Despite one's more sanguine notions, we need to view the nation not as a continent of distinct regions and disparate terrain, but as an integrated geographic machine, serving the industrial and social operations that support our consumptive culture. -Damon Farrugia

In the Gallery

Subterranean Renovations:
The Unique Architectural Spaces of Show Caves

Thirty color photographs of some of the most compelling architectural spaces within show caves were featured in the CLEO exhibit.

CLEO photo

Like an elaborate stage for an audienceless performance, spectacular natural caves formed and transformed over the ages in the unseen world of the underground. When modern humans came into this subterranean world, first as explorers, then as tourists, they brought with them elements from their surficial realm, from cement and electricity to postcards and fried chicken. From the first lantern-led tours through Mammoth Cave in the early 1800's to the drive-through caves of today, the two hundred or so caves in the country that have been opened to the public (out of over 30,000 caves discovered in the United States so far) have been transformed by the interests of tourism and the fancy of cave owners and promoters.

Field Report

The Oak Ridge Observatory and
The Search For Extraterrestrial Intelligence

In the hills of eastern Massachusetts stands the Oak Ridge Observatory: a picturesque cluster of old astronomical facilities in a grove of pine trees, among which is the only major facility in the United States fully dedicated to the search for extraterrestrial intelligence.

The facility consists of an old but still serviceable 84-foot steerable radio antenna and a control building, located on the edge of the observatory grounds. The observatory belongs to the Harvard-Smithsonian Center for Astrophysics, which has permitted the use of an under-utilized radio antenna by the Search for Extraterrestrial Intelligence (SETI) program.

For over 55 years, SETI has been sporadically using various antennas for its quest, as funding and other astronomical programs permit, including the 1,000 foot dish at Arecibo, Puerto Rico. NASA partially supported the program from the 1970's to 1993, but it is almost entirely privately funded now.

SETI started with the astronomer Frank Drake's first searches in 1960, at the Green Bank observatory in West Virginia, and was further popularized by Carl Sagan. The director of the SETI program operations at Oak Ridge is Paul Horowitz, from Harvard University, one of the more well-known theorists on the subject.

The Oak Ridge dish has been a full-time SETI site since the 1980s, joining the Parkes antenna in Australia and the Giant Ear in Ohio (which has since been destroyed). The first system at Oak Ridge, called META (Million-channel extra-Terrestrial Assay), was supported by a $100,000 donation from Steven Spielberg, whose now...
Field Report

The Biggest “Five and Dime” in the World
A Visit to Bentonville, Arkansas
Wal-Mart Ground Zero

The Wal-Mart visitor’s center in Bentonville.

It looks like a typical small town five and dime store circa 1945, right on the village green across from the courthouse. It even says “5-10” in red letters. Even though that is exactly what it once was, its new just a facade. Go inside the front door, and as a greeter in a blue vest welcomes you in (just as at every Wal-Mart store), you begin to sense the contrasting worlds: you’re not in a five and dime or a Wal-Mart, but in a sort of meta-store: a gift shop selling souvenirs about the largest retailer in the world. This is the Wal-Mart Stores Inc. Visitors Center, located in the building where Sam Walton had his first store, in Bentonville, Arkansas.

Sam Walton in front of the Wal-Mart visitor’s center.

Beyond the greater and gift shop/foyer is the corporate public relations environment of the Visitors Center, a labyrinth of trade-show like displays and vitrines telling the Wal-Mart story. Highlights of the information-packed gallery include “Sam Walton’s Favorite Pickup” (a 1979 Ford, permanently parked on a riser inside the gallery), photographs of Sam Walton’s sprawling house, located just outside town, and behind glass windows, a full-size recreation of his office at the corporate headquarters.

Besides starting his first business here, living here, and building the first store with the Wal-Mart name here (actually the first one was opened in Rogers, the next town over), Sam insisted that the corporate office remain in this small town in rural northwestern Arkansas. Suitably, the Corporate Headquarters for the 3,250-plus Wal-Mart stores across the globe (including China) is not on Main Street, in the old center of town, like the visitor’s center, but is a mile or so away on the commercial strip, down the road from the usual strip fixtures like Applebees and Meineke muffler, and within sight, of course, of a Wal-Mart store.

Subterranean Renovations
Continued from page 1

Most modifications to the natural cave are of a practical nature, made in order to accommodate visitors. New cave entrances are blasted to allow more convenient access, pathways are installed to allow visitors to move easily along the otherwise uneven cave floor, and lighting of some type is installed to make the formations and pathways visible.

