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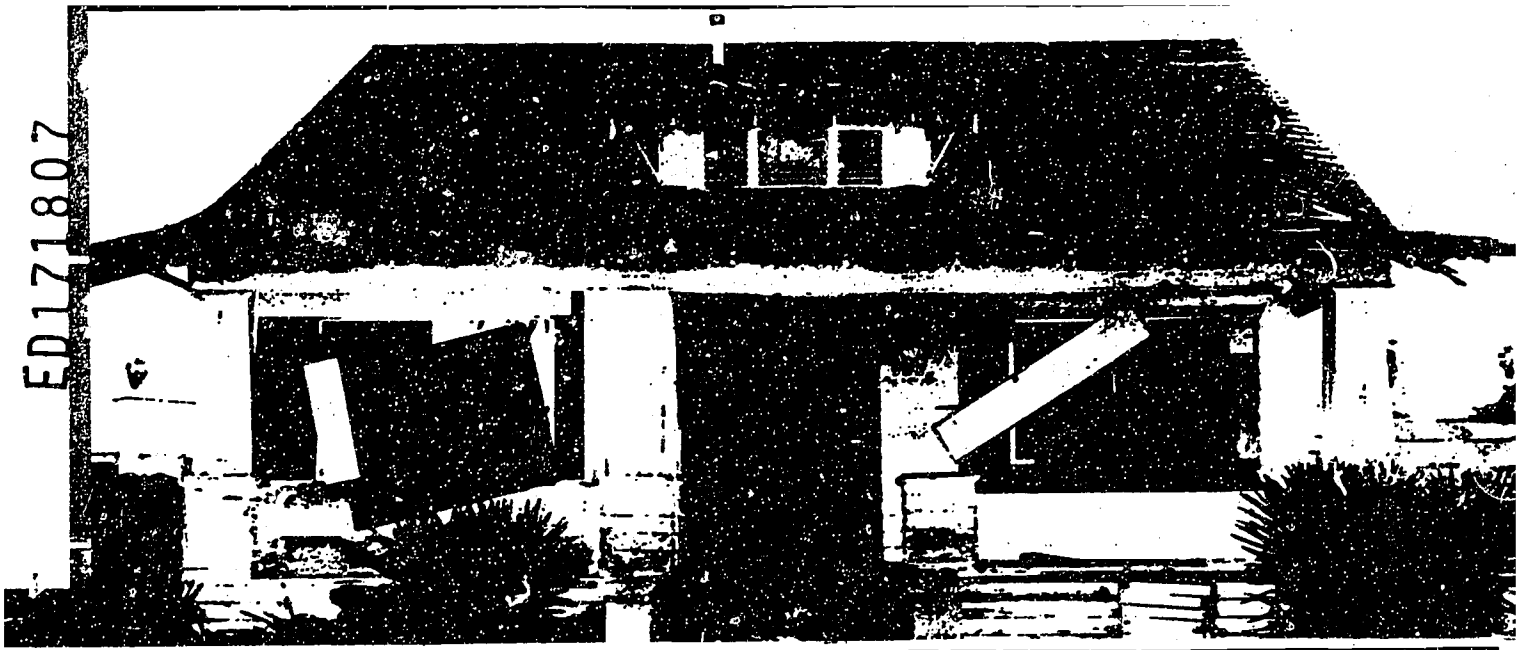
ABSTRACT

This notebook serves as a guide for learning activities in environmental education. Twelve themes are treated in four groups: (1) sense of place includes history and landscape; (2) the natural environment covers air, water, energy, and landforms; (3) the built environment includes architecture, transportation, and housing; and (4) the social environment covers population, politics, and planning. Each unit contains a theme sheet and a topic outline. Many units also contain worksheets and activity guidelines. (MC)

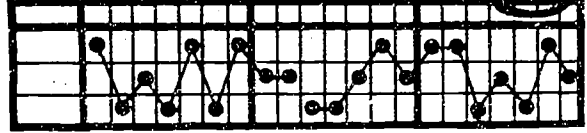
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Scoring Los Angeles Landscapes



ENVIRONMENTAL EDUCATION IN AN URBAN SETTING

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

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UCLA Urban Environmental Education Project

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ENVIRONMENTAL EDUCATION IN AN URBAN SETTING.

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David Alpaugh
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Edited and designed by David Alpaugh

Materials produced for the UCLA Urban Environmental Education Institute, a component of the UCLA Urban Environmental Education Project.

Summer 1978

This book is the result of the efforts of many people. The work was supervised by Project Coordinator Lucy Blackmar, who provided hours of conceptual direction and critical review. Important contributions to the writing and production of these units were made by Henry Custis, David J. Healy, Peter Merlone, Ula Pendleton, and Cathy Riggs. Margo King typed the final copy, and Randall Higa provided the cover photograph. Thanks are due all of these people for their assistance and support.

The UCLA Environmental Education Project is supported by grants from the National Endowment for the Humanities and the California Department of Education. The project is co-sponsored by the UCLA Office of Experimental Educational Programs (OEEP) and the Department of Geography. The principal investigators are Prof. Christopher L. Salter (Geography), Dean Jane S. Permaul (OEEP), and Prof. Harry Silberman (Education). The project administrator in OEEP is Dr. Mark R. Lipschutz.

Daily Format

Monday, Tuesday, and Wednesday	8:30 - 10:00	Lecture
	10:00 - 10:30	Break
	10:30 - 11:00	Group Discussion
	11:00 - 12:00	Workshop
Tuesday Afternoons	1:00 - 2:30	Guest Lecture Series
Wednesday Afternoons	1:00 - 3:00	Open Classroom (Optional)
Thursday	8:30 - 4:00	All Day Field Trips

WEEK ONE: STUDY OF A SENSE OF PLACE

Monday June 26 Lecture: Introduction to the Institute and Orientation to Landscapes of Los Angeles

Workshop: Orientation to workshop format and activity approach to environmental education.

