THE LAY OF THE LAND

“Aerial photography exposes the scattered tracks and traces of humanity on the planet’s surface, their extent, their shapes, and their layers - in a sense, everything that defines human settlement as an aspect of the earth’s surface. It also demonstrates that the landscape is always both the incidental product and the physical expression of the meeting between mankind and nature.”

-From the essay “Aerial Geography,” by Jean-Marc Besse, from the newly published Designs on the Land, by Alex MacLean

THE CALIFORNIA COASTAL RECORDS PROJECT

EXHIBIT AT CLUI LOS ANGELES

The California Coastal Records Project is a photographic portrait of the coast of California, composed of nearly 12,000 aerial images taken in the past year and a half by Ken and Gabrielle Adelman, a husband and wife team from Northern California. The Project was featured in an exhibition at the Center’s Los Angeles Exhibit Hall this Spring, as part of the Center’s Focus on the West Coast. Though originally designed as a web site, the Adelman’s project was shown as a digital projection at the CLUI, with each image displayed for three seconds, similar to the rate at which they were taken. At this rate, the entire portrait of the California Coast, from the border of Oregon to the border of Mexico, takes 9 hours, 51 minutes and fifteen seconds to complete. The Adelmans assisted with the presentation of their material at the CLUI by providing all the images, scaled to the right resolution for the projection.

The low altitude, high resolution, oblique images were recorded digitally during more than a dozen flights in 2002 and 2003 by Ken Adelman, from a helicopter flown by Gabrielle. The helicopter maintained an altitude of around 500 feet, allowing a few hundred yards of coastline to be visible in each image. Each image overlaps a bit with the adjacent images, so that shown together as a sequential projection at the CLUI, objects travel from right to left, as the view moves down the coast, creating a mesmerizing display of information-packed images, from a perspective unavailable to the land-based traveller.

The project reveals hidden and unknown spaces, as many of the places that are shown are practically inaccessible from the ground, such as large private ranches, gated communities, fenced industrial areas, or roadless wilderness. It also shows the extent of development along the coast, as well as the remarkable lack of development in some places.

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HUDSON RIVER TREASURE HUNT

REPORT FROM A RECENT VISIT TO A NEW ART MECCA

The art and land projects sprouting up this spring centered around the Hudson River town of Beacon make for an interesting treasure hunt through this newly culturally engorged industrial-pastoral landscape.

The obvious place to start is at Dia:Beacon, which opened in May, and may be the largest contemporary art museum in the nation. The huge old factory is now full of big art, some of it the brand of minimalism that moved outdoors in the 1960’s and 1970’s in the form of Land Art. Inside the museum are some often depicted but rarely seen things like Smithson’s dirt piles, Beuys’ wolf piece props, and some new Heizer holes. The landscaping is by the post-minimalist gardener, Robert Irwin.

Just beyond the museum, the road dead-ends at the town sewage treatment plant, a handsome brick building with a stack, and a trail heads off into an intriguing peninsula that extends into the river beyond the shoreline railroad tracks. This is Denning’s Point, an undeveloped 65 acre wooded site where the artist Lothar Baumgarten is creating a number of sculptural installations and sound pieces that will be complete next year.

Baumgarten’s project, funded by Lannan Foundation, is part of the Watershed Art Project, which begins exhibiting this year as a program to create artwork and educational programs that “raise awareness of the imaginative and physical landscapes of the Hudson River Valley.” The project is managed by a Manhattan-based organization called Minetta Brook, which distributes a field guide to the projects from its storefront exhibit space in downtown Beacon.

Follow the field guide’s directions to sound-equipped park benches at a few locations in the region, which provide an audio track of interviews and sounds when you sit down on them; or head out to scenic overlooks with customized mounted viewing binoculars, one on either side of the river; or to a site at Beacon Point, where the landscape artist George Trakas is building a sculpted storefront peninsula.
The project was conceived to be a baseline of data, available to anybody. While presented at the CLUI as a continuous image, it may be read as resembling the work of photographers and conceptualists like Robbert Flick, or Ed Ruscha, and have some of the qualities of German typological photography. But it was conceived by the Adelmans to help advance the preservation of the coast. “Our goal is to create a aerial photographic survey of the California Coast and update it on a periodic basis,” says Ken Adelman, who was inspired to create the project while involved in the (successful) effort against the massive Hearst Corporation’s proposed coastal development near San Simeon.

The web site, online since October, 2002, has already had an impact on development by providing evidence of unauthorized building projects and seawall construction. Architects and developers have been complaining about the project, while code enforcement agencies and the Coastal Commission have praised it. Some consider having their home visible on the internet as a violation of their privacy, and the “rants” listed on the project web site are exemplary. Barbara Streisand has recently filed a $10 million suit against the Adelmans, who maintain that they can’t help it if people’s houses happen to be on the coast that they are documenting. “We have little sympathy for those who would feel that in order to enjoy the beauty of the coast that they must deny others access to it,” says Ken. A hearing on the case is scheduled for August 28th.

The only part of the coast not represented in the exhibit, or on their website, is the 35 miles along Vandenberg Air Force Base. Permission to fly through this active and sensitive military zone has not yet been granted by the Air Force. But the Adelmans will keep trying, and will be updating the existing images with future flights. They are also currently working on a similar project for Oregon.

The California Coastal Records Project was presented at the CLUI as part of the Center’s Independent Interpreters series of presentations. The exhibit ran continuously at the Center, visible during normal public hours of noon to five PM, Fridays, Saturdays, and Sundays. Special showings of the complete portrait were scheduled by appointment, during which refreshments were made available. Additional information on the project and access to the Adelman’s website, www.californiaoastline.org, was also available in the exhibit space.

The unceremonious entrance to the Watershed exhibit site, in the mostly empty Dick’s Castle, New York.

