

END NOTES

Authors, primary sources, references and consultants for each chapter.

chapter 1 PROBLEMS & SOLUTIONS

- author Bob Vint, Architect
- primary source Travel research and documentary photography of border region, Bob Vint and Arthur Vint
- reference Veregge, Nina. "Transformations of Spanish Urban Landscapes in the American Southwest, 1821 – 1900." *Journal of the Southwest*. Volume 35, Number 4, (Winter 1993), pp.371 – 459.

chapter 2 DESIGN

- author Bob Vint, with contributions by John Messina, AIA
- primary sources Measured drawings of historic structures, Christina Neumann and Bob Vint
- references Books
- Houk, Rose. *Casa Grande Ruins National Monument* Southwestern Parks and Monuments Association, Tucson 1987.
- Nabokov, Peter. *Architecture of Acoma Pueblo* Santa Fe: Ancient City Press, 1986.
- Stilgoe, John R. *Common Landscape of America, 1580 to 1845* Yale University Press, New Haven 1982.
- Reports
- A History of the Edward Nye Fish House*, Tucson Museum of Art, Lyons, Bettina 1989.
- Heart of the Empire*, Historic Structures Report (incomplete) National Park Service, Southwest Region, 1994.
- The Old Adobe: Charles O. Brown House*, Arizona Historical Society, 1980.
- Tucson Historic Sites*, Historic Areas Committee, Tucson Community Development Program, 1969.

chapter 3 MATERIAL

authors Bob Vint (adobe, foundations and roofs) and Christina Neumann (rammed earth and straw bale)

references Books

Easton, David. *The Rammed Earth House*.
White River Junction, Vermont: Chelsea Green Publishing Company, 1996.

Houben, Hugo and Guillaud, Hubert. *Earth Construction: A Comprehensive Guide*.
London: Intermediate Technology Publications, 1994.

McHenry, Paul Graham, Jr. *Adobe and Rammed Earth Buildings*. Tucson: University of Arizona Press. 1989.

Myhrman, Matts and MacDonald, S.O. *Build it with Bales: A Step-by-Step Guide to Straw-Bale Construction*.
Tucson: published by the authors, 1997.

Roberts, Caroline.

Tibbets, Joseph M. *The Earthbuilders' Encyclopedia*. New Mexico: Southwest Solaradobe School, 1989.

Conference Proceedings

Out of Earth: First National Conference on earth Buildings, Centre for Earthen Architecture
Plymouth School of Architecture, UK, 1994.

6th International Conference on the Conservation of Earthen Architecture.
Los Angeles: The Getty Conservation Institute. 1990.

chapter 4 PERFORMANCE

author	Christina Neumann, LEED ^(TM) A.P. with contributions by Bob Vint	
consultants	Structural engineer:	Steven Hess, P.E
	Materials testing:	Ralph M. Pattison, P.E.
	Energy modeling:	Nader Chalfoun, Ph.D.
references	Fathy, Hassan. <i>Natural Energy and Vernacular Architecture: Principles and Examples with Reference to Hot Arid Climates</i> . Chicago: University of Chicago Press, 1986.	
	Moore, Fuller. <i>Environmental Control Systems: Heating Cooling Lighting</i> . McGraw Hill, Inc., 1993.	
	Cofaigh, Eoin O., et. al. <i>The Climatic Dwelling</i> . London: James & James (Science Publishers) Ltd., 1996.	

chapter 5 PROTOTYPES

Author	Bob Vint, Architect	
Primary Sources	Architectural design and presentation of prototypes:	Bob Vint, Architect
	Drafting assistance and graphic layout:	Paul Briggs, A.I.T.
References	Land, Peter. <i>Economic Garden Houses: High Density Development</i> . Chicago: College of Architecture, Planning and Design, Illinois Institute of Technology. 1977.	
	Land, Peter. <i>Economic Housing: High Density, Low Rise, Expandable Unit design, building technology, urban structure</i> Champagne-Urbana: Department of Architecture, University of Illinois. 1975.	

ANNOTATED BIBLIOGRAPHY

authors John Messina, AIA with contributions by Bob Vint

HISTORICAL PERSPECTIVE

books

Bourgeois, Jean-Louis. *Spectacular Vernacular: A New Appreciation of Traditional Desert Architecture*. Salt Lake City: Gibbs M. Smith, Inc. 1983.

A well-illustrated worldwide survey of earthen structures, with an emphasis on North Africa. A large format edition with improved reproductions was republished in 1990.

Brown, Arthur T. *Arthur T. Brown, FALA: Architect, Artist, Inventor*. Tucson: College of Architecture Library, University of Arizona, 1985.

Monograph on the work of a southwestern modernist architect who was a pioneer of passive solar design. Contains photographs and floor plans of several of his significant projects, as well as a revealing commentary on the architectural profession over the 20th century.

