

CURRICULUM VITAE

Gary Joseph Coates, Professor

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EDUCATION

- M. Arch. School of Design, North Carolina State University, 1971.
- B.E.D. School of Design, North Carolina State University, 1969. (Bachelor of Environmental Design)

ACADEMIC EXPERIENCE

- 1984-present Professor, Department of Architecture, Kansas State University, Manhattan, Kansas.
- 2012-spring Faculty, KSU Italian Studies Program, Orvieto, Italy
- 2002-spring Visiting Professor, School of Architecture, Washington University, St. Louis, (on leave without pay from Kansas State University).
- 2001-spring Visiting Adjunct Professor, School of Architecture, Washington University, St. Louis, teaching lecture/recitation course on “Climate and Light”.
- 1988 Two month summer program in Todi, Italy on, *Sustainability and the Italian Hill Town*, for students from K-State and the University of Kentucky. (taught jointly with Professor Richard Levine, University of Kentucky)

- 1977-1984 Associate Professor, Department of Architecture, Kansas State University, Manhattan, Kansas.
- 1971-1977 Assistant Professor, Department of Design and Environmental Analysis, Cornell University, Ithaca, New York.

HONORS AND AWARDS

- 2012-13 Recipient of the *Association of Collegiate Schools of Architecture Distinguished Professor Award*, a title that is given for life in recognition of “sustained creative achievement in the advancement of architectural education through teaching, design, scholarship, research, or service”.
- 2011 Kansas State University’s professional Master’s program in the Department of Architecture was **ranked number one in North America in “Sustainable Design Practices and Principles.”** The only required course in the area of sustainability since 1977 has been Coates’s *Environmental Systems in Architecture I*. Coates has offered studios and seminars focused on sustainable design since 1977.
- 2011 The **2011 NAAB Accrediting Report** indicated that the Kansas State Architecture program met **Criterion 3.B: Sustainability, “with distinction”**. The only course listed for satisfying this Criterion was Coates’ *Environmental Systems in Architecture I*.
- 2008 Coates listed in **80th percentile** in *Rating the Architecture Professors in Research: 2008 Report*.
- 2007-2010 Selected as the inaugural **Victor L. Regnier Distinguished Faculty Chair** in the Department of Architecture, Kansas State University.
- 2009 **Award for Excellence in Historic Preservation** given by the *Manhattan Area Preservation Alliance* for porch additions to the Coates/Siepl-Coates residence.
- 2007 Recipient of a **Professorial Performance Award** (starting in fall 2008) in recognition of “excellent and sustained performance in the areas of teaching, creative and scholarly work and service as a full Professor at Kansas State University”.
- 2007 *Bioclimatic Screened Porch*, designed by Coates for the Coates/Siepl-Coates Residence, is included in James M. Crisp and Sandra L. Mahoney, **On the Porch: Creating Your Place to Watch the World Go By**, Newton, CT: The Taunton Press, 2007, pg. 63.
- 2006 Selected as member of the **Core Faculty**, College of Architecture, Planning and Design, multi-disciplinary PhD. Program.

- 2006 *Special Recognition*, American Institute of Architects Committee on the Environment's (COTE) *Ecological Literacy in Architectural Education* awards program competition funded by *The Tides Foundation*. Coates' **Environmental Systems in Architecture I (ESA I)** course as well as his **Ecological and Sustainable Community Design Service Studios and Seminars** were described as exemplary. ESA I was noted by COTE member Gregory Mella for its ability "to merge design with technics in a replicable way" providing "a true model of how ecological design can be taught in architecture schools." Courses from eleven schools in North America are featured in Kira Gould, Lance Hosey, et. al., *Ecological Literacy in Architecture Education 2006 Report and Proposal* published by the AIA Committee on the Environment, 2006, pp. 68-70.
- 2005 *Who's Who in the Fine Arts*, AcademicKeys.com.
- 2003 Nominated for *University Distinguished Professor*, Kansas State University.
- 2003 Nominated for the *Higuchi Endowment Award*, University of Kansas.
- 2002 *American Institute of Architects (AIA) Education Honor Award*, for "Affordable Housing: Reweaving the Fabric of Manhattan's Older Neighborhoods", a community service design studio. This course was noted as "A significant achievement in the formulation, implementation and outcome of architectural instruction", and was one of two awards given nationally in 2002. The competition was open to candidates from all accredited schools of architecture in North America.
- 2000 *Commerce Bank Award for Outstanding Undergraduate Teaching* Kansas State University.
- 2000 *2000 American Institute of Architects Honor Award*, given by the American Institute of Architects Kansas Chapter for a design proposal for the international competition for a Norwegian Opera House, Oslo, Norway. (Member of design team led by Professor Torgeir Norheim)
- 1997 *Svensk Bokkonst Prize* awarded by the Royal Swedish Library for *Erik Asmussen, architect*, Byggförlaget, 1997
- 1994 *Who's Who in American Education*
- 1989 *American Men and Women of Science*
- 1984 *Who's Who in the Midwest*
- 1984 *Who's Who in Technology Today*
- 1984 *Who's Who in Frontier Science and Technology*
- 1984 *Contemporary Authors*

- 1983 **Honorable Mention** (with Ifan Payne), *Association of Collegiate Schools of Architecture (ACSA) National Educational Research Competition on “Teaching Energy in Design”* for research related to *Environmental Systems in Architecture I*. (\$1,000 award)
- 1982 **Resettling America: Energy, Ecology and Community** nominated for the **1982 Transformational Book Award** given by *Renewal Magazine*. Other authors nominated included Norman Cousins, Jonas Salk, Jean-Jacques Servan-Schreiber, Daniel Yankelovich and Hazel Henderson.
- 1980-86 **Associate, Danforth Foundation**
- 1969 **Graduated Magna Cum Laude**
- 1968 **Phi Kappa Phi**, National Scholarship Society
- 1966 **Phi Eta Sigma**, Freshman Scholarship Society

ONGOING RESEARCH

In my book, *Resettling America: Energy Ecology and Community (1981)*, I argued that the basic building block for a sustainable society worth sustaining is the community, not the individual building. From 1988-2007 I expanded my research on sustainable communities and urban design by writing books on two Swedish architects, Erik Asmussen and Carl Nyrén, both of whom are internationally recognized practitioners of place-based and culturally situated sustainable design at the building, neighborhood and community scales of environment. In the course of doing research for those books I studied Swedish examples of sustainable urbanism including: the mixed-use urban infill district, **Hammarby Sjöstad in Stockholm**, which was master planned by the office of Carl Nyrén, with many mixed use housing blocks also designed by that firm, and; the ecological, renewable energy powered **Western Harbor District of Malmö**, which includes projects by many well known Swedish architects, including the office of Carl Nyrén. In recent years I have become increasingly involved in research, writing and lecturing about sustainable urbanism and community design in Germany.

Sustainable Urbanism in Germany

The Sustainable Urban District of Kronsberg, Hannover, Germany.

Since it was first begun in 2000, I have been studying this new development, which was developed as a model sustainable urban district for EXPO 2000 held

in Hannover. From 2007-10 I was able to examine this community in-depth as my selection as the inaugural *Victor L. Regnier Distinguished Faculty Chair*. To date I have presented papers based on my research at four international conferences and I have authored a lengthy chapter on resilient and sustainable community design using Kronsberg that will be published as a case study in an edited book coming out in 2013.

The Sustainable Urban Districts of Vauban and Rieselfeld in Freiburg, Germany.

These two districts in “Solar City Freiburg” are among the most advanced and instructive examples of social, economic, architectural and technological sustainability in Germany. I began my research in the summer of 2012 and will continue it with a Sabbatical leave during the spring semester of 2013. My intention is to disseminate my findings through conferences, journal articles, book chapters, and perhaps a book or monograph dealing with all three of the major sustainable urban districts in Germany.

SCHOLARLY WORK

BOOKS

- 2013 Gary J. Coates, *The Rebirth of Sacred Art: Reflections on the Aperspectival Geometric Art of Adi Da Samraj*, Middletown, CA: The Dawn Horse Press.
- 2007 Gary J. Coates, *The Architecture of Carl Nyrén* (Preface by Juhani Pallasmaa), Arkitektur Förlag, Stockholm, 2007.
- 1997 Gary J. Coates, *Erik Asmussen, architect*, (Foreword by Dennis Sharp), Stockholm, Sweden: Byggförlaget. (Awarded the 1997 *Svensk Bokkonst Prize* by the Royal Swedish Library), 240 pages, 170 ink line drawings and diagrams and 240 color photographs.
- 1981 Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community*, (Foreword by Amory Lovins), (Andover, MA: Brick House Publishing Co.), 570 pages. Nominated for 1981 *Transformational Book Award*.
- 1974 Gary J. Coates (ed.), *Alternative Learning Environments*, (Stroudsburg, PA.: Dowden, Hutchinson & Ross, Inc.), 400 Pages.
- 1969 Gary J. Coates and Ken Moffett (co-editors), *Response to Environment*, Vol. 18, Nos. 1 & 2, Student Publication of the School of Design, North Carolina State University, Raleigh, N.C., 200 pages. This book was widely used around the country as one of the first texts on environment-behavior studies.

BOOK CHAPTERS

- 2013 Gary J. Coates, “Sustainable Urbanism: Creating Resilient Communities in the Age of Peak Oil and Climate Destabilization”. Invited chapter for Isidor Wallimann (ed.), *Environmental Policy is Social Policy—Social Policy is Environmental Policy: Toward Sustainability Policy*, Springer Books, 2013, pp 81-101. The case study for this paper is the sustainable urban district of Kronsberg (Hannover), Germany.
- 2007 Gary J. Coates, “Biotechnology and Regional Integration,” in Vincent B. Canizaro (ed.), *Architecture and Regions*, Princeton Architectural Press, 2007, pp. 350-360.
- 2003 Gary J. Coates, “Preface”, *Three Decades of Design and Community*, H. Sanoff and Zeynep Toker (eds.), School of Architecture, College of Design, pp. I-V.
- 2001 Gary J. Coates and S. Siepl-Coates, “Spiritual Functionalism in the Architecture of Erik Asmussen”, in Anna Sokolina (ed.), *Architecture and Anthroposophy*, 2001. This is the first book in Russian on this subject. (Translation of Russian book title), Moscow, Russia: KMK Scientific Press, Ltd.,
- 2001 Gary J. Coates, “Seven Principles of Life-Enhancing Design: A Study of the Architecture of Erik Asmussen,” published in Alan Dilani (ed.), *Design & Health: The Therapeutic Benefits of Design*, Stockholm: AB Svensk Byggtjänst, 2001, pp. 239-254.
- 1993 Gary J. Coates, “Reflections on Resettling America,” in Georg Feuerstein and Trisha Lamb Feuerstein (eds.), *Voices on the Threshold of Tomorrow*, Wheaton, Illinois: Quest Books.
- 1993 Gary J. Coates and D. Seamon, “Promoting a Foundational Ecology Practically Through Christopher Alexander’s Pattern Language: The Example of Meadowcreek,” in David Seamon (ed.), *Dwelling, Seeing and Designing: Toward a Phenomenological Ecology*, Albany, N.Y.: The State University of New York Press, 331-354.
- 1991 Gary J. Coates, “Le Nuove Citta-Stato: Costruire Quartieri Per Una Societa Adeguata” (“The New City-States: Building Blocks for a Sustainable Society”) in Egidio Mucci and Paolo Rizzoli (eds.), *L’Immaginario Tecnologico Metropolitano*, Milano, Italy: Franco Angeli, s.r.l., 1991, pp. 179-197.
- 1991 Gary J. Coates, “The Nance Canyon Code Solar Standards,” published in Alex Krieger (ed.), *Andres Duany and Elizabeth Plater-Zyberk: Towns and Town-Making Principles*, a Harvard Graduate School of Design Publication, New York, N.Y.: Rizzoli International Publications, 1991, p. 87.

- 1989 Gary J. Coates, “Stone Soup: Utopia, Gift Exchange and the Aesthetic of the Self-Consuming Artifact”, invited paper in, *Utopia e Modernita: Teorie e prassi utopiche nell’eta moderna e postmoderna* , edited by Giuseppa Saccaro Del Buffa and Arthur O. Lewis in two volumes, Rome, Italy: Gangemi editore, 1989, volume one, pp. 287-310.
- 1986 Gary J. Coates, “Foreword”, *Resettling Duluth: A Book by and for the People of the Arrowhead Region*, Duluth, Minnesota: Duluth Energy Resource Center, 1986, pp. 6-8. This book was inspired by Coates’ *Resettling America: Energy, Ecology and Community*.
- 1985 Gary J. Coates, S. Ernst and J. Dubois, “Community Energy Planning: A Case Study of Marysville, Kansas,” in John Byrne, David A. Schulz and Marvin B. Sussman (eds.), *Families and the Energy Transition*, New York, N.Y.: The Haworth Press.
- 1983 Gary J. Coates and I. Payne, *Teaching Energy in Design*, final research report of the ACSA *Teaching Energy in Design National Educational Research Competition*, Department of Architecture, Kansas State University, Manhattan, Kansas, 200 pages. This study that showed that student learning outcomes and environmental attitudes were better in *Environmental Systems in Architecture I* when taught with design recitation sections, when compared to a control group taught with only the lecture.
- 1981 Gary J. Coates, “Future Images, Present Possibilities: Revisioning Nature, Self and Society”, in G. Coates (ed.). *Resettling America: Energy, Ecology and Community*, Andover, MA: Brick House Publishing Company, pp. 53-88.
- 1981 “Gary J. Coates, “Planning and the Paradox of Conscious Purpose”, in Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community*, Andover, MA: Brick House Publishing Company, pp. 525-551.
- 1981 Gary J. Coates, “Rebuilding the City: Increased Self-Reliance Through Neighborhood-Based Economic Development”, in Arthur Shostak (ed.), *Long-Term Future for Philadelphia: The Next 25 Years*, an interim task force report of *The Philadelphia Past, Present and Future Project, a Century IV Project* of the University of Pennsylvania and Temple University, Center for Philadelphia Studies, School of Public and Urban Policy, Philadelphia, PA.

MONOGRAPHS

- 2011 Gary J. Coates (ed.), *Sustainable Manhattan 2050: Visions for Resilient Community in the Age of Peak Oil and Climate Destabilization*, a summary of design proposals for the city of Manhattan, KS developed under Coates’ direction in a year-long graduate design studio at Kansas State University.

- 2008 Gary J. Coates, *The Rebirth of Sacred Art: Reflections on the Aperspectival Geometric Art of Adi Da Samraj*, essay prepared for distribution in association with the exhibition, *Transcendental Realism: The Art of Adi Da Samraj*, at the Cenacolo di Ognissanti, Florence, Italy, February 23-July 20. This essay has been translated into German and Italian and continues to be widely distributed. In addition it is posted on the website, www.daplastique.com.
- 2007 Gary J. Coates (ed.), *Greening Greensburg: Affordable and Sustainable Home Design*, design proposals (including energy performance estimates) for net zero and near net zero energy houses developed in a semester-long graduate design studio under Coates' direction for a Kansas town that was completely destroyed by an F-5 tornado on May 4 2007.
- 2002 Gary J. Coates, *Bioclimatic Dwelling Design: A Sun, Wind and Light Student Workbook*. Written as a required text for ARCH 413: Environmental Systems in Architecture I as well as design studios, this text is keyed to the book *Sun, Wind and Light: Architectural Design Strategies* by G. Z. Brown and Mark DeKay.
- 2001 Gary J. Coates, *Affordable Housing: Reweaving the Fabric of Manhattan's Older Neighborhoods*, Department of Architecture, KSU, December 2001.
- 1983 Gary J. Coates and I. Harritt, *Edible Landscaping in Kansas*, UFM Edible Landscape Project, UFM, 1221 Thurston Avenue, Manhattan, KS, 43 pages.
- 1983 Gary J. Coates and I. Harritt, "Edible Landscaping In Kansas", *slide show with scripted text*, *UFM Edible Landscape Project*. Distributed free of charge to organizations and groups throughout Kansas by the UFM Edible Landscape Project directed by Coates.
- 1982-83 Gary J. Coates and I. Harritt, *Seeds for a Sustainable Food System*, vol. 1, nos. 1-4. newsletter of the *UFM Edible Landscape Project*. (1200 copies per issue distributed to an 11 state Midwest/Plains states region).
- 1976 Gary J. Coates (ed.), *Living Lightly on the Land: The Design of an Energy Self-Reliant School*, Department of Design and Environmental Analysis, Cornell University, 75 pages. (Distributed to hundreds of visitors from every continent at the United Nations Conference on Human Settlements in Vancouver, British Columbia). (Editor and author).
- 1976 Gary J. Coates, *User Participation in the Design Process: Domestic Farm Labor Housing, Wayne County, N.Y.*, Department of Design and Environmental Analysis, Cornell University, 300 pages.
- 1971 G. Coates et. al, *SEARCH* (Systematic Evaluation of Architectural Requirements for Community Housing), a collection of housing preference games, each of

which is designed to help establish trade-off-based preferences for a set of intra- and inter-dwelling characteristics. Published in a boxed set by the North Carolina Extension Service, North Carolina State University, Raleigh, USDA cooperating, May.

- 1970 *Child Development Center*, published by the North Carolina Agricultural Extension Service, Raleigh, North Carolina. (Co-authored with H. Sanoff and J. Sinnett).
- 1968 H. Sanoff, G. Coates, et. al., *Techniques of Evaluation for Designers*, School of Design Research Laboratory, North Carolina State University, Raleigh, North Carolina.

