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Until Los Angeles - Infrastructure of the Void

Ecology of infrastructure

Until Los Angeles, American cities had great rural¹ hinterlands. On the east coast, the farms, forests and fishing grounds propelled the growth of the historic colonial centers on the Atlantic coast. New York had the Hudson Valley, Philadelphia had the Delaware, and New Orleans had the entire Mississippi. Crossing the Appalachians, our cities are situated on the rivers or the Great Lakes where they could easiest move grain, ore and machinery to the markets. Early into American history, infrastructure was used to leverage the growth of cities - such that the cities with the best infrastructural access to the rural hinterlands exploded in population and wealth. The completion of the Erie Canal in 1825 initiated the modern primacy of New York City (displacing the revolutionary capital of Philadelphia). Starting the 1830s, railroads began to expand across the entire nation, and by 1869 (with the completion of the transcontinental railroad) the iron horse had replaced the slow barge. As the 19th centuries pre-eminent railroad town, Chicago won the race to be the nexus of the greatest network collecting goods from the largest hinterland. Those railroad driven mercantile and commodity empires of Chicago transformed a swamp next to a lake into the ultimate nature's metropolis.²

Los Angeles has no hinterland in the tradition of Chicago. As Los Angeles grew, it cannibalized its once rural lands until everywhere was city. Once there were citrus groves in San Fernando, Riverside, Anaheim, and Arcadia that were the pride of the civic boosters. Today, these groves have been completely replaced by suburban tract housing and tilt-slab factories – there is no there, there. Today, instead of claiming neighboring rural agricultural and mining regions as the hinterland of the city, there are vast wilderness deserts and mountains ensnared to the city by infrastructural life-support lines. Owens Valley, 200 mile north of the Los Angeles is one of these places, created and maintained as a municipal colony for the singular exploitation of water and power.

Global Hinterlands – Infrastructure of Connections

Los Angeles' tentacles of water and power, communication and transportation dominate the largest area of any American city, if not the world. Los Angeles power plants and reservoirs are urban outposts in the American frontier of the vast western desert. Los Angeles is connected to extreme corners of the adjacent state - a hydroelectric dam here, a coal-fired power plant there, aqueducts flowing from North, the East, and the West. There are gas pipelines, fiber optics, the electric pylons connecting all the way up to Canada, along with the busiest railroads and highways flowing to rest of the continent. This enormous spiders web of infrastructure enables the modern megalopolis.

¹ Rural areas are being defined as places where signs of human activities are obviously present, beyond defining them as only places with small populations (as the census bureau and most others define it), not wilderness where the traces are few and far between. See <http://roadless.fs.fed.us>

² Cronon, 1991.

Looking at a map of California, Los Angeles appears to command a fertile and rich hinterland that includes the San Joaquin Valley to the north, the alluvial plains of Oxnard, the depth of the Coachella Valley, and the industrialized deserts of Riverside County. But these places are not rural hinterlands, but urbanized and mechanized global entities that feed the entire nation. The rich agricultural bottomlands of the Coachella and Joaquin Valleys are watered by enormous irrigation project that span the entire state. The infrastructure of water has done more to reshape the habitation of the entire state, than all the gold prospected by the '49s or the awesome geological tremors that shaped the rugged geology.

Water of Growth

Water is what makes the large cities of the west possible. Without Hoover Dam commanding vast reservoirs of year-round water, the cities of Las Vegas and Phoenix would be insignificant dusty towns limited by the finite supply of groundwater. Los Angeles would be a thirsty place of around 200,000 people without the support of the three major aqueducts that serve the metropolitan region. Even San Francisco would be gasping for a drink without the Hetch Hetchy reservoir and aqueduct. Maybe flood-prone Sacramento would be the largest city in the state, or San Jose or Oakland. The visionary and audacious engineering feat that the City of Los Angeles undertook to divert the flow of the Owens River down to Los Angeles changed how the west was settled and where we live today.