Bunting, Bainbridge. *Early Architecture in New Mexico*. Albuquerque: University of New Mexico Press, 1976.

A richly illustrated account of 1600 years of New Mexico's architectural history, beginning with fourth-century pit houses and ending with the Territorial period. Many historic photographs of buildings and details accompany the text.

Bunting, Bainbridge. *Taos Adobes: Spanish Colonial and Territorial Architecture of the Taos Valley*. Albuquerque: University of New Mexico Press, 1964.

A detailed examination of twelve domestic structures of the northern New Mexico region. Includes photographs, descriptions and measured drawings.

Bunting, Bainbridge. *Of Earth and Timbers Made: New Mexico Architecture*. Albuquerque: University of New Mexico Press, 1974.

Primarily a photographic study of northern New Mexico vernacular architecture. Many well reproduced photographs of buildings and details including doors, portales, windows and carpentry. A brief yet informative text by the noted architectural historian Bunting.

Conzen, Michael P., ed. *The Making of the American Landscape*.

New York: Routledge, 1994.

A collection of essays, by leading scholars, concerning the evolution of the cultural American landscape. Historical forces that shaped the land are viewed from the perspectives of ethnic, cultural and environmental movements. A very thoughtful book.

Crouch, Dora P., Garr, Daniel, and Mundigo, Axel. *Spanish City Planning in North America*.

Cambridge, Mass.: MIT Press, 1983.

The Spanish conquest and settlement of the New World led to the building of almost 350 new cities in accordance with a set of edicts known as the “Laws of the Indies.” These laws embodied Renaissance concepts of urban form such as regular street patterns, harmonious groupings of major institutions around a central plaza, and provisions for orderly expansion features that are still relevant for town and community planning today. In examining North American Spanish cities, including Santa Fe, Los Angeles and even St. Louis, this book presents a neglected aspect of American urban history.

Garrison, G. Richard and Rustay, George W. *Early Mexican Houses*.

Stamford: Architectural Book Publishing Co., Inc., 1990.

This is a high quality reprint of a study of Mexican architecture by two American architects who traveled throughout central Mexico in the 1920s. Their exquisite measured drawings and photographs are among the best documents recording traditional Mexican architecture.

Giebner, Robert C. and Harris J. Sobin, eds. *Barrio Historico Tucson*.

Tucson: College of Architecture, University of Arizona, 1972.

A study by architecture faculty and students of what remains of Tucson’s Mexican-American barrio, unfortunately, conducted shortly after much of the barrio was destroyed during “urban renewal.” Contains measured floor plans and elevations of numerous examples of true Sonoran domestic architecture. A rare and out of print document, possibly only available through university libraries.

Houk, Rose. *Casa Grande Ruins National Monument*

Tucson: Southwest Parks and Monuments Association, 1987

An historical and archeological guide to the Hohokam pre-historic site in central Arizona. Concise, with valuable plans and historic photos.

Hyer, Sally. *Recording a Vanishing Legacy: The Historic American Buildings Survey in New Mexico 1933 – Today*.

Santa Fe: Museum of New Mexico Press, 2001.

An overview of New Mexico’s historic domestic, religious, and civic architecture, including examples from the Indian pueblos, as recorded by the Historic American Buildings Survey (HABS). Contains more than thirty measured drawings and descriptions, of which only a few are residential. Nevertheless, a valuable publication on the regional history of an important National Park Service program to record historic buildings. HABS was created under FDR’s “New Deal” during the Depression to put unemployed architects to work. The program continues to the present day.

Jacobs, Jane. *The Death and Life of Great American Cities*.

New York: Vintage Books, 1961.

Still relevant after almost a half century, this book by the great urbanist describes what went wrong during urban renewal efforts in the United States. With vivid descriptions of traditional neighborhoods, the author points a positive path to more livable streets and cities. This book is to towns and cities as Rachael Carson's *The Silent Spring* is to the natural environment.

Jeffery, R. Brooks and Nequette, Anne. *A Guide to Tucson Architecture*.

Tucson: University of Arizona Press, 2001.

A guide to the three centuries of Tucson's architecture heritage. Contains descriptions and annotated photographs of some houses; although, unfortunately, there are no floor plans. Still this is a helpful study of the architecture of a multi-cultural southwestern city. The historical introduction offers a critical commentary of post-war development in Tucson.

McAlester, Virginia and Lee. *A Field Guide to American Houses*.

New York: Alfred A. Knopf, 1989.

An essential book for anyone interested in American vernacular architecture, with many black and white photographs and excellent illustrations. Contains clear and factual descriptions of each stylistic period, illustrating the salient features of virtually every house type in the United States.

McCoy, Esther. *Case Study Houses, 1945-1962*.

