

# The California Geographer

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# THE CALIFORNIA GEOGRAPHER

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# **The California Geographer**



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# Investigating Connectivity: The Vermont Street Pedestrian Bridge in San Diego

Brenda Kayzar  
*San Diego State University*

Spanning a road-filled canyon between two San Diego neighborhoods is a connection not often found in the urban landscape—a pedestrian bridge. While the current Vermont Street Pedestrian Bridge opened in 1994, the history of a footbridge in this location dates back to the age of intraurban rail. This study explores the historical context of the original construction of the footbridge, its demise and eventual demolition in 1980, and its resurrection in the 1990s. Historical data is supplemented with recent interviews that offer insight into how the bridge is perceived and used today. Results of this study suggest that providing increased pedestrian access to places of work, recreation, and entertainment can reduce automobile dependency. The footbridge represents an inexpensive pedestrian detail that can be replicated in other places, particularly automobile-oriented suburbs. Understanding the importance of the bridge to current users, as well as its history in relationship to changing planning ideals, can provide the necessary insight for future planning decisions.

## Introduction

*What idle or significant sentence will we write with brick and stone, wood, steel and concrete upon the sensitive page of the earth?*

—Irving Gill, architect (quotation engraved on Vermont Street Bridge)

THE VERMONT STREET PEDESTRIAN BRIDGE spans the canyon between the San Diego neighborhoods of University Heights and Hillcrest, crossing over busy, six-lane Washington Street (Figure 1). The original connection was built in 1917 but torn down in 1980; in 1994 it was reincarnated in conjunction with the construction of a mixed-use project nearby—the Uptown District. Sandblasted into the concrete walkway of the 416-foot-long steel structure are dictionary definitions for the word “bridge,” describing it as a structure that provides passage and connects places. What makes this particular bridge

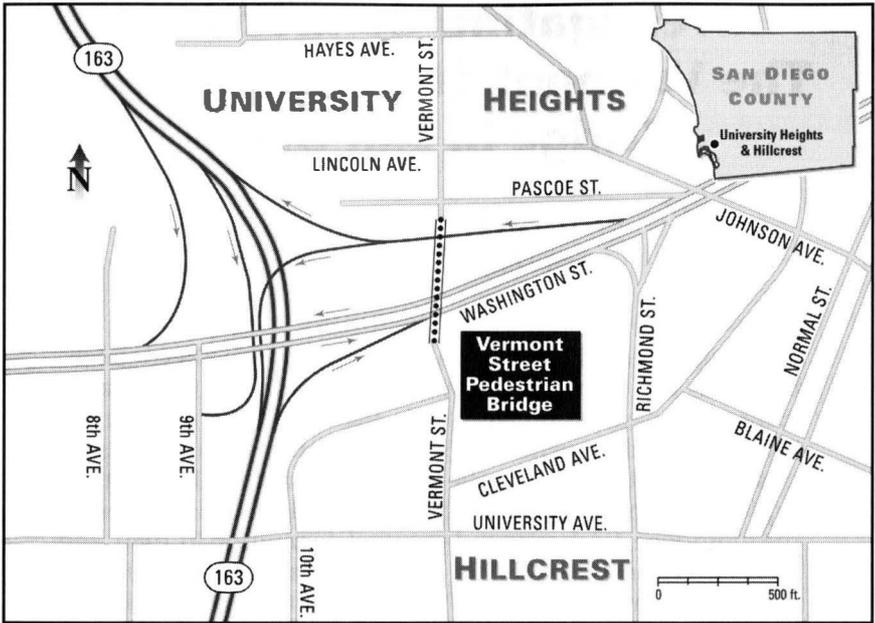


Figure 1—The Vermont Street Pedestrian Bridge connects the neighborhoods of University Heights and Hillcrest, approximately three miles from downtown San Diego. (Cartography by the author and Jim Craine.)

unusual is that it is a *pedestrian* bridge, offering passage exclusively for pedestrians, cyclists, skateboarders, and wheelchair users, and enabling them to surmount many difficulties created by San Diego’s uneven canyon and mesa topography.

The footbridge is a type of connection that exists in few residential communities today. For the most part, post-World War II residential planning neglected pedestrian needs in favor of the automobile. Wide residential streets were meant to accommodate the automobile and relieve congestion associated with the narrow streets of pre-War neighborhoods. The wider streets were typically combined with zoning that separated residential and commercial land uses and encouraged large residential lots, garage-dominated façades, cul-de-sacs, and expansive commercial parking lots (Southworth and Ben-Joseph 1997, 97–129). Pedestrians were thus subjected to long, indirect routes and inhospitable walking environments. As a result, most metropolitan residents today commonly choose the automobile as the only reasonable link between home, work, entertainment, and recreation (Kunstler 1993, 136; Ford 2000, 20).

Critics of the automobile-dependent landscape and its by-products—e.g., traffic congestion, disconnection, and isolation—have demanded that planning guidelines incorporate pedestrian-friendly features such as those found in pre-World War II town designs (Hayden 1984; Kunstler 1993; Langdon 1994). The neotraditional planning movement, which encompasses the widely popularized New Urbanism, has embraced these ideals and today many communities have updated their standard suburban master plans by incorporating elements of “Traditional Neighborhood Design” (Audirac and Shermyen 1994; McCann 1995). New subdivisions are designed to encourage pedestrian access to parks, schools, shops, and services by incorporating such elements as a gridiron street pattern and a network of paths (Duany, Plater-Zyberk, and Speck 2000, 183–214).

Proponents of pedestrian-oriented design have proposed inserting footbridges into existing neighborhoods (especially where the terrain is hilly) to mitigate automobile dependency and concerns over traffic, but many communities and planners remain resistant to the idea (Langdon 1994, 185–87; Kunstler 1996, 152; Duany, Plater-Zyberk, and Speck 2000, 192–94; for specific examples in San Diego, see Weisberg 1994a, 1994c; Smith 1995). The focus of this study is a pedestrian bridge that was *reinserted* into an existing urban landscape, indicating that despite the rise of the automobile, it had remained an important asset to the communities it served. It is therefore useful to explore what factors led to its original construction, its demolition, and its eventual reconstruction. As I will show, the history of the footbridge spans different eras of neighborhood planning with different attitudes toward accommodating pedestrians. Further, the unique history of the Vermont Street Pedestrian Bridge and the insights and perceptions of current bridge users can offer lessons for promoting this type of improvement in other neighborhoods. It is hoped that this study will help planners and residents appreciate the benefits that a similar pedestrian detail can offer their community.

## **Methodology**

Urban geographer Larry Ford suggests that ordinary, everyday spaces are often overlooked by scholars in their quest to tackle the large-scale issues of planning and development (Ford 2000, 7–9). Yet how people use and perceive the built features in their everyday worlds provides insight into the value of these features—functional as well

as aesthetic. My goal in this study was to suggest that a better understanding of the overlooked features can help with the planning and design of future developments and provide ideas for improving existing places. Toward this end, I present an architectural history of the footbridge, relating its trajectory to changing social contexts and planning ideals. Specifically, I focus on how the structure's functional value was perceived at different times within San Diego's political and planning realms. I relied largely on information from the San Diego Historical Society as well as local histories and newspapers, which taken together provide a detailed account through the present day.

Interviews formed an important part of this study. I conducted more than thirty interviews with current bridge users in order to gain insight into what the structure means to people who use it. The sample of bridge users was not large, because results were intended merely to supplement the historical account. The interviews were unstructured and informal (allowing interviewees to express themselves more freely (Jones 1985, 46–47) and concentrated on two general lines of questioning: how and why the bridge was currently being used and how it was perceived by those who used it. I made four visits to the bridge at different times of day and on different days of the week, spending over two hours each time conducting interviews. Although pedestrian traffic varied, it was usually steady. My approach was to introduce myself to passersby on the bridge, explain that I was writing a report about it, and ask how often they used the bridge. This provided a prologue into further conversation. I spoke with bridge users of different ages and both sexes, although selection was based solely on my availability to talk to them as they crossed the bridge.

## **History of the Original Vermont Street Bridge**

The current Vermont Street Pedestrian Bridge has been open to foot traffic since December 10, 1994. Unknown to many, however, is the fact that it replaced a wooden trestle bridge that was built in 1917 but torn down in 1980 after being declared unsafe by transit officials (Clark 1994). For sixty-three years, the neighboring communities of University Heights and Hillcrest had had a pedestrian connection—initially over a deep, shrub-filled canyon, and eventually over a busy, six-lane thoroughfare.

Construction of the original footbridge in 1917 coincided with increases in San Diego's population during the late nineteenth and early twentieth centuries (Ford 1976, 174–75; Griffin 1976, 63–67). As the city grew, improvements in intraurban rail expanded the area that could be connected to the downtown business district (Pourade 1964, 185). This also fueled the imagination and ingenuity of real estate speculators. The original bridge, built by sugar heir John D. Spreckels, is an excellent example of such ingenuity and the reciprocal relationships that existed between largely private transportation and development interests during this era. In 1982, Spreckels bought the city's existing intraurban rail system, updating it with motorized cars that were able to traverse the uneven terrain of canyons and mesas surrounding downtown (Pourade 1964, 178–82; Holle 2002, 75). Spreckels had an interest in real estate development as well and owned large plots of undeveloped land north of the growing central business district (Jarmusch 1995; Holle 2002, 74–76). Plots owned by Spreckels and other land speculators were often separated by canyons from the fixed-rail transportation system; footbridges were built largely as a way to make these isolated plots attractive for residential development. In addition to the Vermont Street Pedestrian Bridge, two other footbridges were constructed in the uptown area between 1905 and 1917 (Grant 2001; Stein 2002). Both remain in use today.

Spreckels's intraurban rail line eventually reached University Avenue in Hillcrest, across the canyon from land that he owned in what would become University Heights (Figure 2). Construction of the Vermont Street Pedestrian Bridge facilitated residential development in University Heights by providing residents access to transit in Hillcrest and jobs downtown (Quastler 1976, 157). Shortly after the bridge's construction, however, intraurban rail transportation in San Diego became less important as the private automobile grew in popularity.

Substantial road paving began in earnest in the 1920s, including the construction of Washington Street, whose six lanes now wind through the canyon below the pedestrian bridge. The streetcars along University Avenue were dismantled and people came to depend on their automobiles for the work commute (Quastler 1976, 158–59). The footbridge continued to provide a connection for pedestrians between the two communities although the reasons for its use had changed. Access to retail shopping gave the bridge a new purpose; it became a connection to life's necessities for the residents of Uni-



*Figure 2—Downtown real estate office selling residential property in University Heights in 1887. Note the horse-drawn rail car in front. (Photograph reproduced courtesy of the San Diego Historical Society.)*

versity Heights, which had remained primarily a residential community with limited commercial offerings, while commerce in Hillcrest had increased substantially. The access-to-retail function was enhanced in 1953 when Sears opened a large department store in Hillcrest at the corner of University Avenue and Vermont Street, one block from the southern end of the footbridge (Pourade 1977, 94) (Figure 3).

The success of regional shopping malls and freeways over the next two decades would erode the value of the original footbridge. By the early 1980s, large, self-contained shopping malls with a variety of stores, free parking, and easy freeway access had drawn customers away from the retailers located along older automobile strips (Ford 1994, 245–46). University Avenue was no exception. The popularity of the Sears department store began to decline as shoppers chose to go to malls in nearby Mission Valley rather than to individual retailers in Hillcrest (Pourade 1977, 145–52; Dillinger 2000, 149).



*Figure 3—Aerial photo of original footbridge connecting University Heights residents to the newly opened Sears department store in Hillcrest in 1953. (Photograph reproduced courtesy of the San Diego Historical Society; modifications by the author.)*

It was during this era that physical decay brought about the demise of the sixty-three-year-old wooden trestle bridge. Termites had badly damaged the structure so that repairs would have been costly (Clark 1994), and the city determined that limited funds and low demand for Hillcrest businesses did not warrant repair or replacement. Pedestrian facilities were a low priority at the time, and San Diego's transportation fund was already overtaxed. In addition, the initial motive for building the bridge—to encourage residential development in University Heights—was no longer relevant, as the community was already well established. Therefore, despite protests from area residents, the bridge was demolished in 1980 (Young 1994).

Although the city refused to fund the bridge's restoration, officials did propose creating a new tax assessment district—encompassing University Heights and Hillcrest—to facilitate bridge rebuilding

(Young 1994). But a majority of residents, many of them elderly and on fixed incomes, objected to the proposed increase in their property taxes, so the idea was dropped. The 1985 closure of the Sears department store dealt a major blow to residents still pursuing bridge replacement (Dillinger 2000, 154).

## **Rebuilding the Footbridge**

Five years after Sears closed, redevelopment began on its vacant 12.5-acre site by a consortium of local architects and developers intent on creating a small-scale, mixed-use project (Weisberg 1996a). This proved to be just the type of project that would provide much-needed support for the footbridge's reincarnation.

The proposed infill project, called the Uptown District, combined more than 300 condominiums in two- and three-story buildings with 145,000 square feet of street-level retail space (Weisberg 1996a) (Figure 4). Its pathways, Mediterranean pastel colors, bright awnings, and mix of residential and commercial space were meant to replicate the feeling of a European village.

After decades of suburban-style development in San Diego, however, such "neotraditional" projects were a hard sell (Weisberg 1994b). As in most U.S. cities, zoning restrictions had made it virtually unlawful to build mixed-use projects, and lenders were wary of funding unproven building designs that were supported by limited



*Figure 4—The mixed-use Uptown District, 2003. (Photograph by the author.)*

comparable resale data (Audirac and Shermyen 1994, 165; Kunstler 1996, 109–10, 188–89). Furthermore, during the construction of what was referred to as a “grand experiment,” the Gulf War broke out and a prolonged recession set in, adding to a growing list of concerns regarding the project’s profitability (Weisberg 1996b). Heightened apprehension over the Uptown District’s success reopened discussion about the possibility of bringing back the Vermont Street Pedestrian Bridge as a way to generate foot traffic to the district’s new retail businesses (echoing the bridge’s former function).

The Uptown District was completed in 1992, but two years later developers were still having difficulties leasing to and maintaining tenants in the commercial spaces, and no new bridge had yet been built. City Councilperson Ron Roberts took up the cause and argued that retail shops in the struggling development would benefit from pedestrian traffic generated by the footbridge (LaRue 1994). Thanks to a 1988 voter initiative (Proposition A), which increased the sales tax in order to fund city transit improvements, funding was now available from transit reserves, alleviating a big concern that had hampered replacement in 1980 (Clark 1994). The city soon approved construction of the new bridge.

At the opening ceremony and bridge dedication in late 1994, City Councilperson Christine Kehoe acknowledged that the rebuilt bridge was something both communities had desired for a long time (LaRue 1994). After a fourteen-year absence from the landscape, the Vermont Street Pedestrian Bridge once again provided a pedestrian connection between the two communities.

## **Public Art on the Bridge: Creating a Sense of Place**

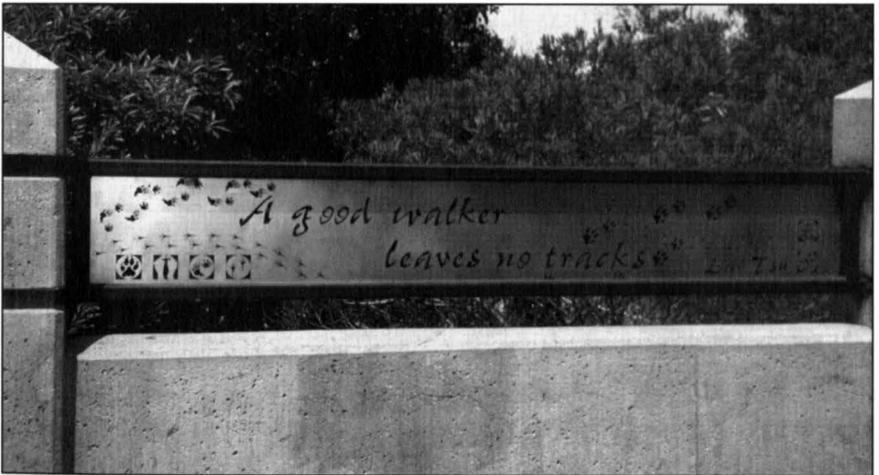
Gordon Brown, a longtime resident of University Heights, was one of the first to cross the newly built bridge at the opening ceremony (LaRue 1994). The seventy-eight-year-old declared he was happy to have this safe route returned to him and recalled the days when as a child he rode his bike across the old bridge to deliver newspapers.

While Brown’s trip across the new bridge brought back many memories, and while the old and new bridges served similar functions, the new bridge bore little physical resemblance to the old wooden structure. It was made of cobalt-blue steel embellished with

Plexiglas® side panels, and inscribed with quotations about the benefits of walking and definitions of the word “bridge” (Figures 5, 6). The new bridge was a beneficiary of the city’s 1992 public art policy and was meant to be a bold, artistic testament to pedestrian ideals (Pincus 1998). The policy called for the inclusion of local artists in all city development plans, similar to the collaborative efforts being implemented in other urban areas (Fleming 1981, 21–



*Figure 5—The Vermont Street Pedestrian Bridge, 2003. (Photograph by the author.)*



*Figure 6—Artwork, with quotations about the virtues of walking, lines the sides of the new footbridge. (Photograph by the author, 2003.)*

22). A group of three local female artists known as Stone/Paper/Scissors was selected by the San Diego Commission for Arts and Culture to work in partnership with transit engineers on the design for the new footbridge (Clark 1994). While the engineers' initial architectural rendering suggested an olive-green structure meant to blend into the canyon walls, the artists proposed painting the steel beams a bright cobalt blue to draw attention to the bridge.

In addition to beautification, the goal of most public art collaboratives is to integrate artwork into public projects in such a way that it reinforces the meaning and identity of a place (Hein 1996, 4; Cheng 2000). According to Ford and Griffin (1981, 47), public art "records a heritage, announces current issues, and advocates future actions" and is "integral in personalizing the landscape." The city's public art coordinator hoped the artistic expressions would personalize the footbridge and instill both communities with a sense of pride and ownership in it.

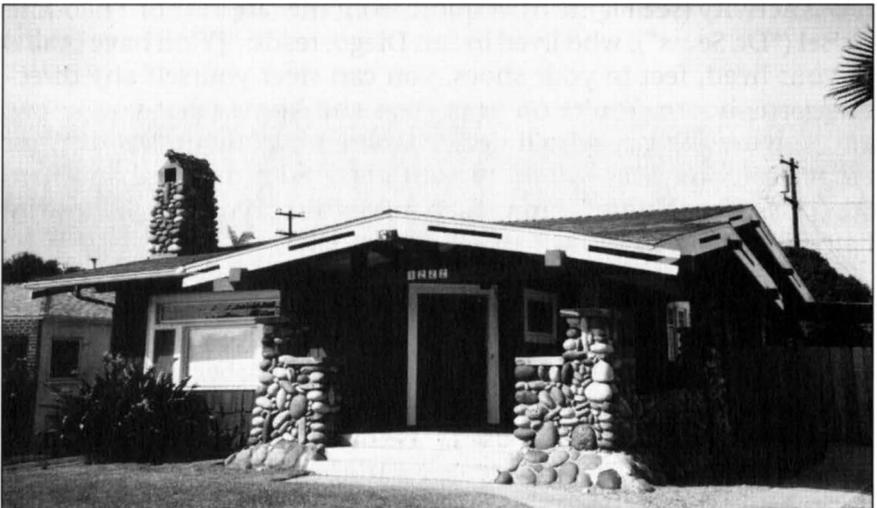
The public art on the bridge advocates walking and confirms a recorded local heritage. Aphorisms about walkers and the benefits of walking are laser-cut into thirty-two Plexiglas® panels along the length of the bridge (Pincus 1998). Citations by ancient philosophers such as Lao Tsu and Pythagoras suggest that walking is a virtuous activity (see Figure 6). A quote from the late author Theodore Geisel ("Dr. Seuss"), who lived in San Diego, reads: "[Y]ou have brains in your head, feet in your shoes, you can steer yourself any direction you choose. You're on your own and know what you know, and you are the guy who'll decide where to go." Quotations from architect Irving Gill, who built many homes in the area, and Kate Sessions, who planted more than three hundred trees in nearby Balboa Park, recall San Diego's early history.

Enthusiastic responses by bridge users suggest that the incorporation of public art into the design has created a sense of pride and ownership in the footbridge. Indeed, one member of a group of young adults pointed to the electrical outlets at the base of the lamps lining the footbridge and mused, "Wouldn't it be great to have our band play on *our* bridge?" References to the artwork were common during interviews; bridge users often pointed proudly to specific artistic features. Several residents from University Heights, for example, pointed out the stone pillars at the northern entrance, designed by Stone/Paper/Scissors to replicate a common feature of

craftsman-style homes within the community (Figures 7, 8). (The artists designed a unique entrance for each end of the bridge.)



*Figure 7—Stone pillars at University Heights entrance to the footbridge are much admired by bridge users. (Photograph by the author, 2003.)*



*Figure 8—The footbridge pillars replicate stone pillars such as these, commonly found on craftsman-style bungalows in University Heights. (Photograph by the author.)*

The artwork also made the bridge an interesting place to visit, and bridge users frequently directed their visitors to it. A woman in her sixties from New York who was visiting her son said he told her about the footbridge and suggested she see it and take time to read the quotations. Similarly, two other interviewees had learned about the footbridge from friends and were there to “see what it was all about.”

## **Perceptions of Bridge Users**

Although initial development of both neighborhoods took place during the same era, Hillcrest and University Heights are noticeably different from each other today. University Heights is a predominantly residential community of single-family houses, many of which were built in conjunction with the original footbridge (Fredrich 1989, 4–15). Quiet residential streets, sidewalks, mature palm trees, and craftsman-style architecture create a charming atmosphere. The main commercial street within the community has limited services offered by auto repair shops, liquor stores, and used furniture sellers, although some gentrification can be seen in the recent opening of a few coffee houses and upscale eateries.

While University Heights has retained its image as a quiet residential area, Hillcrest has continually expanded its commercial district and increased residential densities with the construction of multi-unit complexes. The neighborhood includes a mix of turn-of-the-century, single-family houses, small mid-century apartment buildings, and newer mixed-use and loft-style developments (Weisberg and Showley 1997). In addition to retail shops in the Uptown District, Hillcrest also has two busy commercial streets lined with stores, restaurants, and office space and a large medical complex that offers considerable employment opportunities to the community.

The differences between the two communities are also evident in the reasons given by bridge users for visiting the opposite side of the footbridge. For University Heights residents, the footbridge provides easy access to commercial centers and social venues in Hillcrest. During the period when there was no bridge (1980–1994), gaining access to these places meant either crossing Washington Street’s six lanes of traffic or driving (Figure 9). While it was not surprising to find that the bridge was valued by University Heights residents, it also held a special value for Hillcrest residents, who crossed it to



*Figure 9—After demolition of the original bridge, pedestrians had to cross busy, six-lane Washington Street. (Photograph by the author, 2003.)*

visit friends in University Heights or to stroll, jog or bicycle in a “quieter” neighborhood with interesting old houses.

Jack, the first person I interviewed, was in his nineties. His reasons for using the bridge were typical of University Heights residents. He had owned a barbershop in Hillcrest for almost fifty years, during which he generally walked the mile and a half from his University Heights home to his business and back; the footbridge thus played an important role in his daily routine. After 1980 he could have crossed Washington Street at Johnson Avenue, but he explained that the duration of the light was too short for him to make it to the other side safely. This led him to take a much longer route, crossing at Park Boulevard where the light was longer. Although he has since sold his business and retired, he makes daily trips into Hillcrest to buy food and medicine, using the rebuilt footbridge.

Bill, also a longtime University Heights resident, referred to the bridge as his “portal to everything.” Recalling the years after the old bridge had been torn down, Bill said he felt as if he had been “cut off” from Hillcrest and even thought about moving out of the area. Greg, a thirty-two-year-old native of San Diego, recalled that he and his friends used to ride bikes across the old bridge to get to

the Sears store in Hillcrest. The convenience and attractiveness of the new bridge were selling points for him when he decided to move back to University Heights after college. Like many other bridge users I observed, Greg was carrying bags with purchases made in Hillcrest.

A group of University Heights residents in their early twenties were dressed up and planning to spend the evening in the restaurants and clubs along University Avenue in Hillcrest. For these young people, the bridge provided access not only to shopping but to what Ray Oldenberg (1989) calls “third places”—the neutral ground where people can gather and socialize but do not have to concern themselves with playing host. Such places allow for associations outside the spaces of home and workplace, hence the name “third place.” In Hillcrest, third places are abundant and most are within short walking distance from the footbridge.