The story of Los Angeles is a story about water. Take the water away from Los Angeles and the metropolis dies. The Spanish Mission replaced a Tongva village located at the one site in the entire basin with a reliable year-round supply of surface water, yet safe from the seasonal floods. By a quirk of geology, the vast groundwater reservoir of the San Fernando Valley, are forced upwards to briefly flow above ground through the Whittier Narrows, before sinking back into the porous alluvial deposits that create Los Angeles basin floor. The historically verdant landscape was recharged by the storm clouds that piled up against her mountains, and ultimately could support a population of around 200,000 people. This was where the city found itself at the turn of the 20th century. Future growth of Southern California required a new source of water, and so the epic quest of William Mulholland and Fred Eaton was launched. Once the waters from the Eastern Sierras arrived via the Los Angeles Aqueduct, the population and area of the city boomed.

Ditches

"Included in this work were 215 miles of road, 230 miles of pipe line, 218 miles of power transmission line and 377 miles of telegraph and telephone line. Fifty-seven camps were established along the line of work, most of them in the mountains, and good roads made to reach them." –William Mulholland (LADWP, 1916)

The lineage of the 213-mile long Los Angeles Aqueduct goes back to the indigenous settlements in Los Angeles. The Tonva tribes, before the Spanish settlers arrived, had a modest network of ditches to extend the surface flow of the river beyond the Whittier Narrows. The Spanish (who have long irrigated their fields with sophisticated networks of canals and rills) expanded this effort to supply the kitchen gardens of the pueblo via the

*Zanja Madre*³ that diverted water from the Los Angeles River in the Elysian valley. The later American residents, continued to expand the diversions from the Los Angeles River, creating canals further and further upstream to expand the agricultural fields. By 1886, so little water was left in the river with over 1100 acres of irrigated fields, that tunnels were dug below to tap the subsurface flow to provide drinking water for the city.⁴

Looking north to the Owens Valley was a technological leap of faith for 1904 and a cultural milestone for Los Angeles. The diversion of the Owens River in 1913 allowed the modern metropolis to emerge by providing ten times the water as previously available from the Los Angeles River. Accompanying the construction of the Aqueduct was the noir stench of corruption and greed as has been well fictionalized and documented. Only in 1998, was the issue of compensation for past injustices and environmental damage of the Owens Valley been started to be resolved.

40 acres and a mule for the Owens Valley

The greatest casualty of the Los Angeles Aqueduct has been Owens Lake which had been named *Pacheta* by the local Paiute/Shoshone Indians.⁵ After the 1913 diversion of the Owens River into the Aqueduct, the level of the lake started falling precipitously.⁶ By 1923, only a dusty brine pool covered a lowest third of the lakebed. 1872 marks the first irrigated fields in the Owens Valley and start of the gradual anthropogenic decline of the lake's level.⁷ Today, Owens Lake is a parched 100 square-mile playa⁸ fringed with scattered seeps, springs and wetlands. The Owens River estuary pokes a riparian finger several miles out onto the playa. The modern playa consists of sand dunes, alkali flats,⁹ and deep mud covered with a thin salt crust.

With Los Angeles increasing thirst and the drought of the 1930s, the city began drilling hundreds of wells to tap the Valley's great reserve of ground water. Because of the massive pumping of groundwater, the modern landscape of sagebrush emerged and dust storms emerged. In 1940, the city started diverting water from the Mono Lake

³ The mother ditch, remnants of which can be found on the site of the Los Angeles Historic Park that is being developed by the State next to Chinatown on the Cornfields Site.

⁴ Gumbrect, 1999

⁵ Putnam & Smith, 1995.

⁶ <http://geochange.er.usgs.gov/sw/impacts/geology/owens> (accessed October 2004) there is a discussion of the effects of the aqueduct on the lake. Additionally, see www.ovcweb.org

⁷ In 1872 it was 49' deep (elevation 3,597' above sea level), by 1876 it had dropped to 38' deep, in 1913 it was about 29' (elevation 3,577'). There was a seasonal fluctuation of the lake depth (still seen today) of about 6' each year between winter and summer. The Owens Great Lake (Putnam & Smith, 1995 p.247: 1888 map reproduction), the historic Pleistocene era lake, was 270' deep and left traces in the terraces and beaches of pebbles on the alluvial slopes above the modern shores. Then, Owens Lake was part of the chain of lakes feeding Lake Lahontan north of Lake Tahoe. To reach there, the water overflowed through Haiwee Pass and cascaded down into China Lake, then onto a series of other lakes down into the bottom of Death Valley. (Gale, 1913).

⁸ The lake runs about 24 km/15 miles north from Olancho and is about 11 km/7 miles wide west of Keeler, 123 miles north of Los Angeles along CA Highway 395.