Tuesday June 27 Lecture: Origins of the Los Angeles Landscape

Workshop: Techniques for historical/environmental inquiry

Afternoon Guest Lecture: Stanley Wolpert
"The Meaning of the City"

Wednesday June 28 Lecture: Modern Los Angeles

Workshop: Scoring the Los Angeles CBD

Thursday June 29 Field Trip: Downtown Los Angeles

WEEK TWO: THE NATURAL ENVIRONMENT OF LOS ANGELES

Monday July 3 Lecture: Supplying Los Angeles with water and energy

Workshop: Making children aware of limits in our water and energy supply

Tuesday July 4 INDEPENDENCE DAY - NO CLASS

Wednesday July 5 Lecture: David J. Healy: Dynamics of air quality in Los Angeles

Workshop: Experiments for children in measuring air quality

Thursday July 6 Field Trip: Community field day

WEEK FIVE: EXPERIENCING COMMUNITY

- Monday 8:30 - 10:00 Final exam on content phase of Institute
July 24
Workshop: Model units for introducing environmental education into the elementary school curriculum
- Tuesday Lecture: Dean Jane S. Permaul: Motivation in experiential education
July 25
Workshop: Techniques for aiding experiential learning
Afternoon Guest Lecture: Peg Curran-Gardels
"Solarcal: Breakthrough in Solar Energy Legislation"
- Wednesday Lecture: Roderick Sykes: St. Elmo Village
July 26
Lecture: Appreciating community--themes and dimensions
- Thursday Field exercise and reporting
July 27

WEEK SIX: ENVIRONMENTAL COMMUNICATION WORKSHOP

- Monday Curriculum convention: sharing resources
July 31
- Tuesday Media workshop
August 1 Open classroom
- Wednesday Scoring workshop
August 2 Open classroom
- Thursday Administrators Day
August 3 Panel of principals: "The Role of the Principal in Curriculum Innovation"
(Coordinated by Dr. Rosemarye Phillips)
- Noon: Picnic potluck in the Sculpture Garden
- CONCLUSION OF THE INSTITUTE

When the blackbird flew out of sight,
 It marked the edge
 Of one of many circles.

Wallace Stevens

Cities are so complex and dynamic that we often do not see the exciting ideas that are recorded in their landscape, nor are we able to name some patterns we see but do not comprehend. This Institute, and the year-long environmental education project that follows, is designed to help us open our eyes, become attuned to our daily experiences in the city, and appreciate the interaction of our personal values with the landscape. We will be concerned with the issues and principles of urban ecology to alert us to the things we may expect to experience in the landscape. We will develop an investigative language to take with us into the field to structure our observations and to promote their communication. And we will seek ways to act on our environment that allow us to see even more acutely the aggregate effects of our personal and collective decisions.

Our first goal, then, is to educate ourselves to the realities and possibilities of the urban environment. A second and equally important goal is to bring our understanding of the dynamics of environmental change to the local level. We will focus intensively on the community context in which each of our participating elementary schools sits, in order to see how those communities comprise the fabric of greater Los Angeles and in order to determine ways in which the local landscape can serve as a learning tool for the educational needs of our elementary school age population. Incorporating environmental experience into the elementary school curriculum is a central goal of this project. Participating teachers will develop detailed lesson plans for their own use during the coming academic year, and participating UCLA undergraduates will devise mini-courses for delivery in the elementary school classroom in the Winter Quarter, 1979.

The mini-courses are required of the UCLA undergraduates because the preparation and presentation of a teaching unit for young children will intensify the educational as well as the environmental experience of the UCLA students. Such mini-courses will also assist the elementary school teachers in their efforts to introduce environmental education into their schools' curricula. The mini-courses are to be designed around topics of the undergraduate students' personal interest, but in conjunction with the curriculum needs of the host teacher at the chosen school. The undergraduates will be teamed with teachers at the outset of the Institute and common interests and programmatic needs can be articulated during the ensuing weeks. We believe there is enough latitude within the definitions of environmental problems to allow each school and each student adequate academic flexibility to create a program which is both satisfying and productive.

The Summer Institute is offered to serve in some respects as a model for the kinds of programs the teacher-student teams will bring to the schools in the fall and winter of next year. It is structured in such a way as to complement academic demands (such as lectures, discussions, and readings) with field exposure (class trips and team trips) and hands-on workshop settings to reflect and act on what we have learned. If, for example, we consider for a morning the historical evolution of the inner-city residential environment, we will also create the opportunity to explore such a place on foot and then work on ways to fit such exploration into the elementary curriculum. It is intended that each academic theme have some personal, field component during the summer.

This notebook can serve as a guide for these varied learning activities. Each unit parallels a lecture topic to be offered at some time during the first four weeks of the Institute. A unit contains a theme sheet and a topic outline. You might read these before the scheduled lecture to orient yourself briefly to the morning's subject area, or you might read them afterward as a way to jog your memory or to find a substantive basis for curriculum design work of your own. Many of the units also contain worksheets and activity guidelines to help organize our own inquiry into the structure of the urban landscape and to help us question its meaning. Some of these activities may be taken directly into the elementary school classroom, and the rest of them can be adapted to serve children's as well as our own learning needs. Finally, the concept of projects dealing with the environment of the local community is critical as a way to bring environmental education concepts together in packages that make sense in the local community. We hope that these projects during the spring of next year will involve not only the elementary school students but perhaps their parents or people from the school neighborhood. Community projects should communicate through words, images and actions the fact that environmental change is the product of countless-but never mindless-individual design and consumption decisions.

Finally, we feel the need to explain the word scoring. The focus of this program is Los Angeles, and we are proceeding on the premise that environmental literacy is best rooted in a strong sense of place. At least part of the act of acquiring such a sense is developing the ability to see cultural forces at work in the landscape and to assess the importance of the phenomena observed. We have chosen to borrow the term score from the work of landscape architect Lawrence Halprin because it so richly evokes the various operations we perform on our setting in order to make sense of it: organizing, recording, accounting, reckoning, orchestrating, tallying, and arranging its elements to, in essence, evaluate its impact on our lives. As we explore Los Angeles over the course of this Institute we will establish our own scores for assessing the city's vitality. Through such efforts we will appreciate the complex systems that underlie the urban landscape and will sharpen our communication skills for passing on our new awareness to our children.