Residents of Hillcrest also value the bridge, if for different reasons than mentioned above. Most of these have to do with leisurely activities, including dog-walking. Jane, the thirty-eight-year-old vice president of the Uptown District Homeowners Association, was instrumental in persuading the association to put up a signpost with plastic baggies at the Hillcrest entrance to the footbridge that encourages dog owners to clean up after their pets. Jane walks her two dogs across the bridge every day and says “quite a few” other dog owners also use the bridge daily. Jane was very vocal in her enthusiasm for the bridge, recalling how difficult it was to cross Washington Street with her dogs when she moved into the Uptown District before the bridge was rebuilt. She now uses her position in the association to “tell everyone how much I like to use the bridge.” (She later mailed me a copy of an article she wrote in 1994 for the association’s newsletter, praising the artistic expressions on the footbridge.)

I interviewed a number of other Uptown District residents who had similar reasons for using the bridge. One woman in her fifties moved there after her divorce in 1994 and found University Heights to be a safe place for evening walks, which resolved concerns she’d had about leaving the safety of her previous community where she had lived for more than ten years. She noted that the “lovely gas lamps” on the bridge contributed to her feeling of safety. Doug and Mike, two Uptown District residents in their thirties, enjoyed running errands and recreating on foot. Doug said he drove fifteen miles in

heavy traffic to his job and at the end of the day did not want to get back in his car. Mike admired the quotes carved into the bridge, as they reflected his personal decision to “adopt a pedestrian lifestyle.”

Jim and Sandra, Hillcrest residents in their mid-fifties, valued the bridge for each of the reasons mentioned so far: They “love[d] the artwork” on the bridge, brought visitors to the bridge; and crossed the bridge on weekend walks into University Heights where they enjoyed looking at houses and visiting their many friends there. This last was true as well for Carolyn, another Hillcrest resident in her fifties, confirming that the footbridge provides a vital pedestrian connection for friends in the neighboring communities.

In addition to foot traffic, I observed many joggers, bicyclists, roller skaters, and skateboarders crossing the bridge, especially during evenings and weekends. Most recreational users originated on the Hillcrest side, which is often congested due to its heavy commercial activity. The bridge allows recreational enthusiasts easy access to the quieter streets in University Heights. Adams Avenue Park, located at the northern end of University Heights, can also be reached via the bridge, thus avoiding crossing any major thoroughfares.

Other important reasons for the bridge’s popularity are the safe passage and sense of independence it provides to certain groups of people. This was confirmed by the elderly people I spoke with, who related how they were able to get to stores and services they needed, and places where they socialized, without the aid of a car. One woman using a cane was happy she no longer had to ask her son for a ride to the store. Two wheelchair users expressed great pleasure at being able to use the bridge rather than having to cross the wide street below. I also witnessed a number of children crossing alone or accompanied by adults (Figure 10). As might be expected, safety and accessibility seemed to be especially important to bridge users whose ability to drive or safely cross busy intersections was limited.

The interviews suggest that pedestrian access between communities is valued for a number of reasons, including passage to commercial offerings and entertainment venues, to visit friends, and for recreational purposes. For members of both communities, the bridge provided safe passage and independence from the automobile, regardless of the destination. Also revealed by the interviews was the value bridge users placed on the artwork incorporated into the design of the new bridge.



Figure 10—Children and adults share footbridge with bicyclist.  
(Photograph by the author, 2003.)

To conclude my fieldwork, I visited Rattan Realty, located in an Uptown District retail space, and spoke with two agents who regularly represent buyers in Hillcrest and University Heights. Both confirmed that property values in the two communities had risen dramatically since the Uptown District opened, and claimed this was due to the limited availability of, and high demand for, pedestrian-friendly environments. Both agents mentioned the Vermont Street Pedestrian Bridge as “one of the area’s attractions” and “a selling point.” Their comments about this pedestrian-oriented detail underscore the important role such ordinary structures play in the landscape and support the need for more studies such as this one.

## Conclusion

*With lively feelings may I walk. Being as it used to be long ago, may I walk.*

—Navajo chant (engraved on the Vermont Street Bridge)

The goal of this study was to explore the evolution and current meaning of a pedestrian-oriented detail within an established land-

scape. The history of the construction, demolition, and rebuilding of the Vermont Street Pedestrian Bridge chronicles the changing value of the pedestrian to planners over time. During the era when mobility was limited, pedestrian access was a high priority in the design and development of growing communities. The original Vermont Street Pedestrian Bridge was perceived as a necessary link in the network of transit options. Without that link further city growth would have been delayed. However, the footbridge was unable to retain its value to city planners as automobile use and suburban-style development flourished after World War II. Due to widespread use of automobiles, neighborhood planners no longer considered pedestrian access a high priority. Repairs to the Vermont Street Pedestrian Bridge were neglected and it was torn down in 1980, not to be replaced until fourteen years later.

Reconstruction of the footbridge coincided with emerging planning ideals and principles in the 1990s associated with the neotraditional design movement. Such principles were incorporated into the Uptown District in Hillcrest. As this study showed, concern over the possible financial failure of the project helped catalyze the restoration of the bridge and validated a key neotraditional concept—that the success of a retail project can be enhanced by creating better pedestrian access.

The original wooden-trestle footbridge was primarily functional and lacked artistic adornment. The rebuilt structure, however, a collaborative effort of engineers and artists, melded technology and function with aesthetics and sense of place. Many bridge users lovingly pointed to the artwork on the new bridge and revealed a sense of ownership and pride in the structure. These and other insights from the interviews can be valuable in assisting other neighborhoods in overcoming objections to the addition of similar pedestrian-oriented features. Pedestrian bridges offer a way to accommodate automobile and pedestrian traffic within the same space, at two different levels. While motor vehicles travel along six-lane Washington Street below, pedestrians can safely traverse the Vermont Street Pedestrian Bridge above.

What makes this particular story even more interesting is how the past came to influence the present. After initially discarding a structure that was built to serve pre-automobile pedestrian needs, the city rediscovered its value, and it now coexists with cars—the very

vehicles that were supposed to have made it obsolete. One lesson is that the introduction of new technologies—whether transportation or any other—should not necessarily result in the complete rejection of older landscape features that may still serve a valuable function. The story of the bridge illustrates that often automobile-oriented landscapes can be improved by drawing upon planning ideas from the past.

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# **Dependent Environmentalism: A Case Study of *Orerros* and the Corcovado National Park in Costa Rica**

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I use the phrase “dependent environmentalism” to describe the process in which a conjuncture of three interests—local environmental elites, international environmental elites, and the state—structures and shapes environmental conservation in less-developed countries. In the case study presented, the imposition of a U.S. national park model and a U.S. environmental ethic of “wilderness thinking” in the establishment and management of Costa Rica’s Corcovado National Park had deleterious effects on the local gold-mining-based economy and peasant *orerros* (gold miners). This paper examines the environmental, economic, and social context of the park’s establishment and demonstrates a need for more inclusive strategies of natural resource protection that show more concern for affected populations of rural poor.

## **Introduction**

COSTA RICA IS for many reasons one of the most remarkable countries in the world. Two achievements set it apart: the abolition of a standing army after a civil war in 1948, and the dedication of its government and leaders to environmental conservation and preservation. This paper takes a sympathetic but critical look at one of Costa Rica’s celebrated environmental achievements.

Costa Rica’s achievements have, at least statistically, taken on extraordinary dimensions. Over a period spanning just three decades, a succession of Costa Rican governments has set aside more than a fourth (28 percent) of the country as protected land. This includes 11 percent of the country in national parks (Figure 1), 4 percent in indigenous reserves, and 13 percent for a variety of purposes including national forests, monuments, wildlife refuges, and biological reserves. Today, Costa Rica stands as a shining example of what

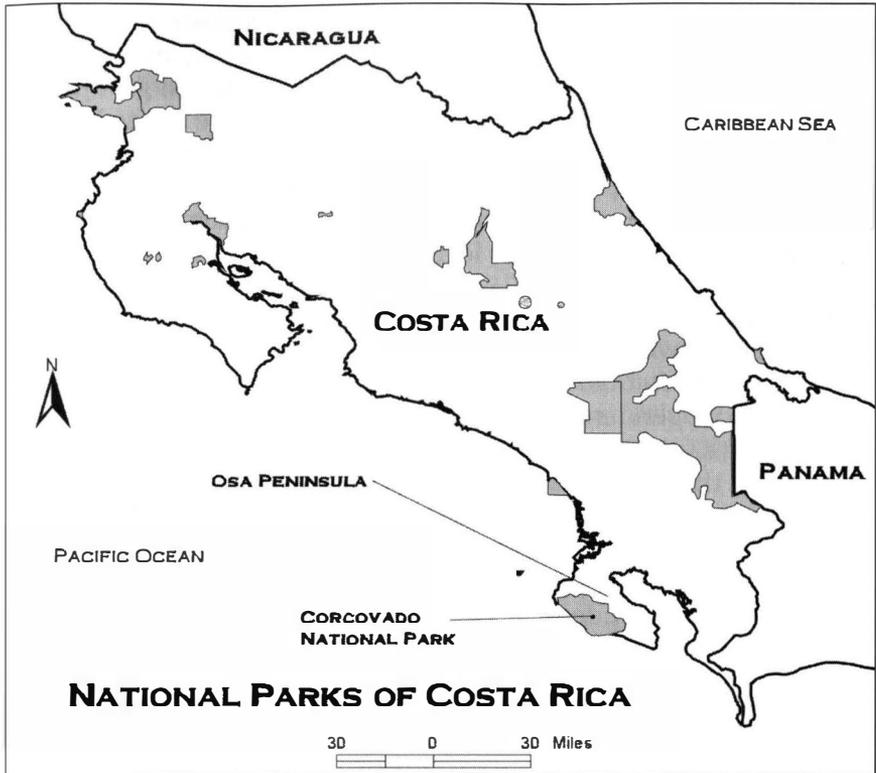


Figure 1—National parks of Costa Rica. (Adapted from Evans 1999, 9.)

a country with limited resources can do. It has indeed become, following the title of historian Sterling Evans’s 1999 book, a “green republic.”

Set in context, this achievement is even more laudatory. Like all of Central America, Costa Rica suffered terribly over the same period from a host of economic and environmental afflictions, including the loss of most of its remaining forest cover due to the highest deforestation rate in all of Latin America (Sader and Joyce 1988, 14; Jones 1992); a related crisis in soil degradation through erosion (Faber 1993, 64); a high per capita debt load (231) and rapid population growth (75); inflation and diminished spending power among most segments of society; periods of high unemployment (Evans 1999, 109–10, 144); and the dedication of much of the country’s most productive land to export crops and ranching rather than subsistence agriculture (Williams 1986, 115–17; Nations and Komer 1987).

Given these conditions, Costa Rican environmentalists would probably not have accomplished much without encouragement, expertise, and financial support provided by environmental groups and agencies from the developed world, particularly the United States. Therein lies the rub: there are always strings—even invisible strings—attached to such support, and sometimes these strings involve expectations rooted in North American environmental assumptions that take too little account of local human needs and conditions.

In 1979, Peter Evans published an incisive analysis of the political economy of development in Brazil titled *Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil*. Evans argued that dependency theories failed to explain how or why diverse groups formed coalitions as less-developed countries interacted with the world economy. In his case study, Evans demonstrated how Brazilian development had been structured by a three-sided conjuncture of interests—local capital, international capital, and the state—that had joined as partners in economic investment and growth. “Dependent development” was Evans’s label for this tripartite coalition.

I apply Evans’s analysis to environmental development in Costa Rica in this paper, arguing that environmental conservation efforts followed a similar pattern of “dependent *environmentalism*,” structured by a conjuncture of interests representing local environmental elites, international environmental elites, and the state. I argue that when the assumptions of North American environmentalists are applied to less-developed countries, with insufficient concern for the welfare of inhabitants of conservation areas, the impacts on local economies and the rural poor can be harmful if not devastating.

During fieldwork conducted on the social impacts of the establishment and expansion of the Corcovado National Park on the Osa Peninsula, I found dependent environmentalism to be very much in evidence, undermining the welfare of hard-working people. Because this park was based on North American notions of how a wilderness should be conserved, local inhabitants were denied access to resources such as placer gold that for decades had formed the basis of a local economy.

The creation of Corcovado National Park in 1975 very much followed a U.S. “national park model” of wilderness conservation.<sup>1</sup>

The coalition of interests behind park formation included the Costa Rican government, Costa Rican environmentalists trained in U.S. conservation and park management programs, and U.S. institutions and scientists who provided education, expertise, encouragement, and funding. Local inhabitants, who were not consulted in the process, were forcibly ejected from the park with little concern for their welfare, and much of their economy was destroyed as a result.

My fieldwork was conducted in 1984 and 1985. Subsequently, Costa Rican environmentalists endeavored to bring a greater sense of social justice into their environmental planning (Evans 1999, 154–81), and by no means do I wish to indict their earlier efforts—all things considered, their achievements were truly extraordinary. Rather, I hope to add a cautionary note to the assessment of environmental initiatives in less--developed countries.

## **Gold Rush History of the Osa Peninsula**

The gold-rich core of the Osa Peninsula is composed primarily of incredibly rugged ridges of volcanic origin, rising to a maximum height of 745 meters and cut so tightly by a complex system of rivers and tributaries that few people besides hunters, miners, scientists, and sanctuary-seekers are attracted to the area. The peninsula receives between four and six meters of rainfall annually with a short dry season.

The power of rain and rushing water is a daunting force of nature on the peninsula. As the rain drenches the hillsides, it pours into the rivers and cascades towards the ocean. Rivers and streams comprise the main routes of travel. One is always wet and always removing river-borne grains and pebbles from one's boots. Rivers have taken a number of miners' lives and can be especially dangerous when swollen after a heavy downpour, especially as they near the sea. The mouth of the Madrigal River, at Madrigal Beach, emits a roar like a dozen bulldozers at work. There the water meets a thundering Pacific Ocean with breakers so strong and constant that even gold can hardly escape. Madrigal is one of the few beaches on earth where heavy particles of gold are thrown back upon it.

*Oreros* (gold miners) came in numbers to the Osa Peninsula during the first modern gold rush in the late 1930s. According to local lore, the rush began in 1937 when a man named Ernesto, who was for-

aging along Madrigal Beach, picked up a shell and shook it only to discover a large nugget of gold rattling inside. Within two years, more than 2,000 miners were crowded along this extraordinary beach and foreign buyers (largely German merchants) were using airplanes to ferry money and supplies in and gold out.

Miners from the 1930s gold rush panned the dark volcanic sands of Madrigal Beach and found gold everywhere. They would haul five-gallon cans of sand up the beach to a little stream in which the work of panning could be done. Miners would either do the panning themselves or sell their sand to panning specialists. On average, five gallons of sand would yield between five and seven grams of gold, a gold so fine in texture that it became famous to jewelers worldwide as *Oro Madrigal* (Madrigal Gold).

The early *oreros* prospered in almost complete physical isolation from the rest of the world. There were fights, deaths, and tales of theft and betrayal, but there were also families, births, stories of love, and measures of contentment. It was an active, thriving community until World War II, when the money/supply chain was cut off because so many of the airborne merchants had been German. Most of the miners and mining families subsequently dispersed.

Those who stayed were not to see a similar economy return to the peninsula for almost thirty years. The price of gold had been linked to the U.S. dollar and frozen in 1935. Not until Richard Nixon's presidency did the United States go off the gold standard, and not until January of 1974 did it become legal once again for U.S. citizens to own gold. In the intervening decades, the life of an *orero* was generally uneconomical and few remained on the peninsula. According to one veteran who had settled there in the mid-1960s, the entire population of the gold rivers of the peninsula in 1967 comprised just eleven families.

This changed quickly as the price of gold rose from U.S. \$35 per troy ounce in 1974 to as high as U.S. \$800 by 1977, and eventually settled in the U.S. \$300–\$400 range, where it remains today. Over the next two decades, growing numbers of Costa Ricans migrated to the Osa Peninsula. Old miners returned and new miners learned the trade working beside *oreros* who had been there undisturbed for decades. The populations of makeshift villages swelled, forcing some inhabitants to scavenge necessities by begging or thievery.

The influx of needy strangers to a thriving local economy created a crisis that in part led to the establishment of the Corcovado National Park in 1975 and extensions to the park in 1978, 1980, and 1985. Gold mining was outlawed in the new park, despite the fact that park boundaries encompassed the most productive gold rivers on the peninsula (Figure 2), and officials made periodic, if often unsuccessful, attempts to remove humans from the park.

Damage from mining was not the only or even main environmental concern behind the creation of the park. Livestock production had cleared many lowland areas of the peninsula (Figure 3), and a timber company, Osa Productos Forestales, which owned large tracts of the lush rainforest that it periodically cropped, had threatened to subdivide larger sections for real estate development; it had also begun discussions with a foreign (Japanese) corporation to begin more aggressive logging. In addition, a U.S. corporation was considering investing in a citrus plantation. Of greatest concern to environmentalists, however, was the growth in the number of *precaristas* (peasant squatters) who had begun laying claim to vulnerable sections of land (Christen 1994, 60–63; 81–82).

The thriving economy that sprouted so quickly after the price of gold began to rise explains why the creators of the Corcovado National Park (and those who later expanded it) had to seek international funding to help the government buy out the *oreros*, farmers, merchants, and traders residing within its boundaries. Although these individuals might not have owned park property in a legal sense, Costa Rican law requires that squatters be compensated in full for any “improvements” they make to land occupied for 3 months or longer before they can be removed. No compensation, however, was provided for their lost income or for the lost opportunities for prosperity that mining was bringing to the region.

## **Life Among the *Oberos***

Fieldwork among the *oreros* of the Osa Peninsula in the mid-1980s was an extraordinary but disturbing experience. To be identified as a scientist in this remote Pacific Coast location, as happened to me on several occasions, could be deadly. A month prior to the 1975 establishment of the park, a foreigner—Swedish environmentalist Olof Wessberg—was murdered by machete by a local man while surveying the area for the government. A subsequent decade of ten-





Figure 3—Lumbering and forest clearing continue to threaten areas adjacent to the Corcovado National Park in 1984. (Photograph by author.)

sions between miners and park officials was reaching a moment of crisis when I arrived.

At the time, I was less interested in national parks, environmentalism, and social fairness than in gold. I was there to meet miners, listen to their stories, and observe their work for a book I was writing. Toward that end I recorded the oral history of gold rushes on the Osa Peninsula from an expatriate American adventurer, Patrick Jay O'Connell, who had prospered as a resident gold trader for more than twenty years. Growing to share my informant's love and respect for the peninsula and its inhabitants, I published my research in *Goldwalker: Tales of the Osa Peninsula of Costa Rica from the Life of Patrick Jay O'Connell* (1989). Looking back with new theoretical insight, I find that this lingering love and respect—an insider's view—both colors and adds color to my analysis.

By the time of my first encounter with *oreros* in 1984, the miners and park officials had reached an uneasy standoff. The closing of the banana plantations in nearby Golfito had brought a recent in-

flux of needy and politically sophisticated migrants into the mining community, perched in settlements at the park's fringes. *Oberos* made occasional forays into prized spots along the gold rivers, living in shelters made of little more than poles and polyethylene sheeting, panning nervously, and disappearing back into the rugged hillsides whenever they feared discovery. There was anger and occasional violence. Park officials, intimidated by the miners as much as they intimidated the miners, no longer acted with authority to expel the interlopers. Instead, they called for special units of Rural Guard commandos (police) from the capital to do the unpleasant and dangerous business for them. As a result, miners became more timid when commandos were in the area but bolder when they were gone (Figure 4).



*Figure 4—Squatting illegally within national park boundaries, the oreros living in this makeshift shelter fled into the rainforest at the sound of approaching strangers, leaving warm food on the table. (Photograph by author, 1984.)*

Most miners lived and worked in families. They built homes in the open *rancho* style suited to the warm, wet climate. They worked in the rivers and saved, aspiring to acquire the small private *finca* (farm)

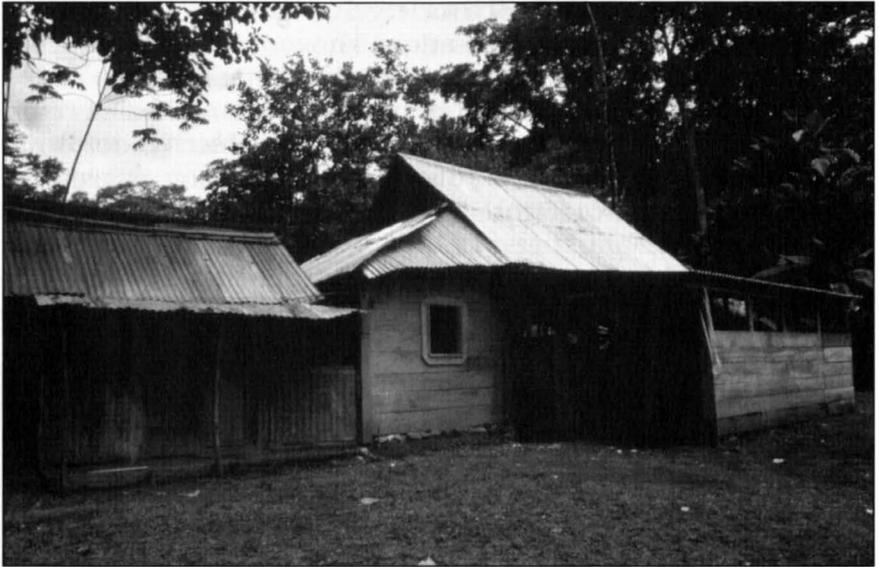
that was every *campesino's* dream. There were several criminals and desperados among them—unsavory characters, known by nicknames and often the subject of legends—but they frequently became productive members of a society that did not judge them and offered meaningful work. One miner, known locally as Juan Torte (Juan the Screw-Up) threw a legendary party after finding a nugget weighing fourteen pounds on Violin Island north of the Osa Peninsula. An eight-pound nugget was pictured on the cover of *Argosy Magazine* in the 1970s and the discovery of other large nuggets was a frequent occurrence (Figure 5). (The record pan was measured at half a kilogram.)



Figure 5—This splendid nugget, weighing nearly two pounds, was worth about ten years' wages for the average Costa Rican. (Photograph by author, 1984.)

*Oberos* seldom needed to leave the settlements that had sprung up along the gold rivers. A group of perhaps twenty petty entrepreneurs, including my informant O'Connell, regularly traveled the rivers and footpaths of the peninsula to trade for gold and deliver medicines and supplies. Tiny stores among the hills allowed miners to acquire staples such as beans and rice, chilies, saltines, tinned fish, and flashlight batteries. Some of these *pulperias* also sold alcohol, on which so much of the local social life hinged. The occasional *cantina* in the larger settlements sold hot food and cold beer

and often stayed open into the night under electric lights supplied by generators (Figure 6).



*Figure 6—This pulperia, or small store, represented small-scale economic development and provided miners with necessities such as canned fish, saltines, flashlight batteries, and news from the outside world. (Photograph by author, 1984.)*

By 1984, cattle were grazing in lowland areas and miners had settled in all the productive rivers beyond the park boundary. There were several dozen small settlements and a growing community on a section of Madrigal Beach just beyond the park's edge. Puerto Jiménez, the peninsula's oldest permanent community with a relatively protected harbor on the Golfo Dulce, had grown into a thriving town and port. In addition to a bank and post office, Puerto Jiménez contained motels, flophouses, two Chinese restaurants, and a large well-stocked hardware store. It was served by buses, several new roads, and two airfields, and local entrepreneurs were doing brisk business in trade, transport, hauling, agriculture, real estate, and construction.

Miners on the Peninsula had a common saying: *"El río es mi patrón y su ley es un gramo al día"* ("The river is my boss and its law is a gram a day"). To find and pan a gram of gold daily took an average

of four hours' heavy toil and represented a healthy income within the local economy; its value varied, but a gram was in the range of U.S. \$10. People came and went, but O'Connell estimated that there were 2,000 miners working in the rivers and on the beach in 1984. A government study confirmed that 1,500 *oreros* were working illegally in the park in 1985 and an additional 3,500 were working in nearby areas (Evans 1999, 144). According to my estimate, the community above Madrigal Beach had approximately five hundred inhabitants living in two hundred makeshift houses. Working half-time, miners were bringing at least U.S. \$10,000 into the local economy each day. Total earnings would have reached several million dollars each year without considering the occasional rich strike. According to traders I consulted with, this is a reasonable estimate of the extent of the local industry before the extensions of the park and enforcement of evictions. The estimate is also supported by a government report showing the country exported refined gold valued at \$3,558,080 in 1982 (Evans 1999, 144), most of which came from the Osa Peninsula and nearby areas.