During the opening weekend of Watershed, May 24th, visitors had an added, temporary site along the Watershed Project trail, that involved a visit to Dick’s Castle, the looming, monolithic, hundred year old, locally legendary unfinished residence on a hillside at Garrison. On arrival, a sign indicated a side door through which to enter the seemingly unoccupied castle, near an unfinished fountain and a gravel parking area. Inside, was a small unpainted drywall room, with only an elevator door and a sign that said: Please Take the Elevator to the 3rd Floor. On the third floor was a grand room, partially furnished with a banquet table, sofas, and paintings. An attendant, working for Minetta Brook, oriented visitors to the featured Watershed piece, a large map on a table, marking spots along the river where field recordings were made by Annea Lockwood in the 1980’s, following the river from the Ocean to its source. The recordings played on speakers in the room. Archived interviews with longtime Hudson River characters could be accessed via a digital playback machine and headphones.

Additional and more far flung Watershed sites include an exhibit of new and locally shot photographs by James Welling, in New Paltz, and an agricultural sculpture on the grounds of Bard College.

Back in Beacon, the previously “unremarkable” and generally poor upstate town is beginning to reflect the new art culture that Dia has precipitated, which will take form over the coming years with a planned conference center, shoreline housing developments, and a multimillion dollar Rivers and Estuaries Center. For now, a walk down Main Street shows a mix of old convenience stores and new art galleries. Two adjacent nondescript storefront spaces serve as additional exhibit spaces for Hudson River films commissioned for Watershed. Nearby, across the street is Beacon Project Space, a new gallery whose curator, David Ross, is the former director of the Whitney Museum and the San Francisco Museum of Modern Art.

Beacon Project Space’s current exhibition program focuses on artists and architects working in the Hudson River Valley. The inaugural exhibition included work by artist Carrie Mae Weems, who launched a new long-term residency project in Beacon. The gallery and the residency are programs of the Beacon Cultural Project, started last year by the New York developer and art patron William S. Ehrlich, who has purchased “half of Beacon” according to some published reports, and who has teamed up with the Mayor, David Ross, and others to spearhead the revitalization of the city.
Ehrlich’s sites include what is possibly the most interesting and pleasantly sited abandoned and crumbling mill complex on the Hudson, the old Tioronda Hat Works. It is a network of several connected buildings from different industrial periods, spanning the early 1800’s to the 1960’s, located at the intersection of the Hudson River and Fishkill Creek, Beacon’s 19th Century industrial corridor. Uses for the buildings that have been seriously considered include a performing art space for Twyla Tharp and an exhibit space for some of the Sonnabend art collection. In the meantime, the grounds are untamed and sort of open to the public. A path leads along the edge of the broken and collapsing complex, to a viewing area at a scenic marsh on the edge of the Hudson River, where scattered fragments of police-line tape allude to some unknown incident or rehearsal.

SONOMA COUNTY

NEW CLUI REGIONAL EXHIBIT AT SONOMA COUNTY MUSEUM

The Center was asked to investigate Sonoma County, north of the San Francisco area, for an exhibit about land and art at the Sonoma County Museum in Santa Rosa, California. The museum is exhibiting an experiential space by James Turrell, as well as models of his Roden Crater project, and the Center’s “Formations of Erasure” exhibit, about the decay of earthworks. In addition, an aerial survey of human-made landforms in the county was conducted by the Center, and is being exhibited in the museum, June 21 - October 19, 2003.

The landscape of Sonoma County is a monumental blend of exposure and concealment. The bare, rolling hills broadcast a bucolic scene, a showcase land of wineries, farms, and touristied Victorian towns. Elsewhere, the trees have reclaimed the land from the lumber barons, forming a dense storybook forest of hidden retreats and rushing rivers. To the east, the mountains divide Sonoma from its more moderated forming a dense storybook forest of hidden retreats and rushing rivers. Elsewhere, the trees have reclaimed the land from the lumber barons, forming a dense storybook forest of hidden retreats and rushing rivers. The landscape of Sonoma County is a monumental blend of exposure and concealment. The bare, rolling hills broadcast a bucolic scene, a showcase land of wineries, farms, and touristied Victorian towns. Elsewhere, the trees have reclaimed the land from the lumber barons, forming a dense storybook forest of hidden retreats and rushing rivers. To the east, the mountains divide Sonoma from its more moderated

Sonoma is also a mixture of romantic escapism and suburban bliss. From the Russian River bohemians to the hilltop Buddhists, Sonoma’s retreats are as exotic as they are notoriously unknown. The hippies and utopians who have headed to the hills here, and even the corporate communities, like Sea Ranch, Rohnert Park, and the curiously hexagonal Cotati, each have a planned vision of the future, a pride of place, and a persistent optimism.

The image and myth of this superlative place is supported by its denizens and promoters, and by the equally epic mechanisms of the working landscape. Lake Sonoma, for example, the county’s largest body of water, was created from scratch, less than 20 years ago, to reduce flooding along the Russian River - one less valued valley permanently flooded to protect another from flooding. Here and there in the county, gravel pits dug into the hills pull the raw ground up earth out to build the roads and subdivisions of the expanding suburbs, while other hills are formed by the mountains of trash these new places generate.

The quest for energy to drive the stumbling but stable economy of the county creates forms like the hole in Bodega Head, from an aborted nuclear plant project (built in another form in Diablo Canyon), and the miles of pipes in the remote northeastern corner of the county where the ground itself is plumbed and tapped to draw the heat of the earth into electric turbines, in the largest geothermal complex in the country.

Looming over all of this is the 4,300 foot peak of Mount St. Helena, topped with communications towers and transmitters, bathing the landscape in the bitstream. At the bottom of the county, on San Pablo Bay, sea level is seeping back into Skaggs Island, slowly flooding the foundations of a former village of Navy spies, who abandoned their post a decade ago, taking their secrets, but leaving the doors open.

REPORT FROM MARFA

CLUI ASSOCIATE SPENDS TIME IN CURIOUS TEXAS TOWN

CLUI associate William L. Fox spent the fall of 2002 in Marfa, Texas, as a Lannan Foundation writer-in-residence. He submitted the following report about his impressions and experiences in this increasingly unusual place, linked to the developments at Beacon in a number of ways.