Sum

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Social

Population			
Politics			
Planning			

Built

Architecture			
Transportation			
Housing			

Natural

Air			
Water			
Landforms			

Activity

Evidence

Evaluation

Interviews and Surveys. Talk to as many people in the community as possible in an informal, almost random manner. Ask them what they do in the community, why they live here, and what they like and dislike about their particular neighborhood.

Think of people in particular roles who might have a special point of view and seek them out (e.g. the school principal, a postman, an elected official, an employee of a local industrial firm, a newcomer, a child...).

Think of a particular topic or issue you want to know more about and design a questionnaire or survey to try out among a number of people in the community.

Maps and Sketches. Carry a street map with you on all your field trips. Refer to it frequently and mark on it freely to record environmental features, observations, and other notes. (You may want to use the code suggested in Kevin Lynch's Image of the City, or to design other symbols of your own.) Later, you can transfer information to large scale maps and design other mapping exercises to bring to attention particular features like the distribution of gas stations, routes of railroad tracks, major landforms, density patterns, etc.

Cognitive mapping gives people a chance to construct graphically an image of a place from memory, (see The Visual Environment of Los Angeles for examples). This requires only a blank sheet of paper and a pencil, and it is interesting to compare the cognitive maps of several persons within a group.

Sketches are another way of recording observations of a place and can be useful in noting details and idiosyncratic situations.

Photography. Photographs are a good way of taking visual notes on environmental cues in a community. You can make a conscious effort to record examples of natural, man-made, or social features in the environment or you can simply photograph things that come to your attention or strike your fancy. It is interesting to gather pictures over time, on different days. You can use your photographs (or other media, like video or sound recordings) to put together slide shows, displays, exhibits, or photo essays to communicate the visual sense of a community, or to document an environmental problem.

Historical Inquiry. Often there are cues in the present which suggest what a place was like in the past. Some of these are noted on the activity sheet Seeing the Urban Past. Others will occur to you as you become more familiar with your community setting. Old newspapers, photographs, memories of old-timers, and public documents can answer questions about the past and tell about changes that have occurred.

Notes and Journals. Notes of your field experiences are important to retaining the many kinds of information you will be gathering. They should be made during the trip or as soon after as possible as the memory fades fast. Write about your first trip in as much detail as you can, giving little attention to style or structure. Then review your notes and underline or summarize your major observations, questions, and feelings. Record subsequent trips and begin to develop a format that you are comfortable with. As time goes on and you develop strong interests, you will want to give some issues more attention than others. Periodically report on what you think you are finding out to other team members.

Annotated Bibliography

The following three books are required texts for the Institute

- Banham, Rayner: Los Angeles: The Architecture of the Four Ecologies (New York: Harper & Row, 1971). This exciting book by a British architectural historian is a well-illustrated explanation of the special landscapes of Los Angeles. The four ecologies which Banham focuses his work on are entitled Surfurbia, Foothills, the Plains of Id, and Autopia. Within these clevernesses, a good understanding of what cultural and environmental forces have created the city emerges.
- Clay, Grady: Close-Up, How to Read the American City (London: Pall Mall Press, 1973). "Reading" the city is exactly what this book is about, and Clay provides us with the vocabulary and structure of a visual and conceptual language for observing the urban scene. The author's exposition is clear, the language he proposes is useful and appropriate, and the book is loaded with examples and illustrations. It is a language that we can apply equally well to unfamiliar settings as to our own block.
- George, Carl J., and Daniel McKinley: Urban Ecology: In Search of an Asphalt Rose (New York: McGraw-Hill Book Company, 1974). This book covers a whole series of themes in urban landscapes and resources. It is made up of clearly written, almost casual chapters on the genesis of the city and its particular problems today. One of the unusual aspects of the book is the authors' interest in and belief in environmental education. They see many of the problems of the city being at least partially solved by culture change through education and not just the addition of still more expensive technology. There is also a useful bibliography in the back of the book.
- The rest of these books are highly recommended as good sources for general information on environmental themes in Los Angeles:
- Lynch, Kevin: The Image of the City (Cambridge: MIT Press, 1960). This early work on the "legibility" of the city as perceived by its inhabitants is very significant. Lynch, working with only very small samples from Boston, Los Angeles, and Newark, New Jersey, creates a vocabulary and a loose methodology for the analysis of the visual and, to a lesser degree, functional sense of city space.
- Nelson, Howard J. and W. A. V. Clark: Los Angeles: The Metropolitan Experience (Cambridge: Ballinger Publishing Co., 1976). This volume is one of eleven separate urban studies on American cities done by professional geographers. The volume done on Los Angeles is rich in maps and has particularly interesting sections on the physical setting and natural hazards, and the changing impact of minorities in addition to considerable information on movement and economic structure in Los Angeles. It is an excellent foundation volume for the study of this city.

Jones, Ronald W.: Your City has been Kidnapped (Addison-Wesley Publishing Co.). This workbook volume conveys a good sense of the varied ways in which one can come in touch with his or her city. The activities which are outlined all lead to a better sensing of the environment in urban space, but they also intensify a relationship with the city. The book is an excellent example of how to show a person the way to break down the formal, distant reaction to streets, smells, sounds, and happenings of a city.

Department of City Planning: The Visual Environment of Los Angeles (1971). This volume outlines the goals of the Department of City Planning for the 1970s and beyond. Good maps and photographs are accompanied with tentative plans and rationale for patterned development of Los Angeles. The social concerns of the planners are refreshing to see.