The gold industry was leading to what political economists define as "articulated"—as opposed to "disarticulated"—development (De Janvry 1981), because it was an inclusive rather than exclusive economic activity and put spending money into the pockets of a wide range of people. With a very small initial investment—a pick, a shovel, and a pan—a worker could be in business. It was a democratic (even anarchistic) economy, with rules and customs of rights and behavior established through practice and negotiation by the local population. Rights of access were denied to no one, but qualities of persistence, intelligence, experience, and intuition brought rewards to the ablest veterans. The gold industry involved a renewable staple commodity in the sense that gold was continually eroding from the hillsides and tumbling into the rivers. Gold mining led to the proliferation of businesses linked to the staple resource by small investments, a spirit of entrepreneurship, and a market. A number of other multiplier effects had begun to materialize from gold mining; it was even playing an important, if minor, role in helping the government address the national debt.

## **Environmental Impacts on the Osa Peninsula**

### ***Orero Mining***

*Orero* practices were virtually indistinguishable in their environmental impact from the powerful natural processes at work upon these

river valleys. Although there were some *orero* concession mine cops (described below), most peasant miners worked alone or in small groups, choosing sites by instinct or experience, interpreting the terrain and its evolution, and looking for pockets in ancient riverbeds in which heavy chunks of gold might once have settled. In a few instances a discovery led to tunneling, but in local practice this was extremely dangerous and favored by few. Most of the *oreros* I saw worked in or near the rivers, digging and panning in quiet contemplation. Disturbances they made added minuscule amounts of particulate matter to rivers that were already heavily laden with soil, pebbles, rocks, and boulders that constantly tumbled downward from the rain-soaked, eroding hillsides. Scars in riverbanks left behind by *oreros* washed away in a few months.

One experienced group of miners I met (two partners and their families) applied a very systematic technique to their claim. They had set about the laborious task of moving every rock, pebble, and grain within their stretch of river valley—about a hundred meters long and half as wide—from one side of the river to the other, panning every shovelful (Figure 7). With patience and persistence, in a process taking several years, they were determined to capture every grain of gold in their claim. What boulders they could not move by hand they smashed into pieces with sledges. They worked quietly and left behind a river valley looking virtually undisturbed. They were making a solid, independent living and contributing to the local economy. The leader of these miners, I should add, was seventy years old, looked fifty, and had been mining on the peninsula for more than forty years.

Only two significant environmental problems were caused by the growing number of *oreros* on the peninsula. The first was the use of mercury in the process of securing traces of gold from the bottom of a pan.<sup>2</sup> The second was hunting for food and pleasure.

### **Hunting**

Wild pig, which had always been abundant in the region, was a favorite game. The large herds of several hundred beasts that had brought my informant O'Connell to the peninsula in the first place had diminished dramatically over the previous decades. Tapir, the large mammals for whom the peninsula is named (although *osa* translates as "she-bear" it is used locally to describe the tapir), had become exceedingly rare. Alligators had been a favorite prey during the quiet times on the peninsula; and hunters had been able to sell



Figure 7—The impact of this orero's practices, moving every rock and pebble by hand from one side of the river to the other, was virtually indistinguishable from the powerful natural processes at work upon the rivers. (Photograph by author, 1984.)

hides for quick income when the price of gold was low. They also boiled alligator fat to make *manteca*, an oil they sold for medicine. As a result, most of the larger alligators had been wiped out by 1984. Other favorite prey were *gallina de palo* (literally "tree chickens," referring to iguana) and *tepezquintle* (paca, opossum-sized nocturnal rodents reputed to be of particularly delicious flavor).

Hunting, however, ceased to be a necessity once the price of gold began to rise. Miners could afford the rice, beans, and chilies that were the local staple diet, and they could purchase milk, eggs, and meat from local farmers. Also, they could clear small patches of ground to grow roots crops such as yucca and malanga, takiski (a fruit), and squash, papaya, plantain, lemon, and sour orange. As long as gold profits fueled the economy, there was always money for food. One effect of the incorporation of the best gold rivers into the national park was the depression of this economy and the increased need for locals to supplement their diets through hunting.

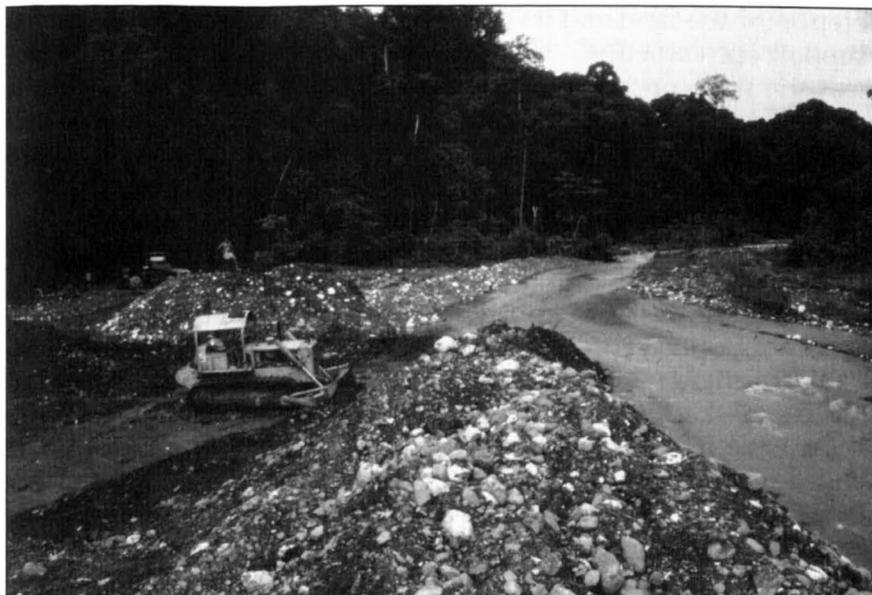
The park may have protected those species within its boundaries from excessive poaching, but this exacerbated the problems in the surrounding ecosystems. Costa Rican environmentalists began to address this problem by emphasizing management of “buffer zones” beyond national park boundaries rather than acquisition of more national park land (Evans 1999, 145).

### **Concession Mines**

As practiced by individual *oreros*, mining was potentially, although not necessarily, environmentally destructive. But there was a second group of miners on the peninsula whose impacts on the economy, politics, and environment cannot be underestimated: these were professional miners representing international capital from the United States, Canada, Japan, and Europe. Joined by local partners, they obtained contract agreements from the Costa Rican government giving them gold rights to specific locations; such outfits were called “concession mines” and their local reputation was poor.<sup>2</sup>

Concession mines had serious impacts on the economies and environments in which they operated. They evicted all squatters within their concession areas and hired armed guards to keep people away.<sup>3</sup> Mine operators employed few locals and rarely for long, hiring carpenters and heavy equipment operators just long enough to set up facilities. Perhaps a cook or a bulldozer operator would find permanent work, but most of the professional miners were foreigners whose wages were many times the local scale. From these enterprises gold profits were mostly expatriated or spent on imported fuel and machinery, with few multiplier effects to enrich the local economy.

Environmentally, the difference between bulldozers and men with picks and shovels was profound. Concession mining brought noise, fumes, and complete disturbance of the river valleys (Figure 8). Although environmentally devastating “hydraulic giants” were outlawed on most of the peninsula, typical concession mine practice used bulldozers to drive every bit of loose matter from the floodplain through a sluice, leaving a large area of scarred terrain, piles of tailings, and heavy siltation downriver. Government requirements for restoration were either ineffective or not followed. Concession mining lent credibility to expert reports blaming excess river siltation on mining and calling for such practice to be outlawed in the park.



*Figure 8—Foreign-owned concession mines greatly disturbed rainforest ecosystems while providing few resources for the development of local communities. (Photograph by author, 1984.)*

## **Dependent Environmentalism in Action**

### ***Evictions***

The miners and citizens of the Osa Peninsula resisted the encroachment of the national park upon their livelihoods. Repeatedly I heard angry complaints that the park was “*internacionalista*” (internationalist) when it should have been “*nacionalista*” (nationalist), indicating an underlying feeling it had been incorporated for an international purpose regardless of its claim to be a “national resource.” In the eyes of the locals the land was being reserved for the interests of a handful of scientists (which was a fairly accurate assumption at the time—its value as an ecotourism attraction with jobs and opportunities for locals had yet to be established). Whenever a group of miners gathered, one would inevitably quote former President León Cortés, a politician from the 1930s, who upon thwarting an earlier imperialist encroachment, declared: “All the rivers of Costa Rica are free for all people with pick and shovel!”

*Oberos* were aware of the conservation efforts that supported the park’s establishment. As rural peasants, they too had a special rev-

erence for the land and its preservation and were fully prepared to support such an effort. What they could not understand, however, was the way conservation was structured to deny them access to resources, even if they found ways to exploit placer deposits with a limited environmental impact. They proposed alternative strategies; according to one, miners would be licensed and enlisted as unpaid park guards, vigilant against hunting and the use of mercury, in exchange for the right to work in the rivers.

Their suggestions went unheeded and in 1986 the Costa Rican government decided to drive all *oreros* from the Corcovado National Park. On March 2, the Rural Guard evicted them, destroying their shelters and seizing their mining equipment. Although the evictions were meant to proceed without payment, the government ended up paying out U.S. \$3,800 to each *orero* in 1987 (Evans 1999, 145). Illegal mining resumed in the park and surrounding areas several years later, and the uneasy standoff between *oreros* and park guards persists to this day.

### **The Tripartite Coalition**

#### International Interests

There are multiple actors and motives behind any major accomplishment such as the creation of the Corcovado National Park, but the role of the international scientific and environmentalist community in this effort cannot be underestimated. According to environmental historian Catherine Christen, whose 1994 dissertation describes the creation of the park in great detail, a cadre of more than 1,000 students and scientists who conducted fieldwork from 1962 through 1973 on the Osa Peninsula at the Tropical Science Center's Rincón station formed the backbone of a powerful and influential conservationist constituency that lobbied for the creation of the park. Christen (1994, 136) argued: "Corcovado's conception and creation were inextricably tied to professional estimates of the region's scientific merit," and she ascribed very deliberate and self-seeking motives to this largely foreign-born and foreign-trained constituency:

By the 1960s and 1970s, the once contented tropical scientists found that if they wanted to continue to pursue their Costa Rican studies in the style to which they had become accustomed, they might be obliged to enter the fray of the always ongoing Costa Rican debate about land use rights, privileges, policies, and practice. They would have to introduce a new paradigm,

conservationism, one which directly competed with the traditional Costa Rican concept that land should be worked and “improved” if it were to serve the country’s interest. Scientists and a growing cadre of allies had to begin to think about what might be the political, economic, and social justifications of preserving land in its natural state. Just as importantly, they had to determine how they might convincingly communicate those values to Costa Rican policy makers without running afoul of the continual menace of being branded foreign or elite interventionists. (1994, 28)

In introducing the new paradigm of conservationism to Costa Rica, this international conservationist constituency employed notions of land management arising from a mostly U.S. context of dealing with wild or sparsely-populated territories.

Ramachandra Guha (1989) provides an informative interpretation of the nature of North American conceptions of environmentalism and shows how they do not always translate appropriately within other contexts. According to Guha, there are three main approaches to environmental ethics, each of which posits a social utopia and each of which bears a distinctly U.S. origin. *Agrarianism*, founded in medieval Europe, has a long tradition in the settling of the United States and the writings of Thomas Jefferson. *Scientific industrialism* represents a philosophy of resource use exemplified by U.S. Forest Service policies. It seeks to replace the anarchy of market economics with rational programs of state control and management. *Wilderness thinking*, Guha argues, is the dominant paradigm among U.S. environmentalists. It gained early currency in the writings of New Englander Henry David Thoreau and naturalist John Muir, and has become a fundamental tenet of organizations such as the Sierra Club, the Nature Conservancy, and the World Wildlife Fund. Taking nature appreciation as an indication of a culture’s maturity, wilderness thinking substitutes biocentric for anthropocentric values. In its most radical formulation, wilderness thinking takes pre-Columbian America as its utopia and espouses a 90 percent reduction in human population worldwide as a precondition for long-term survival (Hall 1990).

In more recent environmental discourse, especially in the face of worldwide destruction of habitats such as the Amazon rainforest, wilderness thinking has become a philosophy of desperation. It has given rise to its own journals, such as *Wild Earth*, and has inspired a growing cadre of voices, led by Gary Snyder (1996, 1967), Donald

Worster (1997), and Wendell Berry (2002), extolling the virtues of untouched places. It has also given rise to a cadre of critics, including William Cronon (1996), Richard White (1996), and David Demeritt (1994), who suggest that wilderness thinking stems from a mostly elite construction of a cultural myth of a mostly nonexistent world presumed to be untouched by human hands. This myth sees centuries of North American depredations on the land as an almost unstoppable force that can be curbed only by removing humans from protected places. For Americans who bear a collective guilt for centuries of unhindered plundering of a continent—and for whom there are so many alternative and environmentally benign ways to make a living—wilderness thinking represents a logical and noble mode of resistance. It also represents a very attractive cause for donations.

Enormous sums of money are collected by North American, European, and international environmental organizations that promise wilderness preservation initiatives in places of desperate need (see Bonner 1993). It is only natural that these initiatives reflect the environmental ethics of the donors. It is also to be expected that environmentalists from less-developed countries internalize to some degree the environmental ethics of donor societies, especially when they receive training and guidance from donors as well as financial support.

#### Local Environmentalists

Costa Rica's success in attracting money and training from environmental agencies and institutions in donor countries has been remarkable. Sterling Evans has documented this story in great detail in *The Green Republic* (1999). According to national lore, the story begins with two Costa Rican naturalists, Alvaro Ugalde and Mario Boza, who heroically spearheaded a national environmental movement that began with almost no local resources. Boza became the first and only national park employee in Costa Rica in 1970, the same year that Ugalde became the unpaid superintendent of the Santa Rosa Battlefield National Park. Both were profoundly influenced by mentors steeped in the North American wilderness-thinking tradition, especially those associated with the Tropical Science Center and its Osa Peninsula field station. Both took training courses sponsored by the U.S. National Park Service, and Boza sent a number of employees to training programs run by the U.S. National Park Service. At one point, Ugalde took a leave of absence to get a master's degree in environmental management from the Uni-

versity of Michigan. For their work, including the creation of the Corcovado National Park, Boza and Ugalde in 1983 shared the most prestigious international honor for environmental activism—the J. Paul Getty Wildlife Conservation Prize.

According to Christen (1994), however, the story of the establishment and expansion of the Corcovado National Park began not with Ugalde and Boza but with direct interventions by the constituency of mostly North American scientists and environmentalists associated with the Tropical Science Center's Rincón station. The station had been run by North American scientists during the eleven years of its presence on the Osa Peninsula, but closed in 1973 after relations deteriorated with the timber company from which it leased land. Its displaced scientists, by nature and training disposed to wilderness thinking, were motivated not only by a desire to see ecosystems preserved on the peninsula, but now also by the need for a permanent place from which they could continue "concerted, long-term scientific study of the kind that had been carried out at the Rincón station" (135).

A complementary group that had also been run mostly by U.S. scientists, the Organization for Tropical Studies, also sought a permanent station on the Osa Peninsula "to insure local continuity for its own long-term scientific research and training programs" (Christen 1994, 136). Both of these organizations had a tremendous influence on the growing cadre of Costa Rican environmentalists and scientists who had received training in biology, ecology, and conservation in Costa Rica and abroad. Both Costa Rican and foreign individuals associated with the two groups became aggressive lobbyists for the creation of the park, especially after they arrived at a consensus as to where and how much of the Osa Peninsula was to be preserved (138).

U.S. Peace Corps volunteers were instrumental in creating and implementing the consensus. Beginning in 1971, when the Peace Corps sent 120 volunteers to Costa Rica, Boza and Ugalde often had more Peace Corps volunteers under their supervision than regular park service employees. One former volunteer, wildlife biologist Christopher Vaughan, wrote the management plan for the future park in 1971, and another, Tex Hawkins, helped develop a public relations program for Boza's department (Evans 1999, 85–87).

The consensus was cemented in 1973 after another group of scientists—biologists from the University of Florida—published and distributed an emotional and convincing brochure extolling the rich natural heritage of the Osa Peninsula and the threats posed by squatters seeking arable farm land. The brochure, *La Cuenca del Corcovado* (The Corcovado Basin), included “a plea to its readers to advocate the accumulation of political support and funding to effect protection” of what it defined as the Corcovado Basin, an area that corresponded to the most productive gold rivers on the peninsula. One of the brochure’s authors, ecologist Jack Ewel, identified the proposed location of the park and was thus responsible for much of its character (Christen 1994, 264).

Ewel and other members of the mostly U.S. conservationist constituency made sure that Costa Ricans perceived the Corcovado conservation project as “a Costa Rican venture” (Christen 1994, 265). In the years leading up to the park’s creation, they maintained a low public profile while working behind the scenes. They rejected an earlier notion of establishing an international refuge and began describing the park as a showcase national resource for Costa Ricans. This was an essential element in achieving buy-in from the Costa Rican environmental elites.

#### Costa Rican Government

The Corcovado National Park finally became a reality when the third party to dependent environmentalism’s tripartite coalition—the Costa Rican government—realized its interests in the park’s creation. In 1975, the conservationist constituency convinced newly elected President Daniel Oduber that it would be a wise political move, both nationally and internationally, to establish the park. Alvaro Ugalde, who became Oduber’s national parks service director, stated publicly that the Corcovado conservation effort was one of his agency’s top priorities, reaffirming its identification as a national project and making it possible for the President to support it politically (Christen 1994, 350).

A succinct and moving letter to Oduber from Italian scientist Paolo Cappelli also caught Oduber’s attention (Christen 1994, 369), and an extremely influential lobbyist—Karen Olsen de Figueres, the Danish-born and American-raised wife of Costa Rica’s most revered political figure, President José Figueres—caught his ear (Evans 1999, 76–77). Members of international conservation organizations made

a promise to find a decoration with which to reward Oduber if he were to establish the park (Christen 1994, 373). He did so, by decree, and was presented with the Albert Schweitzer Award from the World Wildlife Fund in 1976 and the Green World Award by the New York Botanical Gardens in 1977 (387).

Oduber played a significant role in the coalition of interests, committing substantial national resources to the creation of the Corcovado National Park and other conservation initiatives. The national government acquired most of the Corcovado basin through a land swap with the timber company. Ugalde's original estimate of \$176,000 for setting up the park (mostly to buy out squatters) later rose to at least \$1.2 million, but Oduber agreed to spend it (Evans 1999, 99). Government officials and the scientists who determined the location of the park had spent so little time in the Corcovado basin that they had not realized how many settlers had been attracted by the rising price of gold. In fact, gold mining was often not even mentioned in letters and documents lobbying for park creation. It was not until 1985 that another North American, University of Pennsylvania biologist Dan Janzen, conducted a study on the impact of *orero* mining in and around the park and it was his recommendation that led to the complete eviction of miners in 1986 (145).

Overall, Christen (1994, 281–85) estimates that the Costa Rican government spent more than \$2 million on its Corcovado conservation project. This turned out to be a remarkably astute investment, for it opened the floodgates for international contributions to other Costa Rican conservation initiatives. Conservation agencies, such as the World Wildlife Fund of California, had been anxious to donate funds to support these initiatives but were waiting for the right kinds of projects, i.e., projects that would attract donors steeped in the wilderness-thinking tradition. Corcovado, held up as a model national park and unpopulated wilderness dedicated to scientific study, was exactly what they had in mind. The World Wildlife Fund and the Rare Animal Relief Effort donated seed grants of \$10,000 each in 1975 and again in 1976. Joined by the Nature Conservancy, these organizations raised and donated more than \$240,000 to support the Corcovado project by 1977 (Christen 1994, 284–85). The importance of these grants should not be underestimated, for in 1976 the entire budget of the Costa Rican Park Service was only \$600,000 (Evans 1999, 101).

Funding for the Corcovado National Park and other Costa Rican environmental initiatives became so heavily dependent on the generosity of outside donors that in 1979 Mario Boza established the *Fundación de Parques Nacionales* (National Parks Foundation) to solicit grants and channel funding to the most important priorities (Evans 1999, 113). Over the years, millions of dollars flowed into the country in grants and loans to support conservation causes. This included loans and foreign aid from the United States, Canada, Sweden, Finland, Denmark, Norway, Germany, and Great Britain; donations from other environmental agencies including the Sierra Club, Caribbean Conservation Corporation, New York Zoological Society, International Union for the Conservation of Nature, and the Natural Resources Defense Council; and grants from the Rockefeller, Ford, and MacArthur Foundations.

## Conclusion

The establishment of Corcovado National Park vividly illustrates the workings of dependent environmentalism. A conjuncture of interests involving the state, international interests, and Costa Rican environmental elites came together to create the park. But why would Costa Rican leaders, in a country of predominantly poor and rural citizens, and facing difficult economic times in the 1970s and 1980s, choose to adopt such a strongly U.S. strategy for environmental conservation, especially if doing so meant denying financial security to thousands of their fellow citizens?

The fact that most Costa Rican environmentalists were trained in the United States or by U.S. scientists provides part of the answer. The powerful impact of U.S. cultural hegemony on ideas, values, and practices throughout the world provides another part. However, the most basic issue was money. Overwhelmingly in Costa Rica the resources and support upon which environmental conservation efforts depended came from the United States. U.S. organizations and agencies donated cash for projects that conformed to their own expectations of environmental conservation. The idea of saving a rainforest, or establishing a reserve in wilderness for perpetuity, has always held enormous appeal for American donors.

Costa Rican environmentalists joined international scientists and environmentalists in lobbying the state to create and extend the Corcovado National Park and expel the *oreros*, not just to satisfy the expectations of American donors, but because they deeply believed

in what they were doing. Given the unruliness of *orero* life and the preciousness of rainforest ecosystems, perhaps there was no other realistic choice. But the uneasy standoff and continual competition between *oreros* and park officials over the resources of the Osa Peninsula has provided one stimulus for the development of a more nationalistic environmental ethic. Today, Costa Rican environmentalists have added concern for human needs and local community welfare to their conservation planning. Although *oreros* have yet to be given permission to return to the gold rivers of the park, administrators now consider locally based economic uses in their management guidelines for other parks (Evans 1999, 161–65).

As this case study demonstrates, dependent environmentalism can impose unnecessary hardships upon the rural poor but it also may be just a stage in the evolution of natural-resource management in less-developed places. Once the tripartite conjuncture of interests takes hold and establishes an enduring legacy in a place like Costa Rica, and once the desperation that initially motivated these interests begins to subside, the three partners can take a critical look at the human consequences of their actions and begin to bring the local needs of human beings back into the picture.

## Acknowledgments

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## Notes

1. Although mining can be a permitted use in U.S. National Parks and in National Forest wilderness areas, the *Wilderness Act of 1964* was designed to promote the establishment of places free of roads, resorts, or other human-made intrusions, and defines wilderness as “an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain” (1).
2. The process of mercury amalgamation represents the most significant environmental risk posed by gold placer mining today. Miners apply mercury to the residue in their pans so that tiny particles of gold adhere to the mercury, making it easier to separate from other elements. Using heat, they evaporate the mercury and are left with pure gold. However, this places them at risk of mercury poisoning (Reto 2002). In the

process of recovering evaporated mercury for reuse, miners also risk losing small amounts to the environment. These small amounts can add up to a great deal. Hundreds of thousands of pounds of mercury remain at many sites of the California Gold Rush in the Sierra Nevada (USGS 2003), and fifteen million pounds of mercury were lost to the Carson River watershed during the historic mining of Nevada's Comstock Lode (Lechler 1992). Although mercury amalgamation has caused severe problems in Brazil, Venezuela, and Papua New Guinea, my informant O'Connell considered it to be a minor problem on the Osa Peninsula. Although mercury had been used commonly during the first gold rush on Madrigal Beach, where the grains of gold were so fine they were difficult to recover from a pan, the costly substance was less likely to be used in the steep river valleys of the Corcovado Basin, where the gold particles tended to be larger and easier to recover.

3. Although a few were profitable operations, many were suspected of mining mainly investors. In fact, I met several traders who admitted to having sold gold to concession mine operators for the purpose of salting—that is, fraudulently enriching—their sluices when potential investors were expected. The success of such schemes was a subject of much discussion on the peninsula, and one informant told me, comically, that he had seen an American lawyer rip the breast pocket of his shirt pulling out a checkbook to write a check for a substantial sum after seeing piles of glittering metal at the bottom of a concession mine sluice.
4. Professional squatters, known colloquially as *casucas*, dogged the concession miners persistently, erecting temporary shelters whenever possible in order to be evicted repeatedly and compensated for improvements.