PEER REVIEWED PUBLICATIONS

- 2010 Gary J. Coates, “Transcendental Realism: An Introduction to the Nondual, Aperspectival Geometric Art of Adi Da Samraj”, *abstract* published in *Toward a Science of Consciousness*, University of Arizona Center for Consciousness Studies, 2010, pp 209-210. Also available at <http://www.consciousness.arizona.edu/>
- 2010 Gary J. Coates, “Toward a Rebirth of the Sacred: An Introduction to the Visual Art of Adi Da Samraj”, published online at www.acsforum.org/symposium2010/ as part of “Open Session 3: Design, Art and Processes (archive).”
- 2009 Gary J. Coates, “Evoking a Sense of the Sacred: Memory, Imagination and Meaning in Carl Nyrén’s Vitlycke Museum”, *2A Architecture and Art*, Autumn 2009, Quarterly, Issue no. 12, pp 94-97.
- 2009 Gary J. Coates, “The Rebirth of Sacred Art: Reflections on the Aperspectival Geometric Art of Adi Da Samraj,” in the *Cyberproceedings of the 2009 CESNUR Conference*, www.cesnur.org
- 2009 Gary J. Coates, “Kronsberg, Germany: A Study of Sustainable Urbanism”, presented at *EDRA40: The Ethical Design of Places*, abstract published in Meldrena Chapin, Janice Bissell, et. al., *Proceedings of the 40th Annual Conference of the Environmental Design Research Association*, Kansas City, MO, May 27-31, 2009, pp 391-392.
- 2009 Gary J. Coates, “Transcendental Realism: An Introduction to the Aperspectival Geometric Art of Adi Da Samraj,” abstract published in *Program and Research Abstracts, Science and Nonduality Conference*, San Rafael, CA, October 21-25, 2009, pg. 76.

- 2009 Gary J. Coates, "The City as Garden: A Study of the Sustainable Urban District of Kronsberg (Hannover), Germany", *Documentation Set #57 Sustainability Issues Shape Planning: Selected from presentations at the International Making Cities Livable Conferences*, Copyright IMCL Council 2009, P.O. Box 7586, Carmel, California 93921.
<http://www.livablecities.org/documentationsets/57sustainability-issues>
- 2009 Gary J. Coates, "Transcendental Realism: An Introduction to the Nondual, Aperspectival Geometric Art of Adi Da Samraj," abstract published in *Program and Research Abstracts, Science and Nonduality Conference*, San Rafael, California, October 21-25, 2009, pg. 76.
- 2005 Das, Nibedita, Gary J. Coates and R. Todd Gabbard, "Using Computer Simulation to Demonstrate the Relation Between Aspect Ratio and Cross Ventilation for Residential Buildings in Calcutta (India)", *Proceedings of the Passive Low Energy Architecture Conference*, Beirut, Lebanon, November 22.
- 1996 Gary J. Coates, "Healing Architecture: A Case Study of Vidarkliniken", in the *Journal of Healthcare Design*, Volume VIII, July, pp. 99-107. (Co-authored with S. Siepl-Coates).
- 1992 Gary J. Coates, "Vidarkliniken: A Study of the Anthroposophical Healing Center in Järna, Sweden," in *Healthcare Forum Journal*, special issue on *The Healing Environment*, September/October, pp. 27-29. (Co-authored with S. Siepl-Coates).
- 1990 Gary J. Coates and S. Siepl-Coates, "Spiritual Functionalism: Nordic Tradition and Anthroposophic Impulse in the Architecture of Erik Asmussen," in William Miller and Patricia O'Leary (eds.), *The Architecture of the In-Between: Proceedings of the 78th Annual Meeting of the Association of Collegiate Schools of Architecture*, Washington, DC: ACSA Press, 1990, pp. 389-398.
- 1990 Stephanie Rolley, J. Dubois and G. Coates, "The 12th Street Neighborhood Studio: A Case Study in Collaboration," in Bruce E. Moore (ed.), *Collaboration in Architecture: Proceedings of the West Central Region of the Association of Collegiate Schools of Architecture*, Drury College, Springfield, MO, 1990.
- 1987 Gary J. Coates and S. Siepl-Coates, "Ecological Architecture in the Federal Republic of Germany," in Dennis A. Andrejko and John Hayes (eds.), *Solar 87: The 12th Passive Solar Conference Proceedings*, American Solar Energy Society, Inc., Boulder, Co., pp. 556-560.
- 1987 Gary J. Coates, "The Meadowcreek Project: Ecological Architecture Designed with Patterns," in Jos Weber (ed.), *Proceedings of the Fourth International Congress on Architecture and Town Planning*, Malmo, Sweden, pp. 31-33.
- 1985 Gary J. Coates, "Education and Design for Sustainability: A Case Study of The Meadowcreek Project, Fox, Arkansas", in Alexander T. Wilson and William

- Glennie (eds), *Proceedings of the Tenth National Passive Solar Conference*, American Solar energy Society, Inc., Vol. 10, 1985, pp. 21-26.
- 1985 Gary J. Coates, S. Ernst and J. Dubois, "Community Energy Planning: A Case Study of Marysville, Kansas," in a special issue of *Marriage and Family Review*, on *Families and the Energy Transition*, Vol. 9, Nos 1/2, Fall, 1985.
- 1984 Gary J. Coates, S. Ernst and J. Dubois, "Community Energy Planning as a Statewide Economic Development Strategy", in Skip Laitner (ed.), *Proceedings of the National Colloquium on Community Energy Management as an Economic Development Strategy*, sponsored by Nebraska State Energy Department, 1984.
- 1981 Gary J. Coates, "Appropriate Technology is Key to Solving Problems of Rural Elders", *Generations: Quarterly Journal of the Western Gerontological Society*, Volume VI, Number 2, Winter.
- 1980 Gary J. Coates, W. M. Martin and A. Edgar, "Community Education and Participatory Design: A Case Study of the Use of Scenario Modeling in the Design of a Solar Greenhouse", in *Proceedings of the 5th National Passive Solar Conference*, Oct. 19-26, Volume 5.1.
- 1974 Gary J. Coates and E. Bussard, "Patterns of Children's Spatial Behavior in a Moderate Density Housing Development", in Daniel H. Carson (ed.), *Man-Environment Interactions: Evaluations and Applications, the State of the Art in Environmental Design Research--1974*, Volume 12, "Childhood City", Robin Moore (ed.).
- 1973 Gary J. Coates, abstract of "Environmental Modification and Social Change: Some Thoughts About the Politics of Design", in *The DMG/DRS Journal: Design Research and Methods*, Vol. 7, no. 2, April-June.
- 1973 Henry Sanoff and G. Coates, "Behavioral Mapping: An Ecological Analysis of Activities in a Planned Residential Setting", a short digest in *Ekistics*, special issue on *Feedback on Housing*, November.

INVITED PUBLICATIONS

- 2012 Gary J. Coates, Preface, *A Small Book of Right-Sized House Plans: The Organic Architecture of Daryl S. Rantis*, forthcoming.
- 2011 Gary J. Coates, dust cover endorsement for Mark DeKay's book *Integral Sustainable Design: Transformative Perspectives*, London: Earthscan, 2011.
- 2011 Gary J. Coates, "Cultural Meaning", in the online architecture magazine, *e-architect*, Newsletter 98, March 29.

- 2011 Gary J. Coates, "Beyond Modernism: 'Perfect Abstraction' in Adi Da Samraj's *Orpheus* and *Linead Suites*", *2A Architecture and Art*, Spring 2011 Quarterly, Issue No. 17, pp 36-39. Also available at www.acsforum.org/symposium2011/papers/coates.pdf
- 2009 Gary J. Coates, "The Aperspectival Geometric Art of Adi Da Samraj", *2A Architecture and Art*, Autumn 2009 Quarterly, Issue no. 12, pp 116-121.
- 2003 Gary J. Coates, "All Tradition is Change: Vytlycke Museum Analyzed" (All tradition är förändring: Analys av Vitlycke museum), in *Arkitektur: Byggnad, Interior, Plan, Landskap*, no. 4, vol. 103, June 2003, pp. 46-57. [Published in both English and Swedish]
- 2002 Gary J. Coates, dust cover endorsement for *Patterns of Home: The Ten Essentials of Enduring Design* by Max Jacobson, Murray Silverstein and Barbara Winslow, The Taunton Press.
- 2000 Gary J. Coates, "The Living Image of Time: The Spiritual Significance of Metamorphosis in the Architecture of Erik Asmussen," in *Ptah: Architecture Design Art*, May 2000, pp. 23-30.
- 1994 Gary J. Coates, "Qualities of Metamorphosis", in the section on *Fundamental Principles of Organic Design*, *International Forum Man and Architecture (IFMA) Newsletter*, vol. 9.
- 1993 Gary J. Coates and S. Siepl-Coates, "Funcionalismo espiritual: A arquitetura antroposofica de Erik Asmussen," in *Projeto*, issue 164, June 1993, pp. 20-23.
- 1992 Gary J. Coates, "Qualities of Metamorphosis: A Report on a Workshop by A. John Wilkes," invited paper in *How Does One Create a Human Environment?* A report on an international conference held in Järna, Sweden, July 12-25, 1992, published by *International Forum Man and Architecture*, pp. 86-89.
- 1991 Gary J. Coates, "Living Architecture and Community: The Work of Architect Erik Asmussen in Järna Sweden Explores the Possibilities of Spiritual Functionalism", in *Progressive Architecture*, March 1991, pp. 70-73.
- 1990 Gary J. Coates and S. Siepl-Coates, "More Holistically Than Thou?" in *World Architecture*, issue no. 6, fall. An article on the architecture of Erik Asmussen.
- 1990 Gary J. Coates and S. Siepl-Coates, "Bewegt ruhende Form: Die Architektur von Erik Asmussen" (Movingly Restful Form: The Architecture to Erik Asmussen), special issue on "Adequate Form" in *Archithese: Zeitschrift und Schriftenreihe fuer Architektur*, 5-90, September/October, 1990, pp. 19-27.
- 1990 Gary J. Coates and J. Coates, "Bioregion as Community: The Kansas Experience", (excerpt of an article previously published in *Co-Evolution Quarterly*, Winter, 1981) published in *Home: A Bioregional Reader*, Santa Cruz,

CA: New Society Publishers, 1990, edited by Van Andruss, Christopher Plant, Judith Plant and Eleanor Wright.

- 1989 Gary J. Coates, S. Siepl-Coates and D. Seamon, "Die Pattern Sprache: Eine produktive Theorie zu architektonischen Formen." ("The Pattern Language: A Productive Theory About Architectonic Form"), *Gesundes Bauen und Wohnen*, 35, June, pp. 3-9.
- 1989 Gary J. Coates, "Design for Sustainability at Seaside," in *OZ: Journal of the College of Architecture, Planning and Design*, Volume 11, College of Architecture and Design, Kansas State University, Manhattan, Kansas, pp. 48-51.
- 1988 Gary J. Coates, "Story Telling as a Design Method", in *OZ: Journal of the College of Architecture, Planning and Design*, Volume 10, College of Architecture and Design, pp. 62-63.
- 1987 Gary J. Coates, S. Siepl-Coates and D. Seamon, "Christopher Alexander and the Nature of Architecture," in *Orion Nature Quarterly*, special issue on "Architecture and Nature," volume 6, number 2, pp.20-33.
- 1984 Gary J. Coates, "Design Plans for Meadowcreek", *Meadowcreek Notes*, vol. 6 summer 1984, The Meadowcreek Project, Fox, Arkansas. (Co-authored with David Seamon)
- 1984 Gary J. Coates and D. Seamon, "Toward a Phenomenology of Place and Place Making: Interpreting Landscape, Lifeworld and Aesthetics", *OZ: Journal of the College of Architecture, Planning and Design*, Vol. 6, College of Architecture and Design, Kansas State university, 1984, pp. 6-9.
- 1983 Gary J. Coates , book review of *Insideout: Design Procedures for Passive Environmental Technologies*, in the *Passive Solar Journal*, vol. 2, no. 2, 1983, pp. 152-155.
- 1981 Gary J. Coates and J. Coates, "Bioregion as Community: The Kansas Experience", *Co-Evolution Quarterly*, special issue on *Bioregions*, No. 32, Winter, 1981, pp. 75-83.
- 1980 Gary J. Coates, "Planning and the Paradox of Conscious Purpose, *OZ: Journal of the College of Architecture and Design*, Kansas State University, No. 2, pp. 8-18.
- 1976 Gary J. Coates, book review of *School Zone: Learning Environments for Children*, by Anne P. Taylor and George Vlastos, published in 1976 by Van Nostrand Reinhold, in *Journal of Architectural Research*, Vol. 5, No. 2, August 1976.
- 1972 Doug Zimmerman and G. Coates, "Behavior and Design in the Real World," *Human Ecology Forum*, Special Issue, Vo. 3, no. 2, Autumn.

- 1972 Larry Friedberg and G. Coates, "Farm Labor Housing: Research for Environmental Change", *Human Ecology Forum*, Special Issue, Volume 3, no. 2, Autumn.
- 1970 King Burgwyn, G. Coates, D. Cohen and G. Ellinwood, "A Demonstration of Low Income Housing", in David Alpaugh (ed.) *Design and Community*, Student Publication of the School of Design, vol. 19, no. 2, North Carolina State University, Raleigh, North Carolina, 287 pages.
- 1970 Gay J. Coates, "Residential Behavior Patterns", in David Alpaugh (ed.), *Design and Community*, Student Publication of the School of Design, vol. 19, no. 2, North Carolina State University, Raleigh, North Carolina.
- 1970 Gary J. Coates, D. Cohen, et. Al., "Craft Center, Boone," in David Alpaugh (ed.), *Design and Community*, Student Publication of the School of Design, vol. 19, no. 2, North Carolina State University, Raleigh, North Carolina.
- 1970 David Alpaugh, G. Coates, et. al., "Community Representation in Participatory Design", in David Alpaugh (ed.), *Design and Community*, Student Publication of the School of Design, vol. 19, no. 2, North Carolina State University, Raleigh, North Carolina.

PEER REVIEWED PRESENTATIONS

- 2011 Gary J. Coates, "Beyond Modernism: 'Perfect Abstraction' in Adi Da Samraj's Orpheus and Linead Suites", presented at the *2011 Architecture, Culture and Spirituality Symposium III*, Serenbe community, Chatahoochee Hills, Georgia, June 29-July 2. Coates also gave a DVD presentation, "An Introduction to the Art of Adi Da Samraj" at this conference.
- 2011 Gary J. Coates, "Sustainable Manhattan 2050: Visions of Resilient Community in the Age of Peak Oil and Climate Destabilization", presented at the *Third Annual Kansas State University Sustainability Conference*, KSU Student Union, March 30-31. Each of my graduate students in my Graduate Design Studio made poster presentations.
- 2010 Gary J. Coates, "Transcendental Realism: An Introduction to the Image-Art of Adi Da Samraj", *The Second Architecture, Culture and Spirituality Symposium*, June 17-19, the Abbey at St. John's University, Collegeville, Minnesota. Paper published online at www.acsforum.org.
- 2010 Gary J. Coates, "Transcendental Realism: An Introduction to the Aperspectival Geometric Art of Adi Da Samraj", at the international conference, *Toward A Science of Consciousness*, Center for Consciousness Studies, University of

Arizona, April 12-17, 2010, Poster and Art & Technology Memos, Wednesday, April 14.

- 2009 Gary J. Coates, “Transcendental Realism: An Introduction to the Nondual, Aperspectival Art of Adi Da Samraj”, poster presented at the *Science and Nonduality Conference*, San Rafael, California October 21-25. Presentation included a *paper* distributed along with a 3’-0” by 6’-8” full color canvas *poster*.
- 2009 Gary J. Coates, “The City as Garden: A Study of the Sustainable Urban District of Kronsberg (Hannover), Germany”, presented at *the 47th International Making Cities Livable Conference* in Portland, Oregon, May 10-14, 2009. (The theme was *True Urbanism: Cities for Health and Well-Being*).
- 2009 Gary J. Coates, “The Rebirth of Sacred Art: Reflections on the Aperspectival Geometric Art of Adi Da Samraj”, *2009 CESNUR (Center for Studies on New Religions) Conference*, Salt lake City, Utah, June 11-13.
- 2009 Gary J. Coates, “Kronsberg, Germany: A Study of Sustainable Urbanism”, presented at the *40th Annual Meeting of the Environmental Design Research Association*, Kansas City, Missouri, May 27-31.
- 2009 Gary J. Coates, “Evoking a Sense of the Sacred: Memory, Imagination and Meaning in Carl Nyrén’s Vitlycke Museum,” presented at the *Inaugural Architecture, Culture and Spirituality Symposium*, March 24-26, Mount Angel Abbey Retreat House, St. Benedict, Oregon.
- 2008 Gary J. Coates, “The Greening of Greensburg: Designing Sustainable Dwellings”, presented at the *Kansas State University Sustainability Conference*, January 23. (presented in absentia by Todd Gabbard)
- 2007 Gary J. Coates, “Ecological and Sustainable Community: A Study of Kronsberg, Germany,” *International Conference for Sustainable Urbanism: Squaring Off, A New Paradigm for Urban Change*, April 1-3, Texas A & M University, College Station, Texas, April 1-3..
- 2005 Das, Nibedita, Gary J. Coates and R. Todd Gabbard, “Using Computer Simulation to Demonstrate the Relation Between Aspect Ratio and Cross Ventilation for Residential Buildings in Calcutta (India)”, *Passive Low energy Architecture Conference*, Beirut, Lebanon, 22 November. (Unable to present due to lack of funding). Paper selected for publication in conference proceedings.
- 2005 Nibedita Das, R. Todd Gabbard, Gary J. Coates, “Kolkata: Comfort in Courtyard Houses”, presented at the *Society of Building Science Educators* session at the *International Solar Energy Congress*, Orlando, Florida, August 8-12. Paper presented by R. Todd Gabbard. (Peer reviewed)
- 2005 Gary J. Coates and Mark DeKay, “Bioclimatic Dwelling Design: Teaching Beginning Students with a *Sun, Wind and Light* Student Workbook,” at the

conference on “**Greener Foundations: Environmental Technology and the Beginning Design Student**”, sponsored by *the Society of Building Science Educators* and held at the Savannah College of Art and Design, Savannah, GA June 9-12.