Nairn, Ian: The American Landscape (New York: Random House, 1965). Here is an irritating and excellent book on the ways in which the American landscape has been designed and misdesigned. It is written in a polemic, personal perspective and causes one to react to both the book, its pictures and the city space in which the reader lives. It is more specific than abstract and it is quite provocative.

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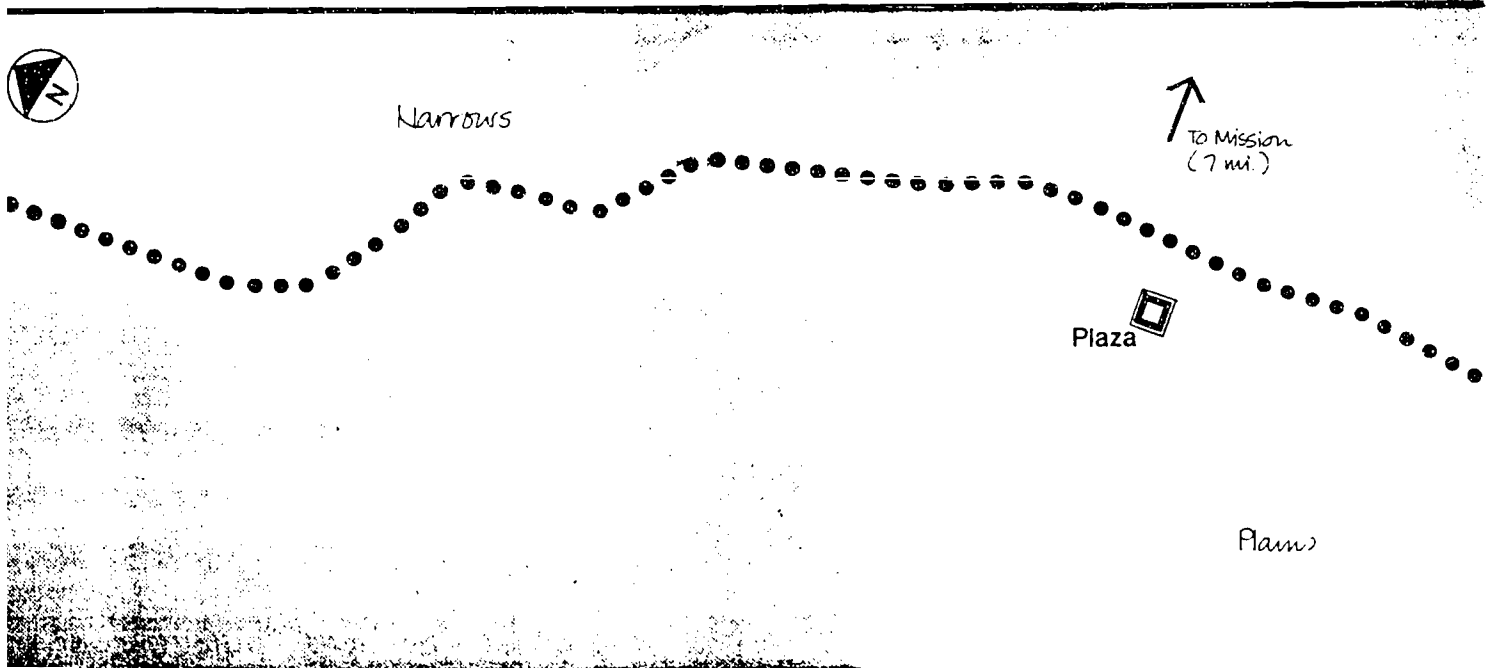
History.

ORIGINS OF THE LOS ANGELES LANDSCAPE

The development of cities was not a "natural" process, but was in fact an invention of man. The urban idea arose perhaps 10,000 to 15,000 years ago when itinerant growers, gatherers, and hunters formed groups that with time grew large enough to support specialized functions and activities, freeing a small number of people from agricultural labor as the source of their support. Some city leaders were supported by tithes from farmers in exchange for ritual sacrifices. Some places became manufacturing centers for tools, weapons, or ceremonial luxuries leading to an exchange economy. Factors of military and strategic locational advantage led to common protection arrangements. The elaboration of irrigation networks for improved farming required a superstructure of administrators, as well as engineers. Each of these phenomena has been proposed as the roots of urban development. Essentially, they all lead to the same conclusion: from division of labor emerged new patterns of social and spatial organization. These were the origins of urban space.

We can see some of the same principles at work in the origins and formal development of Los Angeles. The earliest population of Southern California were hunter-gatherers who had no sizable settlements by the time the Spanish first arrived with their missions. The pueblo of Los Angeles was founded as an agricultural community near enough to the San Gabriel Mission to help provide it with food and defense, but distant enough to shelter the newly Christian mission Indians from the secular influences of the European settlers.

The specific siting of Los Angeles reflected the requirements of a frontier farming community, and so water and the potential for irrigation played a major role in site selection. Locating along the Los Angeles River assured access to a relatively large and dependable stream, unlike most others in the region. The plains below the Glendale Narrows, where the constriction of the channel brought much ground water up to the surface, provided level, irrigable land for growing. Finally, the settlement was placed high enough on a terrace above the river to reduce the exposure to winter floods. Thus, agriculture was the basis for the pueblo's location.



ORIGINS OF THE LOS ANGELES LANDSCAPE

The initial settlement focused on a compact village centered around the church and the plaza, a typical Spanish colonial pattern. Later, ranchos (large land holdings) developed in the countryside around the town, though these also focused on the town as a center of culture and commerce. As the city entered its more distinctly American period in the early nineteenth century, it was the largest city in California, although remote from American culture and unpromising in its resource base. Easily eclipsed by San Francisco during most of the last century, the major breakthrough that changed Los Angeles' status was the introduction of the transcontinental railroads during the 70s and 80s. This prompted a real estate boom which brought about a surge of population and interest in the region. Developments in the production and especially the marketing of the irrigated sub-tropical crops of Southern California, as well as growing interest in the climate as an amenity, propelled the area's growth by the turn of the century.