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# **Geographic Education**



# Incorporating Active Learning in Large Lecture Classes

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Large lecture classes present unique challenges and opportunities. A CSU San Bernardino instructional development grant enabled us to hire student assistants for our large-enrollment geography course in order to conduct small group discussions around a series of videos shown in class. After the student assistant-led discussions, some groups were called upon to report their discussions to the entire class. Student response to this innovation was positive; many of them enjoyed the opportunity to discuss a controversial topic.

## Introduction

COURSES TAUGHT in a large lecture setting require creative pedagogical approaches, as they often lack opportunities for discussion and interactive experiences. This project addressed that pedagogical challenge, introducing active learning to a large lecture geography class (eighty-seven students) by creating small discussion groups. Groups were assigned debate questions that incorporated course content and objectives, such as a comparative analysis of different cultures and regions. The active involvement of students in discussion groups enabled them to improve their critical thinking and debate skills and enhanced the learning environment. Students were also given opportunities to improve their oral presentation skills by presenting their discussions/debates to the entire class.

The project was implemented during fall quarter of 1998. Funding came from a Faculty Instructional Development Opportunity Grant at California State University, San Bernardino.

## Background

The general education requirements at CSU San Bernardino include a wide selection of courses in the social and behavioral sciences. This project involved one such course, titled "Social Sciences 165: Regions and Peoples of the World." Taught by both geographers and anthropologists, the course offers "a survey of major regions of

the world using general physical and cultural concepts to explain patterns and problems of human activities in relation to natural environments" (*Bulletin of Courses 2003–2004*, CSU San Bernardino, 332).

Regions and Peoples of the World is taught every quarter and has experienced significant increases in annual enrollment since 1994–95. Total enrollment jumped from 521 students during academic year (A.Y.) 1994/95 to 859 students in A.Y 1995/96, and so more sections were offered; but this resulted in even more enrollments. Over the past ten years, total annual enrollment has never dropped below 699 students, and in 2002–03 annual enrollment exceeded 1,000 for the first time (Table 1). This growth in enrollment in the course occurred during a time when overall campus enrollments remained relatively stable.

## **Project Description**

On five occasions during the quarter, we devoted approximately half of a 100-minute class period to viewing and discussing a video from *The Power of Place* series, designed to accompany the textbook for the course, *Geography: Realms, Regions and Concepts*, by Harm deBlij and Peter O. Muller. On one occasion, we showed a different video, not from the series. After each showing, we divided the class of eight-seven students into nine groups (approximately ten students each) to discuss and debate a question based on the video.

We paid nine undergraduate student assistants to lead the discussion groups. The student assistants met on Tuesdays during the time the traditional lectures were given. They used this time to preview the upcoming video and “dry-run” the discussion questions, including likely points to be debated. On Thursdays they joined the class for the video, then led the small group discussions and attended the full class discussion/debate, during which selected groups reported their discussions to the entire class.

Discussing the video in small groups gave students an opportunity to examine specific topics in depth and enabled them to synthesize and analyze the material to an extent not possible in the large lecture format. We discovered that videos with controversial subject matter created the best situations for lively debate and insightful dialogue.

Table 1—Enrollment in Regions and Peoples of the World, 1993–2003

Quarter	Number of Sections Offered	Total Enrollment
Fall 1993	2	130
Winter 1994	3	208
Spring 1994	2	130
TOTAL 1993/94	7	468
Fall 1994	3	202
Winter 1995	4	215
Spring 1995	2	104
TOTAL 1994/95	9	521
Fall 1995	4	246
Winter 1996	5	319
Spring 1996	5	294
TOTAL 1995/96	14	859
Fall 1996	3	220
Winter 1997	4	311
Spring 1997	4	168
TOTAL 1996/97	11	699
Fall 1997	4	284
Winter 1998	2	240
Spring 1998	2	181
TOTAL 1997/98	8	705
Fall 1998	4	352
Winter 1999	3	223
Spring 1999	3	221
TOTAL 1998/99	10	796
Fall 1999	4	330
Winter 2000	3	307
Spring 2000	3	307
TOTAL 1999/2000	10	944
Fall 2000	3	314
Winter 2001	3	254
Spring 2001	3	322
TOTAL 2000/01	9	890
Fall 2001	4	308
Winter 2002	2	246
Spring 2002	3	312
TOTAL 2001/02	9	866
Fall 2002	2	250
Winter 2003	3	376
Spring 2003	3	389
TOTAL 2002/03	8	1,015

Groups were selected according to a different determinant each time, such as the first letter of students' last names or where students sat in the classroom. This altered group composition each time, allowing students to experience different group leaders and preventing one student from dominating a group.

## **Results and Conclusions**

Students generally appreciated the opportunity to exchange views with their classmates and take an active role in the learning process, as reflected in comments on student evaluations; the following are representative:

The instructor's organization was good: films with discussion groups, lectures.

Organization was good. Discussions should be held earlier in class with questions given the previous class.

Good use of group discussion sections.

Group discussion helped somewhat, but not enough participation by class.

Discussions good but a little broad.

The group discussions were interesting and very helpful. It gave me a chance to interact and talk with my peers about current events and what-if situations.

Open discussion is good. It helps us learn more.

Group discussions worked better when students were allowed to make up the questions. Forces us to actively participate and give input.

Discussion groups are effective.

Groups discussion fairly good idea.

Discussions were interesting.

Discussion made a nice break between lecture sessions. They are interesting to see how others felt about certain issues.

Class discussions not well received with the exception of the forum where we chose pro or con side and debated.

Classroom discussions are great and the use of guidance overhead (approaches to discussion).

The discussion groups were okay. They could be improved by more controversial topics where more people would become involved.

I enjoyed the discussions in this class.

Discussion groups are good.

We responded to student feedback during the quarter by continuing to vary group composition.

Recruiting undergraduate students to be discussion leaders may be a challenge for others wishing to implement this idea. Although we offered to pay discussion leaders for their preparation time in addition to actual contact time, and although hundreds of students on campus had taken the course and were thus qualified to serve as assistants, we had difficulty finding students who were able and willing to serve. We recommend paying a wage higher than the on-campus student rate or pursuing creative means for giving course credit to discussion leaders. Where graduate students are available, this problem may be alleviated.

Funding sources at CSU San Bernardino are for the most part limited to departments, college deans, and a teaching resource center, with departments being the most likely to shoulder the costs. Although the project has not yet been repeated at San Bernardino, as neither of us has taught the course since 1998, we do plan to implement it the next time we teach the course. We anticipate that student assistants will most likely be paid by the department or given independent study credits for the course.

The selection of appropriate videos is critical. In contrast to the six videos from the *Power of Place* series, which contained basic descriptions of cities and regions with little controversial content, we also showed “China’s Only Child,” a moving documentary about China’s “one family-one child” program and some of the measures taken to enforce it. Discussions following this film were the most stimulating.

A discussion-friendly classroom is critical. In a pilot experiment in 1997, we attempted discussion groups in a trailer classroom that was at full capacity and it was difficult to rearrange the students into groups in such a small space. In 1998 we were fortunate to have an oversized auditorium-style room that allowed groups to meet in different areas. If separate classrooms cannot be secured for the discussion sections, we recommend arranging for an oversized room—ideally one with moveable chairs.

In summary, the addition of discussion sections to a large lecture class can be implemented with few additional resources besides funding and shows great potential for improving the quality of the educational experience.

# From Prime Numbers to Place Names: A New Use for Eratosthenes' Sieve

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The sieve of Eratosthenes (the ancient Greek mathematician and geographer) is presented as a tool for teaching about place names in geography classes. The sieve concept provides the cultural geographer with a method for undertaking content analysis. In this demonstration, a "toponymic sieve" is used to sort urban place names, separating them primarily by linguistic origin. The results of the sieve-style content analysis suggest various dimensions of American culture that have influenced place naming.

## Introduction

ERATOSTHENES (born 276 B.C.) is well known among geography teachers. His treatise on the Earth was, in fact, the first book ever to carry the word "geography" in its title. In addition, using nothing more than the shadows of the sun at two different latitudes on the day of the summer solstice, he was the first to calculate accurately the circumference of the earth. A reader's survey by *Physics World* magazine ranked his circumference calculations as one of the ten "most beautiful" experiments of all time (Crease 2002). A prominent 20th-century historian of science called him "the earliest outstanding geographer" and "one of the greatest geographers of all time" (Sarton 1952, 102). On maps of the Mediterranean, his name will live forever: a submarine elevation just south of Cyprus carries the name "Eratosthenes seamount."

What many geographers may not realize, however, is that Eratosthenes is also well known by mathematicians. Without his help, no algebra student would be able to factor a polynomial equation. He developed what is now known as "Eratosthenes' sieve," a step-by-step method for identifying prime numbers that quickly enables one to classify integers into two groups: prime numbers and composite numbers. In fact, his pioneering work has evolved into a realm of modern mathematical inquiry known as sieve theory (Halberstam and Richert 1974). And the ever-larger numbers of known primes

have been used to generate a virtual landscape of their own, called Prime Island (Leatherland 2001). Complete with peaks and valleys derived from the distribution of prime numbers, it looks like a digital elevation model (DEM).

### Eratosthenes’ Sieve

Literally speaking, a sieve is a screen used to separate liquids from solids (think spaghetti) or to separate particles of different sizes from each other (think gravel, sand, and silt). Eratosthenes saw in the concept of a sieve a method for discovering prime numbers by “sifting out” composite, or non-prime numbers. His mathematical sieve strains out, in succession, multiples of two (i.e., all even numbers), then multiples of three, then multiples of five, then multiples of seven, and so on. A graphic illustration using the first fifty positive integers makes the process easier to envision (Figure 1).<sup>1</sup>

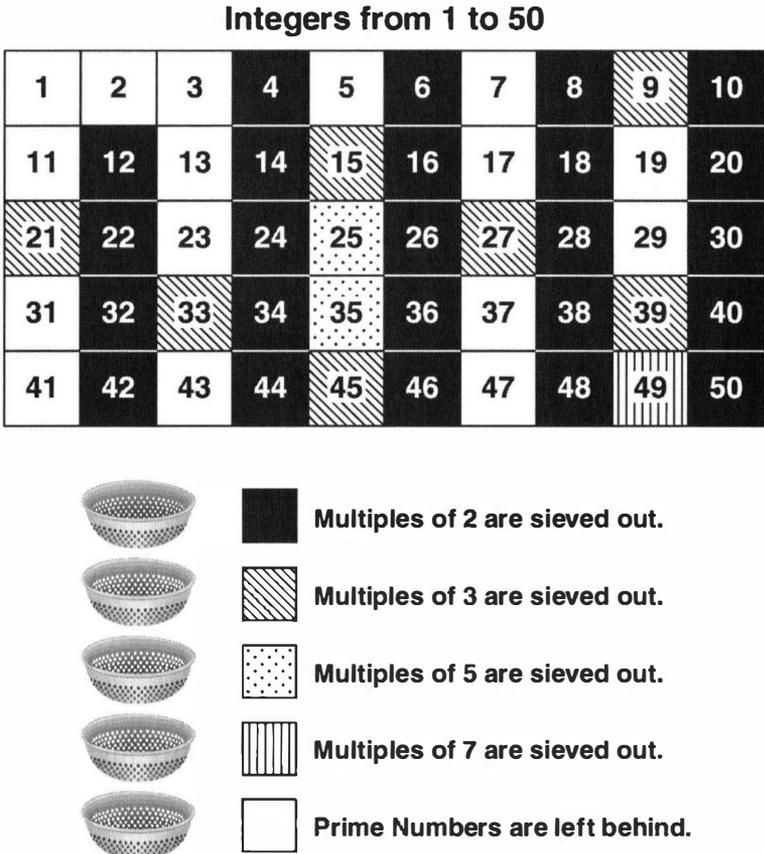


Figure 1—Eratosthenes’ Sieve

For teachers who are inclined toward interdisciplinary teaching, Eratosthenes can be an inspiration, as many of his ideas cut across disciplines. His sieve, for instance, may be used for its original purpose—classifying whole numbers—but may also be used for sorting all manner of data, qualitative as well as quantitative. Maps carry a multitude of cultural symbols that lend themselves to sieve-type classification. Place names constitute a specific set of these symbols. Using a “toponymic” sieve similar to the mathematical sieve of Eratosthenes, we can sift through and classify place names (Figure 2). Classification is one of the most fundamental of intellectual exercises. It is, in fact, the beginning of pattern recognition—a stepping stone to breaking down systems into their component parts, and a key to analysis. After classifying the names, we will perform a content analysis, which as Krippendorff (1980, 22) points out, offers a “method of inquiry into the symbolic meaning of messages.”

### TWENTY LARGEST CITIES IN THE UNITED STATES

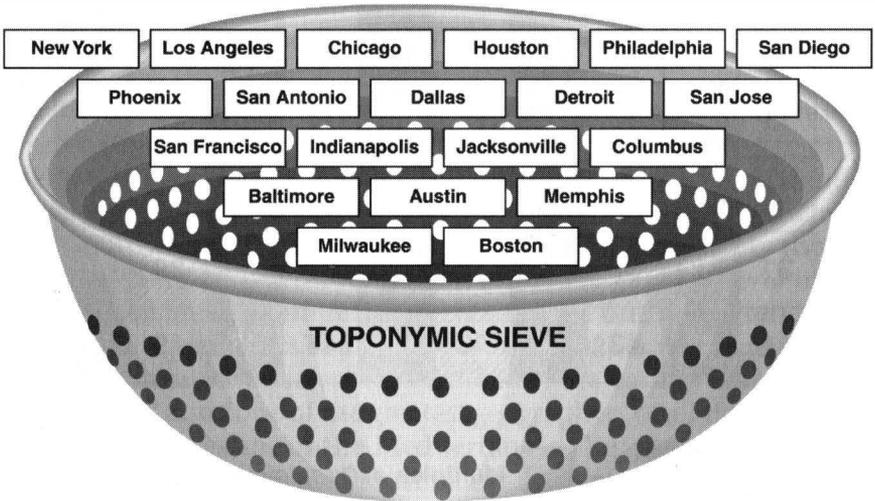


Figure 2—The Toponymic Sieve

## Sieving Through Urban Toponyms

A toponym is a place name (*topo* = place; *nym* = name). Toponyms are charged with cultural meaning. The history behind every toponym is unique; yet collectively these histories highlight similarities and differences from place to place. As cultural markers, toponyms may reveal ethnic roots, imperial histories, the trends of popular culture, or the accomplishments of individuals. In the

United States, about 25,000 places, each with its own name, are recognized by the U.S. Census Bureau. We could look for patterns across all 25,000, but a limited sample might be just as revealing of broad national patterns.

This case study uses as its sample the names of the twenty most populous urban places (as reported in the 2000 Census). Table 1 lists the cities along with notes on the origin of each name. What can the names of these places teach us about the cultural geography of the United States?

For the sieving process I used linguistic origin as my primary criteria and individual people's names as my residual criterion. Because language is an expression of the broad patterns of culture, place names of different linguistic origins were sieved out first; names of individuals remained until last. Individuals with honorific titles such as Lord and Saint, however, were sieved out according to their linguistic origin primarily because their full titles tended to include a place name.

The results of the sieving process are presented in Figure 3. At the first level, I strained out the names of Spanish origin. At the second level, I strained out those of English origin. French-origin names were strained out at the third level, and names of American Indian origin were strained out fourth. At the fifth level, I strained out names of classical origin. These last, by the way, draw upon the heritage of ancient Greece and Rome. For a few decades after the Revolutionary War, such names became popular—in part because English names became very unpopular and in part because they connected the new nation to the birthplaces of democracy (ancient Greece) and republican government (ancient Rome). Names like Troy, Rome, Utica, Syracuse, and Cincinnati were fitting toponyms for the new nation (Stewart 1945, 183–84). Classical culture thus became part of popular American culture, a civics lesson on the cultural landscape. What was left, at the sixth level, were names of individuals important in American history. Note that this criterion is different than the above criteria, as it did not pertain to linguistic origin. In fact, the individual names could be captured at the first level of the sieve analysis.

Among the twenty largest cities in the United States, five have names of Spanish origin, five carry the names of important figures associated with American history, four are of classical origin, three origi-

Table 1. Name Origins of the Twenty Largest Cities in the United States

Rank, city, and population (in millions)	Notes on Origin of Name
1 New York (8.0)	Chartered to the Duke of York; York is a major city of north England
2 Los Angeles (3.7)	Spanish for "Our Lady of the Queen of the Angels of Porciúncula"
3 Chicago (2.9)	Potawatomi Indian name, Chicagou, possibly meaning "great" or "onion-place"
4 Houston (2.0)	Sam Houston, General in Texas war for independence
5 Philadelphia (1.5)	Greek for "City of Brotherly Love"; also an ancient city of Asia Minor
6 Phoenix (1.3)	Mythical bird (with roots in ancient Egypt) that rose from its own ashes in Greek mythology
7 San Diego (1.2)	Spanish for "Saint James," who brought Christianity to Spain
8 Dallas (1.2)	Possibly after George M. Dallas, U.S. Vice-President (from Pennsylvania) under Polk
9 San Antonio (1.1)	Spanish for "Saint Anthony" of Padua; first applied to the river
10 Detroit (1.0)	Originally <i>Ville d'etroit</i> , French for "city of the strait" referring to the Detroit River
11 San Jose (0.9)	Spanish for "Saint Joseph"; founded as "El Pueblo de San José de Guadalup"
12 Indianapolis (0.8)	Named after the state, which was named after the Indians; <i>polis</i> is Greek for city
13 San Francisco (0.8)	Spanish for "Saint Francis" of Assisi; name first applied to the bay
14 Jacksonville (0.7)	Andrew Jackson, Territorial Governor of Florida and later U.S. President
15 Columbus (0.7)	Named after Christopher Columbus
16 Austin (0.7)	Stephen F. Austin, "the father of Texas"
17 Baltimore (0.7)	Englishman George Calvert's estates in Ireland (near Longford), called Baltimore
18 Memphis (0.7)	Greek translation of Mennufer ("the good place"), first capital of ancient Egypt
19 Milwaukee (0.6)	Algonquian Indian word for "good land" or "great council place"—Mahn-ah-wauk
20 Boston (0.6)	English port from which the Puritans sailed in 1633; originally Botolfston, after St. Botolph

nate with English settlement, two are based on words from native American languages, and one goes back to the naming practices of the French.

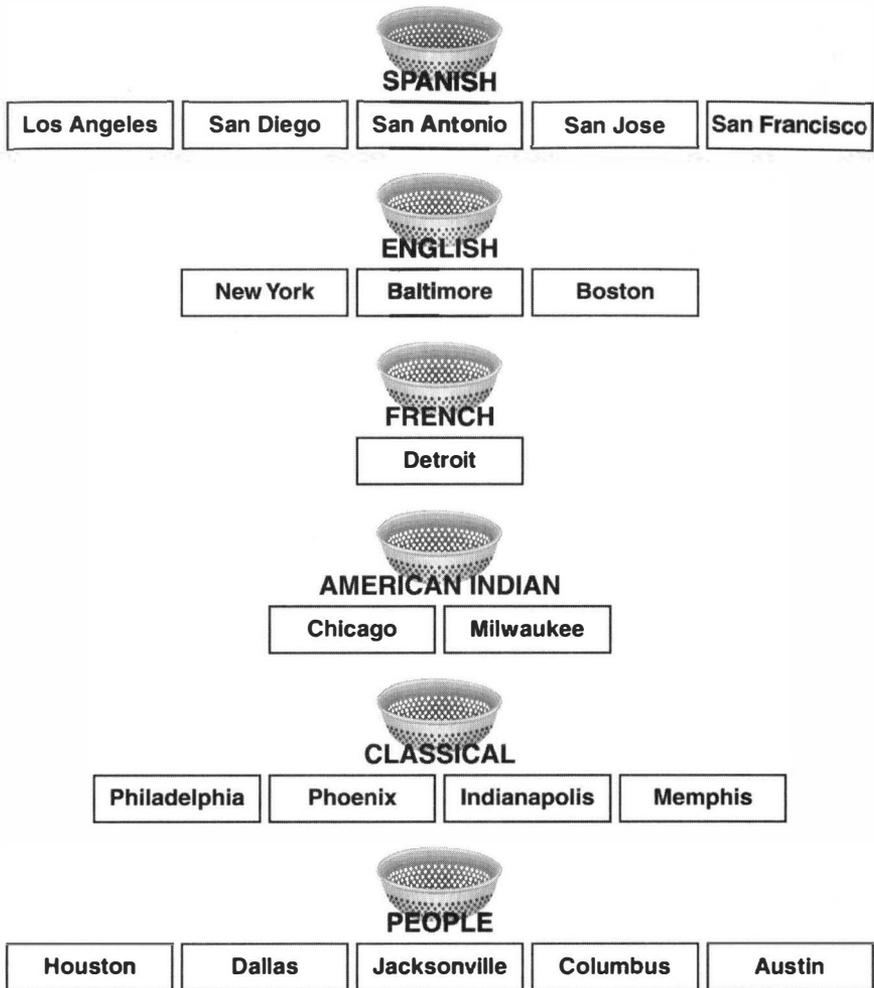


Figure 3—Results of the Sieve Analysis

## Relationships Between Urban Toponyms and American Culture

A content analysis typically ends with an analysis of results (Rose 2001, 63–65). In this case, the analysis constitutes an interpretation of patterns and relationships that have been brought into focus by the sieving procedure.

- **Cultural Connections.** It takes only 20 toponyms out of 25,000 to cover the major culture realms of the North American continent. All four major cultures of North America—

Indian, English, Spanish, and French—are evident in the names of the ten most populous U.S. cities. The coterminous United States was put together from American Indian, English, French, and Spanish land acquisitions, and the place-name map reflects that heritage. Other cultures—the Swedes, for example (Landelius 1985)—have donated a rich variety of place names to North America’s linguistic landscape, but their dominance has been limited to smaller areas and ethnic islands. Groups that came later to the United States usually had to adapt to the place-name environment already created by the first settlement wave.

- **Linguistic Geography.** What is the major language of the United States? Judging from the sieving results, the answer should be Spanish, since more cities carry Spanish names than any other language group. Yet English is the quasi-official language of the United States. Looking at the geographical distribution of Spanish toponyms, however, one is reminded that the border of Spanish-speaking America was originally much farther north than the current political boundary between the United States and Mexico. The linguistic map also betrays the religious geography of the continent, since many Spanish Roman-Catholic settlements were named after saints and English settlements typically avoided saintly names. According to Marckwardt (1958, 157), at least a fifth of the Spanish place names in California carry saints’ names. Here is an instance in which the sample may lead someone to draw false conclusions based on number of occurrences—that the United States is a Spanish-speaking, Roman Catholic country.
- **The Melting Pot.** Judging from the sample of place names, American culture is more like a multicultural stew than a melting pot. Place names seem to persist through time as individual elements of American culture. Yet some forced blending into “American” culture is evident even in these urban toponyms. *Nuestra Señora la Reyna de Los Angeles de Porciúncula* was shortened to Los Angeles, for instance, and the accents were removed from *Détroit* and *San José*. But no one has gone so far as to propose renaming these three places Angel City, Straitopolis, or Josephburg! Blending is also illustrated by the name “Jacksonville,” which borrowed the French suffix *-ville*, a practice that became popular in the late 1700s because of the “prestige value” of all things French (Marckwardt 1958, 34).

- **Individualism.** In the United States, places are often named after national heroes—the saints of secular society. The federal capital, for instance, was named after the country’s first secular saint, George Washington. Often these people represent the triumph of the individual over circumstances, a constant reminder that individualism is one of the virtues of American culture. Whereas in Europe, people took the names of places (e.g., Newberger, Preston, VanBuren, Alford); in the United States places took the names of people (e.g., Houston, Dallas, Austin). A good question to ask students is why they think places named after American women are so rare in the landscape.

## Conclusion

How many uses can you think of for a sieve? Eratosthenes found a use for it in mathematics. We have found a use for it in performing a content analysis on map symbols. Place names are only part of a map’s contents, however. You can try a content analysis of other cartographic symbols...or even colors. Boundary lines tend to look spaghetti-like on a map, so you might want to use a sieve to strain out geometric boundaries from natural boundaries. Come to think of it, those dots that are used to symbolize cities, towns, and villages look a lot like gravel, sand, and silt. The sieve has artistic potential, too. There is a famous painting of Queen Elizabeth I that is called the “sieve portrait” (Folger Shakespeare Library 2003). The artist, George Gower, used a sieve to symbolize the queen’s virginity, a reminder of Rome’s vestal virgins who carried water in a sieve. Lots of people, beginning with Eratosthenes, have found inspiration in the sieve. You can too.