The West Texas town of Marfa, population approximately 2,500 residents and visitors on any given day, is located on State Highway 90 about 200 miles southeast of El Paso, or 500 miles southwest of Dallas. It sits at 4,688 feet above sea level on the Trans-Pecos plateau of the Chihuahuan Desert, and is surrounded by the arid remnants of cattle ranches. Look down most any street and at the end you’ll find a barbed wire fence; beyond that, it’s all open range that’s been grazed for more than a century down to bare dirt in places. A multi-year drought has put many of the local ranchers out of business, but the town has found other ways to survive.

Marfa, reputedly named by the wife of a railroad executive after a minor character in Dostoyevsky’s The Brothers Karamazov, was founded in 1881 as a water stop for the Texas & New Orleans Railroad. Some two dozen trains daily still roar through town at all hours, often at more than 50 mph. Coal headed west for power plants, camo-paint ed military vehicles going east, and shipping containers bearing the logotypes of multinational corporations rolling in both directions are among the cargo.

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Marfa is only sixty miles north of the Rio Grande and the border with Mexico, and local arroyos bear names from the previous century such as Contraband Gully. It comes as no surprise that the principal employer in town is the Border Patrol, which maintains 200-plus agents to patrol the largest sector in the American Southwest: 135,000 square miles and 420 miles of border. The patrol’s motor pool here includes buses for transporting illegal immigrants en masse back across the border, as well as a semi-trailer truck rig for hauling away larger vehicles.

North of town a large white plastic aerodynamic balloon is anchored by a long cable to a U.S. Air Force facility, one of the country’s ten “tethered aerostat radar system” blimps. The system was started in 1985 to provide counter narcotics surveillance and deter airborne drug running. The blimps are twice as large as the Goodyear models, can fly up to 15,000 feet, and see aircraft out as far as 200 miles. Marfa’s facility was put into service in 1989, and the blimp is visible most days as it hovers a few miles outside town in the startlingly blue sky.

Patrolling the border first became an economic mainstay of Marfa in 1911 when the U.S. sent cavalry to harass Pancho Villa during the Mexican Revolution. Biplanes were housed in large canvas hangers and deployed in reconnaissance flights over his troops. The duties were turned over to the newly-formed Border Patrol in 1924, but what was Camp Albert became Camp Marfa, and then with the active lobbying of citizens the fulltime Fort D. A. Russell. Its barracks were constructed in 1920, and long artillery sheds in 1939. At its peak in 1945 during WW II, Marfa had 5,000 residents, 200 of which were German prisoners of war housed on the fort grounds.

A couple of gas stations, a small market, some motels, a liquor store and a Dairy Queen are scattered among the businesses along the highway. Intersecting US 90 at right angles is Highland, the town’s main street, which is anchored at its northern end by the Presidio County Courthouse, a three-story Renaissance-revival structure built in 1886 and recently renovated. Nearby is the Paisano Hotel, an historic structure and headquarters for the 1956 movie classic Giant, directed by George Stevens, and starring Elizabeth Taylor, Rock Hudson, Dennis Hopper and James Dean. The hotel now hosts a variety of weekend visitors, including escapes from the lower and hotter cities of Texas, hunters of pronghorn antelope and the local mule deer (the latter’s estimated regional population standing at 151,000)—and international art consumers, many dressed in the inevitable all-black of the self-conscious cognoscenti.

The sculptor Donald Judd (1929-1994) served at Fort Russell during the Korean War, then returned in the early 1970s, seeking a place in which he could permanently install his work. Museums and commercial galleries often were unable to display his larger works, which depended on running out a long series of minimalist permutations in three-dimensional forms. The answer was to buy massive amounts of inexpensive property in a remote location, thus forcing viewers to come to terms with his work on a ground of his own choice.

Judd first bought up properties in downtown Marfa, among them the bank on Highland, and an entire city block along the highway, which he subsequently surrounded with a high adobe brick wall, much to the consternation of residents. Judd named the place “The Compound,” and turned its spacious industrial buildings into studios, libraries, and living quarters. Upon his death everything was left exactly in place, per his request, including his bedroom slippers. As a result, visitors can readily trace a variety of Judd’s working habits. A bed sitting in one corner of a large studio space allowed him to live with early pieces and think through their implications. The severe geometries of Navajo blankets and Mimbres pottery were kept in full view, as were all of his kitchen utensils arrayed on shelves and walls in calibrated order of size and shape. Top quality cookware and an elaborate turntable for playing classical and traditional bagpipe music indicate a predilection for quality tools.

Starting in 1979, Judd began refurbishing the army buildings on the southern edge of town, sharing the old fort with the offices of the Border Patrol. The barracks and artillery sheds, themselves minimalist serial objects, became stage sets for the work of Judd and his friends, fellow sculptors Dan Flavin and John Chamberlain. Judd’s one hundred aluminum boxes are installed in the two high-ceilinged artillery sheds, and the light admitted by windows on all sides allows the works to hover, reflect, disappear, and then come back into view as you circle them. Flavin’s arrays of fluorescent tubes in various colors turn the U-shaped barracks into subtle meditations on color theory, and make you feel as if you’re walking into a sculptural equivalent to Rothko paintings.

Other works on site include the nostalgic recreation of a Soviet-era schoolhouse by Russian installation artist Ilya Kabakov, concrete poems in vitrines by Carl Andre, as well as more recent sculptures by Roni Horn and Richard Long. Outside the barracks stands a 19-foot-tall horseshoe by Claes Oldenburg and Coosje van Bruggen, “The Lost Horse,” done in homage to the final cavalry mounts to be put down here. Robert Irwin is scheduled to install a piece in forthcoming years. Tours through the Judd’s 340-acres on the fort, as well as for various facilities in town, can be arranged through the Chinati Foundation (named after a nearby mountain range—www.chinati.org).