The early industrial development of Los Angeles focused on the petroleum industry, motion picture industry, and aircraft industry, with a continuing strength in the agricultural support industries. Major engineering projects such as the construction of the Panama Canal (1903), the development of Los Angeles Harbor (1900), and the Los Angeles Aqueduct (1913) contributed largely to the industrial base of the city. Together with this growing industry, the increased complexity of business and its need for large supportive office services, and the rise of mass purchasing power and its unprecedented demand for retail goods, the center of the city became dominant. Access of workers and consumers to the center was assured by development of mass transportation, although the primitive horse and wagon and the lack of effective mass communication hampered the movement of goods and information. The net result was the aggregation of all this expanded business activity into a concentrated district focusing on the point of maximum accessibility. Downtown became the heart of the city, the sole important location of employment, wealth opportunities, services and retailing, wholesaling, and a host of other civic and cultural activities. This central focus of Los Angeles was accompanied by high land values, intense land use through tall buildings and elimination of open space, and land use specialization that permitted the district to function efficiently.

The business district possessed at least four general subdivisions--wholesale/industrial; retail; financial; and administrative. These competed with each other and with surrounding land uses for necessary space. Over time, as the district became larger and as older portions of the business district were replaced by newer structures and activities, horizontal expansion took place. This expansion sought areas of lower land values which still allowed the district to retain its advantages of accessibility and functional integrity. Other factors favoring decentralization include the fact that Los Angeles, a good 50 to 75 years behind the intense urban growth of New York or San Francisco, for example, avoided much of the high density housing so common among large cities that developed earlier in the industrial era. The location of the harbor away from downtown and the unique land use requirements of the petroleum, motion picture, and aircraft industries, all accentuated decentralization, as did the popularity of single-family residences and, later, automobile transportation among migrants to the city.

The dominant minorities of Los Angeles--Mexican, Jewish, Black, and Japanese--give the city a distinctive character compared with other large American cities, where a greater variety and numerical dominance was usually associated with European immigrants. Many neighborhoods have seen their original minority populations move

on in response to the same decentralizing forces that influence business. In some instances, one population leaves to be replaced by another (the Jews have left Boyle Heights for the Fairfax area and were replaced by Mexicans). In other instances, populations expanded from their original locations into adjacent areas (black people settled near downtown, moved down along the Central Avenue corridor, and eventually spread across much of South Central Los Angeles). Los Angeles remains a typically American city in its ethnic diversity, and the competitive forces underlying the location of the four major and numerous minor ethnic populations have, to a great extent, shaped the residential environment of the inner city.

Annotated Bibliography

- Cleland, Robert: The Cattle on a Thousand Hills (San Marino, CA: Huntington Library, 2nd ed., 1951). This is the authoritative social and economic history for the period of transition from Mexican to American influence in Southern California. Although landscape is not emphasized, the events and processes outlined and analyzed here are vital to any full understanding of the events which set the stage for the onset of rapid urbanization after the 1880s in Southern California.
- Dumke, Glenn: The Boom of the Eighties Come to Southern California (San Marino, CA: Huntington Library, 1944). This book provides an authoritative historical analysis of the events surrounding the first great land boom in Southern California during the 1880s. During this time, the railroads first brought Los Angeles into effective, efficient contact with the rest of the country, ending its isolation, and setting the stage for the full impact of industrial technology and modern society in the region. Much of the character of the region was established during this time, including the multi-centered, sprawling nature of the landscape, rapid population growth, and a strong identification with real estate speculation and promotion.
- Fogelson, Robert: The Fragmented Metropolis: Los Angeles, 1850-1930 (Cambridge, Mass.: Harvard University Press, 1967). This is one of the most authoritative studies of Los Angeles' emergence as a major metropolis. Considerable attention is focused on the broad structure of the landscape, as the urban area took on a multi-centered and sprawling organization. He provides an interpretation of specific landscape institutions, such as the failure of mass transit and the popularity of the single-family residence. The landscape focus is especially evident in chapter seven, which is entitled: "The Urban Landscape."
- Hill, Lawrence: La Reina: Los Angeles in Three Centuries (Los Angeles: Security Trust and Savings Bank, 1931). Like the Robinson volume reviewed below, this is also a picture history. There is more emphasis on portraits here, less on landscape, and the overall quality of the reproductions is not nearly as good as with Robinson's volume. However, it does contain many landscape illustrations not found in the other work, and it is particularly valuable for the early American period.

ORIGINS OF THE LOS ANGELES LANDSCAPE

McWilliams, Cary: Southern California: An Island on the Land (New York: Sloan and Pearce, 1946). This is an indispensable volume on the nature of Los Angeles as a major metropolis. It is an unconventional history, written by a journalist with a high sensitivity for cultural variation, minority viewpoints, and the human experience of the city. Landscape is woven throughout the book, though his overriding concern is with people in the city, even in the chapter explicitly entitled "The Cultural Landscape." Although many of his interpretations might not stand the test of strict historical scholarship, this should not be viewed as a weakness. His arguments and analyses are provocative and, in their own way, an accurate reflection of his personal experiences and beliefs arising out of direct, every-day involvement with Los Angeles during the 1920s, and 1930s and early 1940s.

Nelson, Howard J., et al.: "Remnants of the Ranchos in the Urban Pattern of the Los Angeles Area," in Howard Nelson, ed., The Los Angeles Metropolis, 2nd ed., 1974, pp. 148-155. Most of the area of urban Los Angeles today falls outside the borders of the original pueblo. The early history and evolution of these landscapes is traced to events surrounding the sprawling Spanish and Mexican ranchos. This article documents the lasting impact of the ranchos on the urban landscape, including the generally retarded growth of the rancho headquarters, the impact of rancho boundaries on later street alignment and community boundaries, and the contribution of the ranchos to contemporary place names.