The cave developers that go beyond these basic alterations begin a sort of architectural discourse between the strange natural underground features with sometimes stranger-still man-made forms. The effect is the creation of unprecedented, and even sublime spaces, reflecting the complex relationship between humans and the non-human natural world.

The Center’s exhibit, Subterranean Renovations: The Unique Architectural Spaces of Show Caves, displayed in Los Angeles October 2 to November 29, 1998, featured color photographs of twelve of the most compelling examples of this unique form of underground architecture. Represented were the lunchrooms at Carlsbad Caverns and Mammoth Cave, light show theaters at Dekotech and Meramec Caverns, the reception room at Truit Caves, with its working fireplace, and the the abandoned bandstand and dance floor, deep within Wonderland Cave and Club in Bella Vista, Arkansas.

A booklet published by The Center explores this phenomena in greater detail (see the last page of this newsletter).
Exhibit Update
Nellis Exhibit Postponed Due to Security Concerns
CLUI Exhibit Schedule

The Center's exhibit about the Nellis Range, the largest restricted ground space in the United States, scheduled for the Fall of 1998, has been postponed until the Fall of 1999, due primarily to security concerns resulting from recent conflicts between the United States and Islamic groups and nations.

"Due to increased range usage and a heightened security posture because of recent terrorist activities, we have had to reconsider your request for range access," states a letter to the CLUI from Colonel Wilhelm F. Percival, Commander of the Range Management Office at Nellis Air Force Base. At a meeting with Colonel Percival and other range managers, CLUI director Matthew Coolidge became convinced that the Air Force was not immediately going to cooperate with the Center and its requests for access to the range in order to obtain photographs for the exhibit and accompanying book.

"Originally we were going to call the exhibit 'The Landscape of Conjecture,' because so little is known about the range outside of a small circle of Air Force and contractor personnel, sworn to secrecy," said Mr. Coolidge, "but when the range administrators finally offered to support the project by releasing information to us and offering a three-day tour of the range for photography, we changed the working title to something less speculative."

But the change was premature, as access was later denied, just days before the visit was to take place. The title of the exhibit remains The Landscape of Conjecture until, and if, the military allows members of The Center to see for themselves what is and is not on the range, and to emerge with photographs to present to the public.

Since World War II, this Connecticut-sized chunk of southern Nevada has been closed to outsiders. As a result, a sort of landscape museum has evolved. Parts of the range are frozen in 1940, untouched by scavengers, vandals, and industry. Other parts of the range, meanwhile, have been heavily transformed by some of the most unusual and high-impact land use imaginable. For example, a mock Soviet landscape, complete with industrial areas, airbases, and radar and missile sites was developed on the northern range, used for military training, including bombing with live ordnance.

And then there is Area 51. "We rarely spoke of that most sensitive place throughout our negotiations with the Air Force," said Coolidge, "That subject goes nowhere. It's useless to push it beyond asking if the official position regarding Groom Lake has changed." Area 51 remains in some ways the heart of the Landscape of Conjecture, inspiring a variety of interpretations. However, it is just one small piece of a vast complex of unusual, perplexing, and misunderstood land uses.

"We can do the exhibits with or without Air Force cooperation," Coolidge concludes. "It's just better for them, us, and the public to have a more evolved understanding of what goes on out there."

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Das Rolllende Hotel
State of the Art Touring

Tourbusing has reached a new plateau with the custom-made coaches of the Rotel Tour group, out of Tittlingen, Germany. Called Das Rolllende Hotel ("The Rolling Hotel"), this line-up of totally self-contained tour buses offers separate sleeping quarters for each of the passengers on the bus, and an outdoor kitchen, which forms when an exterior panel on the side or back of the bus folds out into a canopy platform with counter space.

Each type of bus is designed for tours destined for different parts of the world. The buses either drive directly from Europe, or are shipped to the point of origin for the tour, then are usually returned to Germany for the next tour. Rotel offers overland bus tours to virtually every country on earth, from Inuvik, on the Arctic Ocean in Canada, to Cape Horn, and from the top of Scandinavia through Baghdad and Buli. Locally, the distinctive red and black buses can be seen lumbering through National Parks and Monuments, mostly in the Southwest.