## Acknowledgments

The author would like to thank Donald K. Emminger of Old Dominion University for preparing the graphics for this article.

## Notes

1. So far, the largest known prime is  $2^{13,466,917}-1$ , which contains 4,053,946 digits (GIMPS 2003). The search for primes continues to be a frontier of mathematics.

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# Geographic Chronicles



*The Sutter Buttes Field Trip group pauses for a mug shot below one of the buttes. (Photo by Kris Jones.)*



# The California Geographical Society: A Retrospective Look

Jenny Zorn

*California State University San Bernardino*

THE CALIFORNIA GEOGRAPHICAL SOCIETY (CGS) is a vibrant organization of geographers from across the state. The strength of the organization has endured over fifty-eight years and currently the CGS is enjoying one of its strongest eras. There are other state geographical societies but none as active and respected as the CGS, which is widely viewed as the premier state geographical society. The CGS hosts a large annual conference; publishes a high-quality academic journal and a professional quality newsletter; awards more than \$2,000 annually in student scholarships and prizes, including an endowed student award; hosts a listserve; and has a diverse membership that includes students, K-12 teachers, community college and university faculty, and applied geographers.

It hasn't always been this way for the CGS. The organization has had periods of instability and uncertainty as well as periods of prosperity. It has had times of visionary leadership as well as times where it has drifted. I write this article from my perspective as a ten-year member and immediate past president. I came to the game relatively late, having attended my first meeting in 1994 (five years after I first arrived in California) at Cal Poly Pomona, at the urging of Joe Beaton. I was immediately hooked, and have not missed a meeting since. I soon became involved in editorial work for the *CGS Bulletin*, knowing that I wanted to associate with, learn from, and grow with this group.

Many members have been active with the CGS far longer than I and know much more than I do about the organization's past. But despite my relatively short history, I have learned a great deal about the organization through a review of the presidential archives and conversations with some of the "old timers." They have provided the insights and perspectives that give the CGS the foundation for its current strength and high standing.

## History of the CGS

In 1946 V. Calvon McKim, State Director of the National Council of Geography Teachers and Chair of the Geography-Geology Department at Fresno State College, contacted Clifford Zierer, UCLA Geography Department Chair, suggesting “the possibility of establishing a state council and proposing a meeting” (Carthew 1965, 11). Zierer assigned Henry J. Bruman, Assistant Professor of Geography at UCLA, the task of calling together geography educators from across the state.

Letters of invitation were sent (Figure 1) and on December 7, 1946, a group of seventeen geographers met in Royce Hall at UCLA “to discuss the role of geography in the schools of California and the possibility of organizing a State section of the National Council of Geography Teachers.” (The National Council had been pushing individual states to establish state councils.) Thus began what we now know as the California Geographical Society.

In the immediate years following World War II, geographic educators were seeking to keep geography in the forefront of academic arenas. While the Association of Pacific Coast Geographers (APCG) already existed as a professional organization, those at the UCLA meeting felt it focused too heavily on graduate research, and that California needed a geographical organization to address all educational levels. At that meeting in 1946, the seventeen founding members—men and women from universities, community colleges, and high schools throughout the state (Table 1)—organized as the “California Council of Geography Teachers.”

The name of the organization has at times been subject to debate. In 1960, a move to change the organization’s focus from teaching to research forced the membership to consider a name change, but in the end members voted to maintain its mission and name (Carthew 1965). In 1969, after some deliberation, the organization made a minor name change to the “California Council for Geographic Education” (from the “California Council of Geography Teachers”).

By the 1970s, the organization had moved beyond its formative years and began to examine its mission. President Richard A. Ellefsen (1971–72) established a new “Grass Roots Program” that the next president, William J. Frazer (1972–73), continued to implement. According to CGS archival records, the goal of the Grass Roots Pro-

December 2, 1946

Head, Department of Geography  
Geography Teacher, or Staff Member  
interested in Geography

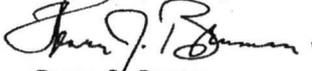
Dear Colleague:

At the suggestion of Dr. V. G. McKim, State Director, National Council of Geography Teachers, we are holding a meeting on Saturday, December 7, in 230 Royce Hall on the U.C.L.A. campus, to discuss the role of geography in the schools of California and the possibility of organizing a State section of the National Council of Geography Teachers. We should like very much to have you attend.

The meeting will begin at 9 a.m. with a general discussion of the function of geography in education in the California schools. Its role at all educational levels will be evaluated. Luncheon for the group has been arranged at the Tearoom of the Bullocks Westwood. The afternoon will be devoted to an organizational meeting.

A few hotel rooms have been reserved for the night of December 6-7. Please inform me by Thursday at the latest if you need hotel accommodations.

Very truly yours,



Henry J. Bruman  
Assistant Professor of Geography

EB:IQ

Figure 1—H. J. Bruman's 1946 letter.

gram was to aid in the improvement and promotion of geographic education at all levels within the state. This was to be accomplished by developing a regional network of geographers to work on curriculum and teacher credentialing and to organize workshops. As the decade progressed, the CGS became increasingly active, working closely with the K-12 community. President Christopher L. Salter brought higher visibility to the organization through various media outlets and journals.

In 1983, the organization assumed a broader mission and changed its name to the "California Geographical Society" in order to at-

Table 1—CGS Founding Members

Name	School Affiliation
Homer Aschmann	San Diego State College
Ruth Baugh	UCLA
Rex Brittingham	Ventura Junior College
Henry Bruman	UCLA
Arthur Carthew	Los Angeles City College
Myrtle Grenels	Fresno State College
Walter Hacker	San Francisco State College
Cecilia Irvine	University High School, Los Angeles
John Kesseli	UC Berkeley
V. Calvon McKim	Fresno State College
Robert Pease	Hollywood High School
Lauren Post	San Diego State College
Ida Mae Shrode	Pasadena City College
Adolf Stone	Long Beach City College
Alfred Sumner	Stanford University
Walter Willey	El Rodeo School, Beverly Hills
Clifford Zierer	UCLA

tract members outside of education. The past twenty years have seen the CGS build on its solid reputation. In the late 1990s, in an effort to boost student participation, the organization began offering more student scholarships and awards. Students now assume leadership roles, with representatives on the CGS board voicing student needs and concerns.

## Leadership

The CGS has enjoyed a strong history of visionary leadership. A total of forty-nine people have served as president of the organization since its inception—thirty-seven from universities or colleges, nine from community colleges, and three from high schools. The initial convener, V. Calvon McKim, served as the first president. Not surprisingly, the first four presidents were among the organization’s founding members (Table 2).

Thirty-two years after founding member Arthur Carthew served as president (1948–49), his son John was elected (1980), making them the only father-and-son presidents of the organization. John is an example of past presidents who remain active in the organization; twenty-three years after his presidency he still is a force at the meetings.

It took thirty years for members to elect a woman to the presidency: in 1976 Gertrude Reith from CSU Fullerton became the first female president of the CGS. Since Reith’s path-breaking election, four other

Table 2—CGS Presidents

Year	President	School Affiliation
<b>California Council of Geography Teachers (1946–1969)</b>		
1946–47	V. Calvon McKim	Fresno State College
1947–48	Walter Hacker	San Francisco State College
1948–49	Arthur Carthew	Los Angeles City College
1949–50	Robert Pease	Hollywood High School
1950–51	Benjamin Thomas	UCLA
1951–52	Chester Cole	Fresno State College
1952–53	David Lantis	University of Southern California
1953–54	Alfred Butz	Santa Rosa Jr. College
1954–55	Bruce Ogilvie	Chico State College
1955–56	David Jennings	LA City College
1956–57	Adolf Stone	Long Beach City College
1957–58	Robert Johnston	Petaluma High School
1958–59	Robert Eidt	Los Angeles State College
1959–60	Walter Olson	San Francisco State College
1960–61	Howard Nelson	UCLA
1961–62	John Crosby	Fresno State College
1962–63	Lauren Post	San Diego State College
1963–64	Raymond Stanley	San Jose State College
1964–65	Sheldon Erickson	Long Beach State
1965–66	Arthur Karinen	Chico State College
1966–67	Robert Richardson	San Diego State College
1967–68	William Thomas	CSC Hayward
1968–69	Rodney Steiner	Long Beach State College
<b>California Council for Geographic Education (1969–1983)</b>		
1969–70	George Nasse	Fresno State College
1970–71	Charles Yahr	San Diego State College
1971–72	Richard Ellefsen	San Jose State
1972 (1 week)	D.R. Lee	Florida Atlantic University
1972–73	William Frazer	Sonoma State College
1973–74	James Switzer	Southwestern College
1974–75	Thomas Pagenhart	CSU Hayward
1975–76	Christopher Salter	UCLA
1976–77	Gertrude Reith	CSU Fullerton
1977–78	Thomas Best	CSU Los Angeles
1978–79	David Hendrickson	Fresno CC
1979–80	Donald Holtgrieve	CSU Hayward
1980–81	John Carthew	Pierce College
1981–82	Charles Yahr	San Diego State
1982–83	Joseph Leeper	Humboldt State
<b>California Geographical Society (1983–present)</b>		
1983–85	James Blick	College of the Sequoias
1985–87	Susan Hardwick	CSU Chico
1987–88	Clement Padick	CSU Los Angeles
1988–91	Richard Hough	San Francisco State
1991–93	David Helgren	San Jose State
1993–95	Bruce Bechtol	CSU Chico
1995–97	Stephen Slakey	La Puente HS/University of La Verne
1997–99	Stephen Cunha	Humboldt State University
1999–01	Carol Cox	Sierra College
2001–03	Jenny Zorn	California State University San Bernardino
2003–05	Debra Sharkey	Cosumnes River College

women have served as president: Susan Hardwick, CSU Chico (1985–87), Carol Jean Cox, Sierra College (1999–2001), Jenny Zorn, CSU San Bernardino (2001–03), and current President Debra Sharkey, Cosumnes River College (2003–05).

Until 1983, presidents served a one-year term; since then they have served two-year terms. Presidents typically serve on the board for a few years prior to election to a two-year term as vice president, followed by a two-year presidential term and then another two-year term on the board as past president. Therefore, a run for vice president is a six-year commitment. The dedication of the presidents is evident by their continued participation in the organization well after their years of intense leadership. Indeed, each year eight to ten past presidents can be seen actively participating in the meetings and organization. They serve as senior advisors and mentors for the current board, offering encouragement, gentle criticism, sage advice, and insightful ideas for the betterment of the CGS.

CGS board members, elected by the general membership, assume active roles in the organization. Positions include president, vice president, past president, secretary, and treasurer. Board members also assume responsibilities at meetings (organizing vendors, judging student competitions, awarding student scholarships, etc.). In addition, they help run elections, work on publicity and membership, and perform many other tasks. I have served in various other volunteer organizations and find the CGS board an exceptional group of dedicated, reliable professionals. They assume their responsibilities with sincere concern for the organization, the membership, and the discipline. It is difficult to imagine a better assemblage of volunteers.

Other dedicated volunteers—who may or may not be on the board—include a business manager, the editors of *The California Geographer* and the *CGS Bulletin*, and a Webmaster (a position created in the 1990s as the CGS moved into the Internet age with its own Web site).

Today CGS membership stands at 472, the highest yet documented. During most of the 1960s and 1970s the organization had over 300 members and usually more than 400. Very few records of membership statistics are available for the 1980s and 1990s, so it is impossible to identify trends in membership during this period.

## Financial Status

At present, the financial status of the organization is stable and secure. The road to this security was long, however, with a few short inclines between the steep declines. At times, the balance in the treasury was unknown due to a missing checkbook or records in disarray. Today's treasurer, Bill Holder, has maintained impeccable records that show the organization's financial health at its very best. Over the past decade, the board has acted responsibly and conservatively to ensure continued financial stability. It has established a presidential spending limit and has carefully limited signature lines on bank accounts to ensure that no single person can abscond with CGS funds. This became necessary as the treasury balance continued to grow.

## The California Geographer

The publication of a journal was a stated goal at the initial meeting of the founding members in 1946. But it wasn't until 1960 that the first edition of *The California Geographer* was printed. The origins of the journal actually go back to the newsletter of the Council, first edited by Lauren Post of San Diego State College. The newsletter was "published several times a year... [and] covered annual meeting plans, program developments on the campuses, professional notes and similar matters" (Frazer 1980, 2).

In 1953, Chester Cole began publishing the *Bulletin* in place of the newsletter, expanding it to include manuscripts. Members still maintained a goal of publishing a journal, and this was viewed as a step toward that end (Carthew 1965; Frazer 1980). The 1959 Executive Board was particularly aware of the need for a journal to serve the "largest and fastest growing concentration of professional geographers in the nation except for Washington, D.C." (Frazer 1980, 2). There was a strong post-World War II expansion of geography and higher education in California, and the journal was seen as "a means of publishing more material on California, on the work of California geographers, or perhaps as an outlet for work which was not finding space in the four national professional geogrpahy [sic] journals of the time" (3).

The shallow pockets of the organization in 1959 gave the board reason to pause over this momentous decision. Dues were \$2.00 and annual income totaled less than \$500. Producing a high-quality journal could prove expensive, at least initially. Despite this fis-

cal uncertainty, the 1959 board gave the go ahead. Robert A. Kennelly assumed the editorship and immediately set upon the task of finding financial support and an inexpensive publisher. He published the first *California Geographer* in 1960 with articles drawn mostly from paper presentations at the annual meetings (Carthew 1965; Frazer 1980).

Editors of *The California Geographer* have continued to increase the quality of the publication, with each editor leaving his/her mark on the publication (Table 3). There were periods when the publication was nearly not produced and production schedules often lagged. However, with the concerted effort of dedicated editors, *The California Geographer* is now on schedule and continues to include institutional memberships (mainly libraries) in its distribution.

Table 3—Editors of *The California Geographer*

Issue Years	Editor
1960–1969	Robert A. Kennelly
1970	Robert W. Durrenberger
1971–1972	Elliot G. McIntire
1973–1974	Roderick C. McKenzie
1975–1978	Donald G. Holtgrieve
1979–1982	Ronald F. Lockmann
1983–1990	Donald R. Floyd
1991–1994	Elliot G. McIntire
1995–1996	Bill Takizawa
1997–2001	Ray Sumner
2002–2003	Judy Walton
<b>Associate and Guest Editors</b>	
1970	Elliot G. McIntire
1978	Nancy Schluntz
1979	James W. Yerdon
1983–1990	William L. Preston
1995	Ray Sumner
1996	Carol Jean Cox
1997	Arnold Court, Dennis Napier, Barney Warf
1998	David Nemeth
1999	Dale Pullin

## Annual Meetings

The initial constitution of 1946 established annual meetings of the Council. The first meeting was held on Saturday, June 21, 1947, in the San Diego Hotel in conjunction with the APCG meeting. Homer Aschmann from San Diego State College was the local arrangements chair, and Lauren Post gave a slide presentation on “A Geography Field Trip in San Diego.” In June 1948, the second annual meeting

was held in Berkeley, where the tradition began of offering a full slate of paper presentations as well as field trips. Like many field trips since, the first was wrought with challenges: only the leader's car completed the trip over the hills of San Francisco (Carthew 1965).

In 1949, the APCG planned to meet outside of California, so the Council held its meeting at Ventura Junior College and discontinued holding joint meetings with the APCG. The meetings also moved to the first week of May, a tradition that remained until 2003 (Sacramento meeting), when the board moved the meetings to the last week in April in order to accommodate colleges and universities with semester schedules. The Ventura meeting included vendors for the first time (Carthew 1965), a practice that continues today. Under the direction of Carol Jean Cox and Debra Sharkey, the vendors have become an integral part of the organization and meetings.

Following the Ventura meeting, the Council established a policy of rotating meetings between northern and southern locations (Carthew 1965). Recent boards have continued this effort, although not always with strict adherence to the north-south alternation. At times in the past, no one on the board was from an institution interested in hosting the meetings, so there was little or no choice in locations. However, the pattern has generally held through the years. A list of the meeting locations (Table 4) demonstrates the variety of places the CGS has met, including one out-of-state location—Lake Tahoe, Nevada.

The organization's fifty-seven meetings have been held as far north as Redding (40° 36' N), as far south and as far east as San Diego (32° 43' N, 117° 10' W), as far west as Ukiah (122° 12' W), and at many points in between. There have been a variety of meeting hosts: almost half (twenty-eight) were hosted by a university, seventeen were hosted by a community or junior college, seven were at a hotel, four at a high school, and one at a member's townhouse!

The most frequent meeting destinations have been San Diego and Fresno: the organization met six times in each city over the years. Meetings were held in Los Angeles five times; Chico, Long Beach, Sacramento, and San Jose three times each; San Luis Obispo, Shasta, and Ventura twice each; and once each in twenty-one other cities. The membership tends to seek out relatively remote locations—such as, in recent years, Ukiah, Sonora, and Lone Pine—but mem-

Table 4—CGS Meeting Sites

Year	Location	Year	Location
<b>California Council of Geography Teachers (1946–1969)</b>			
1947	San Diego Hotel	1959	Long Beach Community College
1948	UC Berkeley	1960	San Jose State
1949	Ventura Jr. College	1961	San Fernando State College
1950	Stanford University	1962	Fresno State College
1951	UCLA	1963	San Diego State
1952	Fresno State College	1964	University of the Pacific
1953	San Diego State	1965	Long Beach State
1954	Chico State College	1966	Watsonville High School
1955	Santa Monica High School	1967	Los Angeles Community College
1956	Sacramento Junior College	1968	CSC Hayward
1957	Compton College	1969	San Diego State
1958	Santa Rosa Junior College		
<b>California Council for Geographic Education (1969–1983)</b>			
1970	Del Webb's Townhouse, Fresno	1978	Pierce College
1971	Sonoma State College	1979	CSU Fresno
1972	Pasadena Hilton	1980	Shasta College
1973	Hyatt House, San Jose	1981	Harrah's, Lake Tahoe, NV
1974	CSC Bakersfield	1982	Bahia Hotel, San Diego
1975	CSU Chico	1983	Cal Poly San Luis Obispo
1976	CSU Long Beach		
1977	Independence High School, San Jose		
<b>California Geographical Society (1983–present)</b>			
1984	Conestoga Hotel, Anaheim	1994	Cal Poly Pomona
1985	CSU Chico	1995	CSU Fresno
1986	West Hills College, Coalinga	1996	Columbia College
1987	Clarion Hotel, Ontario	1997	Mendocino College
1988	Pierce College	1998	CSU San Bernardino
1989	Cosumnes River College	1999	CSU Channel Islands
1990	USC	2000	San Diego State University
1991	Porterville College	2001	Delta College, Stockton
1992	Cal Poly San Luis Obispo	2002	Lone Pine High School
1993	Shasta College	2003	American River College

bers also enjoy urban settings, such as Pomona and Sacramento. All of these venues attract large numbers of meeting participants.

Geographers love field trips, so it is not surprising that field trips have been a focal point of the meetings. Field trips at the early meetings included the hills of San Francisco (1948), an aerial field trip of the Bay region (1950), an aerial field trip of the San Andreas Fault and Los Angeles (1951), the Russell Giffen Ranch west of Fresno (1952), the San Diego hinterland to Julian (1953), the Sutter Buttes (1954), an aerial field trip of Orange and Los Angeles counties (1955), flood field trips in the Sacramento area (1956), Santa Rosa's apple

country to the coast (1958), a Long Beach Harbor boat tour (1959), and the San Fernando Valley's Anheuser-Busch Brewery (1961) (Carthew 1965). Many of these trips have been repeated in succeeding years, including most recently Sutter Buttes (2003) and Long Beach Harbor (a boat tour is planned for 2004).

Attendance at the annual meetings is difficult to track. While it is safe to assume the meeting at Del Webb's townhouse had a smaller turnout than the 2003 Sacramento meeting at American River College (with over 400 in attendance), the archives provide no precise attendance statistics. The evidence, however, suggests that the 2003 meeting was among the largest ever. Other large meetings in recent years include Pomona (1994) and Lone Pine (2002), with approximately 250 in attendance at each. Some remember meetings from the early 1970s, when membership was consistently high, as setting attendance records.

The past decade has seen high attendance and participation at the meetings. Some members have suggested that the 1993 meeting at Shasta College, hosted by Carol Jean Cox, was a turning point that brought us into the "modern" era. I concur. Cox set a high standard of professionalism in the quality of the meetings. She established a model that organizers for the past ten years have followed.

## **Awards**

Over the years, the organization has established a series of annual awards that are announced at the meeting banquet. Non-student awards include Outstanding Educator, Distinguished Service, Distinguished Teaching, and Friend of Geography.

The Outstanding Educator Award, established in 1975, has been given to geography educators throughout California (Table 5). A majority (sixteen) of the past awardees have been from four-year institutions, while four were from community and junior colleges and five from public schools. One time, the award went to the two California Geographical Alliances, north and south.

Numerous people have served the CGS in exemplary fashion. In 1970, the first Distinguished Service Award was bestowed. The Distinguished Teaching Awards began in 1974. In 1995 the first Friend of Geography Award was given. Tables 6, 7, and 8 provide lists of award winners in these three categories.

Table 5—CGS Outstanding Educators

Year	Educator	School Affiliation
2003	Gail Hobbs	Pierce College
2002	Matt Ebner	El Camino College
2001	Bill Preston	Cal Poly San Luis Obispo
2000	Stephanie Buttell-Maxin	San Diego Unified SD
	Stephen Prendergast	San Diego Unified SD
1999	Mike Murphy	Clovis Unified SD
	Jerry Williams	CSU Chico
1998	Barbara Fredrich	San Diego State University
1997	Robert Christopherson	American River College
1996	Janice Hamner	San Bernardino County Schools
1995	Richard Ellefsen	San Jose State
1994	Bill Bowen	CSU Northridge
1993	Steve Cunha	Cosumnes River College
1992	Calif. Geographical Alliance, North	
	Calif. Geographical Alliance, South	
1991	David Lantis	CSU Chico
1990	Bruce Bechtol	CSU Chico
1989	Don Holtgrieve	CSU Chico
1988	Tom McKnight	UCLA
1987	Walter Olson	Sonoma State & San Francisco State Univ.
1986	William Thomas	CSU Hayward
1985	Chet Cole	CSU Fresno
1984	[unknown]	
1983	Willis Park	[unknown]
1982	Robt. Kiskadden	Los Angeles City Schools
1981	Kit Salter	UCLA
1980	[unknown]	
1979	Steve Slakey	La Puente High School
1978	Howard Nelson	[unknown]
1977	[unknown]	
1976	Richard Logan	UCLA
1975	Bill Wake	[unknown]

A perusal of tables 5–8 demonstrates the number of individuals who have contributed to the vitality of the CGS and its mission, including educators who have inspired generations of students and colleagues with their superior teaching. These are just a few of the many people who have made a difference to geography in California.

Student awards are also important to the CGS. As mentioned at the start of this article, the CGS now distributes more than \$2,000 each year in student scholarships and awards. Student participation is at an all-time high, with faculty members bringing van loads of students to each meeting. For many students, it is their first professional geography meeting and their first formal research presentation in a professional setting. Student awards, all of which are monetary, include the David Lantis Student Scholarship, Tom McKnight

Table 6—CGS Outstanding Service Awards

Year	Awardee	Affiliation
2003	Carol Cox	Sierra College
2002	Steve Cunha	Humboldt State University
2001	Ray Sumner	Long Beach City College
2000	Bill Holder	Fountain Valley High School
1999	Steve Slakey	La Puente High School
1998	Carolyn Whorff	Mt. San Jacinto College
1997	Joe Leeper	Humboldt State University
1996	Bruce Bechtol	CSU Chico
1995	David Helgren	San Jose State
1994	Rich Hough	San Francisco State University
1993	Emmett Hayes	La Puente High School
1992	Rod McKenzie	University of Southern California
1991	William Preston	Cal Poly, San Luis Obispo
1990	Don Floyd	Cal Poly, San Luis Obispo
1989	Jim Blick	San Diego State University
1988	George Nasse	CSU Fresno
	John Carthew	Los Angeles Pierce College
1987	Jim Switzer	Southwest College, Chula Vista
1986	Charles Yahr	San Diego State College
	David Jennings	Los Angeles City College
	Adolf Stone	Long Beach City College
1985	Tom Best	CSU Los Angeles
1984	[unknown]	
1983	[unknown]	
1982	Don Holtgrieve	CSU Hayward
	Dave Hendrickson	Fresno City College
1981	Art Karinen	CSU Chico
	Dave Hendrickson	Fresno City College
1980	Rodney Steiner	CSU Long Beach
1979	Andrew Kennelly	CSU Hayward
1978	David Jennings	Los Angeles City College
1977	Gertrude Reith	CSU Fullerton
1976	David Lantis	CSU Chico
	Chet Cole	CSU Fresno
1975	Adolf Stone	Long Beach City College
1974	Haig Rushdoony	CSU Stanislaus
1973	[unknown]	
1972	Loren Post	San Diego State College
1971	Alfred Butz	Santa Rosa Jr. College
1970	Art Carthew	Los Angeles City College

Student Paper Award, Joe Beaton Student Poster Award, Student Map Award, and Geosystems Award.