Robinson, William W.: Panorama: A Picture History of Southern California (Los Angeles: Title Insurance and Trust Company, 1953). This book combines the visual impact of high-quality reproductions of old photographs and illustrations, with the commentary of one of the region's outstanding historians, to create an outstanding commentary on the evolution of the Los Angeles and overall Southern California environment. This book is particularly strong in creating a sense of historic landscape evolution from Spanish-Mexican times down to about the 1920s. Emphasis of the entire volume is on the physical structures involved in the settlement and urbanization of the landscape.

Weaver, John D.: L.A., El Pueblo Grande (Pasadena, Ward Ritchie Press, 1973). Here is a delightful anecdotal history of Los Angeles that defines the main course of the city's development from the earliest explorations of the area to the present by providing an avalanche of marginalia. While not a landscape history per se, Weaver's deep identification of events with their locale gives the reader an awareness of how the city looked at various points in its history. His habit of playing with time and juxtaposing events of different eras against the same physical setting makes us feel the ghosts of the past stalking our present-day activities. The relatively few photographs are well chosen and graphically illustrate the change of the city from small pueblo to its contemporary form.

Nishi, Midori, and Kim, Young Il: "Recent Japanese Settlement Changes in the Los Angeles Area," Yearbook of the Association of Pacific Coast Geographers, v. 26, 1964, pp. 23-36 (excerpted in Nelson: The Los Angeles Metropolis, pp. 237-241). Los Angeles is home to the largest Japanese-American population in the country. Despite the relocations during World War II, the Japanese-American community is thriving in Los Angeles, widely dispersed and integrated into the social and residential fabric of the community, yet maintaining its independent identity. Little Tokyo serves as a cultural, tourist, and business center for the region's Japanese visitors and Japanese-American residents.

ORIGINS OF THE LOS ANGELES LANDSCAPE

- Verspan, Max, and Gartner, Lloyd P.: History of the Jews of Los Angeles (San Marino, CA: The Huntington Library, 1970). This volume devotes considerable attention to the contribution made by Jews to the evolution of Los Angeles as a distinctive city over the decades since 1850, and to the experience of being Jewish in a city like Los Angeles. There is relatively little emphasis of either the landscape or the present day situation, although the brief, closing two chapters do provide important insights into the contemporary geographic dispersion of this large Los Angeles minority population.
- Camarillo, Alberto M.: "Chicano Urban History: A Study of Compton's Barrio, 1936-1970," Aztlan, v. 2, 1971, pp. 79-106. This study deals with the evolution and internal social and economic characteristics of one of the smaller, outlying barrios of the Los Angeles area. Essentially, it involves the application of sociological methods and concepts to the understanding of a unique urban place.
- DeGraaf, Lawrence: "The City of Black Angels: Emergence of the Los Angeles Ghetto, 1890-1930," Pacific Historical Review, v. 39, 1970, pp. 323-352. This is a recent, authoritative study of the important black ghetto during the period of time when its location and environmental characteristics were first taking shape in the Los Angeles landscape.
- Botein, Stephen, Warren Leon, et al. (eds.): Experiments in History Teaching (Cambridge: Harvard-Danforth Center for Teaching and Learning, 1977). Most of the pieces included in this collection are from New England and the East, but the examples they report are rich in ideas easily importable to Los Angeles. The sections on "Landscape History" (p. 12) and "Material Culture" (p. 17) present perspectives for teaching using the world around us as the base. The entire chapter on "Community History" is worthwhile reading, but the sections dealing with urban settings (pp. 44-49) are especially useful to us. Approaches to documenting community history, such as an urban Foxfire project, can be easily grasped by elementary students and can provide a good organizing framework for an integrated curriculum.

Topic Outline

- I. Factors contributing to the development and location of cities
 - A. Defense and ritual
 - B. Agriculture
 - C. Irrigation
 - D. Manufacture and trade
- II. Southern California before Spanish settlement
 - A. Low density Indian population
 1. Economy based on hunting small animals and gathering plant products
 2. Rudimentary technology restricted exploitation of the environment, though fire had a profound impact on vegetation
 - B. Remote location from European perspective
 1. Distant corner of Spanish empire
 2. Separated by thousands of miles of poorly explored territory from early areas of Anglo-American settlement
 3. Suggestions of Russian or British interest in California prompted Spanish settlement as a buffer between the heart of New Spain and any possible foreign intrusion
 - C. The environment offered no particular advantage at that time
 1. No natural harbor--though little need for one anyway
 2. The resource base was not outstanding for Spanish colonization
- III. Spanish-Mexican Settlement
 - A. Missions established near larger Indian settlements
 - B. Presidios and pueblos established to provide military and agricultural support for missions
 - C. In the Los Angeles area, Mission San Gabriel founded first
 - D. Pueblo of Los Angeles founded 1781
- IV. Initial Site of the Pueblo: Los Angeles in 1790
 - A. Site had to satisfy the needs of a small, remote, agricultural settlement of the late 18th Century

ORIGINS OF THE LOS ANGELES LANDSCAPE

- B. Both near enough and far enough away from the mission
- C. Features of the specific site
 - 1. Sufficient level ground for irrigation agriculture
 - 2. Sufficient source of dependable water where Los Angeles River flows through the Glendale Narrows
 - 3. Location on a terrace above the river flood plain to avoid flood hazard
- D. The early site has retained its importance over time
 - 1. Spanish-Mexican Plaza becomes the nucleus of later urban growth
 - 2. The Los Angeles central business district is still adjacent to the Plaza location
- E. The Pueblo also served as a focus of activity for the Ranchos
 - 1. Some date from the Spanish period, but most are after 1822
 - 2. Ranchos provided a broad structure to the region, affecting later boundaries, street alignments, place names, etc. Their agricultural nature inhibited them from becoming directly involved in urban settlement until well into the 19th Century
- V. Transition to an Anglo-American city
 - A. Gradual breakup of the ranchos and the changing agricultural base
 - B. The early Railroad Era: Los Angeles in the '80s
 - 1. Various railroads link L.A. to Northern California and then to remainder of USA from 1876 to 1885
 - 2. Health resorts and the initial real estate boom of the 1870s
 - 3. Railroad competition and the big real estate boom of the '80s
 - 4. 1870-1890, city of Los Angeles population increases from 6,000 to 50,000
 - 5. Industrial development is retarded as Los Angeles retains its agricultural focus until about World War I
 - C. Early industrial development: Los Angeles in the 'Teens.
 - 1. L.A. is an unlikely candidate for a large industrial city
 - 2. The Panama Canal and the development of Los Angeles harbor