**This model, with 24 seats and beds, is used for countries with good roads, such as the United States.**

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**This model has high chancellor and 4 wheel drive and seats and sleep 28. It is used for rugged trips through the Middle East, China, and Africa.**

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**The full size bus and trailer combination seats and sleep 48. It is used throughout Europe and Asia. There is also a four-wheel drive 34 seater with a trailer for trips such as the Trans-African expedition.**

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The Lay of the Land Winter, 1999
Modular Buildings

A Modern Form of Architecture Whose Time, Perhaps, Has Come Again

It is virtually impossible today to assemble a building of any sort in the United States out of large modular assemblies routinely available on the market without introducing innumerable "special details" or "special components" that last minute increase the cost to a point above that of a comparable, conventionally built structure. -From Form Follows Function, by Peter Blake, 1977

In these dynamic times, permanent architecture can seem as archaic as it is impractical. Crusty, primitive building materials from disused demolished structures form piles of rubble that fill our dumps and urban hinterlands, and rotten downtown cores crumble from abandonment brought on by the conflict of shifting demographics and stationary structures. We move into the edificeial flux left by some previous group, and either conform to the tyranny of the existing structure or spend a fortune to modify it to our needs.

Manufactured modular structures offer an alternative. Adaptability exists from their inception, with flexible design options that are easily modified, and the choice of relocatability. The integration of standardization in construction options, based on how organizations tend to use space, and pre-engineered, factory fabricated components, reduce costs to a reasonable level, allowing resources to be committed to the task at hand, rather than the structure in which to do it.

By definition, commercial modular buildings are 60 to 100 percent factory built, and are assembled in one location and moved to another. In fact, most new construction contains many pre-manufactured components, such as kitchen cabinetry, roof trusses, and doorframe assemblies. Totally modular construction simply maximizes the efficiency of the factory assembly line process.

The justified rebellion against modernist architecture led to a reactionary postmodern style. As postmodernism matures, it can return to explore some of the positive attributes of the modernist era, learning from its weaknesses, and building on its strengths. -Damon Farragut

The needs of organizations change over time, as do urban contexts. Modular buildings offer flexibility by being designed with the option of disassembling the structure and moving it to another location. This relocatability means that the investment in the buildings, and the effort to make the improvements to them, is not lost if a move is necessary. And the impact that modular buildings have on their site is minimal. When a lot is vacated, there are no foundation remnants or cellar holes scarring the ground.

In Los Angeles, it is said that you have a 50% percent chance of being educated in one, and if you go to jail, you have a good chance of being incarcerated in one. In an earthquake prone land, this is reassuring as modular buildings are actually structurally stronger than most site-built buildings; as they are constructed to withstand the turbulence of traveling by road from the factory to site. In other ways too, modular construction can improve the quality of the building, as they are manufactured by technicians who are experts at their craft, not unknown journeymen, taken from the local pool of available workers.

For decades, modern utopias have been designed around modular forms of construction. The visionary designers that have had perhaps the greatest impact on architecture, such as Frank Lloyd Wright, Le Corbusier, and Buckminster Fuller, all had designs for low-cost, modular building complexes. The execution of these plans was often foiled by the realities of the marketplace. In the case of those constructed as high rise apartment blocks, the structures became blighted by the social effects of economic disparity, or ended up costing as much or more than regular construction, and were available only to the rich, such as Moshe Safdie's remarkable Habitat building in Montreal, created during the modernist frenzy of Expo '67.
But perhaps modular construction works best when applied to the ubiquitous one or two-level buildings that make up the majority of the world’s architecture. These are the buildings which small business move in and out of, and that families occupy.

There is certainly room for improvement in the construction of pre-manufactured housing units, especially in the variety of options for stylistic elements. However their very existence today is tremendously beneficial, as in these times of hyperinflated housing costs, it enables more people to live in their own spaces, with the freedom of relocatability to boot.

But with the less idiosyncratic requirements of non-residential structures, modularity finds its best medium. From the small, single-wide applications of a security station to four-story hospital structures, modular buildings are making their way down our streets to vacant lots, and their potential is only beginning to be appreciated.
THE CENTER FOR LAND USE INTERPRETATION SHOP

Ordering Information:
Please add $3.00 shipping and handling for the first item, $0.50 for each additional item, and 8.25% tax if ordering in California. Make checks or money orders payable to The CLUI. Mail to: The Center for Land Use Interpretation, 9331 Venice Boulevard, Culver City CA 90232. Phone: (310) 839-5722

CLUI PUBLICATIONS

The Nevada Test Site: A Guide to America’s Nuclear Proving Ground
The only book available that describes the nation’s enormous weapons and R&D test site facility. Prepared by both extracurricular activities and Department of Energy officials.
50 pages, with field-out map and over 100 illustrations and original CLUI photographs.
$12.50

Hinterland Catalog
Illustrated catalog of the 100 items sold in the 1997 CLUI exhibit: Hinterland: A Voyage into Farther Southern California.
112 pages.
$12.50