Marfa is thus a major thoroughfare for cultural and material goods moving east and west along the traditional ley lines of Manifest Destiny, and an armed outpost maintaining a calculated rate of flow from south to north that is allowed to supplement the other flow, but not displace it. That is to say, the influx from Mexico of an illegal but critical low-wage labor force is kept to a politically determined rate. The flow of material products is regulated by NAFTA and inspection stations on the interstates and highways. And as with drugs, the war on terrorism is conducted by the Border Patrol, now augmented with federal troops recently reintroduced into the area since 9/11, an interesting resonance with the year 1911. The modernist aesthetic, which moved steadily westward from northern European countries during the 20th century, marched through town and left behind a fort dedicated to high art. The more colorful aesthetics of the southern hemisphere, traditionally posited in opposition, are relegated for the moment to craft stores and smaller galleries in Marfa.

No report from here would be complete without a mention of the Marfa Lights, a flickering presence outside town of undetermined origin. The Texas Department of Transportation has kindly provided a parking lot and viewing platform for nighttime use, framing the mystery in institutional architecture—a window on what most scientists agree may be nothing more than the headlights of distant vehicular traffic, though traveling in which direction no one can say. ♦
POINTS ON THE LINE
RUMINATIONS ON SOME DELINIATIONS OF THE WEST COAST

As part of its contribution to an upcoming exhibit, called Baja to Vancouver, which will be travelling to a number of art museums (from Baja to Vancouver) starting later this year, the CLUI has been examining the landscape along the West Coast of the United States. Field researchers from the Center have been filling in the gaps in the Center’s photographic and text archives, completing a study of the land use of West Coast of the United States - the coastal line itself.

Depending on who you ask, the West Coast is 1,200 miles long, as a minimum, or 8,000 miles long, if you include the bays and estuaries up to the head of tide. Even though we know it must have some finite length, there is, in truth no way to accurately measure the length of the coast. How minutely do you measure the facets of each peninsula, each rock, or each grain of sand? Some, for example, say Washington State has 157 miles of coast. If you add up all the islands and the estuaries, this number is over 3,500 miles. A recent googling of the phrase “how long is the coastline of Washington State” returned a single web page, one that describes the Mandelbrot set, the Van Koch Coastline model, and other mathematical structures related to fractals and chaos theory. Some of which, interestingly, suggest that the length of the coastline of Washington State may, theoretically, be zero. And, in a sense this is so. The coast is always operating at a loss. No matter what, the coastal structures will, someday, slump into the sea. It is a negative infinity.

Longitude, North to South
One system of abstract measurement that can be applied to the coast with a great degree of certainty is longitude. These unwavering lines radiating out from the poles, round the girth of the planet in invisible stripes, whose location relative to the ground can be measured down to the foot. Within this system, there are certain parts of the coast that really stick out. Cape Flattery, in Washington State, is the westernmost point of land in California, marked the westernmost point of land in California for over 100 years. It was automated in 1951, and the keepers dwellings were burned down in 1960 to keep squatters out. The lighthouse is one that describes the Mandelbrot set, the Van Koch Coastline model, and other mathematical structures related to fractals and chaos theory. Some of which, interestingly, suggest that the length of the coastline of Washington State may, theoretically, be zero. And, in a sense this is so. The coast is always operating at a loss. No matter what, the coastal structures will, someday, slump into the sea. It is a negative infinity.

The coast of Oregon, though rocky and jagged, is relatively straight overall, compared to California and Washington. Few deep natural harbors exist, and thus no major cities have developed on the coast. Features that attest to the abruptness of the Oregon coast include the “world’s smallest harbor,” Depoe Bay, and the “world’s shortest river,” the D River at Lincoln City, only 150 feet long. The Oregon coast does have a longitudinally significant site, however, Cape Blanco, near the southern corner of the state, which is the second most westerly point on the West Coast of the United States. At the tip of Cape Blanco, as is common at rocky points up and down the coast, is a lighthouse, built to warn ships away from the shore. Being such a westerly landmark, the lighthouse was also used by a Japanese submarine captain to locate his sub along this unfamiliar coast on one evening in the fall of 1942, in the midst of World War Two. The submarine surfaced and unloaded a pontoon airplane from its deck. The pilot of the small bomber turned south at the Cape Blanco lighthouse, and flew another 50 miles to a strategic point above the forest, near Brookings, Oregon, and dropped an incendiary bomb, intended to set the Pacific Northwest, and its vast supply of wood, on fire. Though a small fire was started by the bomb, the moisture of the forest kept it from spreading quickly, and it was easily extinguished by firecrews.

There are around 50 lighthouses on the West Coast of the United States, marking westerly points, all of which have been automated (no longer requiring a tender - the “house” part of “lighthouse”), and all of which are maintained by eager lighthouse enthusiasts and historians, who regard these beacons with a level of affection unsurpassed by other forms infrastructural architecture. Within California’s Lost Coast, the largest stretch of coastline without a paved coastal road, the lighthouse at Cape Mendocino marked the westernmost point of land in California for over 100 years. It was automated in 1951, and the keepers dwellings were burned down in 1960 to keep squatters out. The lighthouse was completely abandoned in the 1970’s. In 1998, the lighthouse was moved from this remote, inhospitable spot by lighthouse enthusiasts to a more convenient location 35 miles down the coast, in a park at the town of Shelter Cove.

Latitude, North to South
If the West Coast is united by its geographic structure, the chaotic crumbling coastline, running north and south, it is divided and segmented by the political and geographic stratifications following perpendicular lines, like those of latitude. At the northern end, the longest, straightest international boundary in the world dives into the ocean at Blaine, Washington, after passing through symbolic gates within the curious monument called the Peace Arch (a large white monument built by Sam Hill, in the “no mans land” on the lawn between the northbound and southbound traffic lanes). After crossing the shoreline railroad tracks (where the border line is marked casually in red spray paint), and invisibly spanning the tidal mud flats, the...
Lay of the Land

international boundary makes landfall again at a curious geographic remnant called Point Roberts, a six square-mile community at the tip of a British Columbian peninsula that falls beneath the 49th parallel, thus creating a fragment of Washington State that can be reached by land only by travelling through Canada.

The next major political boundary to the south is the state line between Washington and Oregon, a series of segmented survey vectors which weaves through the Columbia River, angling around islands and nearly touching the riverbank. At the mouth of the Columbia, the second largest river in the country, the state line passes by Cape Disappointment and the Louis and Clark Interpretive Center, at the end of the explorers journey west. Then the line dissolves into the ocean, having become meaningless.