⁹ The lakebed salts and minerals are primarily sodium carbonate based: Halite, Mirabilite, Thenardite and Trona.

watershed through the Mono Craters Tunnel that bored 11 miles to connect to the Owens Valley.

The issue of particulate pollution – toxic dust – has been key to initiating a shift from the Valley being a voiceless water colony of Los Angeles to representation by a local government with a semblance of local control. Finally in 1998, the City of Los Angeles and the Great Basin Unified Air Pollution Quality District reached a court-negotiated settlement to reduce the dust blowing off the lakebed.¹⁰ The mitigation process initiated by the MOA, for its scope and cost, was myopically focused on only a few specific and tangible results: the reduction of dust being blown off the dry lake and the preservation of the nesting habitat of the Snowy Plover.¹¹

What makes Owens Lake different from all the other dry lakebeds in the basin and range region was the speed that the lake was desiccated. The rapid lowering of the waterlevel didn't allow for the normal process of plant secession to colonize the exposed surfaces, didn't allow for the alluvial fans to expand onto the lake, or allow wind blown sediments to cover the salt crusts that originate most of the dust. The dust also contains higher levels of arsenic and selenium (because of the local geology), then most other playas. The Ural Sea is the other significant place in the world where human diversion of water has created an ecological disaster of toxic dust. In bankrupt Russia, nothing is being done to reverse the damage of irrigating vast cotton fields and other crops on the former inland sea.

Dust Control – nobody lives there

Within the mitigation effort, there has been little thought to develop a strategy for the cultural occupation and use of the Owens Lake Playa¹², an issue that requires engaging the broader context of the landscape and pushing the dialectic with Los Angeles from parasitic to mutuality¹³. By focusing on creating shorebird habitat, the MOA ignored several other processes of mitigation/reclamation that could have created a more interesting cultural landscape. A better project would have created more variety of wetland habitats, allowed for emergent vegetation, and looked for other uses of the lake. There was a great opportunity for dust control infrastructure to initiate the cultural

¹⁰ The historic 1998 mitigation Memorandum of Agreement was court ordered after a law suit by several local community groups and national environmental groups; the Great Basin Unified Air Pollution Control District/Inyo Water District are administering the process, with funding/implementation by the Los Angeles Department of Water and Power.

¹¹ There are three strategies for dust reduction legally specified: shallow flooding, planting, and gravel cover. It is also specified that all berms have 'snowy plover crossings incorporated every 500 feet'. Exhibit B, *Joint Statement of GBUAPCP and the City of LA*, July 15th 1998. The PM₁₀ particle pollution is quite ironic for its reciprocity to the famous smog of LA, yet the dust has a greater national impact- traveling to Texas and beyond in greater quantities with its carcinogenic levels of metals. So far, 300 miles of pipe, 5000 irrigation bubblers, hundreds of miles of fiber optic control cables, have been deployed to irrigate the 40 square miles of playa.

¹² Per conversations held with the LADWP and others in the Owens Valley on January 3rd through January 8th, 2005.

¹³ Preserving the flow of water to Los Angeles is one of the conditions that the environmental and ethical pressure of OV rehabilitation must balance.

shift from parasitic exploitation of resources and territory, to being an agent of mutuality for rural¹⁴ regions (not just the generator of urban conditions).¹⁵

The LADWP Dust Mitigation Project has currently installed sprinklers with fiber-optically controlled valves on over 30 square miles of playa; along the east and north sides on the surfaces that were the most prone to dust emissions. There is also an additional four square-miles of irrigated Salt Grass; with the total expenditure of projected to reach \$500 million by the end of 2006. Based on the performance criteria of the MOA, each year 2 additional square miles of playa will need to be mitigated until the dust emission goals are met.

Birds & Bees

The habitat flooding by the DWP has proved to be excellent avian feeding habitat with an abundance of microbes and insects larvae. The native population of the endangered Snowy Plovers is increasing. Over 320 species of birds either occupy the Owens Valley or migrate over the lake and use it as a feeding ground. Until the Lower Owens River Project is initiated, the fish population in the delta region will remain rather small; there is a potential for the hydrological regime of the lake to be significantly altered for better or worse.¹⁶ One of the most striking characteristics of the lake is the intensely colored halobacteria colonies that tint the brine and salt deposit pink to bright red. The water is occasionally tinted green by *Dunaliella* and *Dangeardinella* algae. Seasonally a thick black border of brine flies surrounds the lake (like at the Salton Sea) and feeds the hungry shorebirds.