- 2005 Das, Nibedita, R. Todd Gabbard, Gary J. Coates, “Kolkata: Comfort in Courtyard Houses”, presented at the *Society of Building Science Educators* session at the **International Solar Energy Congress**, Orlando, Florida, August 8-12. Paper presented by R. Todd Gabbard.
- 2002 Gary J. Coates, “Affordable Housing: Reweaving the Fabric of Manhattan’s Older neighborhoods,” the **Association of Collegiate Schools of Architecture (ACSA) National Conference**, New Orleans, Louisiana, April 11-14. (This paper presented work of my design studio that won the **2002 American Institute of Architects Education Honor Award**).
- 2000 Gary J. Coates, “Seven Principles of Life-Enhancing Design: A Study of the Architecture of Erik Asmussen”, **one of 34 papers selected for presentation at The Second International Conference on Health and Design**, Stockholm, Sweden, 18-21 June. Conference sponsored by the Karolinska Institute, Stockholm, Sweden and Texas A&M University.
- 1997 Gary J. Coates, “The Living Temple: The Empowerment of Avatar Adi Da Samraj’s Principal Hermitage Sanctuary, Naitauba Island, Fiji,” presented at the international conference, **Making Sacred Places: A Symposium Exploring Built Form and Culture Research** Oct. 16-19, held at the University of Cincinnati.
- 1993 Gary J. Coates, “Kulturhuset as Gesamtkunstwerk: A Study of Architect Erik Asmussen’s Performing Arts Center in Järna, Sweden,” presented at the session on *Architecture and Intentional Communities* at the **Annual Conference of the Society for Utopian Studies**, 4-6 November, St. Louis, Missouri. I also chaired the session on “Utopian Dimensions of Town Planning.”
- 1990 Gary J. Coates, “Spiritual Functionalism: Nordic Tradition and Anthroposophic Impulse in the Architecture of Erik Asmussen”, at the conference on **Organic Pluralism: A Design Symposium** held at the University of Oklahoma, Norman, Feb. 28-Mar. 3.
- 1990 Gary J. Coates, “Spiritual Functionalism: Nordic Tradition and Anthroposophic Impulse in the Architecture of Erik Asmussen”, presented on March 19 at the **Annual Meeting of the Association of Collegiate Schools of Architecture (ACSA)** in San Francisco, March 17-20, 1990.
- 1990 Stephanie Rolley, J. Dubois and G. Coates, “The 12th Street Neighborhood Studio: A Case Study in Collaboration,” presented by Stephanie Rolley at the **ACSA West Central Regional Meeting** held at Drury College in Springfield, MO, October 12-13, 1990.

- 1989 Gary J. Coates and S. Siepl-Coates, "Vidarkliniken: A Study of the Anthroposophic Healing Center in Järna, Sweden," delivered at the **Third International Conference on Built Form and Culture Research**, Arizona State University, Tempe, Arizona.
- 1987 Gary J. Coates, "The Meadowcreek Project: Ecological Architecture Designed with Patterns", **International Congress on Architecture and Town Planning (ICAT)**, Malmo, Sweden, June.
- 1987 Gary J. Coates and Susanne Siepl, "Ecological Architecture in the Federal Republic of Germany," at **Solar 87: The 12th Passive Solar Conference**, Portland, Oregon. (Paper presented in absentia by professor G. Z. Brown).
- 1986 Gary J. Coates, "New Heaven, New Earth: Some Thoughts on Space Colonies, Genetic Engineering and the Emerging American Anti-City," presented at **The Second International Built Form and Culture Research Conference**, University of Kansas, Lawrence, KS.
- 1986 Gary J. Coates, "Stone Soup: A Utopian Parable", presented at the **International Conference on Utopian Theory and Praxis in the Modern and Postmodern Age**, sponsored by the second University of Rome, the University of Reggio Calabria and the Society for Utopian Studies, Reggio Calabria, Italy, May.
- 1985 Gary J. Coates, "Education and Design for Sustainability: A Case Study of The Meadowcreek Project", presented at **The Tenth National Passive Solar Conference**, sponsored by *The American Solar Energy Society*. I also served as **Panelist** at a roundtable discussion on *Sustainable Community Design*. October 1985.
- 1985 Gary J. Coates and S. Siepl, "The Meaning of Architecture is in the Making of Architecture: Case Studies on the Use of the Pattern language Approach to Designing and Building," at the *Association of Collegiate Schools of Architecture (ACSA) West Central Regional Conference*, **Between Means and Meaning**, St. Louis, Missouri, October 5-7, 1985.
- 1984 Gary J. Coates S. Ernst, J. Dubois, , "Community Energy Planning as a Statewide Economic Development Strategy", at the **National Colloquium on Community Energy management as an Economic Development Strategy**, October 1984.
- 1983 Gary J. Coates, "Teaching Energy in Design at Kansas State University," workshop presentation at the **Association of Collegiate Schools of Architecture (ACSA) National Conference**, Santa Fe, NM.
- 1982 Gary J. Coates, "Teaching Energy in Design: A Proposal for Curriculum Change in the Department of Architecture at Kansas State University", **Association of Collegiate Schools of Architecture (ACSA) National Conference**, Quebec City, Canada, April 3-6. (Co-authored with I. Payne, this paper presented research that

won an **Honorable Mention** in the ACSA national competition on **Teaching Energy in Design**)

- 1980 Gary J. Coates, “Community Education as a Strategy for Creating a Solar Society”, and; 2) Scenario Modeling as a Method for Incorporating User Input to the Design Process. “ **5th National Passive Solar Conference**, University of Massachusetts, Amherst, MA, October 19-26.
- 1979 Gary J. Coates, “The University for Man Appropriate Technology Program as a Vehicle for Community Education,” **Association of Collegiate Schools of Architecture (ACSA) West Central Regional Conference on “Community”**, Kansas State University, October 25-27.
- 1974 Gary J. Coates and Ellen Bussard, “Patterns of Children’s Spatial Behavior in a Moderate-Density Housing Development,” the **Fifth Environmental Design Research Conference (EDRA)**, held at the School of Architecture, University of Wisconsin, Milwaukee, WI, May 30-June 1.
- 1973 Gary J. Coates, “Environmental Modification and Social Change: Some Thoughts about the Politics of Design”, at **The Design Activity International Conference**, University of London, August 29-31. Presentation and workshop discussion filmed by the **British Broadcasting Corporation** for use in **The Open University**.
- 1972 Gary J. Coates, presentation of two case studies of community-based design: 1) “The Johnson County Head Start Playground,” a design/build project 2) “Farm Labor Housing: Research for Design”. At the **Fourth Annual International Environmental Design Research Association Conference**, Virginia Polytechnic Institute, Blacksburg, Virginia, April 15-17.
- 1972 Gary J. Coates, “Behavioral Mapping: the Ecology of Child Behavior in a Planned Residential Setting”, **Third Environmental Design Research Association Conference**, School of Architecture and Urban Planning, University of California at Los Angeles, January 24-27.
- 1970 “Residential Behavior Patterns,” **Computer Applications to Environmental Design Workshop**, University of Kentucky, Lexington, Kentucky.

INVITED LECTURES, WORKSHOPS AND KEYNOTE ADDRESSES

- 2012 Gary J. Coates, “Seven Principles of Life Enhancing Design in the Architecture of Erik Asmussen”, presented to the “**At Home with Growing Old: An Interdisciplinary Salon on Growing Old**”, at the Ed Roberts campus, Berkeley, CA, October 18.

- 2012 Gary J. Coates, “Beyond Modernism: ‘Perfect Abstraction’ in Adi Da Samraj’s *Orpheus* and *Linead Suites*” international conference on, ***Transcendental Realism: The Art of Adi Da Samraj***, May 19-20 at the “Bright Room Gallery”, Maria Hoop, the Netherlands.
- 2011 Panelist, “Gallery Talk: Orpheus in the Modernworld: Ad Da Samraj’s Aesthetic Ecstasy”, Sundaram Tagore Gallery, Beverly Hills, CA as part of the exhibition, ***Adi Da Samraj: Orpheus and Linead***, September 8-October 8.
- 2010 Gary J. Coates, R. Todd Gabbard, Kari Wallace and Benjamin Gray, “The Near Net Zero Energy Transitions House, Emporia, KS”, presented by Gabbard with Coates in absentia at the ***Bringing Kansas Home: The 2010 Kansas Housing Conference***, Topeka, September 8-10.
- 2010 Gary J. Coates with Bill Hanlon (Flint Hills Technical College), “The Transitions House: Designing and Building a Near Net Zero Energy School for USD 253 Special Needs Students in Emporia, Kansas.” *Invited presentation* for the “Sustainable Design and Construction” panel as part of the *Building Communities* session, ***2010 Kansas State University Sustainability Conference*** January 29-30, 2010, Kansas State University, Manhattan, KS. Also a *panelist*.
- 2010 Gary J. Coates, invited panelist, session on *Developing for a Sustainable Community—Building a Local Economy and Discussion* leader for the break out session on *Developing Sustainable Communities*, at the ***5th Annual Kansas State University Dialog on Sustainability: Green Jobs—Finding the Right Path Forward***, Leadership Studies Program, July 22.
- 2009 Gary J. Coates and R. Todd Gabbard, “Greening Greensburg: Affordable and Sustainable Home Designs”, ***2009 Kansas Housing Conference***, presentation at the session on *Green Building: From Trend to Mainstream*, August 19, Overland Park Convention Center, Overland Park, KS.
- 2009 Gary J. Coates, “Ecological and Sustainable Community: A Case Study of Kronsberg (Hannover), Germany,” ***College of Architecture and Planning Spring Lecture Series, Ball State University***, Muncie, Indiana, April 22.
- 2008 Gary J. Coates, “The Greening of Greensburg: Designing Affordable and Sustainable Homes” ***AIAS Midwest Quad Conference***, November 7.
- 2008 Gary J. Coates, “Art Talk”, a panel discussion the evening of August 21 associated with the exhibition, ***Adi Da Samraj: Transcendental Realism/Recent Works***, Los Angeles Contemporary, August 2-30, 2008.
- 2008 Gary J. Coates, “Principles of Organic Functionalism in the Architecture of Erik Asmussen”, ***Alvar Aalto Forum***, April 9 in Helsinki, Finland.
- 2006 Gary J. Coates, “*The Architecture of Carl Nyrén*”, a special open session for leading scholars and students of the Doctoral seminar on “Post-War Swedish

- Architecture”, *Royal Institute of Technology (KTH)*, Stockholm, Sweden, May 29. (All expenses paid for including International travel, plus honorarium).
- 2004 Gary J. Coates, “All Tradition is Change: Deconstructing Carl Nyrén’s Vitlycke Museum,” *College of Design Lecture Series*, North Carolina State University, Raleigh, NC, April 26.
- 2004 Gary J. Coates (with Susanne Siepl-Coates), “Dimensions of Sustainable Design: The Case of Erik Asmussen’s Vidar Clinic”, conference on “*Sustainability for Healthcare Facilities: Healthcare Center of Excellence*”, Boston Design Center, sponsored by *Perkins & Will, Architecture-Interiors-Planning*, September 17. Participation also included a *Sustainability Workshop* on “The Relationship Between Healthy Environments and Healing”.
- 2002 Gary J. Coates, keynote address, “Re-Imagining the Future: The Place of Swedish Architecture in the Transition to a Sustainable Society”, *The Day of Architecture*, sponsored by the Swedish Society of Architects, Stockholm, November 25.
- 2001 Gary J. Coates, “The Seven Principles of Life-Enhancing Architecture”, at the *2001 Lecture Series on Healthcare Design* sponsored by Watkins Hamilton Ross Architects in Houston, Texas, May 4, 2001.
- 2001 Gary J. Coates, invited as one of 30 architects and educators from around the country to an “expert conference” entitled, *How can the Architect Contribute to a Sustainable World*, sponsored by *Second Nature: Education for Sustainability*. The conference was hosted by the *Wingspread Foundation*, Racine, Wisconsin.
- 1999 Gary J. Coates, “The Sustainable Architecture of Erik Asmussen”, *Architectural Association*, London on Monday, October 18.
- 1999 Gary J. Coates, “The Living Image of Time: Metamorphosis in the Architecture of Erik Asmussen”, *Space, Place and Spirituality Symposium*, Ball State University, Muncie, Indiana September 17-18.
- 1999 Gary J. Coates, “Beyond Sprawl: Livable and Sustainable Communities as Engines of Social and Economic Development,” inaugurating the lecture series, *Visioning: Design for Sustainable Communities*, sponsored by the *Unity Temple Restoration Foundation* and held at Unity Temple in Oak Park, March 30.
- 1999 Gary J. Coates, “The Architecture of Erik Asmussen”, *Minnesota Waldorf School* in Minneapolis, Minnesota on May 26
- 1998 Gary J. Coates and S. Siepl-Coates, “The Architecture of Erik Asmussen”, *Graham Foundation for Advanced Studies in the Fine Arts*, Chicago, Illinois on December 2.
- 1998 Gary J. Coates, “Green Architecture: Principles and Projects”, presented at a joint

meeting of the Wichita chapter of the *American Institute of Architects* and *The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)*, Wichita Art Museum, March 19.

- 1998 Gary J. Coates, invited participant, *Second Annual Symposium for a Solar Future* entitled *Rethinking Design Curriculum: Integrating Solar Energy for a Sustainable Future*, sponsored by Global Possibilities and held at the Cooper-Hewitt National Design Museum, New York city on October 22. Transcript of presentation published in symposium proceedings.
- 1997 Gary J. Coates, “Seven Principles of Healing Architecture in the Architecture of Erik Asmussen”, May 9, 10, public lectures held at the Fox Hollow Health Spa, Louisville, Kentucky as part of the *Norton Commons Design Charrette* conducted by Duany Plater-Zyberk, Inc., Architects and Town Planners.
- 1996 Gary J. Coates, “The New Urbanism: A Case Study of Nance Canyon”, at the *Annual Conference of PRC Environmental Management, Inc.*, October 18 in St. Louis, Missouri. [PRC is a Fortune Five Hundred Corporation concerned with Brownfield site mitigation and appropriate urban redevelopment. My lecture and consultation over the following year inspired and informed a new involvement by the company in proposals for New Urbanist redevelopments of brownfield sites].
- 1996 Gary J. Coates, “Resettling America: A Short History of Sustainable Community Design”, at the *Congress for the New Urbanism (CNU IV)*, May 3-5, Charleston, South Carolina. Conference participation was limited to design professionals who had already been actively involved in designing and developing New Urbanist projects. This was the conference that formally launched the New Urbanist movement with the signing of the *Charter of the New Urbanism*. I was invited as “one of the country’s leading experts in ecological and sustainable design” as well as a consultant/designer on New Urbanist projects, Coates was a founding signatory of the Charter.
- 1996 Gary J. Coates, invited member of a small group of educators and professionals to plan and launch the *Ecological Education Network (EDEN)*, a national internship program for students seeking to deepen their understanding of the principles and practices of ecological and sustainable design, sponsored by the *Ecological Design Institute* of Sausalito, California and held January 14-17 at the Esalen Institute, Big Sur, California.
- 1995 Gary J. Coates and S. Siepl-Coates, “Healing Architecture: A Case Study of Vidarkliniken”, *Eighth Symposium on Healthcare Design*, November 16-19, San Diego, CA, sponsored by the Center For Health Design, Inc.
- 1994 Gary J. Coates, “Imperfection, Balance and Humor in the Architecture of Erik Asmussen,” *International Conference on “Architecture as Conversation”* held October 16-23 at the Goetheanum, Dornach, Switzerland. Sponsored by *International Forum Man and Architecture and the Fine Arts Section of the Goetheanum School of Spiritual Science*.

- 1994 Gary J. Coates, “The UFM Passive Solar Addition as a Case Study of Sustainable Design,” *Kansas Alternative Energy Day*, May 16, sponsored by the Kansas Corporation Commission.
- 1993 Gary J. Coates and S. Siepl-Coates, “Erik Asmussen: Living Architecture and Community in Järna, Sweden,” *Lake Superior Design Retreat*, Feb. 5-6, Duluth, MN, sponsored by the Minnesota Chapter of the American Association of Architects.
- 1992 Gary J. Coates, “Ecological Architecture: Principles and Case Studies”, lecture at Oberlin College given as part of a special course on *Ecological Design Arts* which was taught by architects and designer “at the frontier of the green building movement”, including Robert Berkebile, Sim Van der Ryn and William McDonough. The purpose of the course was to explore possibilities for a new building at Oberlin to house the Environmental Studies program headed by David Orr. I also served as advisor and editor for the building prospectus and program written by students, which later formed the basis for a national competition. Won by architect William McDonough.
- 1992 Gary J. Coates, invited lecture and one week long workshop on, “The Experience of Polarity and Metamorphosis in the Architecture of Erik Asmussen”, at the *International Architectural Conference on Creating a Human Environment*,” convened in Järna, Sweden at the Rudolf Steinerseminariet, July 12-25.
- 1991 Gary J. Coates, panelist, “Design for Sustainability Workshop”, at the *Kansas AIA Conference on Design*, Manhattan, KS, September.
- 1990 Gary J. Coates, “Designing Sustainable Communities,” presented as part of the spring lecture series of the *Regents Center for Architectural Studies* sponsored by the College of Architecture and Design at Kansas State University and the School of Architecture and Urban Design at the University of Kansas, May 10
- 1990 Gary J. Coates, panelist for “The Environment: Panel Discussion,” a symposium held as part of the 1990 *Central States Regional Conference* sponsored by the *American Institute of Architects* in Kansas City, October 13, 1990. Other participants included Andres Duany, Ralph Knowles and Bill Hammond.
- 1989 Gary J. Coates, “Planning by Design: The Medicine Lodge Project”, presented at the *Kansas Rural Arts Conference*, Hutchinson, KS, March 31-April 1.
- 1989 Gary J. Coates, “Ecological Architecture”, and “Passive Solar Design for Seaside, Florida”, presented at the *Visions of Quality Development* conference held June 29-30 in Winter Park, Florida. I helped to organize this conference. Participation also included a panel discussion of social and economic issues. Sponsored by *The Florida Solar Energy Center*. At my urging, this conference brought together for the first time leaders in the ecological design and planning movement with the leaders such as Andres Duany of the movement for the New

Urbanism.