The state line between Oregon and California is in the middle of the mythical state of Jefferson, a mildly serious successionist area composed of several Northern California and Southern Oregon counties, that has been independence-minded since the 1940’s. The boundaries of the State of Jefferson, however, have not been agreed on, and are therefore impossible to locate. The Oregon/California state line was established at 42 degrees of latitude, but corrections for surveying inaccuracies make the nearly straight, 350 mile east-west line wobble a bit, changing course within a limit of just a half a minute of latitude. At the coast, the line hits the pavement of the coastal highway, visible with the usual overlapping change in the pavement from one highway department’s asphalt to the other, then it passes invisibly through some trees, across a beach, and into the ocean.

There are other latitudinal striations along the coast of course (county lines, military perimeters, national forests, towns), but the next one of note, continuing north to south, could be the poetically named physical protruberence called Point Conception, where the coast makes a nearly right angle turn, heading east, transitioning from Northern California, to the urban Southland. This remote peninsula, just south of Vandenberg Air Force Base, is inaccessible to the public (except by the Amtrak train), on a massive, privately owned ranch. Its lonely lighthouse and the ruins of some oil infrastructure are exposed on a treeless plain. Below the cliffs is what some claim to be the best surf ing spot on the coast, but there is nowhere to park for miles.

At the bottom of the west coast of the country is the border with Mexico, a few miles after the last coastal apartment blocks of the suburbs of San Diego, and the last military helicopter practice field, and the chaotic, polluted estuary of the river that flows out of Tijuana into a sewage treatment plant on the American side. A small bluff above the beach has a park, on the US side, a stone obelisk monument in the 1800s to mark the border authoritatively, and the steel fence, composed of military surplus Vietnam War era runway landing mats, which plunge into the sea, a “running fence,” if there ever was one.

STATE IN FOCUS: WEST VIRGINIA

EVERY QUARTER, THE CENTER SELECTS A STATE TO EXAMINE IN GREATER DETAIL

By CLUI Researcher Zelig Kurland

In case one needs more evidence of the fact that West Virginia is defined by its mountains, consider that: it is the most mountainous state east of the Rockies; the state’s nickname is the “Mountain State,” and of the 13 states defined as having Appalachian territory, West Virginia is the only state entirely within this boundary.

This distinctive topography has dominated the state’s social and economic history. West Virginia University historian James Alexander Williams cites the incompatibility of the state’s cherished terrain with the needs of the modern industrial economy as the central theme of its history. Playing upon the state’s motto, Mountainers are Always Free, Williams writes that the mountains come with a price: “Whether or not mountainers were always free, they were almost always poor. Consequently...they have tried in every age to find their way around, over, under, or through the barriers to economic prosperity that the mountains raised.”

The evolution of mainstream development in the Mountain State is largely a history of land-moving technology, a movement from railroad tunnels and deep mining to the large-scale “cut and fill” of Interstate highways and mountain-top removal mines—as well as site clearing for office parks, shopping centers, and industrial areas. As a poor state, with energy and natural resources, near the nation’s largest metropolitan centers, West Virginia has also been industrialized in places, with major chemical complexes, power plants, and steel mills, most of which are left over early 20th century investments made by companies that now concentrate their efforts elsewhere. Partially because it is near the federal arc of Washington DC, and partly through the successful efforts of the state’s notorious pork-barrelist Senator Byrd, West Virginia is home to a number of curious and superlative federal facilities as well.

Here are some unusual and exemplary West Virginia land uses, recently investigated by CLUI field researcher Zelig Kurland, for the Center's Land Use Database.

MINING SITES

Tygart River Coal Mine

A large and state-of-the-art underground mine that is now closed, Tygart River is owned by Peabody Energy, the nation’s largest coal producer. It covers an area of more than 20 square miles, beneath which underground corridors are laid out in a grid pattern. The mine was closed in 1995, and all of its 368 employees were laid off. Many underground mines in central West Virginia have closed recently due largely to changing air quality standards that favor “low-sulphur” coal from western states and southern Appalachia, which burns more cleanly. Coal operations in those regions tend to remove their coal more cheaply using strip-mining techniques instead of tunnels.

Sample Mine

The Arch Coal Company's Sample Mine may be the largest surface mine in West Virginia, with an output of 5.5 million tons of coal annually. This is a “mountaintop removal” mine, the Appalachian
equivalent of the open pit and surface mines of the West, that is typical in southern West Virginia. The coal industry increasingly uses dynamite and crane-like earthmoving machines known as draglines to displace dirt from mountaintops and expose the coal seams below. The “fill” is then dumped into adjacent valleys. In the early 1980s, a typical valley fill contained about 250,000 cubic yards of rock and dirt. With the expanded use of draglines and larger trucks, fills can now contain 100 million cubic yards or more. In the West Virginia, more than 300,000 acres of forest have been felled and 470 miles of streams have been buried by mountaintop removal operations.

INDUSTRIAL SITES

Institute Plant
One of two major chemical plants operated by Dow Chemical in West Virginia, the Institute plant was originally constructed by the military in 1943 to produce synthetic rubber for the war. In 1947 it was purchased by Union Carbide. The plant site is now owned by Aventis CropScience (which had acquired the French firm Rhone-Poulenc), with Dow Chemical, which merged with Union Carbide in 2001, and the Bayer Corporation as major tenants. Speciality chemicals are produced here for use in industrial applications (such as leather tanning, biocides, coatings) and consumer products (shampoos, carpeting, crayons, garden hose, antifreeze). Just over a decade ago, the plant attracted attention because it also produced methyl isocyanate, the chemical that was accidentally released at Union Carbide’s Bhopal, India plant in 1984, killing an estimated 3,800 people.