Los Angeles: Hennessey & Ingalls, Inc., 1977.

Survey of a unique program to design and build modern houses, supported by the no longer existing West Coast magazine, *Arts and Architecture*. The illustrated houses, designed by successful post World War Two architects, offer examples of the type of open-plan design, utilizing much plate glass, that allow interior and exterior spaces to flow together. Interesting ideas that are valid for mild climates, although with too much glass for the desert.

McHenry, Paul Graham, Jr. *Adobe and Rammed Earth Buildings*.

Tucson: University of Arizona Press, 1989.

The late author was a champion of earth building long before the current revival began. Provides a brief history, and explains contemporary practices in writing, drawing and photos. A well-illustrated introduction to adobe and rammed earth construction.

Nabokov, Peter. *Architecture of Acoma Pueblo*.

Santa Fe: Ancient City Press, 1986.

An excellent document based on Historic American Buildings Survey (HABS) drawings and photos of the magnificent "Sky City" (Acoma Pueblo) in northern New Mexico. Acoma is among the oldest continuously occupied settlements in the United States, and its architecture, a mixture of adobe and stone construction is an indigenous example of high-density/low-rise urban form. Acoma presents an interesting model for future planned communities in the U.S. Southwest.

Nabokov, Peter and Robert Easton. *Native American Architecture*.

New York: Oxford University Press, 1989.

An outstanding study of the traditional architecture of Native Americans in North America. The authors discuss the building practices of the people, as well as their symbolic meanings. Very well illustrated with drawings and vintage photographs. Southwestern peoples are well represented within this comprehensive document.

Polyzoides, Stefanos, et.al. *Courtyard Housing in Los Angeles*.

New York: Princeton Architectural Press, 1992.

A thorough study by University of Southern California architecture faculty and students of an important building type: multi-family courtyard housing. While the publication focuses on small apartment complexes built during the pre-World War Two era in Los Angeles, this building type still has great relevance for new housing, multi-family or single-family, in today's Southwest. (see: www.mparchitects.com)

Rapoport, Amos. *House Form and Culture*.

Englewood Cliffs: Prentice-Hall, Inc., 1969.

A survey of vernacular architecture from around the world, with a small section devoted to the American Southwest. The author, an architect and anthropologist, uses the lens of cultural anthropology in this valuable contribution to the study of folk building practices.

Scully, Vincent. *Pueblo, Mountain, Village, Dance*.

Second Ed. Chicago: The University of Chicago Press, 1989.

By analyzing the relationships between landscape, ceremony and Pueblo dwellings, the author, an eminent architectural historian, explores the Southwest Native Americans' view of the natural world and how this cosmology informed their architecture. Illustrated with numerous photographs of Pueblo architecture and rituals.

Sergent, John. *Frank Lloyd Wright's Usonian Houses*.

New York: Whitney Library of Design, 1984.

In the mid-20th century, Frank Lloyd Wright developed and built a series of efficient, cost effective, yet beautiful and livable houses. The author of this publication relates the story of the "Usonian House," as Wright called his prototype. Includes many photographs and floor plans of an architecture that remains relevant (although Wright's suburban planning approach is a limitation).

Spears, Beverly. *American Adobes: Rural Houses of Northern New Mexico*.

Albuquerque: University of New Mexico Press, 1986.

A collection of photographs with an informative text documenting the vernacular dwellings of northern New Mexico. Mostly exterior views of adobe houses with pitched metal roofs that have become models for a revival style popular in the Santa Fe area.

Stewart, Janet Ann. *Arizona Ranch Houses: Southern Territorial Styles, 1867-1900*.

Tucson: University of Arizona Press and Arizona Historical Society, 1974.

The most complete book on the ranch houses of southern Arizona from the latter part of the 19th century. Contains exterior and interior photographs, and several floor plans. The author's text provides interesting historical information.

Stilgoe, John R. *Common Landscape of America, 1580 to 1845*.

New Haven: Yale University Press, 1982.

A concise study of how the American landscape, from farmsteads to cities, came about prior to the Civil War. Because the author stresses how the northern European sensibility shaped much of North America, the book is not particularly strong on the Southwest. However, a small section is devoted to the New Mexican settlement of Chimayo.

Upton, Dell, ed. *America's Architectural Roots: Ethnic Groups that Built America*

New York: John Wiley & Sons, Inc., for the National Trust for Historic Preservation, 1986.

An excellent guide to the various forms of American domestic architecture, with special emphasis on the influences of different immigrant groups. The section on the Hispanic Southwest, by Joe S. Graham, provides a brief essay on mission and domestic architecture from California to Texas. Another section, by Kathleen Deagan, discusses the Spanish influence on the architecture of the Southeastern United States. Two interesting comparisons.

Wilson, Chris. *Facing Southwest*.