The **David Lantis Student Scholarship** is named after the organization's seventh president, from CSU Chico. David Lantis received the Distinguished Service Award in 1976 and was named Outstanding Educator in 1991. Now deceased, Lantis authored numerous articles and textbooks including a California geography textbook used by educators throughout the state. He was a strong supporter of the CGS.

Table 7—CGS Distinguished Teaching Awards

Year	Teacher	Year	Teacher
2003	Cynthia Vaughn	1981	[none awarded]
2002	[none awarded]	1980	Jerry Williams
2001	Jerrell Croskrey	1979	Frank Seawall
	John Anderson		Cal Wilvert
2000	[none awarded]	1978	Bruce Bechtol
1999	Cynthia Delameter		Peter Farquhar
	Ann Gonzalez		Sin-Tong Han
	Gwen Jones		Bob Hoffman
	Lynda Lemon		Larry Lane
	Gwen Newman Jones		Art Karinen
1998	Diane Bruns		James O'Keefe
	Don Cross		Clem Padick
	Laurie Finucane	1976	Todd Berens
1997	Sharon Hamid		Dan Epstein
	Rodney Jones		Constance L'Aventure
1996	Stephanie Buttell-Maxin		Tso-Hwa Lee
	Cheryl Connolly		Don Reasons
	Liz Meyer		Christine Roed
	Tom Nelson		Jean Vance
	Larry Osen	1975	David Balogh
	Rosaleen Zisch		Jerry Brothen
1995	Kevin Clark		Charlotte Crabtree
	Steven Kemper		Bill D. Holder
	Bill McElree		Jim Huning
	Ed Myles		Celeste Kostanick
1994	Joe Beaton		Richard Logan
	Jeff Cenoz		Chuck Martinson
	Carol Jean Cox		Crane Miller
1993	Carol Douglas		Marilyn Millington
	Bonnie Emerson		Dennis Napier
	Donald Floyd		Art Nichols
	Tom O'Brien		Richard Reed
	Terry Williams		Lester Rowntree
1992	Robert Christopherson		Steve Slakey
	Janice Jersbek		Lawrence Stevens
	Carol Light	1974	William Adam
	Marilyn Renger		Ken Crump
	Robert Williams		Richard Dastyck
1991	Joan Clemons		Don Forth
	Pamela Gilgert		Carol Hatcher
	Sherri Grazda		David Hedgecock
	Emmett Hayes		Donn Jewell
	Mary Miller		Richard Mackinnon
	Edy Nielson		Marion Menzel
	Richard Raskoff		Ellen Murphy (Oicles)
1988	James Claffin		Arthur Nichols
	Susan Hardwick		David Prewetkt
	Steve Herman		Marianne Reese
	William Preston		Stephen Slakey
1982	Patricia Chapla		Claire Walter
	Jim Scofield		

Table 8—CGS Friend of Geography Awards

Year	Awardee
2003	[none awarded]
2002	[none awarded]
2001	Joan Clemons, UCLA
2000	Yumiko Tsuneyoshi, San Diego State University
1999	[none awarded]
1998	Jack Dangermond, Environmental Systems Research Institute
1997	Joseph Beaton, Cal Poly Pomona
1996	Beth Cantrell, Thomas Brothers Maps Educational Foundation
1995	Frank Baughman, DDS, Porterville
<b>Special Awards</b>	
1994	Huell Howser, KCET Television
1975	Carl Nelson, Denoyer-Geppert Co.

The **Tom McKnight Student Paper Award** honors another long-time supporter of the CGS and its mission. Tom McKnight, from UCLA, was named Outstanding Educator in 1988 and continues to be an active participant today. His consummate professional style and inquisitive nature have earned him the respect of generations of students, whom he has engaged with his dynamic lectures. A prolific author of textbooks on North American and introductory geography, McKnight has received awards from both Australian and Canadian geography organizations for his contributions to the field.

The **Joe Beaton Student Poster Award** carries the name of the late Joe Beaton, who received the Distinguished Teaching Award in 1994 and a Friend of Geography Award in 1997. Beaton, who taught at the California State Polytechnic Institute at Pomona, worked hard to stimulate students to observe and participate in the world. Never known for timidity, he taught with a bravado and energy that inspired students and colleagues alike.

The **Geosystems Award** became the first endowed award in the organization's history. This was made possible in 2002 by Robert and Bobbé Christopherson. Bobbé and Robert's *Geosystems: An Introduction to Physical Geography* is a leading textbook in physical geography. Their dedication to furthering our knowledge of the environment is reflected in their enthusiastic support of students. Robert Christopherson, from American River College, received the Outstanding Educator Award in 1997 and was keynote speaker in the Presidential Plenary at the 2002 meeting.

## Future Directions

The CGS is an outstanding organization and has provided me opportunities for a great deal of professional growth. While it is flourishing today, I see a few areas in which the organization needs to more aggressively pursue its full potential.

The status of the discipline is continually being challenged in state and institutional arenas. The CGS could take a lead in positioning itself in state curriculum committees and arguing its case before the California Commission on Teacher Credentialing (CCTC). The educational institutions in our state regularly review curriculum, and it is important that geographers have a voice on curriculum and general education committees.

CGS should also take an active role in ensuring that departments are well poised to fight the inevitable curriculum battles and maintain geography's presence in the curriculum at all levels. We need representatives on committees reviewing K–12 standards, establishing curriculum for future teachers, and defining general education requirements. We need to convince the CCTC that geography should be identified in the earth sciences curriculum. Its members need to hear from this organization and understand that geographers must be present on the History and Social Sciences review committees. We have to speak in order to be heard, and I don't think we've been voicing our concerns in an organized effort to effect change.

In previous times, geographers were more politically astute and active in ensuring that the relevance of geography was known to decision makers. The 1999 CGS meeting at CSU Channel Islands was the first academic conference held at the not-yet-opened campus (Alvarez 1999). Meeting organizer Linda O'Hirok's intent was to make administrators aware that they needed geography in the curriculum. Following the meetings, however, the CGS made little effort to stay in the minds of key administrators and faculty. We could have written letters and scheduled a meeting with the Provost. The same should be done with the developing UC Merced campus.

The CGS should continue to work with the California Geographic Alliance. We should be offering the expertise for pre-service and in-service training of K–12 teachers. At our statewide meetings, the field trips are extremely popular. I propose we begin organizing field trips at other times during the year that are aimed at K–12 educators. We could organize in time frames that make sense for the teach-

ers, who often cannot attend our meetings because they must get released from classroom duties. The CGS could sponsor these field trips for teachers at lower costs.

I would also like to see improvement in the quality and quantity of manuscripts submitted to our professional journal, *The California Geographer*. While the CG is on-track with its schedule and operating in a professional manner, I see even greater potential. An increased competitive status is an attainable and necessary goal.

The CGS is a healthy organization at present, but it is at risk. Currently, half of the board members are community college faculty members. A healthy CGS needs more balance in its board membership. While in recent years community college faculty members have increased their involvement, university and college faculty and K-12 educators have diminished their participation and are now underrepresented. (At other times in the organization's history, university faculty members dominated.) We need more university faculty involvement in paper presentations and service on the board. We need to find better ways to connect with the K-12 educators and help in their efforts to enhance geography education in their classrooms.

It is also time to start thinking of new ways to raise awareness of geography among the general public. Perhaps the CGS could install "geographical markers" similar to the "historical markers" we see along the roadside. I would love to see a sign reading: "Geographic Point of Interest, 200 Yards Ahead." Just as our founders did nearly sixty years ago in the aftermath of World War II, we should take advantage of the situation we find ourselves facing. Issues surrounding globalization, global conflicts, and advancing technologies are what geography is all about. We certainly have a role to play and we should position ourselves to do so.

We need to widen our sights and enlarge our sphere of influence beyond preaching to the choir. We are poised with financial resources, professional integrity, strong leadership, and an energetic membership. The time is right for us to seize this opportunity and take advantage of our circumstances. As the organization is financially sound, I also believe it's time to begin taking small risks by subsidizing meetings that might open up new opportunities in different venues; for example, Yosemite, Catalina Island, or San Francisco.

I challenge future CGS leaders to set their goals high, because this is an organization that usually attains its goals. The organization's past leadership is positioned to influence some of these changes. The present leadership and the newcomers are energetic visionaries for the future. I fully believe we can improve this already great organization.

## **Acknowledgments**

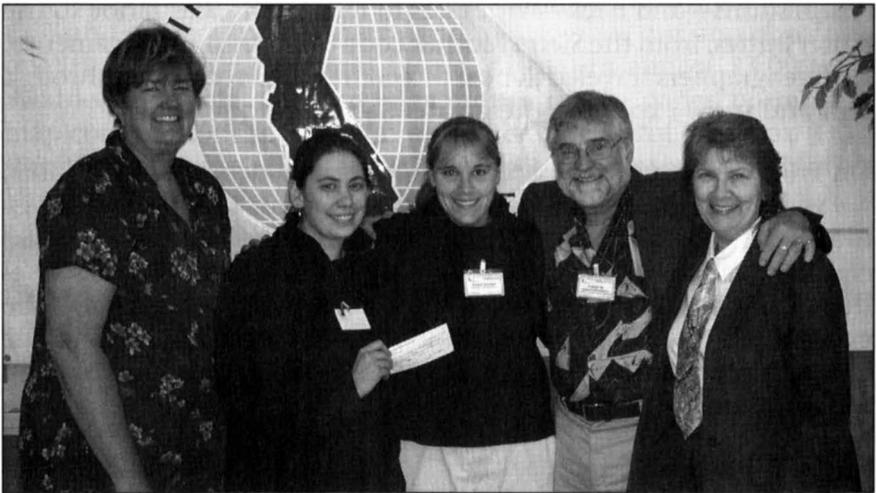
I would like to thank the following individuals for their insights into the CGS, past and present: the late Joe Beaton, Bruce Bechtol, John Carthew, Joan Clemons, Carol Jean Cox, Steve Cunha, Richard Ellefson, Susan Hardwick, Dave Helgren, Don Holtgrieve, the late Dave Lantis, Joe Leeper, Tom McKnight, George Nasse, Clem Padick, and Steve Slakey.

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*The Urban Sacramento Field Trip group, standing in the soon-to-be-filled water fountain that forms part of the public art display for the Capitol Area East End Project, said to be the largest state government project ever undertaken by California (budgeted at \$392 million). (Photo by Michael Wangler.)*



*Geosystems Award winners Kesia Wallen, center left, and Mindy Gentry, center right, from Humboldt State University, receiving the award from Robert and Bobbe Christopherson, award sponsors, and Jenny Zorn. (Photo by Michael Wangler.)*

# The Sacramento Meeting

The 57<sup>th</sup> Annual Meeting of the California Geographical Society was held at American River College in Sacramento, April 25–27, 2003.

DESPITE RAIN AND SNOW, this year's annual conference in Sacramento proceeded as scheduled and without a hitch (well, almost without a hitch). Our fact-checker is still hard at work at the time of this writing, but it looks like attendance hit an all-time high, with 415 faculty, professionals, students, family, and friends in attendance from across the state and nation. Additionally, the eight field trips attracted almost 200 participants. If these numbers are any indication, it's clearly apparent that geography, as a discipline and a profession, is alive and well in the great state of California!

From the conference organizer's perspective (that's me), Friday was shaping up to be a huge disaster. With rain in the valley and snow at higher elevations, it looked as though, at worst, there would be a few field trip cancellations, and at best, itineraries would have to be significantly altered. Fortunately, due to the diligence and hard work of the field trip leaders and the adventurous spirit of the participants, ALL field trips (including the Sunday trips) made it to their destinations—and back—with tales to tell. From Lake Tahoe to the Sutter Buttes, from the Sierra Mother Lode to downtown Sacramento, CGS geographers traveled almost fifteen hundred road miles through rain and snow exploring the greater Sacramento region!

On Friday evening, after quickly moving the kickoff BBQ indoors, we were treated to a biologist's perspective on the outdoor classroom. Keynote speaker Ed Grumbine, currently Director of the Sierra Institute for Field Studies, shared his thirty-plus years of experience as a teacher in the field. Despite flagging budgets and the ever-present concerns over liability, Dr. Grumbine is leading the charge for teachers and students to expand their classrooms beyond walls and institutions.

Saturday's schedule was packed with a broad spectrum of presentations. With strong participation by Sacramento area students, there were almost fifty entries in the student poster competition. Similarly, due to the efforts of faculty from CSU Chico and Humboldt State University to encourage student participation, there were

twelve entries in the student paper and digital map competitions. Finally, among over forty papers presented during the Saturday sessions, almost half were given by students, both graduate and undergraduate. Hats off to these students for their hard work and determination!

Clovis teacher and CGS Board Member Mike Murphy gave Saturday's Presidential Plenary presentation. Mr. Murphy recounted his participation in the NGS-sponsored American Frontiers Public Lands Trek last summer (2002). Through words, music, and slides, he enthusiastically recalled his time in the field, conveying the importance of both sharing and preserving America's public lands.

Another Saturday highlight was the rare map exhibition, "California Cartography: From Myth to Reality," hosted by Gary Kurutz, Principal Librarian in charge of Special Collections for the California State Library. From the map drawers, dusty stacks, and climate-controlled vault of the State Library, Mr. Kurutz assembled a one-of-a-kind exhibit of rare maps and books. Included in this collection were the first published map of California, the first book brought overland into California (a geography book!), and several renditions of the classic early maps depicting California as an island.

The Saturday Awards Banquet was a wonderful opportunity for CGS to award student achievement, applaud important contributions to CGS and geography in general, and to recognize our organization's quality leadership, past and future. A total of almost \$3,000 was awarded in scholarship and prize money for the paper, poster, and map competitions. Awards were also given to Carol Jean Cox (Outstanding Service), Gail Hobbs (Outstanding Educator), and Cynthia Vaughn (Distinguished Teaching) for their roles in furthering the CGS mission. Finally, outgoing CGS President Jenny Zorn passed the gavel (and several other curious items purchased from the Dollar Store) to the newly elected CGS President, Debra Sharkey. This evening of geographic celebration was nicely accented by the live music of Carol Jean Cox & friends.

The Annual Meeting of the California Geographical Society is always a group effort, and this year was no exception. CGS extends a heartfelt thanks to American River College for providing not only the facilities, but also the paid faculty and staff time to help with the conference. Additionally, a huge thanks goes out to the CGS Board—too many to name here—who volunteered countless hours,

put up with harassing e-mails and nagging deadlines, and showed up in Sacramento ready to help. Finally, thank you, Jenny Zorn and Debra Sharkey, for your daily (sometimes hourly) guidance, support, and input in the months leading up to the conference. Your collective patience, professionalism, and kindness made my experience as coordinator an extremely positive one. Again, thanks.

See you all in Long Beach next year!

*John Aubert*  
2003 Meeting Chair  
CGS Vice President



*Jenny Zorn passing the gavel (and badge) over to incoming president Debra Sharkey. (Photo by Michael Wangler.)*



*"Carol Jean Cox & Friends" performing after the banquet. (Photo by Michael Wangler.)*



*Gail Hobbs receiving the Outstanding Educator Award.  
(Photo by Michael Wangler.)*



*Carol Cox receiving the Outstanding Service Award.  
(Photo by Michael Wangler.)*



*Cynthia Vaughn receiving the Distinguished Teaching Award.  
(Photo by Michael Wangler.)*



*First place student poster winner Sheng Zheng, right, and his instructor, Frankie Carey.  
(Photo by Debra Sharkey.)*

# California Geographical Society Award Winners 2003

## OUTSTANDING EDUCATOR AWARD

Gail Hobbs, Pierce College

## OUTSTANDING SERVICE AWARD

Carol Jean Cox, Sierra College

## DISTINGUISHED TEACHING AWARD

Cynthia Vaughn, Rooftop Alternative School, San Francisco

## DAVID LANTIS SCHOLARSHIP AWARDS

### GRADUATE AWARD (\$500)

Stefanie Egan, San Francisco State University

### UNDERGRADUATE AWARD (\$400)

Julia Uhlendorf, Humboldt State University

## JOE BEATON PROFESSIONAL POSTER AWARDS

### Graduate Posters

#### FIRST PLACE (\$100)

Valerie Muller, CSU Long Beach  
*Satellites, Census, and the Quality of Life*

#### SECOND PLACE (\$75)

Janet Choate, San Diego State University  
*Modeling Forest Recovery*

### Undergraduate Posters

#### FIRST PLACE (\$100)

Sheng Zheng, Cosumnes River College  
*Scarcity of Water Resources in China*

#### SECOND PLACE (\$75)

David Gagner and Samuel Levy, Humboldt State University  
*League of Arab States*

#### THIRD PLACE (\$50)

Mindy Gentry, Humboldt State University  
*The Biscuit Fire*

## TOM MCKNIGHT PROFESSIONAL PAPER AWARDS

### Undergraduate Papers

#### FIRST PLACE (\$125)

Kourtne Harris, Humboldt State University  
*Transformation of a Mexican Border City*

#### SECOND PLACE (\$100)

Samuel Krueger, University of Southern California  
*Success & Failure of Pedestrian Malls in Santa Monica*

#### THIRD PLACE (\$75)

Amanda Watty, Humboldt State University  
*Cell Towers in Arcata*

### Graduate Papers

#### FIRST PLACE (\$125)

Liam Reidy, UC Berkeley  
*Historic Environmental Change at Morro Bay*

#### SECOND PLACE (\$100)

Brenda Kayzar, San Diego State University  
*Creating a Place to Work, Play, and Live in San Diego*

#### THIRD PLACE (\$75)

Suzie Earp, CSU San Bernardino  
*The 1938 Flood*

#### GEOSYSTEMS AWARD (\$250)

Kesia Wallen and Mindy Gentry, Humboldt State University  
*Fiery Debate: The Health of Our Nation's Forests*

## MAPPING AWARDS

### Professional Paper Cartographic Awards

#### FIRST PLACE (\$100)

Starla Smock, CSU Chico  
*California's Trail of Tears: The Nome WLT Trail*

#### SECOND PLACE (\$75)

Kyley N. Cross, CSU Chico  
*Penelope's Travels*

#### THIRD PLACE (TIE—\$50 EACH)

Solana Foo, Humboldt State University  
*The Status of Refugees in the World, 2001*

Jolie Henricks, CSU Chico  
*The Journey of Paul Marcel*

## Professional Computer Displayed Cartographic Awards

### FIRST PLACE (\$100)

Melissa Katz, Humboldt State University  
*Interactive Exploration and Early Settlement in California*

### SECOND PLACE (\$75)

Kesia Wallen, Humboldt State University  
*Lightning Quick: The Progression of the Biscuit Fire*

### THIRD PLACE (\$50)

Solana Foo, Humboldt State University  
*Economic Development in the Mission District*

## CERTIFICATES OF APPRECIATION

John Aubert  
Bill Selby



*The Sacramento Floodscape  
Field Trip group listens  
intently to leader John Aubert's  
explanation. (Photo by Debra  
Sharkey.)*

# Abstracts of Papers, Posters, and Maps Presented at the 57th Annual Meeting

Mike Agrimis, *University of Southern California*. **Out of Sight, Out of Mind: The East Coast Bias in American Sports.** The competition in professional and collegiate athletics has become increasingly affected by regional affiliations, causing outcomes to be affected by factors outside of what transpires on playing fields. Recent analyses have shown various patterns in sports that are tied to geographic barriers, including a growing media bias along the East Coast favoring athletes and teams from that region. This paper discusses the structure of college and professional sports across the nation and the geographic implications associated with athletics. These include exploring media advantages and disadvantages involved with geographic regions, indigenous knowledge of athletics by area, and the way in which the human element in sports is shaped by the sports news.

Lauren Akins, *University of Southern California*. **Which Way to the Beach? The Malibu Mirage (poster).** Malibu is an icon of Southern California culture and lifestyle; a gorgeous place to surf and sun, a respite from busy life. Yet critics charge Malibu with actively hoarding their public space, preventing other people from enjoying it. Los Angeles has a tradition of creating such spaces that are lauded and yet inaccessible. Historically, Los Angeles has carefully restricted some people, even as it has recruited other, "more desirable" kinds of people, for those same coveted resources. Malibu is blatantly flaunting laws by positioning beach access as what Steve Flusty calls an "interdictory space." I advance the work of Mike Davis, the Center for Law in the Public Interest, and others, by illustrating and documenting Malibu's strategic abuses and disregard of both law and morality. This poster uses photo-documentation and field research, as well as secondary source research, to determine the status or existence of beach access in Malibu.

Scott Anderson, *University of Southern California*. **The Potential Impact of Global Warming on the Spread of Malaria.** The Intergovernmental Panel on Climate Change has concluded at last that there is evidence of anthropogenic emissions affecting global climate patterns. Among predictions that global warming will increase the risk of natural hazards, raise sea levels, increase average temperatures, promote desertification, and change weather patterns is the potential consequence of promoting the spread of infectious disease. The activity of the malaria parasite and its mosquito vector are responsive to climatic variations, especially in temperature and precipitation. Understanding the implications of this correlation is important to a wide range of people, from scientists to healthcare professionals to development planners at international, regional, national, and local levels. Historical data concerning malaria and climate change is presented for various regions, followed by an analysis of the potential linkages. Other relevant factors, such as El Niño events, changes in population, and developments in healthcare infrastructure are also considered.

Marilee Armstrong, *San Diego State University*. **Women's Relationships with Animals and Nature: Ecofeminism.** In cultural geography, there has been concern over the mediation of natural and cultural boundaries. Another concern has been with diverse social interests such as gender studies and alternative philosophies. This paper examines women's relationships with animals and nature as the basis for ecofeminism as a political movement.

According to activist Ynestra King, ecofeminism is a woman-centered movement that is rooted in the interconnectedness of all life on earth. This global movement is, for the most part, based on a non-hierarchical biocentric philosophy that has many implications for world social policy. Of interest are campaigns that span a broad range of actions, including mobilizations for animal rights; peace advocacy; and opposition to all forms of racism as well as the imperialism of white, dominant culture. I first explore the theoretical foundations, which are rooted in the concept of dualisms, or gendered associations. Major schools of thought include liberal, cultural, Marxist, socialist, and anarchist ecofeminism. A central theme is that empathy with nature is a source of empowerment.

Michael Bell, *University of Southern California*. **Effects of El Niño on San Diego County (poster)**. This poster examines the effects of El Niño and the Southern Oscillation (ENSO) on San Diego County, specifically precipitation anomalies. El Niño years are described as the 20 warmest years out of the last 100 as indexed by tropical Pacific Ocean temperature anomalies. In the years 1991–92 and 1997–98, Southern California incurred major damages as a result of El Niño-caused rain during the winter. Debris flows and erosion have the most damaging effects on the specific region. I locate specific areas where a large amount of property damage has occurred during these El Niño years. This project will display a series of graphs that illustrate the differences in SST and precipitation from “normal years” to El Niño years, as well as photos and a map of my target area that clearly models the problem areas.

Larry Berg, *Cosumnes River College*. **Landscape: Southwoods Homeowners Association (map)**. This is a map of the Southwoods Homeowners Association Complex located in Sacramento, CA. It shows the placement of buildings, roads, trees, and a powerline that runs through the complex. The landscape committee needed a map that showed the location of existing trees and potential tree planting to provide maximum coverage. The map also shows the condition of those existing trees. The associated attribute table also contains the type of tree that was planted. The association landscape committee will use this map to make decisions for the 2003 planting season.

Michelle Best, *American River College*. **Perchlorate Problem in LA Region Groundwater (poster)**. LA Region groundwater supply is seriously impacted by a contaminant called perchlorate. Perchlorate is a chemical widely used in the United States as the main ingredient of rocket fuel, highway flares, and other highly explosive devices. The chemical is released or spilled by local companies and seeps into the groundwater supply creating a high potential for health problems in members of the surrounding communities. The Office of Environmental Health Hazard Assessment (OEHHA), the State Water Resources Control Board (SWRCB), and the Department of Toxic Substances Control (DTSC) are combating this pollution problem by way of groundwater testing and removal of perchlorate from municipal wells and other affected areas in the LA Region.