Route 88:
A Cross-Section of California
Illustrated book about this remarkable, 210 mile roadway. A perfect weekend-long trip from Los Angeles.
50 pages.
$12.50

Six Avenue Pentalekia Tour
"An instructive investigation of urban center." Self-guided tour of a section of Oakland, California’s industrial waterfront. Published by the CLUI.
24-page illustrated booklet.
$5.00

The Chesapeake Bay Hydraulic Model
An illustrated history of this remarkable engineering accomplishment, the largest indoor hydraulic model in the world, now abandoned.
30-page illustrated booklet.
$5.00

Nuclear Proving Grounds of the World
A report on the primary nuclear test sites across the globe, and the hundreds of other sites where single nuclear tests took place on, under, and above the earth. In the former USSR, China, Australia, Pacific Ocean, and elsewhere.
30-page illustrated booklet.
$7.50

Around Wendover
An Examination of the Athapaskan Landscape of the Great Salt Lake Desert Region
A guidebook to "points of interest" in this special Amazonian landscape, with maps and informational services.
42 pages.
$12.50

Subterranean Renovations
The Underground Architecture of Shoe Caves
Illustrates the phenomena and describes depics some of the best shoe caves environments in the United States, with contact and visitation information. From the CLUI exhibit.
38 pages.
$5.00

CLUI NEWSLETTER

Get a year’s worth of The Lay of the Land
The Center’s quarterly newsletter with a minimum donation of $25.00.
Includes new items, site reviews, book reviews, neighborhood news, and more.
Eight pages. The subscription also gets you on the mailing list for notices and invitations for Center events.
Back issues also available for $5.00 each.

CLUI NOVELTY ITEMS

CLUI Pocket T Shirt
Quality gray 100% cotton T shirt with CLUI logo on the pocket.
Specify size (S, L, XL, XXL).
$15.00

CLUI Mug
Standard issue mug, with CLUI emblem. We guarantee that you will get out of it everything you put into it.
$7.00

S полуслепе Organ Tape
A recording of the “World’s Largest Musical Instrument,” the Great Subter Organ, at Lame Covey, Virginia. Rhythms and melodies played by the course of the water using instruments, Mel. LeJault W. Sprinkle (Hansored). Music generated by the Earth itself! Complete with dripping sounds.
25-minute cassette tape, produced by Lame Covey.
$3.99

Suggested Photo Spot Post Card and Tour Book
Full-color cards with 20 Suggested Photo Spot post cards, depicting the sites with the Photo Spot name on the frontpage. Also contains directions to guide people to the Photo Spot, scattered across the country. Published with the support of the Hemingway Western Studies Center.
46 pages, in color, spiral bound.
$14.95

Photo Spot T Shirt
Frees the Photo Spot sign reproduced on a shirt. Be a walking Photo Spot.
$15.00

The Photo Spot Project Video
The video of the CLUI’s Photo Spot Project, by Melinda Stone. (15 minutes)
$15.00

Miniature Tourist View Cameras
$10.00/each
Nevada Test Site Tour View Camera
Tour the Nevada Test Site from the safety of home with this miniature viewing camera. 14 different points of interest at the Test Site are shown. Original CLUI photos!

Photo Spot Tourist View Camera
Offers views of 14 of the CLUI’s suggested Photo Spots!
The Lay Of The Land

Winter 1999

The Quarterly Newsletter for The Center for Land Use Interpretation

CLUI Schedule for 1999

1999 promises to be a busy and interesting year for The Center, and we hope you can participate in some of the upcoming events listed below:

- A photographic installation of work by Bill Dickey will open at CLUI Los Angeles in February, entitled Large-Scale Executions In Nevada.
- Over the coming year, CLUI Archive photos are making their way to exhibits around the country, such as the As Far as the Eye Can See exhibit in Atlanta, opening in January, and at Rosenfeld Felsen Gallery in Los Angeles in February.
- Major improvements will be made to the facilities at Wendover this Spring and Summer, and an exhibit of Wendover residents' work will open in the Spring at the CLUI Exhibit Hall in Wendover, Utah.
- A New modular headquarters for CLUI Los Angeles will open this Spring, next door to the current facilities.
- CLUI exhibit at MIT's List Center in Massachusetts in April.
- More independent Interpretor presentations in Los Angeles, all year.
- Volunteer "Work Party" at Wendover (June. Call if you want to participate!)
- CLUI exhibit at Seattle Contemporary Art Center (Summer)
- Landscape of Conjecture exhibit at CLUI Los Angeles (Fall)

Of course more exhibits venues in the Land Use Museum Complex continue to be under development too...