Albuquerque: University of New Mexico Press, 2002.

Primarily a study the mid-20th century Santa Fe architect, John Gaw Meem, who was largely responsible for the revival of the Santa Fe style of architecture. The author, a fine historian and writer, goes beyond the superficiality of style and discusses Meem's skill at placing his buildings on their site in order to take full advantage of sun, natural ventilation and views, thus creating very pleasant and habitable spaces. The book contains many lovely photographs and well-drawn floor plans.

Wright, Gwendolyn. *Building the Dream: A Social History of Housing in America*.

Cambridge: MIT Press, 1983.

A history of the various neighborhoods and housing types found in the United States during the first two centuries. Beginning with the Puritan townscape to suburban sprawl, the author, an architectural historian, traces the design of American houses and their relationship to the society and technology of their time.

periodicals, articles and essays

Brittain, Richard G. and Matts A. Myhrman. "Toward a Responsive Tohono O'odham Dwelling."

Arid Lands Newsletter, vol. 28 (Spring/Summer 1989), pp. 20-23.

An interesting article describing the process used, by two Anglo designer-builders, in their successful attempt to build for Native Americans. Sensitivity to the Tohono O'odham Indian's building preferences led to a successful reservation building. Although not a residence, but a meeting place, the process still offers instruction on the art of building for different cultures.

Jackson, J. B. "Chihuahua – As We Might Have Been." *Landscape* vol.1, no.1 (1951).

A classic article, by a cultural landscape historian, on how town planning was developing in the Southwest under Spain and Mexico and how settlement patterns changed after the area became a United States possession.

Jackson, J.B.. "First Comes the House." *Landscape* vol.9 no.2 (1959).

Another article by this dean of American cultural landscape interpreters. Here Jackson traces the development of the ordinary American house from its New England roots through its Western migration.

Parfit, Michael, et. al. "Emerging Mexico"

National Geographic (Special Issue) Volume 190, Number 2, August, 1996

Washington D.C., National Geographic Society

The entire issue is devoted to Mexico. Contains extensive articles on the border region, including Tijuana, Chihuahua and Monterrey. Features the characteristically excellent photographs for which NNG is rightly renowned. Very worthwhile.

Veregge, Nina. "Transformations of Spanish Urban Landscapes in the American Southwest, 1821 – 1900."

Journal of the Southwest. Volume 35, Number 4, (Winter 1993), pp.371 – 459.

Tucson, University of Arizona Press

An article derived from the author's master's thesis that discusses the urban transformations of several Southwestern towns, including Santa Fe, Tucson, Albuquerque, as well as Socorro and Las Vegas, New Mexico. Academic in form, but interesting as a study of evolving southwest urban patterns. Well illustrated with maps and vintage photographs.

reports and studies

Garrison, James W. & Ruffner, Elizabeth F. Editors. *Adobe: Practical And Technical Aspects of Adobe Conservation*.

Phoenix: Heritage Foundation of Arizona, 1983.

A useful collection of articles, by various authors, on subjects pertaining to understanding the inherent characteristics and preservation techniques of adobe structures. Might be difficult to locate other than in libraries.

Pratt, Boyd C. and Chris Wilson. "The Architecture and Cultural Landscape of North Central New Mexico: Field Guide for the Twelfth Annual Vernacular Architecture Forum, Santa Fe, New Mexico," 1991.

This is a limited edition guide produced for a conference on vernacular architecture that was held in Santa Fe. While probably difficult to locate, and with copy machine quality illustrations, it does contain informative articles on the architecture of northern New Mexico and is a valuable information resource for northern New Mexico towns and architecture.

CONTEMPORARY APPLICATIONS

books

Alexander, Christopher, et. al. *A Pattern Language*.
New York: Oxford University Press, 1977.

A remarkable book, by a team of University of California, Berkeley architects, that offers more than 250 patterns or precepts that can guide a planner or designer in the act of making towns down to the act of creating small architectural details. Easy to understand with hundreds of illustrations. An excellent guide for professionals and non-professionals alike.

Alexander, Christopher, et. al. *The Production of Houses*.
New York: Oxford University Press, 1985.

The building of a small housing complex in Mexicali, Mexico, utilizing the principles described in the publication above, and involving the future occupants in the planning and construction of their own dwellings, is chronicled in this interesting and illustrated publication. A process of design and construction that is slowly developing in the United States with such programs as Habitat for Humanity, The Rural Studio (see: Oppenheimer) and other self-help type projects.

Arief, Allison and Burkhart, Bryan. *Pre Fab*.
Layton, Utah: Gibbs Smith Publisher, 2002.