William A. Bowen, *CSU Northridge*. **Virtual Landscapes of California: California and the San Francisco Bay Area**. The California Geographic Alliance is supporting the creation of new cartographic resources suitable for instruction

in the public schools of California. Among the materials being developed is a series of computer-generated, animated "flights" over the state's varied landscapes. Examples of two such aerial adventures that encompass all of California and the greater San Francisco Bay Area will be shown. The animated movies were created from public domain data using relatively cheap technologies. Technical and pedagogical issues will be discussed, as will be the utility of employing such materials to teach geography to persons who have never traveled. Free prototype movies suitable for display on most recently manufactured DVD players will be given to the audience.

Melody Bruley, *Cosumnes River College*. **The Universal Staple: Migration and Use of the Breadfruit in the West Indies (poster)**. The breadfruit is one of the oldest staple foods in the world, in use in the West Indies since the 1500s, originating somewhere in Polynesia or Micronesia. Although its origins are not known, its use has long been known in the cultures of the Marquesas, Polynesia, and the Philippines. It is indeed the universal staple because, although inedible until cooked, this tropical fruit can be roasted, baked, boiled, or fried. Its use has become widespread throughout the West Indies. This poster will explain how a South Pacific tropical fruit was brought to the colonial Caribbean and has been assimilated into this region's culture, with connections to colonization, the plantation economy, and the slave trade.

John Carthew, *Pierce College*. **Journey to Kashgar: A Geographer's Visit to Western China in 2002**. Kashgar, an ancient city on the western side of the Tarim Basin, was visited by Marco Polo and mentioned in his book, *The Travels of Marco Polo*. A visit to the Sunday Bazar, where thousands of people come to trade, will be presented.

Janet Choate, *San Diego State University*. **Modeling Forest Recovery Sensitivity to Carbon Allocation Strategies in the Western Oregon Cascades (poster)**. Modeling forest regrowth after disturbance and its sensitivity to climate variability often relies on spatially distributed physically based models. In models that explicitly represent the carbon cycle, an important area of uncertainty is the strategy used to model carbon allocation, or the partitioning of net photosynthesis to roots, stemwood, and leaves. Application of the RHESSys model in a Douglas-fir-dominated watershed in the Western Oregon Cascades was used to compare three carbon allocation strategies: the simplest one uses constant allometric ratios, while the other two use variable strategies based on plant age and resource limitations, respectively. Results show that predictions of mature forest biomass, summer streamflow, and sensitivity to climate variability were significantly altered by the carbon allocation strategy used. This suggests that carbon allocation mechanisms may be important in forest response to disturbances and climate change, and further research to reduce uncertainty in these models is needed.

Kyley N. Cross, *CSU Chico*. **Penelope's Travels (map)**. I will be presenting a cartouche map that is based on a fictional geographer's journal about discovering an island. From the journal notes I have produced a hand-drawn map of the island.

Rebecca Davenport, *Sonoma State University*. **Modeling the Risk of Bicycle-Vehicle Collisions on Sonoma County Roads.** In this paper, a GIS-based model is developed to identify specific Sonoma County roads that present cyclists the greatest risk of collision with vehicles. The procedure involves surveying the local population to assess their relative perceived risk of each of seven variables, then developing a database and building a data layer for each variable. These variables are weighted based on the survey responses and combined to develop a rule-based GIS model of collision risk. The model's results are validated using crash statistics and presented in map form, displaying a continuum of risk and highlighting those roadways that are the most dangerous.

Do Thi Minh Duc, *National University of Education, Hanoi, Vietnam. (Visiting Scholar at CSU San Bernardino)*. **Internal Migrations in Vietnam Between the Late 1980s and Late 1990s.** After renovation in Vietnam, many new industrial areas were set up, networks of cities and towns were developed, and in parallel with this process migrations in Vietnam expanded and became a critical issue. Migrations in Vietnam in the 1990s consisted of a planned migration, controlled by the government, and spontaneous migrations. This paper clarifies different tendencies in interregional and rural-to-urban migration. It explains how the migrants moved and why some regions and provinces had a high rate of net migration while others had a negative rate. Using population censuses in 1989 and 1999, we analyzed not only fluxes of migrants but also impacts of spontaneous migrations on the environment, on social and economic development, and on ethnic composition. Maps and charts show migration fluxes by provinces and geographical regions.

Suzie Earp, *CSU San Bernardino*. **The 1938 Flood.** A destructive flood swept through Southern California in early March of 1938. Along the Santa Ana River Basin, the areas of San Bernardino and Colton were hit especially hard, resulting in the loss of lives, millions of dollars of lost property, and isolation. A rare short movie taken during the flood itself, views of the devastation, and clean up will be shown, telling the story of this event. Dozens of oral histories have been collected with the project, along with many individual photos as well.

Richard Ellefsen, *San Jose State University*. **Urban Morphology of Kuwait City.** Urban Terrain Zones, spatial expressions of the aggregation of land use, the physical characteristics of building construction type, plus building density and separation, have been plotted on a sub-meter resolution satellite image of Kuwait City (Ikonos satellite operated by Space Imaging Corporation). Revealed are large, orderly, homogeneous areas within the city that are the product of comprehensive, recent urban planning; most of the city dates from 1960 with the coming of independence and capital from oil sales ("petro dollars"). Seen are areas of housing, commerce, industry, institutions, transportation facilities, and open spaces. Building construction types are detailed. The fine resolution of the satellite image allows one to identify vehicles in the street by type, parking space lines, etc.

Deborah L. Elliott-Fisk, *UC Davis*. **Viticultural Geography of the Lodi American Viticultural Area and its New Appellations.** The Lodi, California, region has a 150-year history of grape-growing, famous for the Flame Tokay vineyards of the nineteenth century, and more recently designated as an American

Viticultural Area (AVA) in 1986. With the area's delta climate, diverse soils, and new viticultural techniques, the area has emerged as a highly regarded appellation, with the geographic diversity supporting the establishment of seven to ten new AVAs within the Lodi AVA. The viticultural geography of these AVAs as submitted to the federal government for review and approval are discussed here.

Kevin N. Flaherty, *Humboldt State University*. **A Village in the City of Xi'an, The Transformation of Old China**. There have been many studies on urbanization throughout the modern era, but the number of urban studies on China have only begun rising since the end of the Cultural Revolution. As the world watches this newly urbanized China unveil itself, the international community has only recently been able to assess its potential as a critical model. I have explored the ideas of three papers on the subject of urbanization in China and have used them as a lens through which to view my own studies in the People's Republic.

Dan Flanders, *CSUS*. **Building and Displaying Three-Dimensional Terrain Models Using ArcGIS**. ArcGIS allows users to visualize and analyze geographic data in a real time, interactive environment. This presentation will discuss and illustrate the basic processes of building and displaying three-dimensional terrain models.

Solana Foo, *Humboldt State University*. **Economic Development in the Mission District (map)**. The Mission District of San Francisco was once known for its working-class community, mixed residential and industrial character, and Latin American flavor. It is now known for being one of the victims of the dot-com boom and the gentrification that came along with it. This interactive map has been created to display the efforts of the Mission Economic Development Association in saving the character and flavor of this traditionally Latino neighborhood. It includes Census economic data as well as data collected by the organization to educate people on the state of the Mission District today.

Solana Foo, *Humboldt State University*. **The Status of Refugees in the World, 2001 (map)**. Affiliation with a particular race, religion, nationality, social group, or political opinion can often lead a group of people to flee their country of origin. These people are considered refugees, or individuals who have been forced to leave their country from fear of persecution. Many times people fleeing war are included under this title, as armed conflict is often linked to these issues. This map shows the origin and size of refugee populations in countries all over the world. It allows the reader to locate "hot spots" of refugee movement and demonstrates that a single country can be a host as well as a source of refugees. Information about per capita GDP is provided to give an idea of how well host countries can handle massive influxes of people. Many host countries lack the resources needed and require aid from more developed nations.

David Gagner and Samuel Levy, *Humboldt State University*. **The League of Arab States (poster)**. Since the conclusion of World War II, the League of Arab States has represented Arab unity. Today, the organization has grown to twenty-two member states. The League addresses issues within the scope of member nations' interest and those forces that affect the Arab community. The region approximately equals the size of the continental United States and acts as a bridge between Africa and Asia. The diversity existing within political systems and social environments have defined Arab associations within the territory.

Traditional roles are less established today as factors of globalization have affected culture, tradition, politics, and ideology. Education is the key to opening healthier relationships between people and places that do not seem interconnected. Within today's dynamic world, geography, history, politics, and Arab society hold significance in global interests. The importance for analysis and dialogue about Arab society is one key to understanding different aspects of culture.

Mindy Gentry, *Humboldt State University*. **The Biscuit Fire (poster)**. The Biscuit Fire, ignited by lightning in southwest Oregon, consumed almost half a million acres, the largest of the 2002 fire season. A combination of fuel buildup from years of fire suppression, weather, and drought led to the high-intensity fire. Large areas were severely burned, while in other areas the fire crept along the ground, burning brush and the bases of tree trunks. Ground crews, helitack teams, and air tankers were dispatched for suppression efforts. Post-fire restoration efforts were started to prevent further environmental degradation. In an attempt to curb future catastrophic forest fires, President Bush introduced the Healthy Forests Initiative. The Act calls for increased thinning of the nation's forests, while environmentalists pronounce the Act a smokescreen to log. Since the 1970s, forest fires have become larger and more intense, and both politicians and environmentalists agree a change in policy is needed but lack consensus on a plan.

Mike Godfrey, *University of Southern California*. **Directional Variation in Southern California Surf (map)**. This project presents an animated map showing the change in direction of the surf in Southern California. The direction and intensity of the swell affects the quality of the surf depending on the direction of the break. This is done by combining a group of images from the Coastal Data Information Program Web site. This Web site has an archive of old images that I will use from 2002.

Nicole Gomez, *American River College*, **San Francisco Earthquake of 1906 (poster)**. The greatest natural calamity in history took place on April 18, 1906. The earthquake originated on the San Andreas fault that was formed at a junction of two tectonic plates deep in the earth's crust. The plates descend at the Daly City coastline and emerge at Point Reyes; which is located north of the Golden Gate. This project will go into detail of what causes earthquakes, facts and figures of the San Francisco earthquake, and the damages the earthquake caused.

William A Harmon, *Cabrillo, Ohlone Colleges*. **Using "The Field" to Teach Physical Geography at Cabrillo College**. Cabrillo College is optimal for an abundance of local sites that can be used for field studies in physical geography. One mile south of the campus is the New Brighton State Beach. One mile north is The Forest of Nisene Marks. Also, the San Andreas Fault and a host of other natural features are within a short drive of the campus. Despite this abundance of exciting locations, nowhere does the curriculum provide specifically for their use. Many of these field studies have either been newly instituted by this instructor (on a trial basis), and/or their attendance has remained voluntary. Therefore, this presentation will review the attempts, to date, of including field studies into the curriculum of a Physical Geography Laboratory section. This presentation will: 1) review the importance behind including these field study projects, 2) review the methodology used to conduct these field studies, and 3) discuss the results and the perception of these field projects. Results have been encouraging and the presentation of them should be inspirational to others.

Kourtne Harris, *Humboldt State University*. **The Transformation of a Mexican Border City.** Mexican border cities have experienced notable change over the past fifty years, accelerated recently by the introduction of maquiladoras—foreign-owned manufacturing plants. The purpose of this study is to examine urban land use changes along the U.S.-Mexico border by comparing the Mexican border city landscape model to the city of Nogales, Sonora. After reviewing previous research, analyzing demographic statistics, and using on-site observational methods, an examination of the border city landscape was conducted. Similarities and differences between the border city landscape model and Nogales were evident. The major foci of this study were the transportation corridor, Camino Liberamiento, and the housing settlements to the east of the Liberamiento. The generalized border city model provided a foundation in order to study the dynamic processes—an increase in population, urbanization, and transportation—of the actual urban landscape of Nogales.

Matthew Heintz, *Cosumnes River College*. **Location Of CDF Facilities (map).** Can you get the location and facility information about such and such facility? As the Senior Delinicator for the CDF-Technical Services Department, this is a question I often have to deal with, especially when a new project is about to start. Using ArcView 3.2, I generated a map of California with its counties segmented and our CDF facilities plotted on it from known latitude and longitude coordinates. Also incorporated into this map are hotlinks to generate location maps of selected facilities. Once you find the particular facility you're looking for, you pickit with the hotlink button and a location map pops open. The map displays how to get to the particular facility from the nearest highways and provides all the facility information, such as: Facility Name, Section/Township/Range, County, Region (Northern/Southern), Physical Address, and Phone Number.

Jolie Henricks, *CSU Chico*. **The Journey of Paul Marcel (map).** This map was created for a cartography class assignment that required the interpretation of a fictitious explorer's journal. The project emphasized the use of traditional cartography elements and techniques, but was generated using modern computer applications. The modernization of this map is emphasized by the use of an art deco interpretation.

Richard S. Hyslop, *Cal Poly Pomona*. **Homeland Security: It's All About Geography!** The past year has seen many changes in how we perceive the world and the community around us. One of the side-effects of the events of 9/11 as well as the current events in Iraq has been to turn official attention to assuring a more secure domestic environment. As a result, federal (and in California, state) agencies are being reorganized to meet the changing threats and challenges. A significant aspect of these changes involves an increasingly prominent role for geography and its concepts and approaches. This presentation suggests the extent of this geographic focus, as well as the potential evolution of our national overall geographic literacy.

Kris Jones, *Independent Geographer*. **How to Use Slides Set to Music to Reinforce Geographic Concepts in a Classroom Setting.** Many of the students we teach have grown up with MTV and are in tune with images set to music. I have developed a way to teach geography by connecting to this MTV culture. This technique is not only effective and useful but is also fun. This paper will focus on how to use slides set to music to reinforce geographic concepts in the classroom. The presentation will be in three parts. First, I will explain how to set slides to music and why it is useful. Second, I will show a rapid (forty-five minutes compressed to five) presentation on New Zealand and Australia to

illustrate the concepts covered in that section of the world regional geography course. Finally, I will run the music program that is set to that presentation to illustrate how the concepts are reinforced visually.

Michelle Johnson, *Cal Poly Pomona*. **Iceland is Lydhveldidh (poster)**. Countries are often associated with a language. The original concept was to create a world map with country names spelled out in the local tongue as an opportunity to recognize how place names become distorted through language mechanics and mispronunciation. This idea quickly expanded into the study of language classification. The resulting poster shows not only the Country-Name-in-Local-Tongue world map, but also classifies countries by their language family and subfamily affiliations to more clearly visualize the relationships between language and geographic area.

Eric Kauffman, *Cosummes River College*. **Atlas of the Biodiversity of California (poster)**. The "Atlas of the Biodiversity of California" is a guide to California's natural environment. It features full color maps, illustrations, photographs and text written by experts from within the California Department of Fish and Game. Photographs in the atlas are drawn from the work of over fifty photographers from within and outside the department, and illustrations of well-known author and artist Dugald Stermer also appear in the atlas. This book will appeal to anyone with an interest in California's natural environment, from college students to outdoor enthusiasts. Copies of the atlas can be obtained through the Department of General Services, Publications Unit, beginning in June 2003.

Melissa Katz, *Humboldt State University*. **Interactive Exploration and Early Settlement in California (map)**. Since maps first appeared on the Internet, cartographers have continually sought new ways to make them higher quality, interesting, and educational. Recently, interactive and animated maps and atlases have hit the scene, much to the delight of the general public and especially to educators who use these products in their classrooms. The interactive map of Exploration and Early Settlement in California evolved from a static map by HSU Advanced Cartography students. This dynamic version allows the user to display single or multiple explorer routes, and provides a link to further information about each explorer. An interactive and on-line version of the entire HSU student California Atlas will complement the printed edition to be completed next year, and will provide K-12 educators with a new tool for teaching the Geography of California.

Brenda Kayzar, *San Diego State University*. **Creating a Place to Work, Play, and Live: Redevelopment in Downtown San Diego**. San Diego's downtown redevelopment strategy includes many projects similar to those proven successful in other cities. However, a comparative analysis of Census data, newspaper accounts, and promotional literature for cities in the U.S. suggests that each city's redevelopment trajectory is unique. So how do we examine San Diego's process to understand what is fueling the confidence and support behind the recent and ambitious focus on urban residential projects? I propose that the past is an integral part of a city's present and future development. A multiplicity of heterogeneous actors influences the vision for redevelopment activity.

As a way to acknowledge this multitude of actors and the uniqueness of place, I have applied an analytical framework based on Actor-Network Theory (ANT). This analytical tool is used to identify and diagram the process as a network of activity that recognizes individual and contextual actors and the role of cooperation and resistance.

Maureen Ann Kelley, *San Jose State University*. **An Integrative Approach to Teaching Introductory World Regional Geography Using Active Learning Techniques.** Most college world geography classes emphasize either regional or systematic analysis. However, combining both perspectives is important since a single world regional geography course may be the only exposure for many students. An integrative approach to world regional geography is to address both regional and systematic analysis using active, cartographic learning strategies based on topical and current events such as Latin American deforestation, Sub-Saharan African AIDS orphans, and Southwest Asian and North African development. Students create choropleth maps of these issues using different classification techniques such as noncontiguous range grading, equal interval, and natural breaks. The maps are then linked to short writing assignments describing the spatial distribution of the phenomena as well as analyses based on textbook and outside readings.

Guy King, *CSU Chico*. **Academic Geography in the California State University System.** The analysis of academic geography programs in the California State University System was accomplished using information obtained from catalogs and department Web sites. Of the twenty-three CSU campuses, sixteen offer degrees in geography with nine of those granting master's degrees in geography. Among the seven CSU campuses that do not have geography degree programs, four teach classes in geography. The average size of CSU geography departments is nine professors. Thirteen CSU campuses have a formal geography specialization in their undergraduate geography degree programs. Three campuses offer another minor in addition to a geography minor. Eight campuses have geography certificate programs. Catalog data indicates that the average CSU undergraduate geography curriculum consists of 34 percent human, 29 percent technical, 21 percent regional, and 16 percent physical geography courses. The results of this study are useful for geography departments planning curriculum changes and undergoing five-year reviews.

Kim M. Klementowski, *CSU Chico*. **Non-native Invasive Plants of Big Chico Creek's Riparian Ecosystem (poster).** Humans live in a globalized world, one with no boundaries. Through our population explosion, extensive spread and dispersal, and multiple land use changes, we have changed the very way in which all ecosystems function. Geographic barriers have been dissolved, lands have been reunited, and waterways have been connected. With our advanced technology, industrial growth, trade, and travel, we have created ecosystems like none in our history. Transported by increased travel and trade, are non-native invasive species. The consequences are extreme, and yet, this silent environmental catastrophe is, for the most part, ignored. This global issue has reached Chico at a local scale. Big Chico Creek is one of Chico's most-valued yet most-invaded ecosystems. Presented and described within the poster are six non-native plants, all with various but significant ecological impacts. What are the consequences of allowing these six non-native invasive plants to disperse within Big Chico Creek's riparian ecosystem?

Samuel Krueger, *University of Southern California*. **Success and Failure of Pedestrian Malls: A Case Study of Santa Monica's Third Street Promenade.** Many cities have created pedestrian malls in an attempt to save their core retail areas from the effects of competition with suburban shopping centers. Unfortunately, many of these malls have failed

due to problems with street people, dead times, dead spaces, and a lack of visibility. In this paper, I analyze the success of one thriving pedestrian mall, The Third Street Promenade in Santa Monica. The Promenade has overcome the failings of other pedestrian malls by incorporating street people into the image of the mall, eliminating dead time through a focus on entertainment, eliminating dead space through careful design, and providing visibility for its establishments through a linkage with Santa Monica's larger pedestrian system. I hope to show through this study that pedestrian malls can be economically successful and enhance the atmosphere of a city when the constraints and opportunities provided by each specific environment are considered.

Joseph S. Leeper, *Humboldt State University*. **Teachers Need to Go Beyond Where.** Geography gets a bad name from rote activities. People teaching geography need to go beyond "where." Various Internet resources will be shared to help teachers go beyond "where" and add to their teaching toolkit. Desired audience is K-12 teachers and student teachers.

K. Allison Lenkeit, *Foothill College*. **A Global Classroom: Teaching Physical Geography Online.** Physical Geography has been offered on-line (via the Internet with no face-to-face meetings) through Foothill College since the fall of 1998. In the spring of 2002, Foothill's Physical Geography course received IGETC articulation for area 5A, natural science with lab, making it the first entirely on-line lab science course offered in California. Currently, over 100 students per quarter enroll in the on-line section of Physical Geography. This presentation will provide an overview and demonstration of Physical Geography on-line with special attention paid to laboratory exercises, exams, and student outcomes, as well as a discussion of advantages and disadvantages of delivering a course to an audience that is scattered around the world.

Shumin Liang, *UC Davis*. **The Use Of GIS for Locating and Interpreting Contemporary Urban Growth of Chicago's Urban Fringe.** This study examines the physical factors affecting the urban growth of Chicago. The study attempts to locate and explain Chicago's recent urban growth by studying both population change and land use change. GIS is used with multivariable linear regression to identify factors influencing the urban development in Chicago. Fifteen factors are examined in this study. Eleven of them are economic factors, while the other four factors are physical. The patterns of population density distribution, population density change, population percentage change, land use patterns and changes are studied at the township level. Based on regression results, current population growth tends to be attracted to water bodies and limited by environmental protection policies

Soraya Lopez-Flores, *American River College*. **Measuring Glacial Growth (poster).** The earth is getting warmer, causing many changes in our world. One of the changes is the melting of our glaciers. The causes of this problem are various, but I will mention two: natural causes and human activity. Researchers have found that they can study this phenomenon by gathering data of past years and finding differences in the glaciers' evolution. In this way they can determine whether the glaciers are melting or shrinking. Another way to determine is to compare winter ice accumulation with summer melting. Researchers use glaciers as barometers, measuring glacial retreat and snow accumulation to understand small changes in the climate and atmosphere pollution levels.

Stefano A. Mannara, *Sierra College*. **Timing and Runoff: The Growing Predicament**. Recent studies have predicted that because of the earth's warming, there will be more precipitation as rain rather than snow during winter periods—thus possibly affecting the amount of runoff a particular area receives. Timing of runoff and the flow of water from the land surface is something the entire agricultural system relies on. This predicament would cause farmers to receive water they depend on in the summer earlier than expected. This could potentially cause crops to go fallow, flooding in certain areas, droughts during peak growing seasons, and an overall disruption in the agricultural process. I will discuss the possible detrimental and/or innocuous effects of inconsistent and earlier runoff than predicted. I will attempt to demonstrate how global warming is a prominent contributor to the increased amount of precipitation as rain.

Sarah M. Martin, *American River College*. **Sacramento San Joaquin Delta-Levees Habitat and Flood Protection Programs (poster)**. A brief look into the work being accomplished toward protecting homes and the environment from flood damage. Also discussed will be the benefits these projects bring to the environment of California, protecting endangered plants and animals as well as renovating damaged portions of land among the Delta project. The habitat preservation that levees bring will also be included. Both current and past activities will be explained.

Jennifer Mashburn, *Cosummes River College*. **Poverty and Turmoil in the Southern Philippines (poster)**. The Philippines, an archipelago with over 7,000 islands, is home to a diverse multi-cultural population. While it is the only Southeast Asian country that is primarily Christian, the Philippines is also home to a significant number of Muslims, whose population is concentrated in the southern region of the archipelago, particularly the area known as the Autonomous Region for Muslim Mindanao (ARMM). Although a large portion of the country's population is impoverished, the southern region, and the Muslims dispersed there, bear the heaviest burden of the country's poverty. The area has been affected by decades of turmoil due in part to the Muslims' desire for autonomy. This poster will show the difference in poverty levels between Catholics and Muslims throughout the Philippines and examine the connection between poverty and turmoil in the southern region.

Valerie Muller, *California State University, Long Beach*. **Satellites, Census, and the Quality of Life (poster)**. This study analyzed the potential to predict Quality of Life levels in urban environments in Southern California. Twenty-six census variables were used to determine the socioeconomic structure in the study area. Structural variables, consisting of amenities and nuisances as well as the biomass index NDVI, were extracted from satellite images, and the distance of each enumeration district to the structural variables was calculated. Data obtained from two different spatial resolutions were compared to evaluate possible differences in the findings. The predictive potential of the structural variables from the satellite imagery was tested by using multiple regression models. Results indicated that the ability of the structural variables to predict Quality of Life factors is limited. There was considerable variation in the predictive power between census years and between levels of resolution. Furthermore, a comparison of results obtained from data at different spatial resolutions did not result in better predictive power.