South Charleston Plant
The other major Dow plant is the South Charleston Plant. Opened in 1925 by the Union Carbide Corporation, this plant was a successor to Carbide’s Clendenin, WV plant, which opened in 1920 and was the company’s first commercial ethylene plant. In 1927, Carbide purchased Blaine Island, then 80 acres of melon patches and beach recreation, to accommodate an expansion of the plant. Most of the plant is now owned by Dow Chemical, which merged with Union Carbide in 2001. More than 500 different chemicals and plastics are made here, including polyvinyl acetate (used for automotive moldings and chewing gum) and fluids.

John Amos Power Plant
According to the plant’s owner, American Electric Power, this 2,900 megawatt plant burns five million tons of coal per year, which “equates to roughly 500 coal mining jobs,” and can power two million homes. Unit 3, completed in 1973, was the first 1,300 megawatt power plant in the United States. As of 1998, the plant was ranked among electrical utility facilities by the EPA as the second-highest producer of emissions in the nation (second to the Bowen Steam Electric Generating Plant in Bartow, GA).

Mooresfield Poultry Processing Plant
The more than 1,800 workers in this plant slaughter, process, and pack one million pounds of meat per day (1.7 million chickens per week). The plants capacity was doubled in 1993 by WLR Foods Inc., which later merged with Pilgrims Pride to become the second-largest U.S. poultry producer. Chicken from this 265,000 square foot facility is used domestically by fast-food chains and shipped overseas to 64 countries, including China and Jamaica. During the 1990s, the size of the poultry industry in West Virginia tripled, making it the biggest agricultural crop in the state. Chickens are raised on contract by hundreds of farmers throughout the Potomac Valley; typical chicken houses contain 20,000-30,000 birds. The industry generates about 155,000 tons of chicken droppings per year, and 2,000 tons of carcasses from chickens that die before butchering.

FEDERAL SITES

Green Bank National Radio Astronomy Observatory
Green Bank is an extensive and historic radio astronomy site, with numerous large dish antennas. One of the three major facilities for the National Radio Astronomy Observatory, along with the Very Large Array near Socorro, New Mexico, and a group of ten dishes distributed from the Virgin Islands to Hawaii known as the Very Long Baseline Array. The Green Bank Telescope, the largest fully-steerable radio telescope in the world, was dedicated in 2000 and replaces a 300-foot telescope that collapsed in 1988. Facilities also include the Tatel Telescope, used in 1960 for the first-ever Search for Extraterrestrial Intelligence (SETI). Headquarters for the NRAO is in nearby Charlottesville, Virginia.

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Sugar Grove Naval Communications Center
Sugar Grove is a secretive military communications center, with a two-story underground facility, operated primarily by the Navy. One function may be to monitor microwave communications for the National Security Agency. It is located within the National Radio Quiet Zone, a 13,000 square mile zone established by the FCC in 1958 so that this facility—and the National Radio Astronomy Observatory in Green Bank—could operate in an area with little radio disturbance.

Greenbrier Government Relocation Facility
Planned by the Eisenhower Administration and completed in 1961, this formerly secret underground bunker was designed to house members of Congress and their staffs during (and after) nuclear attack and is located below the Greenbrier Resort Hotel. Construction of a new hotel wing and expansion of its golf course served as cover for the bunker's construction. Portions of the bunker, including an exhibit hall and two lecture halls (intended for use by the houses of Congress) were used by the hotel. The blast door leading to these areas, which can withstand a modest nuclear blast 15-30 miles away, was concealed by what hotel guests were told was an “expansion joint.” In 1992, the bunker's cover was blown by a Washington Post reporter tipped by sources who saw the bunker as outdated and unrealistic. The Greenbrier Resort Hotel now gives tours of the 112,544-square-foot facility to hotel guests and the public.

Morgantown Engineering Technical Center
A fossil fuel R&D lab, set up in coal country, operated by the Department of Energy. One of two government-owned fossil energy labs in the country (the other is the Pittsburgh Energy Technology Center in Pennsylvania), which are now merged into one entity, the National Energy Technology Laboratory. The Morgantown center employs around 300 people on a 131 acre site.

IRS Martinsburg Computing Center
The Internal Revenue Service's National Computer Center was dedicated in 1961. Data from taxes filed at the IRS's ten regional service centers is transmitted over secure phone lines to the center, which maintains IRS “master” files and electronically examines returns for tax fraud.

FBI Fingerprint Data Center
The FBI's Integrated Automated Fingerprint Identification System Data Center is the world's largest storehouse of fingerprints; its database includes the fingerprints of more than 43 million Americans. On an average day, 40,000 sets of prints—including those of suspects in custody and of applicants for casino, day-care, and federal jobs—are searched against the database. Matches are made by computer, and then verified by examiners, who are required to evaluate at least 30 sets of prints an hour. Each month, about 8,000 fugitives are identified by the center.

Alderson Federal Prison Camp
Opened in 1927, Alderson was the first Federal women's prison in the United States. Famous inmates at Alderson have included Billie Holiday, Tokyo Rose, Axis Sally and would-be Gerald Ford assassins Sara Jane Moore and Squeakie Fromme. The original design was a horseshoe-shaped configuration of 14 cottages.

Transportation Sites

New River Gorge Bridge
The last link in Appalachian Corridor L, completed in 1977, this 876 foot tall bridge, which weighs 88 million pounds, is the world's largest single arch steel span and the second-highest bridge in the United States. (The Royal Gorge Bridge over the Arkansas River in Colorado is higher.) It eliminated the 40-minute drive through mountain roads formerly required to cross the New River. On the third Saturday each October (“Bridge Day”), the bridge is open to pedestrians and it is legal to parachute from the bridge deck to the river below.
Personal Rapid Transit System
Designed to demonstrate the Personal Rapid Transit (PRT) concept: an extensive network of guideways and small vehicles that would carry passengers, on-demand, directly to their chosen destination. First opened for service in 1975, the PRT’s five stations connect the West Virginia University main campus with two suburban campuses and Morgantown's central business district. The distance between the two end stations is about 3.6 miles, and each car seats eight passengers. Riders press a button to specify their destination when they enter a station, and then wait for the next car to their destination. Each station is “off-line,” meaning that it can be bypassed by cars travelling to other stations.