A rich visual survey, with text, of recent prefabricated houses that will shatter the perception that this type of housing has to look cheap and feel inferior. Shows wonderful solutions to the manufactured house by architects from all over the globe. This could be a valid solution to housing shortages world wide, as well as the American Southwest. (see: Winter)

Arreola, Daniel D. and Curtis, James R. *The Mexican Border Cities: Landscape Anatomy and Place Personality*.
Tucson: University of Arizona Press, 1993.

An examination of cities and towns along the U.S.-Mexican border, showing that despite their presence in, or their proximity to, the United States, these communities are fundamentally Mexican places. While it could be augured that they are really hybrid places, both American and Latin, it is still necessary for any architect or builder working in the Borderlands to understand this unique population. The information in this publication will advance that knowledge.

Benyus, Janine M. *Biomimicry: Innovation Inspired by Nature*.
New York: Perennial, 1998.

An inspirational book which challenges designers to tap into Nature's intelligence as guidance in the creation process and also profiles innovative bio-inspired research.

Georges, Danielle and Andrea Keenan, ed. *Green Building: Project Planning and Cost Estimating*. Kingston, MA: RS Means Construction Publishers & Consultants, 2002.

A reference guide for the construction of sustainable buildings providing cost data for green materials, components, and systems, special project requirements, and financial analysis and incentives.

Chermayeff, Serge and Alexander, Christopher. *Community and Privacy: Toward a New Architecture of Humanism*. New York: Doubleday & Company, 1963.

An interesting and relevant study of the benefits of zoned spaces in residential architecture. Excellent, illustrated examples of domestic floor plans that succeed in providing social space or private space when needed, as well as those plans that fail in this respect.

Clark, Sam. *The Real Goods Independent Builder*. White River Junction, Vermont: Chelsea Green Publishing, 1996.

Cofaigh, Eoin O., et. al. *The Climatic Dwelling*. London: James & James (Science Publishers) Ltd., 1996.

Developed for the Directorate General XII for Science, Research, and Development of the European Commission, this study documents climate-responsive residential architecture. Historical and modern Case studies spotlight urban European approaches to sustainable and efficient housing.

Duany, Andres; Plater-Zyberk, Elizabeth, and Speck, Jeff. *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*. New York: North Point Press, 2001.

As the title suggests this is another critique of the endemic suburban sprawl that plagues the U.S. and is now spreading to other countries. Two of the authors, Duany and Platter-Zyberg have been pivotal architects of the New Urbanism approach to town and community planning (see: Jacobs, Katz and Leccese). Developers and homebuyers should seriously consider their proposals for alternative approaches to land development based on pre-automobile communities alike.

Duffield, Mary Rose and Warren Jones. *Plants for Dry Climates*. Cambridge, Massachusetts: Perseus Publishing, 2001.

A technical listing and description for hundreds of plants suited for arid climates. Includes methods for creating Micro climates and landscaping themes to save energy, increase comfort levels and self-maintaining areas around a building.

Easton, David. *The Rammed Earth House*.

White River Junction, Vermont: Chelsea Green Publishing Company, 1996.

A beginning primer on an increasingly popular form of earthen construction where moistened soil and cement are compressed into wooden or steel forms, thus resulting in thick, high thermal mass walls. A good introduction, but not thorough enough to serve as a complete construction guide. However, there is not much else available – a condition that will probably soon change.

Fathy, Hassan. *Natural Energy and Vernacular Architecture: Principles and Examples with Reference to Hot Arid Climates*
Chicago: University of Chicago Press, 1986.

Drawing heavily from traditional architecture of the Middle East, the author, a renowned Egyptian architect demonstrates the advantages of vernacular building techniques for a hot arid climate. Fathy states a case for architectural forms and materials that have evolved intuitively but are scientifically valid. An excellent guide to passive cooling and natural ventilation strategies. (see: Steele)

Farrelly, E. M. *Three Houses: Glen Murcutt*
London: Phaidon Press Ltd., 1993, reprinted 2002.

These three houses, well illustrated with photographs and detailed drawings, are in Australia, not the U.S. Southwest; however, the type of architecture presented would definitely be suited for any arid terrain. A different and more industrialized approach to domestic architecture.

Golany, Gideon S. editor. *Design for Arid Regions*.
New York: Van Nostrand Reinhold Company, 1983.

An excellent reference book that integrates ancient arid lands building practices with contemporary requirements. Draws heavily from North African and Middle-Eastern experience, and offers guidance on ways of developing an architecture for a hot, arid climate

Golub, Jennifer. *Albert Frey: Houses 1 and 2*.
New York: Princeton Architectural Press, 1999.

Frey, a Swiss trained architect, came out to the California desert during the 1930s and built some remarkable houses, for himself and others, utilizing industrialized materials that can withstand the intense sun. This book ventures into considerable detail concerning two houses that he built for his own use. "House One" is an excellent example of ways to maximize a small amount of enclosed square footage. A good lesson in conserving material resources.

