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— Alianza Arquitectos
Country Home
— Patricia F. Richards

— 1982 Roster — Center Insert
— New Mexico Society of Architects

The Building of the Val Verde Hotel
— by Spencer Wilson and Jack McKee

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(Cover—The Val Verde Hotel—Socorro)

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Charles E. Nolan, Jr.

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Reviewed by: Wolfgang F. E. Preiser

This book is about human needs in interior environments. It attempts to fill a gap where little or no easily accessible information existed in the past.

The book is intended for design practitioners and students looking for usable data and guidance on making interior environments more supportive of human requirements, whether they are dimensional, physiological or psychological in nature.

This is a tall order to fill when one considers the complexity and abundance of human interactions with the environment. The author chooses to address himself to a selected set of problems in interior design (Part I, 150 p.), he limits his discussion to specific uses and building types (Part II, 100 p.) and he, through several case studies (Part III, 65 p.) demonstrates applications of his thinking.

In the introductory chapter, the author presents an intriguing argument, i.e., that of legal accountability of the interior design profession and standard making agencies vs. client/users of interiors. He cites several court cases in which law suits challenged existing space and environmental standards, primarily in institutions. Creating humane, psychological and physical environments, then, is the real challenge of interior design, according to the author.

Kleeman then deals with design for the disabled (based on ANSI Standard A-117, 1-1980 and other relevant material) with some very useful suggestions for applications. Next, several environmental stimuli are addressed, including light, color, texture and visual complexity. Health considerations as affected by the quality of lighting are also treated.

The author then moves on to the topic of communication distances commonly used in interior environments. Ergonomic factors in the design of seating and desks are discussed, and interior design as non-verbal communication. The latter is perhaps the most interesting part of the book.

Part II considers interior ergonomics in spaces for the elderly, in mental health institutions, residential environments, in outer space, offices and university environments.

Part III contains case studies ranging from a doctor’s waiting room to Federal Aviation Administration offices and GSA’s comprehensive interior design process.

A critical assessment of this book indicates a certain imbalance of scope and topics treated. For example, important sensory modes such as the olfactory, tactile and thermal sense are not treated at all.

Human spatial behavior is only touched on slightly where territoriality and privacy is discussed. In personal communication, the author stated that one of the reasons “material on olfactory and thermal senses is not included in that these have been amply covered in other works (one example is *Space for People, Human Factors in Design*, by Corwin Bennett, Englewood Cliffs: Prentice-Hall, Inc., 1977). His synthesis of available material on the luminous, sound and thermal environments is the best I’ve seen in a form that’s easily understandable for interior designers. Additionally, one of the purposes of this book was to gather previously unavailable material and present it in a way so that designers can use it. This is one of the factors that sometimes make it seem uncohesive.”

On the other hand, the data shown such as those from the NASA *Habitability Data Handbook* are very useful, especially to the student of interior design. The language of the book is unpretentious and clear, and the illustrative material is helpful. This is particularly true in the section on the disabled where dimensional requirements are treated.

References can be found at the end of each chapter—a somewhat unorthodox method, but one can live with that. This book was written over a period of eleven years in a process of constant refinement and many of the original references are omitted because their material is incorporated in later references. This fact makes the appearance of some disciplines somewhat blurred, but it should not mask the fact that the material originally came from the many disciplines named in the preface.

The feeling of lack of cohesion among the disparate elements treated is reinforced by the observation that no integrative conceptual framework is presented which links people and aspects of interior environments. But then, no one has been able to devise such a framework, whether planning, urban design or architecture are concerned. A summarization of the issues in relating human needs to interior environments would have made for a less cumbersome or roundabout beginning of this otherwise worthwhile book. Despite the shortcomings referred to above, this is a worthwhile book because it contains the distillate of mountains of data. Its target readership are the interior designers, and they seem to love it judging by the sales (more than 1,000 since June, 1981), because the topic and price are right. WP

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The provocative discussion of historic preservation from the 1979 London ICOMOS Symposium has been expanded in a book that answers many questions of why, what and how it matters to keep buildings, artifacts and landscapes from earlier epochs. *OUR PAST BEFORE US: WHY DO WE SAVE IT?* published in London is now available. This 250 page, soft bound book, illustrated with over 30 photographs, is being sold and distributed in North America for $35.00.

(Continued on page 7)

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Continued from page 4


This important book, edited by geographer David Lowenthal and architectural critic Marcus Binney, answers questions on why it matters to keep old buildings and historic landscapes. It sketches the rise in interest in protecting cultural property; reviews the motives that underline preservation; and discusses management of historic buildings and cultural landscapes for the future. There are four case studies that examine the British experience in linking current inhabitants with historic landscapes and buildings, in the diverse community types from the wild landscape of Dartmoor, the inner city of Leeds, the relict countryside of Suffolk to the outer London suburb.