- 1988 Gary J. Coates, “Ecological Design at Meadowcreek: Using the Pattern Language”, *College of Architecture, University of Kentucky*, Lexington.
- 1988 Gary J. Coates, “Ecological Architecture: A Case Study of the Meadowcreek Project”, *Hochschule fur Bildende Künste*, Hamburg, Germany.
- 1988 Gary J. Coates, panelist, *International Conference on Entrance Requirements* for Schools of Architecture held at the Hochschule fur Bildende Künste, Hamburg, Germany.
- 1987 Gary J. Coates, “Stone Soup: Lessons for Building Communities of Life”, a one day workshop sponsored by *The Waldorf Institute*, Spring Valley, N.Y.
- 1987 Gary J. Coates, “Resettling America”, a public lecture sponsored by *The Waldorf Institute*, Spring Valley, N.Y.
- 1987 Gary J. Coates, “Resettling America: The Green Alternative”, presented at conference on *Cultural/Technological/Metropoli*, sponsored by the University of Florence and held in Florence, Italy. Participation also included a panel discussion. Coates was the only scholar from the United States participating in this “by invitation only” event.
- 1987 Gary J. Coates, “Technology and the Paradox of Conscious Purpose”, presented at the conference on *Technology and the Human Future*, held at The Meadowcreek Project, Fox, Arkansas.
- 1987 Gary J. Coates, “Toward a Recovery of a Sense of the Sacred in the Architecture and Theories of Christopher Alexander”, presented at the *Kairos Workshop on Sacred Architecture*, held at the Lindisfarne Mountain Retreat Center, Crestone, CO. (I also took part in this week long course in August).
- 1987 Gary J. Coates, “Regenerating Kansas from the Grassroots: A Case Study of Marysville, KS,” presented at the conference on *Kansas Habits, Kansas Hopes*, Topeka. This paper was also the basis of a feature article in the *Wichita Eagle-Beacon*, later reprinted in the *Topeka Capitol Journal*. (Co-authored with J. Dubois)
- 1986 Gary J. Coates, “Recollecting the Sacred in Traditional and Contemporary Architecture”, lecture and workshop. This two-day symposium on *Science and the Spirit* featured a conversation between myself and Professor Robert John Russell, physicist and Director of the Center for Theology and the Natural Sciences at the Graduate Theological Union in Berkeley, CA. It was sponsored by *The Bishop’s School of Ministry, Episcopal Diocese of Arizona* and was held in Sedona, Arizona, August.
- 1986 Gary J. Coates, “Stone Soup: Some Thoughts on Gift Exchange as the Economy

- of Community”, at the conference on ***Sustainable Economics: Toward a New Economic Paradigm***, *The Meadowcreek Project*, Fox, Arkansas, January.
- 1986 Gary J. Coates and J. Dubois, “Energy Efficient Communities”, at the ***Symposium on the Future of the Iowa Community***, sponsored by Iowa State University College of Architecture and Design, the Iowa State Extension Service and the office of Senator Tom Harkin, Iowa State University, March. 1986
- 1986 Gary J. Coates, “Ecological Architecture in the USA: An Overview and Case Study”, presented at the ***School of Architecture, University of Hannover***, Hannover, Germany.
- 1986 Gary J. Coates, “Stone Soup: Some Thoughts on Gift Exchange as the Economy of Community”, at the conference on ***Sustainable Economics: Toward a New Economic Paradigm***, held at *The Meadowcreek Project*, Fox, Arkansas, January 1986.
- 1985 Gary J. Coates, “Beauty, Order and Sustainability,” lecture and three-day workshop at the conference/intercession course on ***Sustainable Agriculture: Revisioning Rural Places***, held at *The Meadowcreek Project*, Fox, Arkansas, Jan. 4-8. (Workshop conducted with S. Siepl)
- 1985 Gary J. Coates, “Stone Soup: Some thoughts on Gift Exchange as a Paradigm for Human Services”, lecture and afternoon workshop, ***Annual Meeting of the Minnesota Financial Worker and Case Load Association***, Duluth, Minnesota, Sept. 26.
- 1985 Gary J. Coates, keynote address, “Stone Soup: Some Thoughts on Gift Exchange as the Economy of Community”, at the conference on ***Building Blocks: Creating Your Neighborhood’s Future***, sponsored by the Duluth Department of Community Development, March 8, 9.
- 1985 Gary J. Coates, “The Design of a Demonstration Neighborhood Energy Super Block”, a one day workshop at the conference on ***Building Blocks: Creating Your Neighborhood’s Future***, Duluth, Minnesota, March 8, 9.
- 1985 Gary J. Coates, “Principles of Neighborhood Design”, to Duluth architects, city planning officials and community leaders, March 9.
- 1984 Gary J. Coates, “Recollecting the Sacred: Toward an Architecture of Place”, conference on ***Place***, held at *The Meadowcreek Project*, Fox, Arkansas, January.
- 1984 Gary J. Coates, *plenary address*, “Solar Retrofit in Kansas”, ***Energy Efficient Housing Conference*** sponsored by the Kansas Energy Extension Service for representatives of the regional building design, financing and construction industry.
- 1983 Gary J. Coates, Keynote address, “Future Images, Present Possibilities:

- Revisoning Nature, Self and Society”. Two workshops: 1) Marysville, KS: Steps Toward a Sustainable Community”; 2) Appropriate Technology and Community Education.” At the **North American Conference on Building a Planetary Village**, Whidby Island, Washington, sponsored by the Chinook Learning Community, May 15-20. (One of five “world renowned” guest faculty).
- 1983 Gary J. Coates, “Recollecting the Sacred: Architecture, Ecology and Community”, workshop on *Phenomenologies of Place and Environmental Experience*, at the **Annual Meeting of the Society for Phenomenology and Human Sciences**, St. Louis, MO, October 22-23.
- 1982 Gary J. Coates, plenary address on “Resettling America: Toward a Sustainable Food System” and workshop presentation on “Edible Landscape Design”, at the conference on **Creating a Sustainable Food System**, sponsored by the *Midwest/Plains Congress for a Sustainable Food System* held at St. Mary College, Leavenworth, Kansas, May 21-23.
- 1982 Gary J. Coates, “Resettling America”, lecture and afternoon workshop at the **1982 Prairie Festival: Resettling America**, sponsored by and held at the Land Institute, Salina Kansas, May 29-30.
- 1982 Gary J. Coates, “Community Education and Ecological Architecture”, at **The Meadowcreek Project**, Fox, Arkansas, November 22-24. Consultation on curriculum development at Meadowcreek as well as planning for architectural facilities and a future design studio.
- 1982 Gary J. Coates, “Design for Sustainable Communities: A Case Study of Marysville, Kansas”, presented at the **National Forum on New Communities for the Rural Renaissance** sponsored by the American Land Forum, Bethesda, Maryland, November 15, 16.
- 1983 Gary J. Coates, “Urban Agriculture and Edible Landscape Design”, presentation at conference on, **Creating a Sustainable Food System: Local and Regional Action**, sponsored by the UFM Edible Landscape Project, Manhattan, KS.
- 1981 Gary J. Coates, “Energy and the Redesign of Cities,” panelist and workshop leader at the **Time of Transformation Conference**, Kansas City, MO, November.
- 1981 Gary J. Coates, “Rebuilding Rural America: Toward an Appropriate Technology Policy for the Rural Elderly”, presented at the **First National Research Conference on Technology and Aging**. (*Expert participation by invitation only*), jointly sponsored by *The Gerontological Society of America* and *The Western Gerontological Society*, held at The Wingspread Conference Center, Racine, WI, July 30-August 1.
- 1981 Gary J. Coates, “Future Images, Present Possibilities: Revisoning Nature, Self and Society”, featured speaker at the conference on **2020 Vision: A Conference**

on the Future, sponsored by the University of California, Santa Cruz and the *Center for the Study of Local Alternatives*, held on the University of California at Santa Cruz campus, June 19-21.

- 1978 Gary J. Coates, “Appropriate Technology and Community Education”, presented at *Grass Roots in High Places: A Conference on Community and Natural Resource Connections in the Rockies*, sponsored by The University of Colorado at Boulder, October.
- 1978 Gary J. Coates, *Soft Energy Paths*, panelist with physicist and energy expert Amory Lovins and two other Kansas State University faculty, Forum Hall, KSU Student Union.
- 1978 Gary J. Coates, “Appropriate Technology and the Future of Small Towns,” presented at the *Small Rural Villages Conference*, Aurora, KS.
- 1977 Gary J. Coates, *Colloquium on the Social and Environmental Implications of Home Computer and Home Video Player Use*. Participation as an architect/educator on an “expert panel” that included scientists and engineers who developed the technical basis for the computer industry as well as nationally and internationally recognized experts in the fields of sociology, education, child development, medicine and other fields). Using a variety of future visioning techniques the task of this expert panel, called together by an “unnamed large computer company”, was to chart the direction of the “coming professional and home computer revolution”.

REVIEWS OF BOOKS AUTHORED AND EDITED BY COATES

- 2001 Kenneth Frampton, “Community Builder”, a review of Gary J. Coates, *Erik Asmussen, architect* in *Design Book Review* 44/45, winter/spring 2001, pp. 84-85.
- 2000 Robert Mugerauer, a review of Gary J. Coates, *Erik Asmussen, architect* in *Environmental and Architectural Phenomenology Newsletter*, volume 11, number 2, spring 2000, pp. 6-8.
- 2000 Juhani Pallasmaa, “...an architecture of compassion and humility...” a review of Gary J. Coates, *Erik Asmussen, architect* in *Architectural Research Quarterly*, volume 4, number 3, 2000, pp. 281-282
- 2000 Juhani Pallasmaa, review of Gary J. Coates, *Erik Asmussen, architect* in *Ptah: Architecture Design Art*, 1999:1-2, p. 68.
- 1999 *Arkkitehti*, [The Finnish journal of architecture], a review of Gary J. Coates, *Erik Asmussen, architect*.

- 1999 Stefano Andi, review of Gary J. Coates, *Erik Asmussen, architect* in *Domus* 820, November 1999. [Italian journal of architecture and design]
- 1998 Peter Blundell Jones, book review of Gary J. Coates, *Erik Asmussen, architect*, in *The Architectural Review*, volume CCIII, no. 1216, June 1998, p.9
- 1998 Claes Caldenby, “Asmussen in English”, book reviewed in *Arkitektur: The Swedish Review of Architecture*, vol. 2, pp. 60-61.
- 1983 John Peterson, review of Gary J. Coates, (ed.), *Resettling America: Energy, Ecology and Community*, *Rain*, February/March.
- 1982 Kirkpatrick Sale, review of Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community* in *The Nation*, December 25. “...rich in anecdote and detail as well as analysis and theory, this represents the most important work of its kind since the pioneering studies by Lewis Mumford and the original Regional Planning Association of the 1920s.”
- 1982 Michael Shepherd, review of Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community*, *Sunpaper*, April, pp.30, 31.
- 1982 *Manas*, June 2 review of Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community*, pp. 3, 8.
- 1981 *Future Survey*, review of Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community*, December, 3:12, p.15.
- 1981 *Renewal*, review of Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community*, December 7, p. 34. ...”*Resettling America* provides one of the most thorough and accessible introductions to the work in progress around the country, and, more importantly, to some of the conceptual framework that will ultimately unify this work in a science of ecological design and “right livelihood.”
- 1981 *Publishers Weekly*, review of Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community*, June, p. 74.
- 1981 James A. Cox, review of Gary J. Coates (ed.), *Resettling America: Energy, Ecology and Community* was reviewed on a November 1 telecast by *The Midwest Book Review on MCAC Cable Television, Madison, WI* as part of a thematic special surveying “the best of the ecology and environment books published in the last couple of seasons”.

RADIO, VIDEO AND TELEVISION INTERVIEWS OF COATES

- 2005 Gary Coates (and others, including artists, art historians and art critics), *The Transcendental Art of Adi Da Samraj*, the Avataric Samrajya of Adidam Pty Ltd.
- 1998 Gary J. Coates and S. Siepl-Coates, “The Architecture of Erik Asmussen”, videotape of an invited lecture at the *Graham Foundation for the Advanced Studies in the Fine Arts*, Blue Sky Video Productions, Lake Bluff, IL.
- 1995 Gary J. Coates and S. Siepl-Coates, “Healing Architecture: A Case Study of the Vidarkliniken”, an audio tape of a refereed paper at the *Eighth Symposium on Healthcare Design*, Professional Programs, Inc. Santa Clarita, CA.
- 1990 Gary J. Coates, “Resettling America: Ten years After,” 30 minute radio interview with Deanne Wright which was aired on *KKSU’s Ideas Unlimited* program aired to Kansas and four surrounding states.
- 1988 Gary J. Coates, “Changing Definitions of Reality”, reprint of portions of my “General Introduction” to *Resettling America: Energy, Ecology and Community in Time’s Harvest: Exploring the Future*, (Reader I), published by the International University Consortium, The University of Maryland, College Park, Maryland, pp. 9-13. This is a text for a media assisted telecommunications course on the future.
- 1982 Gary J. Coates, invited participant, *International Videotape Seminar on Community Self-Help Approaches to the Alleviation of Poverty*, sponsored by the Catholic University of Columbia, Bogota. Preparation of two one hour video tapes on “The Community Education Approach to Self-Help:: The Kansas Experience”.
- 1981 Gary J. Coates, interview on passive solar energy design, the UFM passive solar greenhouse and edible landscape and related topics, for the television documentary on “Energy” produced for the *Sunflower Journeys* series on *KTWU*. Filmed at the UFM solar greenhouse designed by Coates in 1979 and built as part of a Department of Energy grant in 1980.
- 1973 Gary J. Coates, “Environmental Modification and Social Change: Some Thoughts About the Politics of Design”, paper presentation and workshop discussion taped by *The British Broadcasting Corporation (BBC)* for use in *The Open University*.

SELECTED CITATIONS

- 2011 Mark DeKay, *Integral Sustainable design: Transformative Perspectives, London: Earthscan*. One of my design/build studio projects from 1985-86, the Meadowcreek Sustainable Farmstead designed by Daryl Rantis and Stan Koehn,

is cited on pg 122 as an example of “Level 1: Traditional Aesthetic of Sustainable Design”. Quotations and photographs from my book, *Erik Asmussen, Architect*, are used on page 125 to present Asmussen’s architecture as an example of “Level 4: Integral Aesthetics of Sustainable Design. A quotation and three photographs from my book, *The Architecture of Carl Nyrén*, are used (on pages 386-87) to present Nyrén’s Vitlycke Museum as an example of the highest, or Integral Design Strategy, i.e. “designing to open multiple natures and contexts and to express the metaphoric power of nature.”

- 2006 Gary Coates is cited as one of a dozen “architects and designers on the cutting edge of the green building movement” by David W. Orr, in his book, *Design on the Edge: The Making of a High Edge Building* (pg 66).
- 2000 Mary Guzowski, *Daylighting for Sustainable Design*, New York, N.Y.: McGraw-Hill, p. 303, 304, 321-333. All seven principles of organic, life-enhancing design described by Coates in *Erik Asmussen, architect*, are presented in *Chapter 6: Address Health and Well-Being* as a comprehensive theory of healing design. Coates, who is extensively quoted and this chapter, which is illustrated with photographs and drawings from *Erik Asmussen, architect*.
- 1997 “Architecture Grows Wild”, an article on the architecture of Erik Asmussen based on (and citing) the book *Erik Asmussen, architect*, in *SAS Airline Magazine*, December 1997.
- 1996 David O. Webber, “Life-Enhancing Design”, in *Healthcare Forum Journal*, “Seven Principles of Healing Architecture”, summarized with extensive quotations in sidebar based on 1992 article by Gary Coates and S. Siepl-Coates in *Healthcare Forum Journal* and their presentation at the *Eighth Symposium on Healthcare Design*, 1995.
- 1993 Dick Russell, “A Garden of Earthly Design: Ecologically Sound Architecture Gains Ground”, an article in *The Amicus Journal*, vol. 5, no. 2, summer 1993 based on interviews with the leading voices in sustainable and ecological design and planning. *Resettling America: Energy, Ecology and Community* is cited and Coates is quoted on p. 20.
- 1992 David Orr, *Ecological Literacy: Education and the Transition to a Postmodern World*, State University of New York Press. Coates is cited as a leading ecological designer on p. 136.
- 1991 “Chapter 8, Leaving the Earth: Space Colonies, Disney and EPCOT”, in Jerry Mander, *In the Absence of the Sacred: The Failure of Technology and the Survival of the Indian Nations*, San Francisco, CA: Sierra Club Books, 1991. The entire chapter grows out of personal correspondence between Mander and Coates. Coates’ book, *Resettling America: Energy, Ecology and Community*, is cited on p. 148 and letters from Coates to Mander are extensively quoted on pgs. 149, 150, 158.

- 1990 Tom Johnson, "Breaking Ground on a New Idea", in *Home* magazine, pp. 20-24. Article on the design of Nance Canyon for a 15,000 acre site bordering Chico, CA by *Duany Plater-Zyberk, Inc. (DPZ)*. Coates is cited as part of the DPZ design team that is, "as cutting edge as any ever assembled". Coates' book, *Resettling America: Energy, Ecology and Community*, is cited and Coates is also quoted in the piece.
- 1988 Citation of *Resettling America: Energy, Ecology and Community* as an important source and Coates as a leading figure in the ecological design movement, in Thomas Berry, *The Dream of the Earth*, San Francisco, CA: Sierra Club Books, pp. 68, 83.
- 1987 Steve Downen, Stan Koehn, Doug Pierce and Daryl Rantis, "Homework in the Ozarks: Four Architecture Students Design and Build a Solar Farmhouse", in *Fine Homebuilding*, vol. 37, pp. 70-75. [An article describing Bachelor of Architecture design thesis work done under the direction of Coates in 1985].
- 1986 Pilar Viladas and Thomas Fisher, "P/A Profile: Harmony and Wholeness", in *Progressive Architecture*. An article on the work of architect, educator and author Christopher Alexander and his influence on architectural education. The section on education features excerpts from an interview conducted at KSU with Professors Gary Coates and David Seamon and their former students who worked on the design and construction of passive solar dwellings at *The Meadowcreek Project* in Fox, Arkansas.
- 1986 Steve Downen, Stan Koehn, Doug Pierce and Daryl Rantis, "Architecture as Place-Making: The Design of a Sustainable Farmstead and Staff Housing", in *OZ, Student Publication of the College of Architecture and Design*, Kansas State University, vol. 8, pp. 48-51. An article describing design thesis projects completed under the direction of Gary Coates.
- 1985 Kirkpatrick Sale, *Dwellers in the Land: The Bioregional Vision*, San Francisco, CA: Sierra Club Books. Extended quotations from *Resettling America: Energy, Ecology and Community* on pp. 31-32.
- 1984 Robert Shibley, et. al., *Architecture, Energy and Education: Case Studies in the Evaluation of the Teaching Passive Design in Architecture Workbook Series*, Association of Collegiate Schools of Architecture (ACSA). Summary of award winning Kansas State University project directed by Gary Coates and Ifan Payne for the course *Environmental Systems in Architecture I*.
- 1983 Article on UFM Edible Landscape, *Kansun News*, September.
- 1983 John Conway, "Power on Main Street". An article describing the Marysville Energy Study completed by Coates' 1981-82 Community/Urban Design Graduate Studio at KSU, in *Forbes* magazine, April.
- 1981 Merle Bird, "Promoting Understandable Technology", *The K-Stater*, vol. 31, no.