Ownership and public lands

The state recently designated 10 acres of wetlands at Cartago as a wild life preserve, but there is no public access allowed and no identifying signs to inform the public of it's existence. The privately held lands on the lake includes a 300 acre parcel at the south end that is being half dredged to create a duck hunting club; a 10 acre experimental wetland on the east side north of Swansea¹⁷, and a few smaller parcels at Swansea and Keeler. US Borax currently holds 44-year leases with the state of California for 16,000 acres (on the lake and in the Mojave Desert at the town of Trona) where they have estimated an extractable potential of 50 million tons of trona and other carbonate salts.

Habitation

Inyo County is the size of Connecticut, yet has a population of around 18,000; various legislative acts limit growth and development to 'protect' the watershed for Los

¹⁴ William Cronon reminds us that the rural and the urban are intimately intertwined to the point where they can't be separated.

¹⁵ 'Landscape urbanism' is interchangeable with 'infrastructural urbanism' as they both premise to general emergent urban condition.

¹⁶ Per conversations held with Mike Prather of the Owens Valley Committee on 1/4/2005 and Paul Lamos of U.S. Borax on 1/6/2005 in Lone Pine.

¹⁷ Agrarian Inc., of Bishop owns the experimental wetlands and designed the duck club.

Angeles.¹⁸ As a result of purchasing the water rights from the Owens Valley ranchers, the Los Angeles Department of Water and Power is now the 3rd largest landholder in the California and is very protective of its land. Because of the DWP's control, Inyo County has one of the lowest population densities in California. Growth is bureaucratically limited, and the unavailability of buildable land prevents most private development. With most of the water being exported from the Owens Valley down to the thirsty millions in Los Angeles, there is paradoxically not enough water available for the citizens and farms that were once blessed by the bounteous waters of the Owens River and Eastern Sierra watershed.

Recreation space

Owens Valley has become a tourist destination, since there are few other economic opportunities and there is a great scenic beauty to the place. With Owens Lake straddling the crossroads between Death Valley/Yosemite National Parks, and the Los Angeles/Mammoth Mountain Ski area, the Playa is within a day's drive of 52 million people and circumnavigated by 7 million travelers each year.¹⁹ These travelers are composed of several idiosyncratic and nomadic groups that might be diverted to engage the lake region in several distinct ways. The common thread between these visitors is that they are seeking a place of inspiration and challenge as a respite from urban life; the rural geographic extremes of the Owens Valley serve this vital societal role for both regional and global tourists.

The widest ranging visitors are the foreign tourists (mostly German, Japanese, French and Canadian), who are seeing the sights of America, with Death Valley and Yosemite Park as part of their itinerary. American families and individuals also seek the sights of the American West and travel along side our international visitors. These visitors travel in tour groups on buses, recreation vehicles and automobiles. Rarely do they spend more than a few hours in one place since they are attempting to see as much as possible, not get to know one place.

The other visitors to the Owens Valley are drawn by outdoors recreational pursuits that are best experienced in sparsely settled areas. These people are looking to explore the frontier as part of the American experience. Fishermen are drawn to the amply stocked lakes and streams of the region and served by the infrastructure of the Mount Whitney Fish Hatchery.²⁰ Mountaineers, hikers and backpackers seek the challenge of the highest peaks in the contiguous 48 states and the solitude of the backcountry. Naturalists and the curious visit the unique Bristle Cone Pine forest in the Inyo-White Mountains to be humbled by their age. Skiers pass zoom up to Mammoth Mountain in the wintertime in search of the challenging slopes and pristine powder laid down by the frequent storms. In the spring and fall, Sailplanes and hang-gliders utilize the ample and predictable updrafts and aerial mountain waves produced by the rugged terrain.

¹⁸ Mostly to limit local dissent and demand for water. See (Hundley, 2001, pp141-166) for a chronicle of the politics and efforts.

¹⁹ I have seen an unsubstantiated number of 7 million travelers utilizing route 395 each year. The CALTRANS studies of the region don't clarify the total number of traveler passing through the region.

²⁰ This fish stocking and the artificial fluctuation of water levels has pushed many of the indigenous species towards extinction.