This book is in four parts with fourteen chapters by internationally recognized scholars and practitioners. The first parts of the book discuss the changing attitudes towards caring for the past and the underlying desire to preserve various places and things. There is a focus on the dynamics of preservation in working and living spaces and an explanation of why landscapes are harder to preserve than buildings. In concluding, the editors look to the future and explore the dilemmas of preservation and how to reconcile public interest in the past with other social needs.

The participants in International Council of Monuments and Sites' London Symposium held in April 1979 who have contributed to this book include: Michael Hunter, Hugh Prince, Bevis Hillier, Randolph Langenbach, Tamara Harvey, Peter Fowler, Sylvia Sayer, John Popham, Matthew Saunders, Ken Powell, Marion Shoard, Max Hanna and Elizabeth Beazley. The editors of the book are David Lowenthal and Marcus Binney. Dr. Lowenthal is Professor of Geography at University College London and a well-known authority on conservation and the cultural landscape. Mr. Binney is chairman of SAVE Britian's Heritage and architectural editor of COUNTRY LIFE.

PRG will fulfill individual orders for this book. The price is $14.45 postpaid. Send orders to PRG, 5619 Southampton Drive, Springfield, VA 22151.

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Solar—an Energy Source

Project: Clifford Office Building #4
Location: Albuquerque, New Mexico
Architect: Schlegel & Lewis

This small 2-story commercial lease-space office building of 15,000 SF was designed to conserve energy (specifically, heating with natural gas). In order to meet this challenge by more than merely incorporating additional insulation materials to decrease the U factor, the architects wanted to respond to the different climatic conditions on each face of the building through the design. In the past most commercial leased-space office buildings have been basically a box with the window openings treated the same on all four elevations. This design approach gives a coherence and continuity to the building image but negates the different climatic influences that occur on each elevation.

In our attempt to solve this problem, first we tried to hold the shape of the building as closely as possible within the site configuration to a square achieving a more beneficial surface to volume ratio. Second, we tried through design, to have each elevation and window arrangement respond to our analysis of climatic conditions based on their orientation. Third, we accepted the fact that we had to minimize the window area because of the great heat loss that occurs through the glass when compared to insulated walls. The windows (3' X 5') were designed as punched holes rather than a continuous glass strip so that at least one opening would occur in each 15' office module.

The glass area on the north elevation is one-third less than on the south elevation. The increased window area on the south allows additional heat gain during the winter months, but is protected by overhangs or glass settings in the wall so that the windows are shaded in the summer. The west elevation has no glass, and there is an open stairway located in this area that acts as a shading device from afternoon sun during the summer. The east elevation has glass kept to a minimum except for one large glass area on the second level for a view of the Sandias from the interior stairway.

The building has been occupied during the past four winter months (November-February), and the average gas consumption is 63,150,000 BTU's per month. During this four-month period the average degree days per month was 728, or an average requirement of 5.8 BTU's per SF per degree day. This projects a cost of 7¢ per SF per year for heating.

The challenge of this approach from an architect's design point of view is how to design to respond to climate for each facade and still maintain the overall unity of the design.

March-April 1982
The problem called for 967 SF addition to an adobe house built in the traditional “pueblo” style common to New Mexico, and located in an old apple orchard in the Rio Grande Valley. The addition contains a large room for entertaining and use as a “family room” together with a greenhouse, a small bedroom, kitchen unit and bath, to provide full guest house facilities.

The siting of the addition at the west end of the property allows view orientation east between two rows of remaining apple trees toward the distant Sandia Mountains. The south end of the addition provides, in addition to a small greenhouse, passive solar heating by direct gain through the glass, and six vertical water-filled drums, which act as heat storage elements, warming the air along their surface through convection. Clear skylights in the bedroom and bath add additional winter heat gain.

A Marco fireplace circulates heated air through a convection loop. Conventional gas fired furnace and evaporative cooler provide backup heating and cooling.

Walls are 2 X 8 stud construction with 6” batt insulation yielding an R of 22.22. Roof is 2 X 6 joists and built up roof with 6” fiberglas batt, R 21.28. All window openings are double glazed, with U of .65. Natural ventilation is provided by small casement windows on the west and north and by air grilles above the water drums in the greenhouse. The plan provides winter focus toward the fireplace wall on the west and summer focus toward the outdoor deck on the east, which is shaded by wood louvers angled to provide summer shade yet allow low winter sun.