Hayden, Dolores. *Redesigning the American Dream*.
New York: W.W. Norton & Co., 1984, revised 2002.

A critique of current suburban domestic housing from a gender perspective. An excellent discussion of how, as the occupants of houses have changed to two income producing adults and single parents, most housing form has not adequately evolved to accommodate this new family structure. The author offers recommendations for new housing and settlement patterns that reflect these relatively new sociological conditions.

Houben, Hugo and Guillaud, Hubert. *Earth Construction: A Comprehensive Guide*.
London: Intermediate Technology Publications, 1994.

Almost everything that one needs to know about a traditional approach to building with earth is contained in this book. Chapters range from the chemical analysis of soil to finishes and decoration. A British publication, so it might be difficult to readily obtain, but well worth the search.

Jacobson, Max et al. *Patterns of Home: The Ten Essentials of Enduring Design*. Newtown, CT: The Taunton Press, 2002.

A clearly written and richly illustrated book by three architects, who had previously contributed to *The Pattern Language* (see Alexander) that presents some of the essential issues that contribute to the creating of a well-crafted and habitable house. An excellent planning guide for anyone desiring to design and build a comfortable and inspiring dwelling.

Jones, Tom, et. al., eds. *Good Neighbors: Affordable Family Housing*. Melbourne: The Images Publishing Group Pty Ltd. 1997.

While not specifically limited to the Southwest, this collection of case studies of multi-family houses offers interesting concepts on site planning, material use and various American styles. Most examples are of affordable housing and include a great variety of possible approaches. Does include several examples from Arizona and Texas.

Katz, Peter. *The New Urbanism: Toward an Architecture of Community*. New York: McGraw-Hill, 1994.

For anyone interested in understanding the goals of The New Urbanism movement (see: Duany, Leccese), this book is an excellent introduction. Well illustrated with numerous examples, many unbuilt at the time of publication, of projects by architects who subscribe to this type of community planning. Less a guide to individual buildings than an indication of what new housing and mixed use developments could be like.

Kennedy, Joseph F., et. al., eds. *The Art of Natural Building*. British Columbia: New Society Publishers, 2002.

A collection of articles by authors writing on their choice of “natural” building technique. Topics range from popular traditional methods, such as stone masonry, timber framing, straw bale and earthen construction, to more specialties as earthbag-papercrete, cob, as well as a section on permaculture. A good survey and introduction to different construction possibilities.

King, Bruce. *Buildings of Earth and Straw*. Sausalito, California: Ecological Design Press, 1996.

A structural design guide for buildings made of straw and earth. A lighthearted approach to a complicated topic, King breaks down the analysis of structural forces and calculations of natural buildings to an understandable level, based on modern and historical building techniques.

Kunstler, James Howard. *The Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape*. New York: Simon and Schuster, 1993.

An indictment of the generic landscape of strip shopping centers, vast parking lots, and giant housing tracts. The author proposes remedies for such desolated conditions by having us return to more traditional planning principles, such as those espoused by proponents of the New Urbanism. (See Duany, Katz, and Leccese).

Lacinski, Paul and Michael Bergeron. *Serious Straw Bale: A Home Construction Guide for All Climates*. White River Junction, Vermont: Chelsea Green Publishing, 2000.

A historic and technical approach to how straw bale construction is affected by humidity and temperature. Regional approaches to natural building materials and construction methods.

Leccese, Michael and McCormick, Kathleen, editors. *Charter of the New Urbanism*.

New York: McGraw-Hill, 2000.

With essays and case studies, the editors demonstrate how cities might be revived, suburbs improved and traffic congestion reduced, all by smarter planning based on the New Urbanism principles. (see: Duany & Katz) More of a planning guide, but does include some recommended and salient architectural features.

LeMone, Katia and Dr. Owen Geiger. *Builders Without Borders Straw-Bale Construction Facilitators Guide*. Without Borders, 2004

MacDonald, S.O. and Matts Myhrman. *Build it with Bales: A Step-by-Step Guide to Straw-Bale Construction Version Two*. Tucson, Arizona: Out On Bale, 2004.

A step-by-step guide on how to build and finish a straw bale building. Filled with illustrations, easy to understand descriptions, and advice on all aspects of building with straw.

Magwood, Chris and Chris Walker. *Straw Bale Details*. Gabriola Island, British Columbia: New Society Publishers, 2001

A catalog of material testing, building code information and construction details for the floor, walls and roof of straw bale structures.

Moore, Charles; Allen, Gerald and Lyndon, Donlyn. *The Place of Houses*.

New York: Holt, Rinehart and Winston, 1974.

A classic by three architects who describe through historical examples and their own work how to make houses that are delightful, livable and site specific. Another indispensable addition, along with *The Pattern Language* (see: Alexander), to the library of any house designer.