3. A feature article based on an interview with Coates describing the *UFM Solar Greenhouse* (designed by Coates) and the *UFM Appropriate Technology Program*, which he founded.

RESEARCH AND DEMONSTRATION GRANTS

EXTERNALLY FUNDED GRANTS

- 2001 *The Architecture of Carl Nyrén*. Funding from the **American-Scandinavian Foundation** to continue my research on the architecture of this important Swedish architect. Funded for \$3,000.
- 2001 *The Architecture of Carl Nyrén*, Funding from the **Graham Foundation for Advanced Studies in the Fine Arts** to continue my research toward the first book on this important Swedish architect. Funded for \$7,700.
- 1999 Grant funded by the **Fund for the Improvement for Post-Secondary Education (FIPSE)** to participate in an **Energy Scheming Workshop** (at the end of July) for architecture faculty taught at the University of Minnesota by faculty from the University of Minnesota and the Washington University at St. Louis. Four schools were chosen to participate.
- 1990 *The Architecture of Erik Asmussen*, funding from the **Graham Foundation for Advanced Studies in the Fine Arts** for \$7500 (with Susanne Siepl-Coates).
- 1990 *The Architecture of Erik Asmussen*, **Bicentennial Swedish-American Exchange Fund**, (10,000 SEK.)
- 1988 *The Architecture of Erik Asmussen*. Funded by the **American-Scandinavian Foundation**. (\$2,000, the maximum allowable award).
- 1987 *Toward a Living Architecture: A History and Phenomenology of the Architecture of Erik Asmussen at the Rudolf Steinerseminariet, Jarna, Sweden*. Funded by the **Kansas State University Faculty Development Awards Program**. (\$1500).
- 1984 Grant from the **Association of Collegiate Schools of Architecture (ACSA)** to attend the **ACSA Summer Institute on Teaching Innovations in Architectural Education**.
- 1984 Grant from the **Barbara H. Culver Foundation** to attend a two week workshop **Technology: Design + Energy**, sponsored by the MIT Laboratory of Architecture and Planning and the U. S. Department of Energy, and held on the MIT campus. (All expenses paid). on **Sacred Geometry and Architecture** taught by Professors Keith Critchlow of the Royal College of Art, London and associated colleagues. Held at the Lindisfarne Institute, Crestone, CO. (\$800)

- 1982 G. Coates and I. Payne, Co-Directors of an 18 month evaluation of the use of innovative curriculum materials for the ***National Teaching Energy in Design Program***. Proposal selected as the result of a national competition sponsored by the *U. S. Department of Energy* and the *Association of Collegiate Schools of Architecture*. The project received an *Honorable Mention Award* for excellence (\$1000 award).
- 1981 Grant from the ***Danforth Foundation*** to participate in ***The Learning Process: The Brain, Imagination and Television***, a *Midwest Regional Conference for Danforth Associates*, Overland Park, KS.
- 1976 Faculty Advisor, *A Model for Domestic Energy Self Sufficiency in a Rural Setting*, Alan Wyatt (Student Project Director). A ***National Science Foundation Student Originated Studies (NSF-SOS)*** grant of \$12, 750, One of 69 projects funded nationally, this study, which grew out of a design studio I taught in Spring of 1976, involved nine undergraduate and two graduate students from Cornell University and Ithaca College. This multidisciplinary research team developed a model from an ecological understanding of the site based on a detailed assessment of natural resource and climatic data. Biotic resources of the site were inventoried and assessed for their food producing and energy producing potential. Intermediate technology energy devices were built for adapting the existing house to renewable energy resources. Three scenarios, from simple energy conservation to maximum potential energy and food self-sufficiency were developed and their energetic, social and psychological implications were assessed. Findings were presented by the Faculty Advisor and the Student Project Director at *NSF-SOS conference* in Washington, D.C. A 300 page final report was completed in spring 1976.
- 1973-74 Co-Investigator (Dr. Franklin D. Becker, Principal Director), ***Residential Livability Study*** for the ***New York State Urban Development Corporation (UDC)***. (\$73,000). Twelve planned residential settings, in New York City and other cities in upstate New York, were systematically evaluated to determine user satisfaction with the architectural and landscape designs.
- 1971-73 Principal Investigator, ***User Participation in the Design Process: Domestic Farm Labor Housing for Wayne County, New York***, funded by ***The Cornell College of Human Ecology Overhead Grants*** program (\$5,000) and the ***USDA Agricultural Experiment Station*** under the Hatch Act for rural Development (\$5000). This action research project was undertaken in conjunction with the establishment of a Community Development Corporation (CDC) was set up to develop farm worker housing. Two methods for ensuring user input to the design process were used and systematically and comparatively evaluated for their effectiveness: 1) A Design Charrette involving the use of large scale models and all the project stakeholders, including farm worker, CDC staff and the project architect; 2) A detailed interview, including a housing preferences trade-off game.

UNIVERSITY FUNDED GRANTS

- 2006 “Affordable and Sustainable Housing: Reweaving the Fabric of Older Neighborhoods in a Small Midwestern City”, *Environment, Health and Sustainable Development: 19th IAPS International Conference, Alexandria, Egypt*, September 11-16. **KSU Faculty Development Awards Program Grant** (\$1500, plus \$500 from Department of Architecture). (Unable to attend)
- 2000 **KSU Faculty Development Awards Program (\$2,018)** for presentation of a refereed paper at *The Second International Conference on Health and Design: Integrating Design and Care in Hospital Planning for the New Millennium*, Stockholm, Sweden, 18-21 June.
- 1999 Summer Stipend, **Office of the Dean of the College of Architecture, Planning and Design** in the amount of \$1000 for research and travel in Finland during nine days in June.
- 1996 *Icons of Happiness: A Study of Avatar Adi Da Samraj's Teachings on Sacred Art and Architecture*, funded by the **Kansas State University Small Research Grants Program (USRG)** (\$2,191).
- 1994 Travel Grant, “Presentation of a Paper at the International Architecture Conference on Architecture as Conversation,” Dornach, Switzerland, October 16-23, **Kansas State University Faculty Development Awards Program** (\$600), the Department of Architecture (\$500) and the College of Architecture and Design (\$300).
- 1992 Travel Grant, “Presentation of a Paper/Workshop at the International Architecture Conference on Creating a Human Environment,” Järna, Sweden, July 12-25, **Kansas State University Faculty Development Award**, \$1,090 and the Department of Architecture (\$500).
- 1989 *The Architecture of Erik Asmussen*. Funded (with S. Siepl-Coates) by the **Kansas State University Faculty Development Awards Program**. (\$1500).
- 1980 G. Coates and D. Bryant, Co-Investigators, *A Thermal Solar Performance Evaluation of the UFM Passive Solar Addition*, **KSU Faculty Research Award** (\$700).
- 1978 College of Architecture and Design **Summer Salary Research Grant** to develop an appropriate technology program at the University for Man (free university) in Manhattan.
- 1978 Department of Architecture funding to attend the **Passive Solar Design Workshop**, November, Denver Colorado. Presented by *Passive Solar Associates*. Calculation methods learned in this workshop allowed me to complete the engineering design for the successful UFM Passive Solar Greenhouse Addition grant proposal to the *DOE Appropriate Energy Technology Small Grants*

Program. As a result of my participation in this workshop, I was also the first architecture faculty in the country to introduce these emerging passive solar design techniques into a required environmental systems course.

- 1978 Department of Architecture funding to attend the *4th National Passive Solar Conference* in Kansas City, MO., October.
- 1978 Department of Architecture funding to attend the *Aspen Energy Forum*, Aspen Institute for Humanistic Studies, June.
- 1978 Department of Architecture funding to attend the *Solar Workshop*, presented by faculty from Jordan College, Michigan. Held at Washburn University, Topeka, KS, March.
- 1976 Department of Design and Environmental Analysis funding to represent Cornell University at the *Growth and Education Conference*, Notre Dame Retreat Center, Canandaigua, New York, November.

DESIGN DEMONSTRATION AND SERVICE GRANTS

1978-1983 **The UFM Appropriate Technology Program**

In spring 1978 I founded a joint program between Manhattan's free university (UFM) and the Department of Architecture aimed at helping the citizens of the city, state and region to become more self-reliant in the production of energy, food, shelter and other basic necessities. Since its beginnings in 1968 the University for Mankind (UFM) has spawned literally hundreds of similarly structured free universities in the state and region. **Building upon, and yet extending, the model of the land grant university, the idea was (and still is) to make the professional design knowledge and technical expertise of the College of Architecture, Planning and Design available to ordinary citizens through means of this decentralized, community-based, user-defined learning system.** By working within this educational framework architecture students have been, and continue to be, able to integrate research, service and education in the very process of directly contributing to the creation of a more sustainable society based on the principles of local self-reliance and cooperative community.

The program was formally initiated in 1978 with demonstration/education grants involving the retrofit of the existing UFM house and continued with major grants involving the creation of the *Passive Solar Greenhouse Addition and Edible Landscape*.

While local, state and national sources of funding was available for programs involving alternative energy and appropriate technology, **I was able to secure a number of grants that supported both staff as well as a variety of job**

training, demonstration/education and action research programs. The most significant source of funding was the Department of Energy's *Appropriate Energy Technology Small Grants Program*. I was the only applicant in the nation to receive two grants at close to the maximum available funding per grant of \$50,000. **The DOE featured the UFM demonstration/education program as the flagship of their entire small grants program and it remains the only such program to have continued functioning to the present day.** Following is a summary of the grants I received over a four-year period under the auspices of the *UFM Appropriate Technology Program*.

- 1983 Project Director, *The City of Manhattan Revenue Sharing Fund* funded a grant for staff and program support for the UFM Appropriate Technology Program. (\$8,000)
- 1981-83 Project Director, *The Edible Landscape: Saving Energy Through Urban Agriculture and Community Food Systems*, U.S. Department of Energy *Appropriate Energy Technology Small Grants Program*. (Funded for \$49,773). The demonstration phase of this project involved the creation of a model edible landscape around the UFM house and Solar Greenhouse addition funded earlier by the DOE. Edible landscaping involves the use of locally adapted, ornamental food producing plants to produce food close to where it is consumed while reducing building energy use by controlling, on a seasonally appropriate basis, the renewable energies of sun, wind and light.
- The second phase of the project was an education program concerned with the creation of a more sustainable food system. Courses were taught by staff, KSU faculty, UFM Appropriate Technology Program staff and local residents.
- Project Outcomes*, included: 1) dozens of *UFM classes* on organic farming and edible landscaping; 2) a traveling **slide show on edible landscaping** and the UFM demonstration landscape; 3) a *self-guided tour booklet* of the UFM demonstration landscape; 4) a 43 page booklet on *Edible Landscaping in Kansas*; 5) a regional *newsletter*, *Seeds for a Sustainable Food System*; 6) a regional *conference*; 7) The *Flint Hills Breadbasket* (a cooperative effort with project staff supplying the labor to build shelves and operate the facility until outside funding became available).
- 1981 G. Coates and B. Snead, Co-Directors, *The Green Thumb Community Solar Greenhouse Training Workshop*. A regional workshop held at UFM . Contract funded by the National Farmers' Union Green Thumb Program, U.S. Department of Labor (\$3,800) Program included the construction by participants of an attached solar greenhouse at Carlson Plaza, a rent subsidized apartment building for the elderly in Manhattan.
- 1979-80 Project Director, *Solar Greenhouse Addition for the University for Man (UFM) Appropriate Technology Program*, U. S. Department of Energy *Appropriate Energy Technology Small Grants Program*. (Funded for \$47,500). This 1000 sq. ft. passive solar multi-purpose facility provides a highly visible, publicly

accessible demonstration of low cost, regionally appropriate ways to use on-site flow of renewable solar energy for water and space heating, cooling daylighting and year round organic food production. Water conservation, a key issue in Kansas and the Great Plains, was demonstrated by a variety of means including the use, for the first five years, of a composting waterless toilet. The addition includes: 1) a community solar greenhouse (used for many years by elderly community gardeners and clients of the Big Lakes Developmental Workshop for year-round food production; 2) a community wood working shop and tool lending library; 3) an appropriate technology resource library; 4) a kitchenette and classroom space.

Project Outcomes. Since 1980 the UFM Solar Greenhouse Addition has been operated as a demonstration of how to design a building that is capable of being entirely heated and cooled by passive solar means while producing a significant proportion of a family's needs for fresh vegetables as well as bedding plants for summer gardens. Many thousands of visitors have toured this facility over the years including KSU students, Manhattan and Kansas residents and visitors from around the nation and from abroad.

- 1980 Project director, ***Equipment and Furnishings for the UFM Solar Greenhouse Addition***, funded by the *Clearinghouse for Community Based Free Standing Educational Institutions* (\$2500).
- 1980 Project director, ***UFM Solar Greenhouse Addition Furnishings and Handicapped Accessible Landscaping***. Funding by the City of Manhattan, *Federal Revenue Sharing* program for (\$11,500).
- 1980 Faculty Advisor to Doug Walter (architecture student intern), ***National Science Foundation Public Service Science Intern Program***. One of nine positions funded nationally for (\$3,500). Doug worked as an assistant in the design of the UFM Solar Greenhouse Addition.
- 1978-80 Project Director, ***Windows: A Kit of Parts for Energy Conservation and Passive Solar Heating for Existing Homes***, a demonstration/education grant funded by the clearinghouse for Community Based Free Standing Educational Institutions (\$3,500). The UFM house was used retrofitted with a wide range of energy conserving window treatments, reducing the total building energy demand by nearly 40%. Fliers were provided for the public on each window treatment. Dozens of courses on window treatment design were offered by project staff through UFM.
- 1980 G. Coates, Project Coordinator, B. Snead, Project Director, ***Homeowners' Energy Conservation Workshops***, held in Manhattan, KS and six surrounding towns. Funded to the City of Manhattan by the Kansas Energy Office and sub-contracted to the UFM Appropriate Technology Program. (\$7,818).
- 1979-1982 Supervisor, ***Kansas Farmers Union Green Thumb Program***. A total of four

staff positions at the UFM Appropriate Technology Program were filled continuously for four years by elderly (retired) persons who received half their salaries through this Department of Labor program. Two employees helped to build the UFM Passive Solar Greenhouse Addition, one worked as a secretary and the other was in charge of the greenhouse and gardens.

1978-1981 Supervisor, *Comprehensive Employment Training Act (CETA) Employees*. A total of six Title VI and one Title II special project training grants for solar design and construction and solar greenhouse management were funded. Training related employment in the private and public sectors was obtained by all of the UFM Appropriate Technology Program trainees after the term of their CETA employment.

CONFERENCES, WORKSHOPS & EXHIBITS ORGANIZED

2011-12 *Design Proposals for a Farmers Market and Events Pavilion for Manhattan's South End District*, the master plan for which was done by Coates' fifth year thesis studio in 2010-11. An exhibition in the foyer of the Holiday Inn of models and drawings by students in my third year fall 2011 design studio. The exhibition ran for two months and has generated growing support among community leaders to actually fund and build such a facility to complete the design of the South End district.

2010-11 *A Green Master Plan for the Development of Manhattan's South End District*. An four week exhibition at City Hall, of design proposals developed by my fifth year thesis studio, *Sustainable Manhattan 2050: Visions of a Resilient Community in the Age of Peak Oil and Climate Destabilization*. This proposal attracted the interest of a local developer and was approved unanimously by the Manhattan City Commission. It is now under construction.

2007-present *Greening Greensburg: Affordable and Sustainable Home Designs*. An exhibition of drawings and large scale pull apart models by my fall fifth year design studio, held at the 547 Cultural Center in Greensburg. With a \$1200 grant from *Greensburg GreenTown*, a non-profit organization coordinating re-building efforts, the studio also produced a book of designs as well as CDs for distribution to interested citizens. The exhibition is on permanent display in this town that is slowly rebuilding after being destroyed by a devastating tornado on May 4, 2007. It now has the largest concentration of LEED buildings of any town in the United States.

2001-2002 *Affordable Housing: Reweaving the Fabric of Manhattan's Older Neighborhoods*. An exhibition of drawings and models by Coates' fall 2001 fourth year architecture design studio ran for two weeks in December 2001 and a month and a half in 2002 at the Manhattan Public Library.

1988 *The Italian Hill Town as a Model for Sustainable Community: A Summer*

- Study Program.** A *summer abroad program* organized and offered jointly by myself and Professor Richard Levine of the University of Kentucky in Todi, Italy. There were a total of twelve students, six from the Department of Architecture at Kansas State University and six from the Department of Architecture at the University of Kentucky, (May 15-July 15).
- 1988 ***Porta Alba: Progetto del Centro per una Citta Integrata***, an *exhibition* at the Bishop's Palace of student design proposals for Todi
- 1983 ***Creating a Sustainable Food System: Local and Regional Action***, held at the Manhattan Christian College, August 5-7, UFM Edible Landscape Project funded by the ***Department of Energy Small Grants Appropriate Technology Program***, Gary Coates, Project Director and conference organizer. Presentation on "Urban Agriculture and Edible Landscape Design." More than 100 attendees, including farmers, urban and rural food cooperative representatives, agriculture extension agents and academics. Keynote address by Wes Jackson, Director of the Land Institute in Salina, Kansas.
- 1982 ***The Marysville Energy Study***, an *exhibition* of work undertaken in Coates' Community/Urban Design studio at City Hall, Marysville, KS.
- 1979 ***Bioshelters: Appropriate Technology for Dwelling Design***. An exhibition of student research undertaken in Coates' advanced architecture design studio.
- 1976 ***Invitation by the Canadian government*** to present an exhibit on the design and construction of the Blueberry Hill Parent Cooperative School at "Habitat Forum" (at the non-governmental (NGO) pavilion), the ***United Nations Conference on Human Settlements***, Vancouver, British Columbia, May 28-June 11. This school, designed and built by students in my advanced community service design studio at Cornell University, was one of the world's first examples of ecologically based, resource conserving sustainable design. Many thousands of visitors viewed the multi-media exhibit and hundreds of copies of the book, ***Living Lightly on the Land: The Design of an Energy Self-Reliant Parent Cooperative School***, were sold during the United Nations conference.
- 1976 ***In Search of Symbiotic Community: Toward a Livable, Resource-Conscious Habitat, a Joint Canadian/America Symposium***. Participants included Canadian policy planners, housing experts, political scientist, neighborhood planners, local and regional intentional community members, and Cornell faculty from the Departments of City and Regional Planning, Natural Resources and Design and Environmental Analysis. Funded by the Department of Design and Environmental analysis and the Canadian government. Held on the Cornell campus, spring 1975.
- 1976 ***Living Lightly on the Land: An Exhibit of the Design of Blueberry Hill, an Energy Self-Reliant School***, Memorial Room, Willard Straight Hall, Cornell University. Exhibit included drawings and a large scale architectural model of the school designed in my multi-disciplinary spring design studio as well as

numerous renewable energy technologies, including: a Wincharger wind electricity generator; a solar food dehydrator; a bread box solar hot water heater, a methane-digester stove (we cooked four eggs), flat plate solar hot water heaters. Funded by AEGEDI, Cornell University.