Bird watching is the most passive activity pursued in the Owens Valley. Birding is commonly a group experience on Owens Lake, with large tour groups gaining access to travel out onto the playa. These birdwatchers flock to the migratory feeding grounds of the wetlands along Owens River and in the wetlands of Owens Lake (both the natural and manufactured kinds), along with watching the soaring raptors on the Valley's updrafts year-round. The inverse of the passive observers are (mostly) local hunters, drawn to the waters edge by the large population of waterfowl. They solitarily stalk ducks in makeshift blinds in the riparian edges of the wetlands and estuary.

Of all these recreation-seeking demographics, only those people seeking birds to watch or to shoot are drawn specifically to the lake. Once, off-road vehicle riders used the dunes and mudflats for so high-octane riding. Throughout the construction process, the DWP has enforced a ban on all unauthorized vehicles from the lake to reduce their liability. It remains to be determined what level of access will be allowed to all users once construction is completed.

Infrastructural Ruralism

Infrastructural urbanism as explored by Stan Allen²¹, offers a glimpse into contemporary redefinition of metropolitan and suburban generation. Inverting and expanding this idea into an infrastructural ruralism is a test of the efficacy of this concept and a probe of the underlying issues of infrastructure. Rural landscapes are most easily defined by having visible anthropogenic marks of human habitation and exploitation. The augmentation of the rural land in America is typically done with an economic agenda, whether it is mining, farming, industrial, or exurban subdivision. There are few projects and places that have intentionally intensifying their rural qualities unlike the many urban revitalization projects that seek to become more 'urban'. In most metropolitan areas, there is an effort to implement urban strategies that celebrate and amplify the density, diversity, activity, and culture. If human traces are what separates the rural from wilderness, then at what density of activities transform a place into urban?

Infrastructure is the most visible and persistent network that divide wilderness from the rural. We live in an environment saturated by such visible and hidden systems. The infrastructure of everyday life is a benign presence until it breaks. We rarely challenge the tradeoffs we make for every benefit gained: the environmental, economic, and social repercussions of modern conveniences. Cities could not exist without the prosthetics of highways, electric grids, communication satellites, landfills, oil pipelines, and more. In the countryside, the availability of communication has shifted the economic reach from the local to the global. This ability to communicate has removed respite of cultural isolation of most corners of the world.

As one of the oldest augmentations to our cities and towns, plumbing is one of the simplest to comprehend; yet, its origins in the irrigation ditches of the Indus Valley and elsewhere overshadow the modern sophistication and scale of the typical municipal water supply. Water is one of the essential ingredients for terrestrial life. Only with water, can we grow our food, sail around the planet and synthesis the chemicals that modern industry relies on. The simple desire of turning on a faucet or opening a bottle of spring

²¹ Allen, 1999, pp 48-57

water has the moral implications of diverting water from one ecosystem or depleting a finite fossil source to serve the human will. In the industrial age and in the parched American West, the ecological value of free flowing was ignored.

In southern California, even the 'urban wilderness' of the local mountains would properly called rural by the ubiquitous artifacts of the fire roads, hydrants, power lines, and gateways always within view. But there are few pristine wildernesses left anymore- where can you find an ecosystem that has escaped the ravages of acid rain, clear cutting, prospecting, or abandoned homesteads?

Most public infrastructure is created with a singular purpose; a highway is rarely combined with new parkland, sewers with mass transit, or the electrical grid with public housing. The social context and benefits of infrastructure are multiplied beyond the narrowly engineered realm of bureaucracy. Swimming pools illustrates a few of the interconnections as they are connected to the infrastructure of drinking water, fire prevention, public health, parks and recreation, the ideals of childhood summertime, along with many other parts of culture. In the shift from the industrial economy, there is an emerging trend for reuse and adaptation of infrastructure and sites as they become obsolete, from entire airports abandoned after the cold war, to individual factory buildings being converted into apartments. This reprogramming needs not be limited to underutilized resources. There have been several attempts at the emergence of a new architecture based on multiplicities of use.