Moore, Fuller. *Environmental Control Systems: Heating Cooling Lighting*. McGraw Hill, Inc., 1993.

Introduces and explains, passive solar heating, passive cooling and day lighting strategies in commercial and residential buildings. A great analytical text for understanding site planning and design related to the sun, wind and building materials.

Mostaedi, Arian. *Sustainable Architecture, Low Tech Houses*.

Barcelona: Charles Broto & Joseph M. Minguet, no date.

A wonderful and well-illustrated collection of housing, constructed from natural materials, from the U.S., Europe and Japan. Unorthodox materials, such as paper, sandbags, as well as rammed earth and adobe, are used in beautiful ways. A very inspirational book.

Myhrman, Matts and MacDonald, S.O. *Build it with Bales: A Step-by-Step Guide to Straw-Bale Construction*. Tucson, Arizona: published by authors, 1997.

A guide to the construction of straw bale houses by two pioneers of this recently revived and popular building method. The authors are constantly experimenting and attempt to bring readers up to date by issuing revised editions.

Neutra, Richard. *Survival Through Design*. New York: Oxford University Press, 1969 reprint.

The author, a pioneer in contemporary architecture, presents his approach to the problem of man's survival in an often chaotic and technological environment. He directs us to study basic and organic responses in order to discover the principles for designing vital spaces. This book is as valid today as it was when first published in 1954.

Oppenheimer, Andrea Dean. *Rural Studio: Samuel Mockbee and an Architecture of Decency*. New York: Princeton Architectural Press, 2002.

This book chronicles a remarkable program, in Auburn University's architecture school, where students and faculty live in poor southern communities while designing and constructing houses and other buildings for people who could never afford a well designed house, much less the service of an architect. While not set in the Southwest, many subsistence borderland communities could benefit from similar programs in their areas.

Pijawka, K. David and Shetter, Kim. *The Environment Comes Home: Arizona Public Service's Environmental Showcase House*.

Tempe: Herberger Center for Design Excellence, College of Architecture and Environmental Design, Arizona State University, 1995.

A generously illustrated, bound report on a model energy responsive home built in the Phoenix, Arizona area, with modern materials, during the middle 1990s. Contains excellent preliminary information on design strategies, and lists environmentally responsible building materials and products, as well mechanical/plumbing systems. A good primer for all aspects of house design with specific attention to a hot, arid region.

Roberts, Carolyn. *House of Straw: A Natural Building Odyssey*. White River Junction, Vermont: Chelsea Green Publishing, 2002.

A narrative of all the rewards, hard work and joy that can result from building a straw bale house oneself. Experiences range from choosing the land, designing and building the house to habitation.

Shelter Publications *Shelter*
Berkeley: Ten Speed Press, 1973 and 1990

A catalogue of "...a wide range of information on hand-built housing and the building crafts." A comprehensive hippie's guide to vernacular architecture, quite outstanding and very much of its idealistic time.

Smith, Peter F. *Sustainability at the Cutting Edge*
Oxford & New York: Architectural Press, 2003.

The author describes how buildings can be made to significantly reduce their reliance on fossil-based energy by the use of solar, hydro and geothermal resources. Somewhat technical, but still relevant and stimulating.

Stein, Benjamin and John S. Reynolds. *Mechanical and Electrical Equipment for Buildings*. New York: John Wiley and Sons, Inc., 1992.
A comprehensive reference book on both active and passive strategies for heating, cooling and lighting systems.

Steen, Athena Swentzell, et al. *The Straw Bale House*. White River Junction, Vermont: Chelsea Green Publishing, 2004.
This is a diverse study of straw bale history, design and construction. Case Studies and detailed illustrations provide valuable information for the owner-builder as well as the design and construction professional.

Steele, James. *An Architecture for People*.
New York: Whitney Library of Design, 1997.
A critical view of the Egyptian architect Hassan Fathy and his life long quest to build earthen structures that employ natural principles of ventilation, heating and cooling. Fathy's architecture displays a high concern for sustainability, energy conservation and the responsible use of natural resources. A study of his work will offer relevant ideas for any arid lands architecture. (see: Fathy)

Tibbets, Joseph M. *The Earth Builders' Encyclopedia*.
New Mexico: Southwest Solaradobe School, 1989.
Almost everything one needs to know about earthen architecture with a special emphasis on the Southwest United States. With clear text and the author's enjoyable illustrations, covers topics from "Ablowbe" (a type of blown-on mud plastering system) to Zoquete (slang term for adobe mud). The current edition is only available on CD ROM.

Uviña, Francisco. *Adobe Architecture Conservation Handbook*.
Santa Fe: Cornerstones Community Partnerships, 1998.
More of a restoration manual, but a great book by an extremely knowledgeable author who is a mainstay in a very valuable community service organization in New Mexico. This publication might serve as a repair guide if you were to build with adobe in a traditional manner.