- 1976 Faculty Advisor, *Alternative Energy Exposition*, for *Environmental Heritage Day*, Ithaca Commons. An exhibition and demonstration of a variety of renewable energy devices. May 1.
- 1974 Faculty Advisor, *Alternative Energy Exposition*, Arts Quad and Goldwin Smith Hall. As founding Faculty Advisor to the Cornell Alternative Energy Group, I helped to secure funding and to organize this event. Demonstrations of energy devices (e.g. a sail wing windmill, a solar refrigerator, Savonius Rotor water pumping windmill, solar flat plate collectors and so on). Workshops and lectures by Visiting leaders in the field of alternative energy field. Funding (\$3000) from the Science, Technology and Society Program, Cornell University.
- 1974 *Arts Awareness Program*, workshop organized with Dr. Franklin Becker and jointly conducted with representatives from *The Metropolitan Museum of Art*, was held at the Johnson Museum of Art, Cornell University. Participants numbered 30 and included a broad cross section of academic departments and disciplines (faculty and graduate and undergraduate students) as well as Johnson Art Museum staff. The highly successful Metropolitan Museum's Arts Insights Program for New York high school students grew out of this workshop. Funded by the Dean's Fund, College of Human Ecology, Cornell University

PROFESSIONAL CONSULTING AND DESIGN

- 2004 Designer, **Front Porch and Drought Tolerant Landscape**, Coates/Siepl-Coates Residence, Manhattan, KS.
- 2003 Designer, *Screened Back Porch/Garden Pavilion with Cistern/pool and Drought Tolerant Landscape*, Coates/Siepl-Coates Residence, Manhattan, KS. Designed as a demonstration of ecological and bioclimatic architecture this project serves as a teaching tool. All the porch additions were recognized with a **2009 Award for Excellence in Historic Preservation** given by the *Manhattan Preservation Alliance*. By invitation, the screened back porch was published in *On the Porch: Creating Your Place to Watch the World Go By (2007)*, by James M. Crisp and Sandra L. Mahoney.
- 2002 Designer, *Peace Found Farm*. A detailed program and schematic design for a multigenerational living and working community for sixty residents, Middletown, CA.
- 2000 Design and Planning Consultant to *Daryl Rantis, architect* on the design for the

- expansion of the *Mineral Hot Springs Spa*, San Luis Valley, Colorado.
- 2000 Consultant to *Büro Mosaic, architects* in Hannover, Germany on the design of a competition entry for the remodel/addition of a nursing home in Hannover. The firm won the competition and the building was completed in 2002.
- 1999 Consultant to *Gould Evans Goodman, Architects*, Kansas City, MO on the subject of ecological and sustainable design. I made a day-long series of presentations on Case Study “Green” Buildings. Succeeding visits focused on the question of how to create an in-house education system to educate architects in the firm in the theoretical and practical aspects of sustainable design.
- 1999 Design consultant to the *Minnesota Waldorf School* for the design of a new campus. I made several trips to Minneapolis to make slide illustrated public lectures on “The Architecture of Erik Asmussen” and to critique design proposals by Rafferty Rafferty Tollefson, Architects, St. Paul. Construction was completed in spring 2000.
- 1997 Ecological design consultant to *Duany Plater-Zyberk, Architects* at the *Norton Commons Charrette*, Louisville, KY. The client envisioned a mixed use, neo-traditional new town focused on the theme of ecologically and biologically healthy living. I helped to shape the vision statement and I wrote the *Green Building Standards for Site and Building Design*.
- 1994 Ecological planning and design consultant for *Daryl Rantis, Architect* and the *KSU Division of Biology* on the design of a research laboratory and staff housing cluster for the *Konza Prairie Natural Resource Area* near Manhattan, Kansas. The clients were the *Nature Conservancy* and the *Division of Biology at Kansas State University* and other consultants include the Rocky Mountain Institute and landscape architect Tim Keane. The Division of Biology still uses the drawings and models from this project for fund raising purposes.
- 1990 Ecological design and planning consultant for *Duany/Plater-Zyberk (DPZ)* in the design of the pedestrian-scaled new town of “Nance Canyon” near Chico, CA. I participated in two on-site design charrettes (in March and May). Responsibilities included town and neighborhood design as well as co-authoring the *Solar Urban Code*. My proposal for the master plan became the basis of the design developed by DPZ.
- 1983-present Consultant, *UFM Appropriate Technology Program*.
- 1978-1983 Founding Director, *UFM Appropriate Technology Program*.
- 1979-80 Designer, *UFM Passive Solar Addition*.
- 1981-83 Designer and project director, *UFM Edible Landscape Demonstration and Sustainable Food System Project*.

- 1975 Consultant on the development of *Your Space and Mine: A Behavioral Approach to Environments*, a multi-media educator resource produced by the J. C. Penney Company, Inc. Educational Relations Department. Boxed kit includes a filmstrip, cassette tape and environmental awareness exercises aimed at increasing understanding of how people affect and are affected by their physical and social environments.
- 1975 Expert participant in a two day *Planned Invention Workshop* aimed at generating new design concepts for maximizing the efficiency of planar solar collectors. Workshop organized by *Innotech, Inc.* of Norwalk Connecticut.
- 1970 Designer, *Starmer Residence*, Greensboro, North Carolina. Completed 1971.

TEACHING

COURSES TAUGHT AT KANSAS STATE UNIVERSITY

- 1977-present *Environmental Systems in Architecture I*, a required lecture/design project course covering bioclimatic architecture and passive solar heating, cooling and daylighting.
- 1977-present *Architectural Design Studios at all levels of the BArch and now the MArch curriculum*, including numerous advanced studios focusing on community service projects in Kansas and around the nation concerned with issues such as affordable housing, the creation of cooperative community and ecological design and planning.
- 1978-present Three *Theory of Design* seminar/discussion classes on: 1) *Sustainable Architecture and Ecological Design*; 2) *Architecture in the Age of Simulation*, and; 3) *The Other Tradition of Modern Architecture*

COURSES TAUGHT AT WASHINGTON UNIVERSITY

- 2001 spring *Climate and Light*, a required lecture/design recitation graduate course and an elective for undergraduates.
- 2002 spring *Climate and Light*, a required lecture/design recitation graduate course and an elective for undergraduates.
- 2002 spring *Architectural Design Studio*, a graduate design studio.

COURSES TAUGHT AT CORNELL UNIVERSITY

- 1971-76 *Introduction to Environmental Analysis*, a large introductory undergraduate lecture course. (Team-taught with two other instructors).
- 1971-76 *Residential Environments*, an advanced undergraduate/graduate seminar course.
- 1971-76 *Child Oriented Environments*, an advanced undergraduate/graduate seminar course.
- 1971-76 *Design Methods and Planning Strategies*, an advanced undergraduate/graduate design studio.

COMMUNITY SERVICE DESIGN STUDIOS

In every professional school of architecture the design studio is the course in which knowledge about design theory, history, structures, and environmental controls is integrated. While I have served as a studio instructor in Kansas State's coordinated studio courses at the second and third year levels, I have also consistently offered advanced undergraduate and graduate level studios as problem-focused, issue-based community service courses. **Taken as a whole these studio service projects constitute a sustained program of design research and education aimed at creating a more human and socially and ecologically sustainable society.**

Studio Organization

Each community service design studio that I have taught has been structured in a way that allows for the **integration of research, education and service**. Projects begin with a **research phase** involving literature searches, precedent studies, client interviews and, in many cases, original research such as observation studies and more extensive in-depth interviews. The purpose of this research is, firstly, to create a detailed knowledge-based architectural program that clarifies, for the client as well as the student designers, the aims and purposes of the client organization and how those purposes can be imaged and practically supported by buildings and landscapes. This research/programming phase can take up to a third of the semester. In the **design phase**, students are organized in such a way that the class as a whole covers every possible design alternative that is reasonable to consider. By thus mapping the field of all possibilities, the client is typically able to make an informed choice about how to proceed with the project. In every project **students prepare books documenting their research, the architectural design program and their design proposals**. In the majority of cases **exhibitions** also have been prepared.

Project Outcomes

In a number of instances, these studios have led to the construction of built works. In other instances, clients have decided to delay project implementation of building designs. Often, these studios have been the basis of articles (by myself

and my colleagues as well as students) in scholarly and professional journals. Some of the work resulting from the studios has been presented as refereed papers at national and international conferences. Regardless of the specific outcomes, however, **every project my students and I have undertaken has rendered a valuable service to the client. It is also clear that such engagement with real world projects helps students to develop valuable research and communication skills as well as the ability to understand design as a creative process of structured inquiry, artistic imagination and community service.**

2012

Design for the Abiquiu Inn Courtyard Garden, a four week project for ADS 3 Design Studio (third year). Manhattan resident Colin Noble, who is the owner of many hotels nationwide, including the Holiday Inn in Manhattan and the Abiquiu Inn in northern New Mexico, sponsored an in-class competition for the design of a walled and arcaded courtyard garden for the Abiquiu Inn. Mr. Noble envisioned this courtyard garden as the architectural and social heart of the Abiquiu Inn, a place for weddings, family re-unions, seasonal festivals and movies under the stars, as well as a flexible place for gatherings of all sorts for the residents of the surrounding rural community. He specified that it be a bioclimatically designed outdoor room that can be used year round, with its fountains, nighttime lighting and other needs for electrical power provided by the clean and renewable energy of the high desert sun. By integrating the primal elements of earth, air, fire and water the design of Mr. Noble asked that students design the Abiquiu courtyard garden to appeal to all of the senses.

Project Outcomes

To reward students for their efforts the client gave \$2100 in scholarship prize money. Mr. Noble is using the winning students design as the basis for the design of the built project, which is being developed by a New Mexico architect. To support the studio he paid direct travel costs as well as room and board for a *field trip* to Abiquiu to study the site and the regional architecture and culture.

2010-2011

A Green Master Plan for Manhattan's South End District. In late spring 2010 Mayor Bruce Sned and City Commissioner Jim Sherow put out a call to a number of faculty in the College of Architecture, Planning and Design to -20 In response to this request I decided to include this challenge as part of my year-long architectural design graduate studio which focused on the larger theme of developing a long-term plan for Manhattan that was published in a monograph entitled, *Sustainable Manhattan 2050: Visions of Resilient Community in the Age of Peak Oil and Climate Destabilization*.

The charge was to develop a politically and economically viable master plan for a mixed-use South End district that would strengthen the newly built *Flint Hills Discovery Center* and the adjoining new *Manhattan Conference Center* as well as the nearby historic downtown business district and downtown mall. In addition, I was told that I would need to find a local developer for our plan who would bring a minimum of \$15-20 million dollars of local capital to the project

and would be ready to start construction immediately upon approval by the Manhattan City Commission.

Working closely with my students on all phases of this project, including presentations to the City Commissions, we successfully met all of these requirements with a master plan for a “Green Urban District” that included: 1) two new hotels, including a long term stay hotel, to ensure that there would be sufficient quality rooms in direct eyeshot of the Conference Center and the Discovery Center to guarantee their success; **2)** a mixed-use building with locally owned retail below (including a coffee house and bakery and a high end restaurant), as well as loft housing and office space on the upper levels; **3)** the completion of the large central park with a farmers market/events pavilion; **4)** a green parking lot with permeable paving and bio-swales, solar powered lighting and electric recharging stations for plug-in electric vehicles; **5)** a walking/jogging trail through proposed native landscape gardens to be located around the perimeter of the site.

Project Outcomes

The master plan we developed (sadly with the loss of the green parking lot) is now under construction by a new corporation, *Flint Hills Square, LLC*, which was created in 2011 by two local developers specifically in order to implement the “Coates studio plan.”

As a result of this studio project, some twenty million dollars of local capital is being invested in the South End of Manhattan and the city will be able to meet its financial obligations. By fall 2013, Manhattan will have a vibrant, mixed-use district directly adjoining the historic center of town.

I am continuing to work with my students to design and implement the **Farmers Market/Events Pavilion**, which was central to our Master Plan. In fall 2011 students in my third year design studio took four weeks to make design proposals to city officials and *Flint Hills Square, LLC*. An exhibition of student work ran for a month in December 2011 and January 2012 at the Holiday Inn. I will continue my work to get this project approved by the city commission, designed by a local architect and built by a local builder.

2009 fall

The Jones Education Center (originally *The Transitions House*). This project grew out of a proposal I made to Bill Hanlon, a construction faculty member at the Flint Hills Technical College (FHTC) in Emporia, KS, that we collaborate on the design and construction of a net zero energy house, with my students providing the design and his students doing the construction. Professor Hanlon was delighted by this idea of cross-institutional collaboration. A couple of weeks later he wrote to tell me that a perfect opportunity for such an innovative project had just arisen. The USD 253 school district in Emporia, KS. was planning to build a “house” on land on the FHTC campus for use in teaching independent living skills to children (ages 16-21) in need of special care in the Emporia school district.

For my short (4+ week) instructor's choice project in my third year architecture design studio I organized an in-class competition. Working in two person teams students designed a school to look like a house; the first floor was to be used to for teaching differently abled high school students; the walk-out solar basement was to be used for offices and classrooms by FHTC students and faculty. The special needs teacher and FHTC faculty chose the winning scheme, in part because they felt that it would look to the students like an "ordinary" house, and therefore would help students to transfer the skills they would learn in it to homes in which they would later live. The FHTC faculty also liked the idea that the structure would be seen by visitors as a "home of the future."

The winning design for this 7500 sq. foot school featured many sustainable design features, including: passive solar heating and partial earth-integration; insulated concrete form walls for their strength against wind loads and energy efficiency; low-e double and triple glazed windows; an electrically powered ground source heat pump for heating and cooling; a 10 KW building integrated photovoltaic system; a solar water heating system; Solatubes to supplement windows for maximum daylighting; cross ventilation and stack ventilation for passive cooling; an air-to-air heat exchanger for ventilation; and energy efficient lighting and appliances.

I arranged for the winning team to continue developing their design for the first eight weeks of their second semester studio under the direction of Professor Todd Gabbard. I also recruited Emporia architect Dave Emig to work with the students as a critic during the initial competition stage, with the understanding that he would be the architect of record. Later, when he was doing construction documents he honored his commitment to keep the winning student design as little changed as possible.

In addition, in my further work on the project during the spring 2010 semester, I proposed that we add a community-scale wind generator to complement the solar photovoltaic system and that the entire site be developed as an educational and therapeutic organic edible landscape. I envisioned this entire project as a working demonstration of sustainable living that would serve as the center for classes taught by FHTC's highly popular *Sustainable Living Center*.

To implement this entire vision I recruited KSU's Electrical Engineering Professor Ruth Douglas Miller to work with FHTC to the Kansas "Wind for Schools Project" for a wind generator, which was funded in spring 2012 and erected on-site in August 2012. I also recruited Landscape Architecture Professor Lee Skabelund to work with his students and me to develop a site design for the edible landscape. A Landscape Architecture student is now developing that design as a thesis project. As part of her effort she will she will work with me and FHTC to write grants for funding the implementation of this model landscape.

Because this proposed structure was to be a national model for special needs education, sustainable building and landscape design, multi-disciplinary and cross-institutional collaboration as well as community service education, I

worked with FHTC to write a successful grant proposal for \$350,000 to the Jones Education Foundation for additional funds to help build the school. The project has been getting significant local, regional and national attention from its inception.

Project Outcomes.

The building design was approved and construction began in fall 2010. In fall 2013 the building was opened for classes. A master plan for the edible landscape designed by KSU Landscape Architecture students will form the basis for future funding proposals. The wind generator, funded by a grant from the state of Kansas, was installed in August 2012. Funding is being sought for the photovoltaic system.

2008

Affordable and Sustainable Home Designs for Greensburg, KS. On May 4, 2007 an EF5 tornado, nearly two miles wide, with winds of up to 205 miles per hour, cut a swath through Greensburg, KS, leveling 95% of the town's buildings and leaving most of the rest of them uninhabitable. Some fourteen hundred people were left homeless. Miraculously only twelve people were killed by this catastrophic tornado.

With great courage and vision, as well as full support from Kansas Governor Kathleen Sebelius and various agencies of the Federal government, Greensburg decided soon after the storm to rebuild itself as a model sustainable community for the twenty-first century. Toward that end, the town accepted a comprehensive plan prepared by the environmentally-oriented architecture and planning firm of BNIM in Kansas City as the basis for reconstruction. At present Greensburg is on track to have the greatest concentration of LEED certified buildings of any town in America.

Perhaps the most daunting task facing Greensburg, however, is building affordable, beautiful and sustainable housing. During fall semester 2008 twelve graduate students enrolled in my *Architecture Design Studio 7* joined forces with *Greensburg GreenTown*, a non-profit agency dedicated to rebuilding the town sustainably, to take on this particular challenge. Working with an *Advisory Board* comprised of town officials, area residents, members of *Greensburg Greentown*, and representatives of the business community, Kansas State students did background research and developed eight dwelling designs for 25 foot, 50 foot and 75 foot lots over the course of the entire semester.