Most Americans today, experience the hinterlands and spaces between our cities from the infrastructure enabled air-conditioned comfort of driving of the interstate highway. Travelers have limited contact with the local residents. Only at the interchangeable rest stops, gas stations and fast-food restaurants is there a chance to interact with local citizens; yet the diffuse presence of the American corporate ideal mitigates all most local affect. The local is relegated to the quaint past and the presence is regulated by the national franchises. Technocrats and highway engineers clone bridge after bridge across a state. The road emerges as less as an expression of place, but as the economic engine, that champions the efficiency of reproduction. As the highway enters the metropolitan fringes, the expansive sweep of the countryside and the verdant pleasures of the forest are channeled into the concrete barricade and sound walls that isolate the inhabitants of the dormitory subdivisions from the voyagers and commuters. The road is such an alienating experience that it must be hidden from sight, and excised from the private realm.²²

The visible expression of infrastructure is integral to the experience of small towns. The water tower, grain elevator or smoke stack are visual indicators of habitation from afar, of the human presence that most of us cherish. The farmhouse with its aggregation of barns, silos, paddocks, and rusting combines is a concentration of forces of production and extraction - and tied into a global distribution network and commodities market- ultimately supporting the urban inhabitant. While on the strip malls of Main Street the vernacular blocks of stores and showrooms, the connections to the commodities markets, the loading dock, is often hidden around back. The omnipresent sign and billboard become a semiotic infrastructure that never seems to coalesce into a recognizable place distinct from the clones of the national brand. The infrastructure of

²² There are a few rare cities where the highway experience is part of the local identity and public experience; the best example is Los Angeles as the zenith of the car culture.

Main Street is often an afterthought of tangled transmission lines, painted stripes on the road, and the continual construction required to accommodate the boom times. Does the presence of Main Street represent the triumph of infrastructure or just the expression of the dream of commerce? Once escaped from the exurban interface, what is the heart of the rural region? Is it open space, the few inhabitants, or the visitor from the city appreciating the openness around them?

Where settlement is sparse and dispersed across the region for agricultural, mineral extraction, industrial purposes, and undeveloped areas; the small clusters of amenities that occur in the towns have a greater significance than similar resources have in urban areas. The geographic distribution of towns reflects the fertility of the land and the range of travel possible in a convenient time. As both speed of travel increases and populations dwindle due to the increased mechanization of rural places, the spacing of towns can increase. Where urban infrastructuralism is striving to establish systems for greater density and complexity of the urban fabric, rural infrastructuralism needs to address decreasing density and the simplification of the territory.

The present conditions in the Owens valley today are directly tied to emergence and suppression of critical infrastructure. The presence of the Los Angeles Aqueduct has preserved (or even reverted) the openness of the valley. The lack of a year-round east-west road across the Sierra Nevada Mountains between Bakersfield and Lake Tahoe leaves a 150 miles gap that has limited the economic pressures and development potential for Inyo County. This poses a question for Infrastructural Ruralism - is it the existence of infrastructure or the lack of infrastructure that holds the greatest potential to generate rural conditions. The answer seems to be somewhere in the middle where a thin and non-rugged infrastructure sustains rural economic productivity, but not urban development. Water is key to the development of a large population- so the natural or artificial scarcity is one attribute that can preserve a rural or wilderness condition. Transportation is the second variable. The cities of the American manifest destiny era either were developed adjacent to major transportation networks (rivers, harbors, canals, railroads, roads) or resources such as minerals (mining created funds to import the life sustaining water and sundries). With the shift into an idea-based economy and the utopian movements of the 1960's, the trend back to the land has expanded the locations of urban economic activities into the far hinterlands, but only to sites that had sufficient water resources to sustain a population.

Los Angeles River

The aqueduct is the *Über* river of Los Angeles - expanding the watershed and hinterlands 250 miles north to the eastern Sierra Nevada Mountains and Mono Lake. As part of the political maneuvering to finance the original construction, the city of LA expanded its borders by annexing the San Fernando Valley and claimed most of the unincorporated areas left in the basin. While the efforts to tame the flood prone Los Angeles River have resulted in a concrete lined ditch through densely populated neighborhoods - the equally concrete Aqueduct runs through the minimally settled Mojave Desert.

The transplant of water from the Owens Valley to 'The Valley' has spawned a loaded and derogatory cultural presence in the context of urbanization; sprawl, vapid gum snapping big-haired shop-a-holics, and a lack of identity are the stereotypes of the modern San Fernando Valley. Owens Valley stakes its continued survival on the tourists visiting the Arcadian grandeur of Yosemite, the dialectic of the capitalistic American dream - that of spacious skies and purple mountains.

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