ORIGINS OF THE LOS ANGELES LANDSCAPE

3. Petroleum, movies, and aircraft
4. Continued importance of industries related to agricultural production
- D. Evolution of the Urban Landscape: L.A. by the '40s
 1. The CBD during its "Classic Period!"
 - a. Spring Street Financial District
 - b. Broadway retailing district
 - c. Markets and warehouses towards the east and southeast
 - d. Bunker Hill as a barrier and as a unique landscape
 - e. Changing accessibility with the slow decline of the Pacific Electric and the rise of the automobile
 2. Initial explorations of decentralization

VI. Diversity of ethnic communities

- A. Return of the Mexicans
- B. The Blacks--South to Slauson
- C. The Asians--Chinatown, Little Tokyo, and the Outliers
- D. The Jews--from Eastern Europe to Fairfax

Seeing the urban past.

Architectural Styles

What do the various styles of architecture present in your community tell you about the development of the district? Look for...

... SHAPES
ROOFS
WINDOWS
MATERIALS
ORNAMENT
CORNERSTONES
SPACES AROUND
AND BETWEEN
HOUSES

Do the buildings themselves suggest when they were built? Over how long a period of time?

- schools
- gas stations
- markets
- churches
- banks

Why are certain buildings located where they are?

Have they always been used for these purposes? How have they changed?

Interview

Find some old-timers in the district, or even a teacher who has been here for a long time.

- IS THIS PLACE LIKE IT USED TO BE?
- HOW IS IT DIFFERENT?
- WHAT THINGS ARE UNCHANGED?
- IS IT BETTER OR WORSE? WHY?
- WHAT DID YOU LIKE ABOUT THE WAY IT WAS?
- WHAT DO YOU LIKE BEST NOW?

Leftovers

FIND REMNANTS OF
FORMER TRANSPORTATION SYSTEMS

- tracks
- rights of way
- overhead wires

What does this tell you about the
development of your community?

FIND REMNANTS OF FORMER BUILDINGS,
NOW CHANGED OR DESTROYED

- foundations
- chimneys
- driveways

Who used this building?
What was it used for?
Why is it gone now?

GIVE A SPEECH, WRITE A POEM,
SING A SONG ABOUT THE
IMPACT OF THE TRAIN OR THE CAR
ON THE GROWTH OF
YOUR COMMUNITY!

Parent Survey

Survey the parents and teachers
of your school.

HOW DID YOUR FAMILY
HAPPEN TO SETTLE
IN LOS ANGELES?

List and rank the reasons.

What does this tell you about
the development of the city?

When was this community's
heyday?

What was going on in the rest of
America then?

Is the Community's heyday yet to
come?

Streets and Sidewalks

HOW DID THE STREETS
GET THEIR NAMES?

WHO NAMED THEM?

Sometimes sidewalks, manholes, lampposts,
and other things have dates on them. Look
for some of these in your community. What
is the earliest date you can find? Do other
things in the community have dates on them?

Values and choices.

ORIGINS OF THE LOS ANGELES LANDSCAPE

As you investigate your community and consider the questions below, you might be prompted by these thoughts:

renewal		preservation
self-sufficiency		interdependence
old		new
assimilation		identity
community space		personal space

Inquiry

1. What would have happened in the development of Los Angeles if the climate were rainy and if a range of 9,000' mountains had blocked the Los Angeles Basin from the ocean? Why?
2. What role did the Second World War play in the development of contemporary Los Angeles?
3. Motion Picture industries have had a great deal to do with the images of Los Angeles. What impact did the location of such industries have on Los Angeles, and why did those industries find Southern California so attractive?
4. How can you explain the infrequency with which Los Angeles residents use their "downtowns"? Is this significant? How might this be changed?
5. What role have the various minorities played in the development of Los Angeles? Do you see the addition of any important minorities in the future? Who?

Speculation

1. Speculate how Los Angeles would have developed if the private automobile had not been invented? How would the history of the city have been different?
2. What would have been the differences of the history of Los Angeles if California gold had been discovered in Soledad Canyon (just northeast of the San Fernando Valley) in 1849 instead of in northern California?
3. What do you suppose the causes were of the elimination of the Pacific Electric Street Railway and how might Los Angeles look different if those "Big Red Cars" had continued to be a part of the contemporary landscape?
4. Chinatown in San Francisco is a very important part of the urban landscape in that city. Why do you suppose the Chinatown in Los Angeles has never developed into such a colorful and well-known Oriental neighborhood?
5. Speculate as to what popular reaction would be if Los Angeles residents were told the film and television industry was moving to Florida for cheaper taxes and other costs. Would there be much popular concern for such a move?

Landscape.

MODERN LOS ANGELES

Los Angeles is popularly viewed as a very special place among the cities of America. Images abound of the uniqueness of the city, whether they emphasize its positive attributes or its negative features. With all this imagery, it is difficult or, perhaps, impossible to know the true nature of Los Angeles. The picture we present here will try to give some substance to views of Los Angeles as both a unique environment and as a city which shares numerous traits with other large American cities. Where possible, we will peer beneath the image searching for more tangible evidence and argument upon which to base our understanding. At the same time, however, we should not lose sight that the images themselves have been and still are potent factors in creating a sense of place among Los Angeles residents and visitors, and in influencing what people are able to recognize in the city and how they behave toward it.