Wade, Alex & Ewenstein, Neal. *30 Energy-Efficient Houses You Can Build*.
Emmaus: Rodale Press, 1977.
A bit dated but still relevant, this publication shows examples of relatively small houses that exploit natural energy sources, such as solar by proper siting and choice of materials. Example structures will bring back memories for those of you who remember the energy crisis of the middle 1970s and the subsequent architectural responses.

Weisman, Alan. *La Frontera: The United States Border with Mexico*
Tucson: University of Arizona Press, 1991 (2nd Edition).
The first edition of this book is almost two decades old, but the content is as relevant now as it was at the time of first publication. Not a building guide in any way, but an excellent journalistic report on borderlands social and environmental dynamics.

Wright, Frank Lloyd. *The Natural House*.

New York: Horizon Press, 1963.

Another old-timer, but still quite relevant. If the millions of production houses had followed just a few of the master's recommendation, we would have much better housing stock throughout North America. Recommended for anyone building or searching for a house.

periodicals, articles and essays

Curtis, Wayne. "Material Gains: ...the Search for Enduring Things (Materials with which) to Build."

Preservation. January / February, (2001), p.28.

The author presents a historical view of building materials, from wood to plastic, with an assessment of their relative values and shortcomings. Contains an interesting discussion on new composite materials, such as decay resistant lumber made from waste wood and recycled plastic, as well as other recently developed products.

Roberts, Carolyn. "The House That Built Me."

Natural Home. July, (2004), pgs. 80-81

Steen, Athena and Bill. "Building With Straw Bales"

Mother Earth News. January, (1996), pgs. 40-47.

reports and studies

Chalfoun, Nader V. Ph.D & Richard J. Michal P.E. "Thermal Performance Comparison of Alternative Building Envelope Systems: An Analysis of Five Residences in the Community of CIVANO." University of Arizona College of Architecture, Planning and Landscape Architecture. (2003), pgs. 1-5

Hardin, Mary. "Appropriate Technology: Cycling Between High and Low Tech in the Sonoran Desert." University of Arizona College of Architecture, Planning & Landscape Architecture. (2002), pgs. 1-5

Land, Peter. *Economic Garden Houses: High Density Development*.

Chicago: College of Architecture, Planning and Design, Illinois Institute of Technology. 1977.

Report of a design research studio conducted by the outstanding British architect Peter Land with his students at IIT. The focus is high density/low-rise housing with courtyards as the principal outdoor space. Contains examples of one-level, two-level and split-level models that could be applied the southwestern U.S. This publication is rare, and is likely only available through university libraries. It should without doubt be republished in an expanded and updated format.

Land, Peter. *Economic Housing: High Density, Low Rise, Expandable Unit design, building technology, urban structure*
Champaign-Urbana: Department of Architecture, University of Illinois. 1975.

Results of a design studio conducted by Land while a visiting professor at the University of Illinois. The projects are set in Peru and are a continuation of the author's work with the Programa Experimental de Vivienda (PREVI) in Lima in the early 1970s. The design program required an affordable housing system that could evolve as families grew and changed, while preserving private outdoor space through courtyards and roof terraces. A rigorous approach to design of low-cost housing with an awareness of the importance of urban form.

US/ICOMOS. *6th International Conference on the Conservation of Earthen Architecture.*

Los Angeles: The Getty Conservation Institute. 1990.

The proceedings from a multi-national conference held in Las Cruces, New Mexico, in 1990. Contains many informative papers, each in the language of the author, with Spanish and English, as one would expect, dominating. Many of the articles are highly technical and geographically varied, but not without value.

Vint, Robert. *Architectural Concept Study: Housing Design for San Xavier.* Tucson: San Xavier District of the Tohono O'odham Nation. 1993.

Report on culturally and climatically appropriate housing designs for the Tohono O'odham Native Americans of Southern Arizona. Includes prototypical designs for desert dwellings.

Winter, Steven and Associates. *A Community Guide to Factory-Built Housing.* U.S. Department of Housing and Urban Development. 2001.

A recent report on the potential and utilization of prefab housing units. Not specific to the Southwest United States and the architectural aspirations of models shown are only slightly above par, but could be used as a supplement to *PreFab* (see: Arieff).

"R-Value of Straw Bales Lower than Previously Reported." EBN Volume 7 No. 9, October 1998

Builders Without Borders "Straw-Bale, Low Income Houseing Workshop- Anapra, Mexico"

<http://www.builderswithoutborders.org> 2003

U.S. Department of Energy. "House of Straw: Straw Bale Construction Comes of Age." <http://www.eere.energy.gov> July 2004