Each design is a superinsulated passive solar heated, naturally ventilated structure with a ground source heat pump for heating and cooling powered by a building integrated Photovoltaic system. Energy efficient lights and appliances were used in all cases.

Project Outcomes

Students in Professor Coates' fall graduate studio produced three major project outcomes : 1) A book, ***Greening Greensburg: Affordable and Sustainable Home Designs***, which presents a selection of more than energy efficient,

passively solar heated and cooled dwelling designs that are specifically adapted to the western Kansas continental temperate climate as well as the needs of the citizens of Greensburg, and; 2) CDs containing a digital version of the book as well as additional drawings and energy performance data for each design, and; 3) An exhibition presented at the 547 Arts Building from Sunday, December 14 to Sunday December 21, 2008 that is comprised of drawings and detailed three dimensional models of each design; 4) a permanent exhibition of selected designs to serve as inspiration for Greensburg residents in their efforts to rebuild.

2002 fall

The Manenberg Skills Training Center, Cape Town, South Africa. (The “Giving Back Project”) Keith Mehner, one of my former students who graduated in 1986, contacted me in the spring of 2002 about the possibility of students in my fall fourth year design studio designing a skills training center for one of the townships in Cape Town. As a way of giving something back to the poorest residents of Cape Town, Keith also made the extraordinary commitment of funding the construction of the new facility.

Mr. Mehner visited the studio to provide design assistance and to select a student intern to work for nine months with his architecture and planning office in Cape Town. One of the tasks of that intern was to continue working on the design of the Manenberg Skills Training Center Skills Training Center.

Project Outcomes.

My students and I produced a book summarizing all the design proposals produced by the studio. A jury made up of faculty and professionals chose the prize winners for the competition. The intern completed her internship in South Africa. At present, because of political issues, the project has been put on hold. It is everyone’s hope that this pilot project will eventually go ahead and lead to an ongoing relationship between the Department of Architecture, the architectural office of Keith Mehner and the Department of Community Development of Cape Town, South Africa.

2002 fall

Backhouses for Manhattan’s Older Neighborhoods. Building on work completed in the fall 2001 community service design studio on affordable housing for Manhattan, students in my fall fourth year design studio took some ten weeks to develop detailed proposals for backhouses for Manhattan’s older neighborhoods. One half of the class worked with area residents on custom designs for a range of unit types, including an elder cottage, an apartment above an existing two car garage, a new two car garage, a studio apartment above a new workshop, and a home office above an existing one car garage. Students in the other half of the class developed matrix of design alternatives ranging from one and two person elder cottages to two to three person dwelling units with tow car garages.

Project Outcomes.

City staff and neighborhood activists as well as the clients for the custom designs reviewed the final student proposals, which were comprised of large scale drawings and very detailed, dollhouse sized basswood models. Neighborhood

leaders are proposing to add an amendment to the TNO guidelines that would allow the construction of 600 sq. ft. or less backhouses, using guidelines developed by the students in R-1 as well as r-2 and RM zoning districts. For R-1 zones backhouses would only be allowed if the property deed is amended to specify that the front house or the backhouse could only be rented if the owner is living on the property.

In 2007 I directed work with a graduate student, Harini Sarangapani, on a thesis That was done with a real client for *The Design of a Zero-Energy Garage Apartment Using Regionally Produced Green Building Materials*. The client intends to build such a backhouse as a test of the idea. We hope to pursue this project with the idea of introducing the backhouse option into the city's zoning options as part of a revised TNO.

2001 fall

Affordable Housing: A Community Design Service Studio. At the request of Mayor Bruce Sned, fourth year architecture students under my direction undertook a study of how to provide affordable owner occupied and rental housing while preserving and enhancing the architectural character and livability of existing older neighborhoods in Manhattan. Working closely with an *Advisory Board* comprised of neighborhood leaders, builder and city staff, students analyzed the architectural and urban design patterns of four architectural distinct older neighborhoods. On the basis of this study they developed an *Urban Visual Code* and *Architectural Guidelines* for urban infill housing. Using these guidelines students then designed passively solar heated and naturally cooled dwellings for each of the older neighborhoods. Using a pattern of owner-occupied Fronthouses with basement apartments and/or/backhouses that could be rented to students or young families, students demonstrated that four bedroom dwellings could be provided for families making as little as \$25,000 per year. It was also clearly shown that dwellings designed to meet the urban and architectural guidelines produced structures that protected and even enhanced the character of existing neighborhoods.

Project Outcomes.

Students summarized the results of their research and design efforts in an *exhibit* of drawings and detailed basswood models, which ran for several weeks at City Hall and for nearly two months at the Manhattan Public Library. In addition students and I worked with students to produce a book called, ***Affordable Housing: Reweaving the Fabric of Existing Neighborhoods***, which was distributed to City Commissioners, area builders and developers and neighborhood leaders.

Using the code they developed over the course of the semester with the students, the city of Manhattan passed a **Traditional Neighborhood Overlay District (TNO)** code to guarantee that future infill development is compatible with the character of existing older neighborhoods. As part of this process major portions of older Manhattan were down zoned to R-1 while at the same time designating a part of the city closest to the KSU campus for up zoning. Once again, using guidelines developed by the studio, the City Commission passed a **Multi-Family**

Overlay (M-FRO) District for this area in order to ensure that new development will be compatible with existing neighborhoods. In 2005 the City Commission approved the adoption of the TNO and the M-FRO along with the downzoning of nearly all the older neighborhoods.

In spring of 2002 Coates was awarded one of two national *American Institute of Architects (AIA) Education Honor Awards* for this project. It was described as exemplifying the highest standards of professionalism and commended as a prime example of an approach to design education that helps architecture students to learn important academic and professional skills while helping to solve real community design problems.

1997

Konza Prairie Research Community. This project was undertaken over two semesters by fifth year architecture students under my direction. In the fall course on project programming (ADS 8) students worked with faculty from the Division of Biology to develop a detailed architectural program for a nine thousand square foot research laboratory and conference center as well as four units on on-site housing for visiting research scientists and graduate students from around the world who will visit this unique biological resource for long term ecological research. At the request of the client, students developed individual thesis designs in the spring semester that would be cutting edge demonstrations of resource efficient, ecologically sustainable and biologically healthy living and working environments.

1995

The Tallgrass Prairie National National Preserve, Chase County, Kansas. Funded by *The National Park Trust (for \$5000)* and with the full support and participation of the National Park Service and the staff of the Z-Bar Ranch, students enrolled in a fourth year design studio developed a detailed architectural program and fifteen different design proposals for a visitors center and park service housing. The aim was to demonstrate how the beauty of the tallgrass prairie could be celebrated and preserved as a part of the National Park System. All designs made extensive use of environmentally and biologically appropriate design strategies to provide buildings that would be entirely heated and cooled and daylighted using on-site energy flows. In addition to the architectural proposals students also developed alternative scenarios for Preserve management.

Project outcomes included: 1) A detailed vision statement and architectural program published in 11" x 17" book format; 2) Fifteen different architectural proposals covering every possible site on the Z-Bar Ranch for a visitors center. The professionalism and high quality of the student work was commended by the **Dennis P. Galvin, Associate Director of Professional Services of the National Park Service.** In a letter dated May 6 he stated that "*National Park Service planners in the Omaha Field Area Office believe that the work done by your students is outstanding and has the potential to streamline by 2 to 3 years the time typically needed for park planning*". Copies of the two books produced by the students were presented to Senators Kassebaum and Dole and were used as part of the argument for the admission of the Z-Bar Ranch into the National park

system as the only example of the tallgrass prairie ecosystem. ***Our collaborators at the National Park Service and the National Park Trust indicated that our work made a timely and important contribution to the decision of the Congress to create this new national park monument.***

In 2012, a *Visitors Center* designed by the Kansas City firm of BNIM, was built and is now open for guests.

1994-spring

The Konza Prairie Research Center. At the request of Jim Reichman, Coates directed a fourth year architecture studio in the development of a design program for an on-site research laboratory and researcher housing. This work contributed to the commitment of the Division of Biology to undertake a long-term development plan for the Konza Prairie and led to the commissioning of a professional study using National Science Foundation funding during the summer of 1994.

1991

Design Proposals for Cooperative Community, Middletown, CA. This project was the focus of two design studios: *1) A Community/Urban Design Graduate Studio* in the spring term, and;

2) A fourth year advanced architecture design studio in the spring. Based on indications given by their spiritual teacher Adi Da Samraj, practitioners of the Way of the Heart, or Adidam, requested assistance in programming and designing a cooperative community for about one hundred persons. The client provided \$2,880 to help defray project expenses to students. The program included a k-12 school, a variety of housing arrangements, meditation halls and spaces for a number of guilds (e.g. sacred dance, jewelry, textile art, design arts, and so on). The community asked that the student designs make maximum use of passive solar and renewable energy sources as well as ecologically based and regenerative building technologies, such as biological waste treatment ponds and constructed wetlands.

A major portion of the first semester was spent developing a detailed design program, based on interviews with community representatives and a systematic review of literature on topics such as: the architecture and planning principles of American utopian societies; ecological and regenerative design technologies; the regional architecture of northern California, and; the beliefs, lifeways and spiritual disciplines of practitioners of Adidam. Schematic designs were presented by the students to the community during a field trip to the site during spring break. I also led the students on a tour of significant architectural precedents in the San Francisco area as part of the field trip. Final designs for the spring semester were presented to the community in May, 1991.

The second semester built upon the criticisms and suggestions of the first semester's work. Once again, the client provided funding to help defray project costs to students. Representatives of the community visited Manhattan on two occasions to answer student questions and to participate in interim design reviews.

Project Outcomes. Students in the spring semester produced a slide show and five 11" x 17" books summarizing their work. One book described the architectural program and four others presented alternative visions of cooperative community. The work of the second (fall) semester was presented in the form of a slide show, large-scale drawings and architectural models, which were shipped at the client's expense to California.

1990

Community Design and Neighborhood Revitalization. This project was undertaken over the course of two semesters at the request of *The Twelfth Street Heritage Neighborhood Development Corporation, of Kansas City, MO*, which provided \$5000 to help support expenses for the multi-disciplinary spring studio and \$2,100 to help support the fall semester architecture studio. During the spring semester students and faculty from three departments (Architecture, Landscape Architecture, and Interior Architecture) worked together to develop a master plan for the neighborhood. In the fall, students in my fourth year architecture studio developed more detailed building design proposals that had been identified in the spring studio.

Project Outcomes. There were some half dozen building designs proposed for the neighborhood. These proposals were presented to city officials and neighborhood leaders and residents at the headquarters of the Kansas City Design Center in the form of a slide show. A month long exhibit of drawings and models was also hung at the Center.

1988-spring

Ecologically Sustainable Dwelling Designs for Seaside, Florida. An advanced undergraduate and graduate Community/Urban Design Studio undertaken in spring semester. Seaside is an internationally renowned, award winning new urbanist town designed by *Duany Plater-Zyberk, Inc. (DPZ)*. In January developer Robert Davis asked Coates to evaluate the town plan and building code from the point of view of sustainable design and to design prototype dwellings that would make maximum use of naturally occurring energies for heating, cooling and daylighting.

I led students on a *field trip* to study architectural precedents in New Orleans and the panhandle of Florida. While visiting Seaside, students interviewed Davis and conducted a detailed evaluation of the Seaside code and master plan based on criteria they had developed for social, economic and ecological sustainability. Small modifications in the Seaside code were proposed and students then designed ten dwellings that could be entirely heated and cooled by passive solar means while fitting the community's architectural standards. This work was undertaken with the direct participation of The *Florida Solar Energy Center* and the student designs are still considered to be a model for passive solar energy design for hot-humid climates.

Project outcomes included: 1) a book of house plans that is still kept at the Seaside development office as a design resource for families buying lots and

developing residences; 2) a shift in the design philosophy of DPZ regarding the environmental aspects of the movement for a New Urbanism; 3) an invited presentation at the national conference on *Visions of Quality Development* Conference held in Winter park, Florida in 1989, sponsored by the *Florida Solar Energy Center*.

1988-fall

The Medicine Lodge Project. *The Medicine Lodge Community Health Foundation* contacted the Department of Architecture in Spring 1988 with a request for a design and feasibility study for a civic auditorium and related facilities that would support a sense of community health and well-being. Students in a fourth year fall studio worked closely with the client to develop a comprehensive plan for community development, including a proposal to convert the National Guard Armory into a Health and Wellness Center. Students made several design presentations to the citizens of Medicine Lodge. The Foundation provided \$850 to help defray costs for travel and expenses.

1987 fall

Design Alternatives for the Riley County Seniors Service Center. During fall semester students in a fourth year design studio directed by Professor Coates worked closely with the *Seniors Center Building Expansion Committee* to study possibilities for design development aimed at meeting the present and future needs of seniors in Manhattan and Riley County. Charged with answering five specific questions posed by the Manhattan City Commission at their September meeting, students: 1) conducted observation research and extensive interviews with elders and Seniors Center staff about use patterns and facilities needs, culminating in four detailed reports; 2) visited and assessed the strengths and weaknesses of programs and facilities of seniors centers in Lawrence, Emporia, and Salina; 3) documented and evaluated published building case studies of model seniors centers from around the country, and; 4) on the basis of all this research, developed a detailed architectural program for expanded facilities. In the design phase students developed alternatives involving the expansion of the existing Seniors Service Center and retrofit of the former J.C. Penny building as a new, greatly enlarged *facility for seniors*. *Students made a public presentation of their findings* and designs to the Manhattan City Commission.

Project Outcomes

Building on the work of the students, Karen Davis of the Manhattan *Community Development Department*, wrote a grant proposal for Federal funding to expand the existing facility. **The result is the present Seniors Service Center.** *Coates and his students published an article on this project in OZ*, the award winning student publication of the College of Architecture, Planning and Design.

1986-spring

Centerpoint: The Design of an Ecumenical Spiritual Retreat Center in Prescott, Arizona. I was asked by David Keller and Bazy Tankersley of *Bishop's School of Ministry, Episcopal Diocese of Arizona* to involve my students in the design of an ecumenical retreat center. They specified that the project should have a calm and contemplative mood and that it be entirely self-reliant with regard to energy needs. Because of the aridity of the climate and the remoteness of the site they also insisted that the buildings and landscape be water conserving.

This project was undertaken with fourth year architecture students over the course of two semesters. In the spring semester students visited the site and interviewed members of the building committee as well as staff of the proposed center in order to develop an architectural program. Working in teams, students then developed a number of different design alternatives, which were presented to the client in the form of drawings. Four students and I presented this work to the client in August of 1986.

Work on this project continued in the fall semester for a new site in the Prescott area. In addition two students from the spring studio continued with this project as the basis for their fifth year design theses. The client provided funding (\$1000) to cover the costs of travel and materials for drawings and models.

1985 fall

Resettling Duluth: Creating an Energy Self-Reliant Community, I was invited by the Duluth Department of Community Development to involve students in my fall semester fifth year studio in the re-design of existing Duluth neighborhoods as well as waterfront industrial areas. The aim was to create a more finely grained mixed-use pattern of development throughout the city. In order to help defray costs for a field trip to Duluth as well as the costs of materials and supplies, the project was funded by the Duluth Department of Community Development (\$1000)

Project Outcomes: Working closely with neighborhood leaders and city staff, students came up with design proposals for several neighborhoods as well as the waterfront. The studio inspired and informed area residents to continue developing a comprehensive vision of Duluth's future that was published in 1986 under the title ***Resettling Duluth: A Book by and for the People of the Arrowhead Region***. (This book was inspired by my book ***Resettling America: Energy, Ecology and Community***, 1981) One student continued working on the design of a Duluth neighborhood as his professional design thesis in 1986.

1985 spring

The Kansas City Community Garden Center. At the request of the Kansas City Community Garden Association, I was asked to develop proposals for a new headquarters. The client conceived of this new center as a demonstration of ecologically sustainable architectural design and a model and an organic teaching garden for Kansas City gardeners. Based on frequent site visits and interviews with staff and area gardeners, students developed an architectural program. Using this document, they then worked in teams to offer three different building and site designs. These alternatives were narrowed down to one on which the whole class worked during the final weeks of the semester.

Project Outcomes

The final design proposal, which took the form of a detailed large scale basswood model as well as a complete set of presentation drawings, was presented to the staff and more than one hundred Kansas City gardeners.

1984-1985

Designing and Building the Sustainable Farmstead and Staff Housing at Meadowcreek. Based on the success of the spring 1984 studio, David Orr invited two teams of two students each to program (using the pattern language approach) and design two buildings, funding for which had been partly the result of work undertaken the previous semester. The agreement was that these students would be hired after graduation in spring 1985 to build their thesis designs. With the help of two colleagues who formed with me a thesis committee for these projects, I directed the work of these students from initial design to construction documents and cost estimates. Both buildings were designed to be entirely heated and cooled by natural on-site renewable energies. Heating was provided by passive solar energy from direct gain windows and integral solar greenhouses (with backup heat provided by an airtight wood stove using on-site, renewably harvested wood). Cooling was provided by partially earth-integrated construction, internal thermal mass cooled by nighttime flush ventilation and cross and stack ventilation. Construction material came primarily from sources within a thirty-mile radius of the site. Only biologically healthy materials and finishes were used and human and organic wastes were turned into garden compost with aerobic composting toilets. Both buildings were designed so that in the future photovoltaic cells mounted on the roof-tops could provide all electricity needs.

Project Outcomes

This demonstration project was widely publicized, both in this country and abroad: 1) Students presented their work in a refereed presentation at the ***Tenth National Passive Solar Energy Conference***; 2) Coates made a presentation at the same conference on the use of the pattern language for design, planning and education at meadow creek; 3) Students published an article on the Sustainable Farmstead in ***Fine Homebuilding*** magazine; 4) I published an article on the Meadowcreek project in a German journal focused on sustainable design and lectured about the project at universities in the U.S. and Germany.

1984 spring

The Use of a Pattern Language Approach to Planning and Design at the Meadowcreek Project, Fox, Arkansas. Drawing students from around the country for up to one year at a time, *The Meadowcreek Project* was a center for environmental education and research that balanced intellectual learning with practical education in the areas of sustainable forestry and agriculture, wood and metalworking and land conservation. At the request of Dr. David Orr, Professor David Seamon and I were asked to work with Meadowcreek staff and students to create a means for master planning and development that would be in harmony with their ecological and educational goals. Using architect Christopher Alexander's "pattern language" approach students developed a pattern language specifically tailored to the needs of Meadowcreek and then used that language to design a variety of buildings and outdoor spaces.