Memorial Tunnel/Center for National Response
The tunnel opened in 1954 as part of the West Virginia turnpike, a two-lane road that required the movement of 30 million cubic yards of earth. In 1987, the tunnel was bypassed by an “open cut” that displaced earth from a 371 foot cut in the mountain to a 311 foot deep fill in the adjacent valley (which replaced the bridge that had projected from the south entrance to the tunnel). This cut moved 10 million cubic yards of earth, and yielded about 300,000 tons of coal from the mountain. Since being bypassed, the tunnel has become an unusual testing and training facility. From 1993-95, fires were set in the tunnel to test ventilation designs for Boston’s Central Artery/Tunnel project. Starting in 2000, it has been used by the Center for National Response to train local, state, federal, and military response units. Sets have been constructed within the tunnel, including a post-blast rubble area, a subway station, illicit drug laboratories, and a highway incident scene.

AND FINALLY ONE LAST CURIOUS CULTURAL SITE

New Vrindaban and Prabhupada's Palace of Gold
The New Vrindaban community was founded in 1968 as part of the International Society for Krishna Consciousness (ISKCON) founded by Srila Prabhupada. It is a spiritual center and pilgrimage site for Hare Krishnas and other Hindus and, along with the nearby Palace of Gold, a tourist attraction for everyone else. The mughal-style palace was built from 1973-79 by unskilled Krishna devotees, who used “do-it-yourself” books to guide the construction of the palace's marble inlaid walls and ceilings, crystal chandeliers, teakwood furniture, and stained glass windows. The community center grounds include a man-made pond, statues, guest cottages, a health food store, a snack bar, and an organic garden; a schedule of festivals is maintained on the community’s web site.

♦
Lay of the Land

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tences of the book: "Smithson was an archivist, and his work remains part

bile inventory of forms by flying continuously it seems, at low altitude, taking

photos of everything. Patterns emerge from his avalanche of images of the

landscape. Included is an interview with him by Gilles Tiberghien, author of

the monumental book Land Art.

Reclaiming the American West, by Alan Berger, Princeton Architectural

Press, 2003

A fantastic examination and portrayal of mining landscapes in the American

West, especially the numerous aerial photographs that show the relationship

between pit and spoil, and the more subtle contours of reclaimed sites.

Robert Smithson: Learning from New Jersey and Elsewhere, by Ann

Reynolds, MIT Press, 2003

Great addition to the Library of Smithson, as indicated by the last two sen-
tences of the book: “Smithson was an archivist, and his work remains part

of his archive. The relationship between the two - the work and the archive

- though not strictly parallel, consists of ‘reflections reflecting reflections.’”

Amen.

In Advance of the Landing: Folk Concepts of Outer Space, by Douglas

Curran, Abbeville Press, 2001

This 1985 classic was updated and expanded in 2001, and remains a unique

member of a now crowded field of campy, folksy, ufological cultural research

and documentation books, and among the most sympathetic of the genre

(though there is always room for more - sympathy, that is).

Christo and Jeanne-Claude: A Biography, by Burt Chernow, St. Martin’s

Press, 2001

The official, authorized biography of the landscape wrapping couple, starting

with an image of Christo’s great grandfather, and ending with a description

of their daily routine at their home/studio/gallery on Howard Street in New

York City, where they listen to Mozart- exclusively- everyday.

Great White Fathers: The Story of the Obscure Quest to Create Mt.

Rushmore, by John Taliaferro, PublicAffairs, 2002

It’s hard to think very much about Mount Rushmore, as it is so - monolithic.

But when you do, it becomes more than simply astounding. It helps to ensure

that fact will nearly always trump fiction. This book is a simply told story

of the man behind the faces, the sculptor and Great Man himself, Gutzon

Borglum, and how he was able to convince people to help him carve four giant

presidential heads out of living rock.

Parting the Desert: The Creation of the Suez Canal, by Zachary Karabell,

Knopf, 2003

A compelling account of the construction of one of the most dramatic ter-
restrial engineering projects ever, which had the added dimension of being

as much of a monumental geopolitical construction, a symbolic as well as a

physical portal between Orient and Occident, Europe and the Middle East.

Written on the Land, by Mark Ruwedel, Presentation House Gallery, 2002

The catalog of a traveling exhibit, traversing Canada over the next two years,

of the photographs of Mark Ruwedel, seasoned explorer and documentor of

the incidental inscriptions on the western American landscape.

Designs on the Land: Exploring America from the Air, by Alex S.

MacLean, Thames & Hudson, 2003

More than just eye candy, Alex MacLean (who also did Taking Measures

Across the American Landscape, with James Corner) has created an incred-
ible inventory of forms by flying continuously it seems, at low altitude, taking

Pictures of Everything. Patterns emerge from his avalanche of images of the

landscape. Included is an interview with him by Gilles Tiberghien, author of

the monumental book Land Art.

Gone: Photographs of Abandonment on the High Plains, by Steve Fitch,

University of New Mexico Press, 2003

Gorgeous photographs (especially the classrooms) of decayed interiors of

abandoned homes and schools (primarily), showing floors encrusted in pigeon

poop, rotten carpets, fallen drop ceilings, collapsed plaster, and other touches

of home.

Great Projects: The Epic Story of the Building of America, from the

Taming of the Mississippi to the Invention of the Internet, by James

Tobin, Free Press, 2001

The eight projects featured in this book have been described at great length

before, but this well illustrated book does a good job of linking these projects,

and collecting images and graphics in one volume. Included are the flood-con-
trol works of the Mississippi and Colorado Rivers, Edison’s lighting system

and the spread of electricity across the nation, the Croton Aqueduct, Boston’s

Big Dig, and the Internet.

The Secret Architecture of our Nation’s Capitol, by David Ovason,

HarperCollins, 2000

Looks at the influence of Masonic principles and practices on the planning of

Washington DC, and at the Masonic symbolism of some of its architectural

ornament and sculpture. At times fascinating, the book dwells especially on

astrologic symbols and patterns.