A covered walkway or “portal” provided passage to the main house and the wood lattice screen along its north side provides security from the street while allowing glimpses of the garden from the driveway.
Located on 80 acres this country home will initially function for summer living and as a week-end retreat. Of frame construction with 6" batt insulation, cedar siding, and a sheet metal roof, the energy saving features include double glazed windows and doors, an open plan with cold air track, and sliding exterior shutters. Passive solar features include a south facing greenhouse, brick floors and wall, and a solar water heater. The solar water heating system, which can be drained from the rest of the plumbing system, includes an insulated tank for pre-heated water and insulated water lines to the main electrical water heater. In addition, the entire plumbing system can be drained when the house is vacated for long periods of time. Heating includes a wood burning stove and electrical back-up heat for extremely cold periods.

The house is located on the edge of a meadow with pine, cedar, and pinon trees offering protection from north winds. Since the building is oriented with no north facade, the sun will touch every wall almost every day. Major views are to the SE and SW. Large cedar decks are oriented off the living area and kitchen toward these views.

Use of the building for differing environmental conditions:

(Continued on page 14)
Building the
Val Verde Hotel

by Spenser Wilson
and Jack McKee

The Val Verde Hotel in Socorro, New Mexico, was a nationally known stopping place during its hey-day in the 1920's and '30's. The Val Verde was note-worthy for several reasons; the location, the time period, and the architect.

Socorro is centrally located in New Mexico on the main north-south line of the Atcheson, Topeka & Santa Fe Railroad, from Albuquerque to El Paso, Texas, and on the branch line to Magdalena. Magdalena was an important mining and ranching area which attracted a great deal of attention, while milling operations in the Socorro area also created the need for good hotels. Both towns at one time supported several hotels and rooming houses. The Val Verde was built by a group from Missouri in 1919 to provide first-class accommodations. It was built on the site of the earlier Windsor Hotel which had burned.

The Val Verde is also important because it was a bridge between the period when railroads were the primary means of travel and the coming of the automobile. Road travel became important by the 1920's as both state and federal programs improved main roads into highways. The family car and commercial trucking began the process of replacing the railroad in American life. The Val Verde, however, continued to attract travellers and remained busy well into the 1960's before the modern motel competition forced its closing.

The Val Verde is also important for its architecture and the architect. The building was designed by the famous architectural firm of Trost & Trost of El Paso, Texas. Henry C. Trost was well known for a series of commercial buildings and houses in the southwest. The Franciscan and El Fidel hotels of Albuquerque were among the best known, as well as the Val Verde. (Trost is subject of a recent study by Lloyd C. and June-Marie F. Englebrecht, entitled Henry C. Trost: Architect of the Southwest, published by the El Paso Public Library Association.) Trost designed the Val Verde in the popular California mission style and the hotel opened for business June 19, 1919. The hotel was built in a U-shape around a courtyard, with single-story wings on the west and east sides of the courtyard, and a three-story base of the U on the north containing the reception and lounge area—complete with fireplace. The second and third stories were rooms. The east wing contained living quarters for the owner-manager, the dining room and kitchen, and office or store rental—at one time a barber shop. The west wing was rooms and another commercial area on the tip of the wing. When completed the courtyard was landscaped with trees, flowerbeds, grass and a fountain. This very important and imposing structure is now listed in the National Register of Historic Places.
fig. 5 east wing with roof and beginning the second story in the center. Note heavy construction vehicle on the right.

fig. 9 north wall of center portion

fig. 6 west wing and visitor

fig. 10 the front of each wing

fig. 7 view of west wing from north-west corner

fig. 11 the courtyard

fig. 8 east side

fig. 12 nearing completion
Documentation for the Val Verde is quite complete, which is in contrast with so many historic buildings. The original architectural drawings have survived as well as the hotel register. More recently a group of photographs of construction of the building have come to light. A total of fourteen negatives turned up in a private collection in Socorro and, with the permission of the owner, twelve are reproduced here, the other two are too blurred to print. Trost may have taken them himself to record the construction. He certainly supervised the work and, according to the number of entries in the register, he returned on several occasions to Socorro after the opening.

The Val Verde is no longer a hotel. The building is being developed by a private investor as professional offices and small shops. At the moment there are hopes for a restaurant in the original dining and kitchen area.

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SUMMER VENTILATION
1. Open low windows and doors on colder sides of building.
2. Open clerestory windows to exhaust hot air.
3. Overhangs protect windows from direct sun.
4. Shade greenhouse; open low and high windows for proper air flow.
5. Use shaded decks for summer play and evening meals.

WINTER HEATING
1. Low sun penetrates brick floor and wall of greenhouse and living area.
2. Interior heat tube draws hot air from clerestory; exhausts at bottom through adjustable vent.
3. Door from cold room remains closed to function as cold air trap.
4. Centrally located woodburning stove radiates heat to brick hearth and wall.
5. Sun penetrates clerestory for additional heat and balanced light.
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