Project Outcomes

1) a use tested pattern language for Meadowcreek; 2) specific design proposals for housing and the micro-industrial area. Coates and Seamon also authored a ***book chapter*** and ***several articles***, which were presented and

published in refereed conference proceedings, describing the pedagogical and methodological implications of research and design undertaken in this studio.

1983

Steps Toward Energy Independence: Conservation and Solar Retrofits of Existing Housing in Marysville, KS. During the spring semester students enrolled in a third year undergraduate architectural design studio completed detailed studies of conservation/solar retrofits of a representative sample of all typical Marysville dwelling types. In each such study students worked closely with a particular house and client in Marysville to not only increase energy efficiency and solar energy use but to meet other design and lifestyle needs of selected families. It was found that it would be possible to exceed the reduced energy needs projected in the fall semester's *Marysville Energy Study*, while at the same time improving the livability and quality of life of area residents.

Project outcomes included: 1) An exhibit in Marysville and Manhattan (at the UFM house) of drawings and models of the retrofit proposals; 2) Two Masters thesis projects, one in community and Regional Planning (Steve Ernst) and one in Architecture (Jim Dubois) that further developed both the level of detail of the fall semester's energy study and the architectural and urban design aspects of a transformed, energy self-reliant Marysville community; 3) Further articles by Coates and his graduate student collaborators in a book (***Families and the Energy Transition***) and presentations at regional and national conferences.

This project remains the most comprehensive energy study to have been completed for any community in the nation. It is a significant demonstration of both energy analysis methodologies and design techniques aimed at greater community self-reliance.

1982

The Marysville Energy Project. This project, undertaken with advanced undergraduate and graduate students enrolled in the fall semester Community/Urban Design Studio, was focused on the *completion of a comprehensive community energy study with the following goals:* 1) To determine exactly how much energy of what kinds is currently used by the Marysville community; 2) To determine how much energy could be saved in all energy use sectors using current off-the-shelf technologies and design practices, and; 3) To develop a phased proposal for moving, sector by sector, toward the provision of all of the town's reduced energy needs using only locally available renewable sources such as passive solar heating and wind powered electricity generation.

Project Outcomes for the fall semester included: 1) A detailed report on current community energy use and the economic benefits of greater reliance on local and renewable energy sources; 2) A public presentation to the citizens of Marysville and an exhibit in Marysville as well as Manhattan; 3) Extensive newspaper coverage of the study in newspapers in Manhattan, Topeka and Wichita; 4) An article in *Forbes* magazine summarizing the energy and economic benefits of greater local energy independence in Marysville; 5) Presentation of this study by Coates at various professional conferences in the region and across the nation.

1977 ***The UFM Passive Solar Demonstration Center.*** Working closely with UFM staff, students enrolled in a fifth year studio in the fall semester developed design proposals for an addition to the UFM house on Manhattan Avenue. Proposals included the outline of an appropriate technology center that would function as an educational resource for Manhattan and Kansas. ***Immediate Project outcomes included:*** 1) a book summarizing student design proposals, and; 2) a month-long public exhibit at UFM on *Ecologically Sustainable Appropriate Technologies for Building Design*; 3) the creation of the *UFM Appropriate Technology Program* directed by Professor Coates. (See the *UFM Appropriate Technology Program* in the *Grants and Contracts* section).

1975-76 ***The Blueberry Hill parent Cooperative School: Sustainable Design for an Ecologically Based Approach to Education.*** The focus of this multidisciplinary design studio taught by Coates at Cornell University during the fall and spring semesters was the programming, design, fund raising for and construction of the nation's first entirely renewable energy powered educational institution. Students worked closely with the parents and the children not only to develop a building design but also, with the help of students in natural resources and agronomy, but also to create an experientially based curriculum centered on the study and management of the biological resources of the 126 acre farm where the school was situated. My students and I not only ***developed the design for retrofitting an existing barn*** (with super-insulation, a passive solar greenhouse and direct gain solar gain solar windows, daylighting, composting toilet, wind electric generator and so on) but ***we also raised money for building materials, got manufacturers to donate key items (such as the wind generator and the composting toilets) and helped the parents and children with construction.***

This pioneering project attracted so much media attention that the Canadian government invited me to present the project as a two-week long exhibit at the ***United Nations Conference on Human Settlements*** in June 1976. Hundreds of books (***Living Lightly on the Land: The Design of an Energy Self-Reliant School***) produced by the studio were sold to visitors from every continent who stopped by the exhibit.

MS ARCH GRADUATE STUDENT THESES

Major Advisor

- 2011 Tulu Toro, *Restorative Design: Toward Environmental Restoration*, a non-thesis MSArch report.
- 2008 Trishna R. Pradhan, *Zero-Energy Infill Housing: Front and Back House Options for Manhattan, KS* (electronic resource), Kansas State University Libraries, Manhattan, KS.
- 2008 Harini Sarangapani, *Zero Energy Garage Apartment* (electronic resource), 2008 Kansas State University Libraries, Manhattan, KS.

- 2006 Nibedita Das, *Courtyard Housing in Kolkata, India: A Bioclimatic, Typological and Socio-Cultural Analysis (electronic resource)*, Kansas State University Library, Manhattan, KS.
- 2002 Yoko Kanai, Hiroshi Naito: *A study of the Sea-Folk Museum and the Makino Museum of Plants and People.*
- 2000 Madhuri Rao, *Laurie Baker and the Other Tradition of Modern Architecture*
- 1998 Rajratna Uttamrao Jadhav, *Eastern Regionalism and Indian Identity: A Case Study of Charles Correa's 'Inter-University Center for Astronomy and Astrophysics' & Raj Rewal's Central Institute of Educational Technology'.* **Winner of the Journal of The Indian Institute of Architects Anchor Award, "for excellence on Architecture for Research.**
- 1997 Deepak Gupta, *The Metaphysics of the Mandala in Ancient Hindu Architecture: Spatial Order and Ritual in the City of Madurai..*
- 1995 Christine Hammer, *A Critical Evaluation of the AIA's Environmental Resource Guide: A Case Study of the Use of Technical Information in Design.*
- 1994 Mahesh Senagala (now Mahesh Daas), *A Return to the City? An Investigative Pilgrimage to Banaras.*
- 1994 Anujay S. Vootla, *Aurosthal: India, an architectural design thesis.*
- 1990 Vinod Chaturvedi, Computer Program for Sizing and Analyzing Fixed Shading Devices (SHADE)
- Minor Advisor**
- 2011 Amit Bajracharya, *Handmade Houses for Ex-Kamaiyas: A Pattern Language for for Production of Self-Help Housing in Western Tarai Regions Of Nepal.*
- 2011 Juan Orozco, *Interpreting Two Houses by Luis Barragan Drawing on Kenneth Frampton's Critical Regionalism and William C. Curtis' Authentic Regionalism.*
- 2010 Jacob Sowers, *A Phenomenology of Place Identity for wonder Valley, California: Homesteaders, Dystopics, and Utopics.* Doctoral dissertation in the Department of Geography, KSU.
- 2010 Kalyan Chakraborty, *Ecologically Considered Design of Operational Systems for High-Rise Buildings in Kolkata,* Kansas State University.
- 2009 Lance Klein, *A Phenomenological Interpretation of Biomicry and Its Potential Value for Sustainable Design,* Electronic resource, Kansas State University Libraries, Manhattan, KS.

- 2009 Avinash Gautam, *Climate Responsive Vernacular Architecture: Jharkhand, India* (electronic resource), Kansas State University Libraries.
- 2004 Rahel Erko, *Saarinen's TWA Terminal and McKim's Pennsylvania Station as Interpreted Through Thiis-Evensen's Theory of Architectural Archetypes.*
- 2003 Luis Quiros, *The Loss of the Sacred in the Traditional Costa Rican Bribri Conic House.*
- 2002 Srinivas Reddy Vatte, *The Role of Orientation in the Practical Application of Vastu Shastra in Indian Residential Designs*
- 2002 Enku Assefa, *Interpreting Frank Lloyd Wright's Falling Water and Alvar Aalto's Villa Mairea Using Karsten Harries' Natural Symbols and Thomas Thiis-Evensen' Architectural Archetypes.*
- 2000 Priya Madabhusiraman, *Place Reading of a Commercial Setting: A Qualitative, Descriptive Study of the State Street Area, Ann Arbor, Michigan*
- 2000 Wataru Minezaki, *The New Urbanism and Society: A Critique of the New Urbanism Movement through a Comparative Analysis of Two Developments, Kentlands and Laguna West.*
- 1998 Ganapathy Nagasubramaniam, *Housing for the Poor: A Comparative Study of Hassan Fathy's Housing Experiment at New Gourn, Egypt and Christopher Alexander's Housing Experiment at Mexicali, Mexico.*
- 1997 Sarita Appachu, *Children's Experience with Place: A Phenomenological Study.*
- 1997 Ruchin Kansal, *The Contemporary Public Place: Normative and Spatial Implications of cyberspace on the Architecture of the Public Realm.*
- 1997 Imtiaz Asif, *A Phenomenological Interpretation of Islamic Religious Architecture Based on Thiis-Evensen's Archetypes in Architecture,*
- 1994 Mustaq H. Moosa, *Light as the Manifestation of the Concept of Unity in the Sacred Built form of Islam: A Study with Reference to the Alhambra, Granada, Spain.*
- 1994 Rakesh Singh Kushwah, Louis I. Kahn and the phenomenology of architecture : an interpretation of the Kimbell Art Museum in Fort Worth, Texas, using Thomas Thiis-Evensen's theory of architectural archetypes / by Rakesh Singh Kushwah
- 1992 Sudhir V. Patel, *Sacred Geometry in Chess and the Design of the Hindu Temple.*

1992 Rakesh Singh Kushwah, *Louis I. Kahn and a Phenomenology of Architecture: An Interpretation of the Kimbell Art Museum in Fort Worth, Texas and the Yale University Art Gallery in New Haven, Connecticut Using Thiis-Evensen's Architectural Archetypes.*

STUDENT AWARDS AND HONORS

Undergraduate Students

- 2007 Eric J. Abeln, "Tallgrass Prairie Retreat Center", winner of the Heintzelman Prize for the Best B.Arch Design Thesis.
- 2005 Philip Korthanke, Honorable Mention, **Sixth Annual Bowman Award Scholarship** for his design of the Konza Center in my fall 2005 ADS 3 design studio.
- 2004 Christopher Patneau, **Honor Award** (the highest prize given) **Fifth Annual Bowman Award Scholarship** for his design of the Manhattan Printing Press Addition in my fall 2004 ADS 3 design studio.
- 2000 Chris Sutterer, awarded **First Prize** in the **First Annual Bowman Award Scholarship** for his design for the Konza Prairie Visitors Center completed in my ADS 3 fall 1999 design studio.
- 1998 Anders Henningsson, **Honorable Mention** for the **Heintzelman Prize** for the top thesis design project for his design in my ADS 8 studio on "The Konza Prairie Research Center".
- 1998 Anders Henningsson, **SOM Travelling Fellowship** for a study of Nordic and Mediterranean light.
- 1996 Jeffrey Shawhan, **AIA Kansas Merit Award/Unbuilt Student Architecture Award**, for his proposal for the *Tallgrass Prairie Preserve Visitors Center*, completed as part of my fall 1995 community based design studio funded by the National Park Trust.
- 1995 Nadeem Kafity, **First Prize** in the **Seventh Bayer Stone Competition** for his design for *The Tallgrass Prairie National Preserve Visitors Center*, completed as part of my fall 1995 community-based design studio funded by The National Park Trust.
- 1995 Mark Latham, **Honorable Mention, Seventh Bayer Stone Competition** for his design of a *Visitors Center for the Tallgrass Prairie National Preserve.*
- 1993 Scott Kanaga, Jonathan Rae, Kenny Sheehan, Rick Wilson that won **First Place** in the **Awakening Responsibility: A Call for Creative and Visionary Projects, the AIA Colorado National Sustainable Design Competition**, which was open

to design professionals as well as all students in North American Schools of Architecture. Juror Peter Calthorpe described the Kansas State proposal for a “Sustainable Community for Flood Victims” as “*one of the most sophisticated pieces of work I’ve seen in many years, both interns of ideas and presentation*”. He concluded, in a judgment shared by the rest of the distinguished jury, that the KSU project was clearly “*the most impressive project that we saw in this competition.*” I was one of several Faculty Advisors, with primary responsibility for project ideas and content.

- 1987 Steve Downen, Stan Koehn, Doug Pierce and Daryl Rantis, “Homework in the Ozarks: Four Architecture Students Design and Build a Solar Farmhouse”, ***Fine Homebuilding***, February/March 1987, pp. 70-75. (This paper describes work undertaken under my direction in undergraduate thesis projects)
- 1985 Steven Downen, Stanley Koehn, Douglas Pierce, Daryl Rantis, “Model Sustainable Farmstead and Staff Housing at the Meadowcreek Project, Fox, Arkansas, paper presented at the Tenth National Passive Solar Conference, Raleigh, North Carolina. Paper published in, A. Wilson and W. Glennie (eds.), ***Proceedings of the Tenth National Passive Solar Conference***, American Solar Energy Society, Inc., Vol. 10, 1985. (This paper describes work undertaken under my direction in a design studio and undergraduate thesis design projects).
- 1983 Students in my third year design studio, ***First Prize*** and ***Honorable Mention*** in the ***Kansas Showcase of Solar Homes National Passive Solar Design Competition***.

MS Arch Graduate Students

- 2006 Nibedita Das, awarded the ***John Helm Award*** for the Outstanding Graduate Thesis in 2006. (*Courtyard Housing in Kolkata, India: A Bioclimatic, Typological and Socio-Cultural Analysis*). I was her Major Advisor.
- 2001 Madhuri M. Rao, “Laurie Baker: A Phenomenological Probe”, in ***Architecture + Design***, Mar.-Apr. 2001, pp. 22-29. This article is taken from Madhuri Rao’s KSU thesis, for which I was her Major Advisor.
- 2000 Madhuri Rao, awarded the ***John Helm Award*** for the Outstanding Graduate Thesis in 2000, for which I was her Major Advisor.
- 2000 Rajratna Jadhav, ***12th Journal of the Indian Institute of Architects Anchor Awards, Research Commendation*** (the only award given in the area of research) for his KSU Thesis, re-titled, *Eastern Regionalism and Indian Identity*. I was his Major Advisor.
- 2000 Mahesh Senagala, ***Second Place***, U. S. Department of Energy ***Sun Wall National Competition***, Washington, D. C. Selected out of 115 entries.

- 1997 Rajratna Jadhav, awarded the *John Helm Award* for the Outstanding Graduate Student Thesis in 1997, for which I was his Major Advisor.
- 1997 Ruchin Kansal, “Cyberspace and Political Power: Questions for the Emerging Discourse of Architecture,” a paper completed for my fall 1996 Theory of Design seminar on *Architecture in the Age of Simulation* presented at the **Association of Collegiate Schools of Architecture International Conference in Berlin**, spring 1997 and published in the conference proceedings edited by Beth Young and Thomas Gelanliter, *Building as a Political Act*, 1998, pp. 282-287.
- 1994 Mahesh Senagala, honored with the *John Helm Award* for the Outstanding Graduate Student Thesis of 1994, for which I was his Major Advisor.
- 1994 Mahesh Senagala, *A Return to the City? An Investigative Pilgrimage to Banaras*. (Honored as “*The Best Thesis in the Area of Design Theory*”). (I was Mahesh’s Major Advisor).
- 1994 Anujay S. Vootla, *Aurosthal: An Architectural Design Thesis*. (Honored as “*The Best Thesis in the Area of Design*”).

SERVICE

ACADEMIC COMMITTEE MEMBERSHIPS

- 2012-present Member, Department of Architecture Faculty Affairs Committee.
- 2005-present Faculty Advisor, Emerging Green Builders, a multidisciplinary student organization.
- 2000-present Member, College of Architecture, Planning and Design Library Committee
- 1998-2000 Member, Undergraduate General Education committee as representative of the College of Architecture, Planning and Design Committee on Academic and Curricular Affairs.
- 1998-2000 Chair, Department of Architecture Academic Affairs Committee.
- 1998-2000 Department representative, College of Architecture, Planning and Design Academic and Curricular Affairs Committee.
- 1999 Member, Department of Architecture Strategic Planning Committee
- 1997-98 Department representative, College of Architecture, Planning and Design Promotion and Tenure Committee

- 1992--1996 Member, KSU Rhodes/Marshall Scholarship Committee
- 1992-94 Member, Department of Architecture Student Affairs Committee
- 1990-98 Member, Lou Douglas Lecture Committee.
- 1977-present Member, Department of Architecture Graduate Committee.
- 1987-90 Chair, Faculty Search Committee
- 1989-92 Chair, Faculty Affairs Committee
- 1979-1994 College of Architecture, Planning and Design representative on the KSU Faculty Research Awards Committee.
- 1989-1993 Faculty Advisor (and Founder) of the KSU *Students Acting to Save a Vulnerable Environment (SAVE)*, a campus-wide environmental group.
- 1973-1976 Faculty Advisor, *Alternative Energy Group*, Cornell University. A campus-wide student organization.

ORGANIZATIONAL MEMBERSHIPS

- 2011-present Member, Advisory Board for the Flint Hills Technical College Sustainability Studies Program, a joint program with Emporia State University.
- 1977-present Member, *American Solar Energy Society*.
- 1996-present Founding member, *Congress for the New Urbanism*, an international organization dedicated to the creation of mixed-use, pedestrian scaled neighborhoods, towns and cities as an alternative to unhealthy, sub-human and unsustainable forms of urban suburban sprawl.
- 1996-1999 Founding member and Member of the Board of the *Ecological Design Education Network (EDEN)*, a national organization aimed at connecting students to internships with firms focusing on ecological approaches to architectural and urban design.
- 1983-present Founding member, *Society of Building Science Educators*, an international organization aimed at supporting educators in teaching ecological and sustainable design at universities. It sustains a newsletter and sponsors an annual conference.