Death, Daring, and Disaster: Search and Rescue in the National Parks,

by Charles "Butch" Farabee, Jr., Roberts Rinehart Publishers, 2001

Nearly 400 accounts, often brief, of the at times incredible, strange, absurd,

and tragic situations that are bound to come up in in a National Park system,

where extreme geography meets millions of visitors, looking for fun.

Bring Back the Buffalo! A Sustainable Future for America’s Great

Plains, by Ernest Callenback, University of California Press, 1996

There are now over 200,000 buffalo in isolated pockets in the country, from

islands in the Great Salt Lake, to celebrity ranches. This book presents a rea-
sioned argument for the continued reintroduction of this unique American

animal, which once had a population of sixty million roaming the plains. By

the author of Ecotopia.

Ideal Cities: Utopianism and the (Un)Built Environment, by Ruth Eaton,

Thames and Hudson, 2001

It seems there is an infinite number of ways to slice this subject, and this new

big book presents another POV, with some nice images of historic precedents,

from colonial times to the Renaissance, as well as the more contemporary

notions of Archigram, SITE, and Superstudio.

Encyclopedia of American Prisons, edited by Marilyn D. McShane and


This five hundred page, alphabetically ordered overview of incarceration in

the United States provides a concise and inclusive picture of prison issues, in a

manner that is clear and accessible to the non-professional.

The Stadium: The Architecture of Mass Sport, edited by Michael Provooost,

NAI Publishers, 2000

The catalog of this exhibit, shown at the Netherlands Architecture Institute,

stands alone as an interesting survey of the history and current form of this

often truly bizarre, singular, yet complex type of structure. ♦
Antarctic 1: Views Along Antarctica’s First Highway CD-ROM of the CLUI exhibit, with text by Bill Fox. Includes “clickable map” of McMurdo Station. Works on Mac and PC. $12.50

Back to the Bay: Exploring the Margins of the San Francisco Bay Region A catalog and guidebook of the 2001 CLUI exhibit, at the Yerba Buena Center for the Arts in San Francisco. 110 pp., illustrated. $15.00

The Chesapeake Bay Hydraulic Model An illustrated history of this remarkable engineering accomplishment, the largest indoor hydraulic model in the world, now abandoned. 96 pp., illustrated. $5.00

Commonwealth of Technology: Extrapolations on the Contemporary Landscape of Massachusetts Sites in Massachusetts with an emphasis on the role of technology in the landscape. From the 1999 exhibition presented at the Lie Center for Visual Arts at MIT. 88 pp., illustrated. $12.50

CLUI Pocket T-Shirt Quality grey 100% cotton T with CLUI emblem on the pocket. Specify size: (XXL, XL, L, M, S) $15.00

CLUI Mug Standard issue mug, with CLUI emblem. We guarantee that you will get out of it everything you put into it. $5.00

6th Avenue Peninsula Tour An indepth investigation of urban content. Self-guided tour of a portion of Oakland, California’s industrial waterfront. $5.00

The Nevada Test Site: A Guide to America’s Nuclear Proving Ground The only book available that describes in detail the nation’s foremost weapons and RDD field test facility. Praised by both antinuclear activists and Department of Energy officials! 96 pp., with fold-out map and over 100 illustrations. $12.50

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 blasts took place on, under, and above the earth, in the former USSR, USA, Africa, Australia, Pacific Ocean and elsewhere. 96 pp., illustrated. $7.50

One Hundred Places in Washington 100 exemplary land use sites in Washington, DC. From the 1999 exhibition presented at the Corcoran Gallery of Art in Seattle. 88 pp., illustrated. $15.00

Points of Interest in the California Desert Region With Visitaiton Information Over 100 interesting places in the California desert. 88 pp., illustrated. $7.50

Route 66: A Cross-Section of California Illustrated travelogue to this remarkable, 216-mile roadway. A perfect weekend-long trip from Los Angeles. Revised Edition. 88 pp., illustrated. $15.00

Subterranean Renovations: The Unique Architectural Spaces of Show Caves Examines underground built structures and depicts some of the best tourist care environments in the United States, with contact and visitation information. From the CLUI exhibit. 88 pp., illustrated. $5.00

Suggested Photo Spot Post Card and Tour Book Full color book, with 20 Suggested Photo Spots post cards, depicting the sites with the Photo Spot sign in the foreground. Also contains directional information to the Photo Spots across the United States. 88 pp., Color illustrations, spiral bound. $14.95

Seaclips Organ Tape A recording of the world’s largest musical instrument," the Great Seaclips Organ, in Lunacy, Capernaum, Virginia. Hymns and traditions played by the creator of the wondrous instrument, Mr. Leland W. Sprinkle (deceased.) Music generated by the Earth itself! Complete with shipping sounds. 23 minute cassette tape, produced by Lunacy Capernaum. $3.99

HOW TO ORDER Please make check or money order payable to the Center for Land Use Interpretation, or log on to our online shop and use your credit card. Shipping and handling charges: $3.50 for the first item, $.50 for each additional item, and 8.25% tax if ordering in CA. International shipping: $10.00 for first item, $1.00 for each additional item.
Roden Crater is expected to open in two years, Heizer's Complex City may be complete within a year, and Charles Ross' Star Axis is in the final stages of completion. The Big Land Art projects it seems are alive and well and moving forward, with the Dia Foundation, Lannan Foundation, and others making it happen. This issue of the Lay of the Land discusses some of the “site-based” art activities along the Hudson River, centered on the town of Beacon, and Dia’s new 240,000 square foot museum there, greatly supported by Lannan Foundation. Also in this issue is a report from Marfa, a West Texas town in a curious and heavily altered condition due to support from these foundations as well. We hope that this momentum continues to build, and that new creative land projects will be enabled at other places, all over the country, further infusing the landscape with meaning, mystery, and compelling, progressive interpretations. Incidentally, the fact that the Center is about to open a Northeast Regional Office in the Hudson River town of Troy, New York (waay up river!), is just a coincidence.

This issue also reflects a recent CLUI research focus on the Pacific Coast of the United States, including the exhibition of the California Coastal Records Project, currently on display at CLUI:Los Angeles.

-Lay of the Land Editors