Kimberly Olson-Goodwin, CSU Chico. **Placer Big Trees (Sequoiadendron Giganteum) (poster)**. The giant sequoia, also known as the "Big Trees," "Giant Sequoia," and the "Sierra Redwoods," are considered the largest trees in the world (based on mass). These majestic creatures can live to be thousands of years old and reach heights of 300 feet. The giant sequoia are endemic to California and grow along the western slope of the Sierra Nevada Mountains in a fifteen-mile-wide band stretching some 260 miles from Placer County to Kings County. They are found at elevations between 5,000 and 7,000 feet near water sources. Once more widespread, today only seventy-five groves of the Big Trees remain. Many blame human practices, primarily fire suppression and logging, for their decline. The northernmost grove, found in Placer County, is considered the smallest grove and home to only half a dozen specimens.

Sally Otton, *Independent Scholar*. **Arab and Mudejar Influences on the Present Day Cultural Landscape of Two Spanish Cities**. The Arab and Mudejar influences on the cultural landscape of the region of Aragon, Spain, are actually much more prominent than what are initially perceived. The obvious influences can be immediately noted in the architecture of the cities within the region; however, more subtle influences also exist in other aspects of culture. This presentation will focus on two Aragonese cities: Zaragoza and Calatayud. The Arab and Mudejar influences in architecture will be studied as well as in agriculture, food, people, education, language, music, and dance. The main purpose of this project is to show to what extent the Arab and Mudejar influences still exist today. The majority of the information for this project was obtained last summer during my trip to the region of Aragon. This presentation will be done on PowerPoint and it will include a variety of photos taken in Zaragoza and Calatayud.

Sidra Pauly, *American River College*. **The 1986 Flood of the Russian River (poster)**. In February 1986, a series of storms caused damage to thirty-eight counties in California. One of these was Sonoma County, with the flooding of the Russian River. This research will explain the cause and effect of the storms that led to the flood of the Russian River and the conditions of the land that contributed; how the flooding affected the land and watershed, with emphases on the lower Russian River and Guerneville, California; and why the Russian River floods often, and what is being done to prevent flooding in the future.

Gary M. Pereira, *San Jose State University*. **Questioning GISystem Operations: The Example of Proximity Buffers**. As part of its mission, Geographic Information Science should challenge commonly accepted geospatial primitives as implemented in GISystems. Users must move beyond point-and-click operations if the assumptions behind such operations are not physically or conceptually valid. The example here involves proximity buffers, which are used extensively in many fields of research and spatial management. Since buffers consult only the nearest point on the edge of an entity in calculating the buffer shape, they neglect the integrative influence of the buffered entity. The alternative method of creating buffers proposed here considers the contribution that the internal spatial geometry and attributes of entities have on their surrounding environment. It also considers the cumulative effects of multiple entities. The method is easily implemented in most existing GISystems, and it

is likely to yield results that are more meaningful than those obtained through proximity buffers for most applications.

Barbara Potts, *Cosumnes River College*. **Lower Education Levels in the City of Galt: Using GIS to Find Correlations (poster)**. The percentage of people in the City of Galt who have earned a bachelor's degree or higher is significantly lower than in neighboring communities in Sacramento County and lower than the State of California. Many factors may be related to this low rate of education: the types of available employment, median household income, median housing cost, and other census factors. Using census tract data and GIS, this poster will show which factors correlate to the low rate of education in the City of Galt.

Liam Reidy, *UC Berkeley*. **Historic Environmental Change at Morro Bay, California**. Sediment cores recovered from salt marsh deposits at Morro Bay, on the central coast of California, provide an archive of recent environmental change. The cores have been analyzed for their fossil pollen content, sediment geochemistry, stable isotopes, magnetic susceptibility, and organic content. The results document unprecedented environmental change following permanent European settlement in the area. Much of the change can be attributed to the introduction of cattle during the Mission period and local mining activities in the late nineteenth century during the American settlement period.

Eugenie Rovai, *CSU Chico*. **Letterboxes of Butte County**. Letterboxing is a hobby in which clues involving compass bearings and landmarks are used to guide the participants to a hidden cache. The activity is part orienteering, part hiking, and part problem solving. Letterboxing developed in the 1850s in England but only found its way to the United States in the late 1990s. It can be an activity for all ages and level of skills. There are 4,648 clues on-line for letterboxes in fifty states and eight countries. The clues can be found on-line at [www.letterboxing.org](http://www.letterboxing.org). Unlike its "cousin," geocaching, it does not require the use of a global positioning systems (GPS) unit. Instead, letterboxing relies on cardinal directions and geographic knowledge. I developed a letterbox activity for an introductory college course in geographic research and writing. I asked my students to use their knowledge of the geology, biology, and human infrastructure in Butte County to create clues for placement of letterboxes. I will present a description of the activity and its outcome, and a list of suggestions for more successful letterboxing. I hope to enlighten other geographers to the potential of letterboxing as a tool for student-centered learning.

Michael Sabatini, *American River College*. **The History of the Prime Meridian (poster)**. This poster will explain the history of the Prime Meridian and the techniques used that place the Prime Meridian at its current location as well as reasons why the Prime Meridian has moved.

Amanda Schultz, *Cosumnes River College*. **Bringing Back the Black Rhino (poster)**. The Black Rhino, or *Diceros Bicornis*, is the second largest of the rhino species resident in Africa. The black rhino suffers the most alarming decrease in numbers of all rhino species. Its endangered status is directly related to human factors, among them loss of natural habitat due to human encroachment,

decreased reproduction, and poaching of the animal for the male rhino horn. The horn of the rhino is valued by many cultures that associate it with male potency. This poster will examine the causes and effects of poaching and endeavors to prevent further decrease in the population of the black rhino.

William A. Selby, *Santa Monica College*. **Geographers Must Help Plan the Future California.** From population growth to smart cities, from environmental disasters to cultural experiments, from land use battles to transportation nightmares, California is growing and changing as fast as ever. If not at the center of attention, it should be. Even with our state budget in crisis, we now have the fifth-largest economy in the world. Southern California alone is projected to add the population of two Chicagos in the next twenty-five years! Whether you see us on the cutting edge or falling off the edge, how can we better plan our destiny instead of becoming victims? How can geographers play more prominent roles in planning California's future? One example comes from SMC's Center for Environmental and Urban Studies. Learn how volunteers, businesses, community groups, and activists are working to educate and build a more sustainable California. Feel free to share your ideas, experiments, and experiences.

Thomas J. Sigler, *University of Southern California*. **Railroading Public Transportation in Los Angeles.** Los Angeles is a city that has long been plagued by transportation problems. While improvements in public transit are constant, progress in this matter has been sporadic. Angelenos' love affair with cars has hindered the emergence of a truly adequate public transport grid. This paper traces recent problems with forward movement on the city's rail network while providing insight as to why these measures may not have worked. Findings indicate that a combination of voter disapproval and non-allocation of public monies are to blame for the state of the presently inadequate rail network. While further planning of rail expansion seems necessary, will Los Angeles' inherently autocentric culture inhibit it from ever realizing an adequate public rail system?

Starla Smock, *CSU Chico*. **California's Trail of Tears: The Nome Cult Trail (map).** This map documents the forced relocation of Native Americans along the Nome Cult Trail, also known as California's Trial of Tears. The map focuses one specific journey along the trail that took place in September of 1863. Gathered together in Chico, 461 Native Americans were driven to the reservation in Round Valley.

Christine Sparkman, Mathew Bass, Casey Cleve, Seth Hiatt, Jess Keegan, Mark Johnston, Eddy Muller, John Murakami, Heather Petz, Andrew Recko, Lee Rogge, Mario Villegas, and Hong Yan, *San Jose State University*. **Mapping Land Use along the Urban Fringe: Bolsa de San Felipe in San Benito and Santa Clara Counties, California (poster).** Assessing and documenting the landscapes facing consumption by California's sprawling cities remains an important mission for geographers. In this project, the modern land uses and their historic antecedents were investigated in the Bolsa de San Felipe, which lies on the southern rim of "Silicon Valley" in northern San Benito and southern Santa Clara counties. The Bolsa is dominated by the plains of a relict, Quaternary Lake Basin, which also incorporates the nexus of the San Andreas and Calaveras

faults as they diverge northward to bound the Santa Clara Valley. Modern, primarily rural, land use has its antecedents both in productive ranchos of Mexican California and in the impacts of the Southern Pacific Railroad. For this project, direct observations, historic maps, and multiple editions of topographic maps, along with aerial photos from 1949 and 1997, were compiled and digitized in a GIS. The results emphasize a combination of stasis as well as continuous change as economic innovations operated selectively on the different environmental opportunities in the Bolsa.

Mark Stemen, *CSU Chico*. **The Thinking End of the Shovel: Service Learning Projects on the Butte Creek Ecological Preserve.** In California and elsewhere, faculty are being encouraged to create “service learning opportunities” for their students, such as having social work students volunteer at a local soup kitchen, or geography students restore the local watershed. While these endeavors have obvious social value, their education value suffers if students are unable to make connections between their projects and their academic work. Environmental studies programs are notorious for such disconnected activities. Tree planting is a classic example of a service learning project with little learning. This paper will describe my attempt to connect restoration work at the Butte Creek Ecological Preserve with the academic arguments swirling around mitigation, restoration, and the social construction of nature.

Justin Thompson, *Cosumnes River College*. **India’s Dilemma: The Future Effects of Overpopulation on Human Development (poster).** India has the world’s second-largest population. It is also known that India’s population has grown tremendously over the few past years. In fact, that population growth rate, combined with the already high population, indicates that by 2045, India’s population will have passed China to become the most populous in the world. This will have grave effects on this ancient fertile hearth. This poster will show how the demographic transition and doubling time would produce devastating effects on human development in India. As a less-developed country, India has only a 50 percent literacy rate, and more than half of its children are undernourished. Clearly, some resolution to one side of this equation—overpopulation or human development—must be addressed to avoid a human tragedy.

Peter Charles Unsinger, *Council for Current Events Analysis*. **Sabah’s Coastal Crime Problems—Piracy and Fish Rustling/Bombing.** Sabah (Malaysia) is bounded by oceans on three sides. The seas provide both economic opportunity and crime problems. This presentation looks at three areas of development (fishing, fish farming, and tourism) and problems confronting each (piracy, theft, and poisoning/bombing). All these problems have been met by increased Marine Police and Military assets. This presentation is based upon travels and interviews in the Sabah State.

Daniel Vick, *Cosumnes River College*. **The Relationship Between the Jewish State of Israel with All Muslim Neighbors (poster).** In 1947, the United Nation divided Palestine into two separate states, one for Jews and another for Arabs. This caused tension in the region. In 1967, Israel was involved in the six-day war. Israel took control of land from neighboring Arab countries. The Arabs in the region have been fighting to regain control of their land ever since. This project will show the relationship between the Jewish State of Israel

and its Muslim neighbors. Due to social differences, this region has since experienced conflict. This is shown by terrorist attacks and persecution of Jews in the region. Militant groups in the region continuously try to destroy the state of Israel to give back to the Palestinians. The only peace that can be reached is if the militants and Palestinians agree to a treaty and set up a Palestinian government that can control and punish individuals who violate that treaty.

Kesia Wallen, *Humboldt State University*. **Lightning Quick: The Progression of the Biscuit Fire (map)**. The Biscuit Fire in drought-stricken southwest Oregon quickly became the nation's largest fire for the 2002 season. Frequent lightning storms passed through Jackson, Douglas, Del Norte, Curry, and Josephine counties, igniting numerous fires. The two largest—the Florence/Carter Fire, which began in the northern region of the Kalmiopsis Wilderness Area, and the Sourdough/Biscuit Fire, which started in the southern part of the Siskiyou National Forest—would eventually unite into the Biscuit Fire. Once fused, the Biscuit Fire developed into the nation's highest-priority fire, and red flag warnings persistently troubled the surrounding communities. Strong northeast winds and low humidity enabled the Biscuit Fire to engulf nearly half a million acres of National Forest and Wilderness Area.

Kesia Wallen and Mindy Gentry, *Humboldt State University*. **Fiery Debate: The Health of Our Nation's Forests**. Historical and current fire policy suppressed fires, leading to a buildup of fuels within the forests. The Biscuit Fire in southwest Oregon burned nearly a half a million acres, becoming the nation's largest fire for the 2002 season. This fire was extremely intensified by the weather, drought, and excessive fuels that increased heat and vegetation consumption in the Siskiyou National Forest and Kalmiopsis Wilderness Area. Reacting to the numerous fires throughout the nation, President Bush introduced the Healthy Forest Initiative Act, which called for thinning and litigation reduction, as a way to combat these catastrophic fires. However, environmentalists propose that the Act would only increase logging by the timber industry, and would not reduce the risk of fires. Despite the controversy and conflicting opinions, fire is a natural part of a forest ecosystem and a necessity for healthy forests.

Elizabeth Watson, *UC Berkeley*. **From Cinnabar to Subsidence: Historic Environmental Change in Santa Clara Valley Tidal Marshes**. Before intensive European settlement in the San Francisco Bay area, nearly 60,000 acres of tidal marsh fringed the southeasterly reach of the San Francisco Estuary. Over the past 150 years, these marshes have been diked and developed as garbage dumps, salt evaporators, agricultural fields, and housing and industrial sites. This study details the accretionary record of tidal marsh sediments in a relict Santa Clara Valley tidal marsh. Historic forces shaping the geomorphology and ecology of the area include the introduction of exotic plant species, subsidence related to groundwater withdrawal, mercury deposition from the New Almaden mining district, and fertilization related to the largest sewage treatment outfall in San Francisco Bay. These factors are important considerations in formulating plans for the proposed South Bay Salt Pond Restoration Project, the largest wetland restoration in the world after the Florida Everglades.

Amanda Watty, *Humboldt State University*. **Cell Towers: Playing Hide and Seek in the Arcata Bottoms.** This paper investigates the installation of two new cell phone towers in the Arcata Bottoms. First, information about the project needed to be collected and studied in order to learn the parameters of the project: where the cell towers were going to be located, how they were going to be disguised, when they were expected to be constructed, and why the project is taking so long to be approved. Second, the community response to the project needed to be gauged via a survey to find out how opinions differed. The results intended to find a significant digression between community and HSU opinions to prove that student opinions in Arcata should be considered when it comes to community issues. The research concludes that the study was a successful learning experience but was unsuccessful because community members were not cooperative and would not fill out the survey.

Niomi Winslow, *University of Southern California*. **The Construction of Disney's Magic: Spatial Control of a Themed Landscape.** The secret to Disneyland's "magic" is its ability to transport each visitor away from his or her everyday life and into a dreamlike world where fantasies come true. The park was delicately designed to give this specific experience by involving popular Disney characters, portraying prominent American icons in a positive light, and providing a safe, clean environment while concealing the complete control necessary to create this atmosphere. This paper discusses the historical background, Disneyland's development in American culture, how the park functions, and how the Disney Corporation is changing Disneyland today. In our visual culture where images sell everything from chewing gum to cars, this discussion gives the public a greater understanding of Disney's most popular product—magic.

Lin Wu, *Cal Poly Pomona*. **Teaching Physical Geography Online.** As a participant of the COLT (Collaborative Online Learning & Teaching) program at Cal Poly Pomona, I taught my first complete on-line physical geography course in winter 2003. Student information and performance data from the on-line class are analyzed in comparison to data collected from regular physical geography courses. Findings from the analysis will be presented.



# **Book Reviews**



# Geography Inside Out

Richard Symanski (with Korski). Foreword by Peter Gould. Syracuse, NY: Syracuse University Press, 2002. xix and 277 pages, photos, appendices, notes, and index. \$29.95 cloth (ISBN 0-8156-0732-6).

Reviewed by David Nemeth, Department of Geography and Planning,  
University of Toledo, Toledo, OH.

The villainy you teach me I will execute, and it shall go hard  
but I will better the instruction.

—Shylock, in *Merchant of Venice* by William Shakespeare  
(III.i.60–65)

IF YOU LOVE GEOGRAPHY and its internal affairs but are weary of reading the usual hagiographies by geographers about their mentors and colleagues and autobiographies by academics intent on polishing up their own images and those of their departments/institutions, then consider this unusual book.

The author of *Geography Inside Out* has a somewhat sinister dual identity and could well be a direct descendent of Melmoth, a horrific Gothic wanderer and villain-hero who shocked readers at the close of the Romantic Age. The Gothic villain-hero is characterized in literature as “a personage whose evil is the result of a clash between his passionate nature and powerful individual will, and the unnatural restraints of convention, orthodoxy, or tradition” (Axton 1961, x). “Gothic villain-hero” nicely captures the dual persona of this author.

Feared by some, disliked by many, our villain-author’s roadhouse name is Korski. We learn at the outset that Korski accepts “no authority on principle” (p. 16), and this bit of information goes a long way toward understanding what the book is all about. On the flip side, our hero-author, who endorses his publisher’s royalty checks as “Richard Symanski,” is the loving father of “Cole,” to whom *Geography Inside Out* is dedicated, and to whom he bequeaths and instructs: “... that he will confront stupidity, pretentiousness, hubris, dishonesty, venality, and cowardice—wherever found.” This dedication is also essential to decoding the book and making sense of it. I will hereafter refer to the dual author as “S-K” (Symanski-Korski), and would add that Peter Gould, who penned the Foreword, sug-

gests that any to attempt to clarify the complexity of the book's authorship would frustrate the pleasure of reading it. I agree.

If the events described in *Geography Inside Out* are anywhere near true, S-K's continuing reputation as academic geography's "worst-Bad-Boy-in-exile" is understandable. Geography, as S-K constantly reminds us, is stodgy. This conflicts with S-K's academic freedom to pursue his interest in sex as a geographer. His initial AAG *Annals* article on prostitution in Nevada (1974), and his subsequent scholarly book *The Immoral Landscape* (1981), were both submitted for publication against the advice of the then voices of authority in geography and thus published to the everlasting detriment of his career chances in the discipline. "Publish *and* perish" was S-K's experience as described here. And even now, S-K persists in defying censorship of his research and writing; for example, on page 16 he casually brings the reader with him into the Bogota apartment of a French Avianca flight attendant, where she asks him to tape emeralds to her thighs and other places.

In 1971, S-K, fresh from Syracuse University with a Ph.D. in geography, was a rising star among young academic geographers. A decade later, he simultaneously published *The Immoral Landscape* and the coauthored positivist classic *Order and Skepticism* (1981). By then, his reputation in geography as an enigmatic villain-hero had solidified. *Geography Inside Out* describes his decade-long spectacular free fall from grace as a string of disputes from here to there with colleagues and ranking geographers. His wild academic career on the tenure track finally derails at the University of Texas in 1976, where he is shunted over to the exit door and out—thus one meaning of the book's title, "inside out." S-K is bounced from two other university appointments before finally throwing in the towel and leaving geography's academic circle forever. Since "outed," S-K has roamed just beyond the horizon of that circle, gainfully employed elsewhere but occasionally tossing various-sized stones of defiance and distraction at his old enemies in Fortress Geography. This book is a boulder that has just arrived on target.

S-K, as the book relates, is today securely tethered at UC Irvine as a tenured faculty member in the Department of Ecology and Evolutionary Biology, where he teaches—among other things—writing. But he is on a long leash there, and remains the notorious peripatetic raconteur, bar fighter, and prolific writer that he was way back when, as he details, many academic geographers unjustly judged

him insufferably censurable and vile. S-K still travels the world with pen, pad, and camera, engaging strangers in brothels and elsewhere in exploratory conversations, and bagging in words and images the picturesque, sublime, and emotional treasures of changing cultural landscapes. As I write, he is in Thailand.

*Geography Inside Out* is S-K's very personal critique of the discipline of geography, and of geographers. This critique traces its origins to his graduate student days, when he naively expected reason and principle to rule geography and geographers—but instead found these virtues missing. S-K's gradual alienation from geography can be reduced for discussion purposes here to the ultimate outcome of his relentless pursuit of the answer to one simple question: "What is wrong with this discipline called geography?" (p. 244). He first asked the question systematically and scientifically as a naïve assistant professor. In *Geography Inside Out*, he shares his findings: Geography "is a discipline that, on the whole, is an intellectual desert" (pp. 6–7), from which he elaborates on that list of sins quoted above from the book's dedication page. His major complaints are the "lack of a vigorous critical tradition" in geography and lack of "quality intellectual output." S-K is especially critical of the "liberal Fascism" he discovered among geographers.

S-K has several hobbies. He likes to engage people in conversations, both in real and in virtual space. This involves "mixing and chatting with the locals" around the world (p. 153) and also "engaging in roaring e-mail correspondences" (p. 240). Most of all, he enjoys writing essays "on anything that catches his attention" (p. 244). This book is a collection of some of his essays, all of which offer directly or indirectly his attentive insights into the causes of what he detects as the geographical malaise. Taken together, these essays constitute a postmodern pastiche of irreverent, mocking, analytical, and serious—but always well-written—indictments of geography and geographers. Ambiguous, surreal photographs augment the text. *Geography Inside Out* in toto resembles a David Lynch project. I was left exhausted at the end of it all and wondering whether S-K was either a clever and deliberate stylistic device or a pathological condition of the author...in which case there may very well be nothing wrong with geography and geographers?

*Geography Inside Out* makes plain that although S-K is now pushing past fifty, he persists in his anger and remains dangerous to his enemies, who are always within his stone's throw. What makes S-K so

dangerous, as the book clarifies in five parts and twenty-four chapters, is the combination of his undergraduate degree in accounting, his skill as a master wordsmith, and his love of geography. He loves not the corrupt *discipline* of geography but the pure *spirit* of a reasoned and principled geography, which he himself embodied at the time of his betrayal. He wants to hold accountable all those entrenched elites in geography who did him wrong and/or embody what is wrong with geography. So he barrages them unmercifully with words, details their betrayals and ineptitudes, and sullies their names. He even provides a handy glossary of names for readers on the run, which takes them directly to the trash talk.

*Geography Inside Out* begins with Korski making a “misguided” David Sack an offer he shouldn’t refuse, but does (p. 9). The rest of the book is a merciless broadside (or blood bath), wherein S-K systematically roams the halls of the discipline like Odysseus searching for Penelope’s suitors, and dispatches just about everyone who was installed in geography’s pantheon of heroes during the past fifty years. And so proceeds, chapter upon chapter, this perhaps epic quest by a self-styled reasoned and principled man in futile search of a reasoned and principled geographic discipline. I personally hated to see almost all the captains of the Berkeley School, and especially its admiral Carl Sauer, come crashing to the floor as I turned the pages, and toward the end of the book I tired of the carnage no matter who was the target. That was when I chose the epigraph for this review, for it seems that S-K became as adept an exploiter of despotism in geography as he once was a victim of it, arguably bettering his instruction.

S-K is quite aware that his lifestyle/outlook invites trouble unto himself. He has experienced both ends of the ugly stick, as we learn on page 241 where he describes a bad night in Tijuana’s rough Zona Norte (in the heart of its red-light district), where two thugs take him down hard before they rob him blind. Perhaps geography and geographers were just too tame for S-K—though “boring” is not one of his many complaints.

If S-K had not indeed suffered the injustices he describes, then the late, great Peter Gould, who personally knew most of the players in this steamy melodrama, would likely not have endorsed and recommended the book by contributing its foreword. And since a major academic press has seen fit to publish the book, S-K’s cranky cri-

tique of geography and geographers requires some thoughtful response—it can hardly be ignored.

To the extent that S-K's complaints in *Geography Inside Out* can be successfully dismissed as untrue and the rants of a madman, geography and geographers need not be obliged to change their ways. Of course, academic geography and geographers *have* changed since S-K left their fold, but such changes—the advent of GIS and so on—may be more superficial than profound as they relate to S-K's critique.

Many copies of this book will be sold, if for no other reason than its entertainment value for anyone possessing three sawbucks and a morbid curiosity. As S-K concedes, "Just about everybody likes to see a little blood flow" (p. 245). *Geography Inside Out* will be required reading for my own graduate-level philosophy and methodology course, where its fresh and provocative focus on issues and personalities in academic geography can promote critical thought and discussion. I recommend it as a revealing critique worthy of serious discussion. Geography and geographers are not without sin, and (fortunately) the conscience of geography is not an elected office internal to the discipline.

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The California Geographical Society welcomes submissions in the following categories:

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**GEOGRAPHIC EDUCATION**—short articles on topics that stimulate geographic education at all levels, including innovative teaching techniques, classroom and field activities, educational initiatives, and special workshops.

**GEOGRAPHIC CHRONICLES**—includes chronicles of annual CGS meeting and presentation abstracts, reflective essays about the Society and its members, and items of general geographical interest including commentary on issues within the discipline, notices of grant or travel/study opportunities, and research notes.

**BOOK REVIEWS**—reviews of recently published books or atlases of particular interest to our members.

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**TABLES:** Follow examples in the *Annals* for proper formatting. Place tables in appropriate location in the manuscript, not at the end.

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