We can safely say that the modern city of the angels is a product primarily of massive, relatively recent in-migration. It is large and sprawling, it does depend upon automobiles and freeways for vital transportation and communication, it does suffer from serious smog, brush fire, and earthquake hazards, and it is widely believed to present a unique urban vista. In Los Angeles we find large areas of sprawling, single-family residences, widely dispersed zones of employment, and highly individualized ghetto, mountain, and coastal communities, among others. Yet these features are also found in other large cities, particularly younger cities like Los Angeles, and particularly in the newer areas of older cities. It may be less true to say that Los Angeles is historically unique than to say that it is futuristically typical or prototypical. At the same time, Los Angeles does contain those features which are thought to be more characteristic of other cities, including recent large-scale development of multiple-family housing, a surprisingly strong central business district, and large segregated residential districts within an overall context of considerable ethnic diversity. Los Angeles cannot escape either its unique history or its general inclusion among the large cities of America.

The range of problems that comes into focus when you try to comprehend just where this city is going is broad. Community planning with such a massive urban base becomes nearly unmanageable. Pressures to stop growth by residents come in direct conflict with the wishes of in-migrants and developers, and both of these groups have always been significant in Los Angeles. Transportation and its needs, inefficiencies and visibility calls for ongoing attention. The phenomenal infilling of residential areas by conversion of single-family units to multiple units and/or replacement by apartment units has spawned new social problems that the city and local communities must deal with. And, of course, continual monitoring of changes in environmental conditions will uncover new problem areas and promote the increasing discussion of environment vs. economy. The discussions (with slides) of the community of Beverly Glen and the diverse CBD will bring all of these considerations into a specific focus and serve as microcosms for analysis and reaction.

Annotated Bibliography

- Nelson, Howard (Ed.): The Los Angeles Metropolis (Los Angeles: U.C.L.A. Printing and Duplicating, 1974, 2nd, ed.). This is a collection of readings and original essays created by one of the leading authorities on the geography of Los Angeles. It represents the most comprehensive treatment of the geography of the region, covering such topics as environmental imagery, climate and air pollution, environmental hazards, settlement history, economic activities, residential structure, transportation, and planning. Specifically designed to fit the author's highly successful U.C.L.A. course entitled Metropolitan Los Angeles, the book is only available at the U.C.L.A. Bookstore. The format may be awkward at times for the non-specialized audience, but the quality of the volume makes the book worthwhile reading.
- Nunis, Doyce: Los Angeles and Its Environs in the Twentieth Century: A Bibliography of a Metropolis (Los Angeles: Ward Ritchie Press, 1973). This outstanding urban bibliography contains nearly 10,000 entries drawn from a broad range of popular and authoritative literature on Los Angeles. This is the first place to turn for an introduction to the literature on numerous topics of environmental interest. The entries are conveniently organized under such headings as: architecture, ecology, housing, natural history, planning, public transportation, traffic, urban renewal, water supply, and many more. We may lament that there are no annotations, but we would do better to be thankful that such an extensive list of titles has been brought together in one highly accessible format.
- Rand, Christopher: Los Angeles: The Ultimate City (New York: Oxford University Press, 1967). A highly readable and provocative interpretation of the cultural significance of Los Angeles, viewed from the outside with considerable sensitivity to the social and physical environment. Much of the interpretation is original and open to debate, intended to emphasize the unique aspects of Los Angeles today, but with an eye toward the possible future significance of Los Angeles with respect to American urbanization in general.
- Lillard, Richard: Eden in Jeopardy (New York: Knopf, 1966). This book is a literate attempt to chronicle the lost environmental opportunities associated with large scale urbanization. A variety of cultural and natural features have come together to produce a deteriorated environment in a place like Los Angeles, once widely heralded as a virtual environmental paradise.
- Caughey, John and LaRee: Los Angeles: Biography of a City (Berkeley and Los Angeles, University of California Press, 1977). This book is a very mixed collection of essays that range from scholarly comments to journalistic vignettes. Its value comes in the diversity of landscapes and events that the essays describe. It serves well as a source for information on interesting mini-chapters on the growth of modern Los Angeles.

Topic Outline

- I. Perceptions of Los Angeles: Why are all these people here?
 - A. Marketing the image of Los Angeles
 - 1. Media concentration
 - 2. The impact of the California image
 - B. Resultant Perceptions and Realities
 - 1. Migration and rapid growth
 - 2. Expansive city characterized as sprawling, unstructured, uncultured
 - 3. Smog, fires, landslides and mudslides, floods, earthquakes and strange people all in an environmental Eden
 - 4. The city of the future?
- II. The Growth of Modern Los Angeles
 - A. Vast in-migration, especially during the Great Depression and the Second World War, and the period just following it.
 - B. Diminished importance of L. A. County and relative increase in migration flow to Orange County
 - C. Continued high growth in non-Central City areas with infilling occurring in the Santa Monica Mountains and the level lands of the valleys
 - D. Suburban growth occurring in response to improved transportation linkages between CBD and outlying areas
- III. Landscapes of Los Angeles
 - A. Decentralized residences and local clustering around regional shopping centers
 - B. Multiple localized centers of industrial activity with major centers still active in and near the CBD
 - C. Steady and locally rapid increases in residential density being realized-- especially in western portions of Los Angeles and the San Fernando Valley
 - D. Overall intensification of land-use throughout the north, northwest, and western areas
 - E. Transportation networks as dominant visible landscape features

IV. The Social Geography of Los Angeles: Changing Demographics and Proportions

- A. Mexican-American population
- B. Black population
- C. Jewish population
- D. Oriental populations: Japanese, Chinese, Korean, and Thai
- E. The role of retired populations

V. Transportation

- A. The dominance of the automobile
- B. Laboratory for freeways and freeway-associated innovations
- C. Relic trolley routes, RTD service, and the future of mass transit in Los Angeles

VI. The Natural Environment: Pristine vs. Modified

- A. Climate
- B. Landforms and Topography
- C. Vegetation: Native and Introduced
- D. Water: Local and Exotic

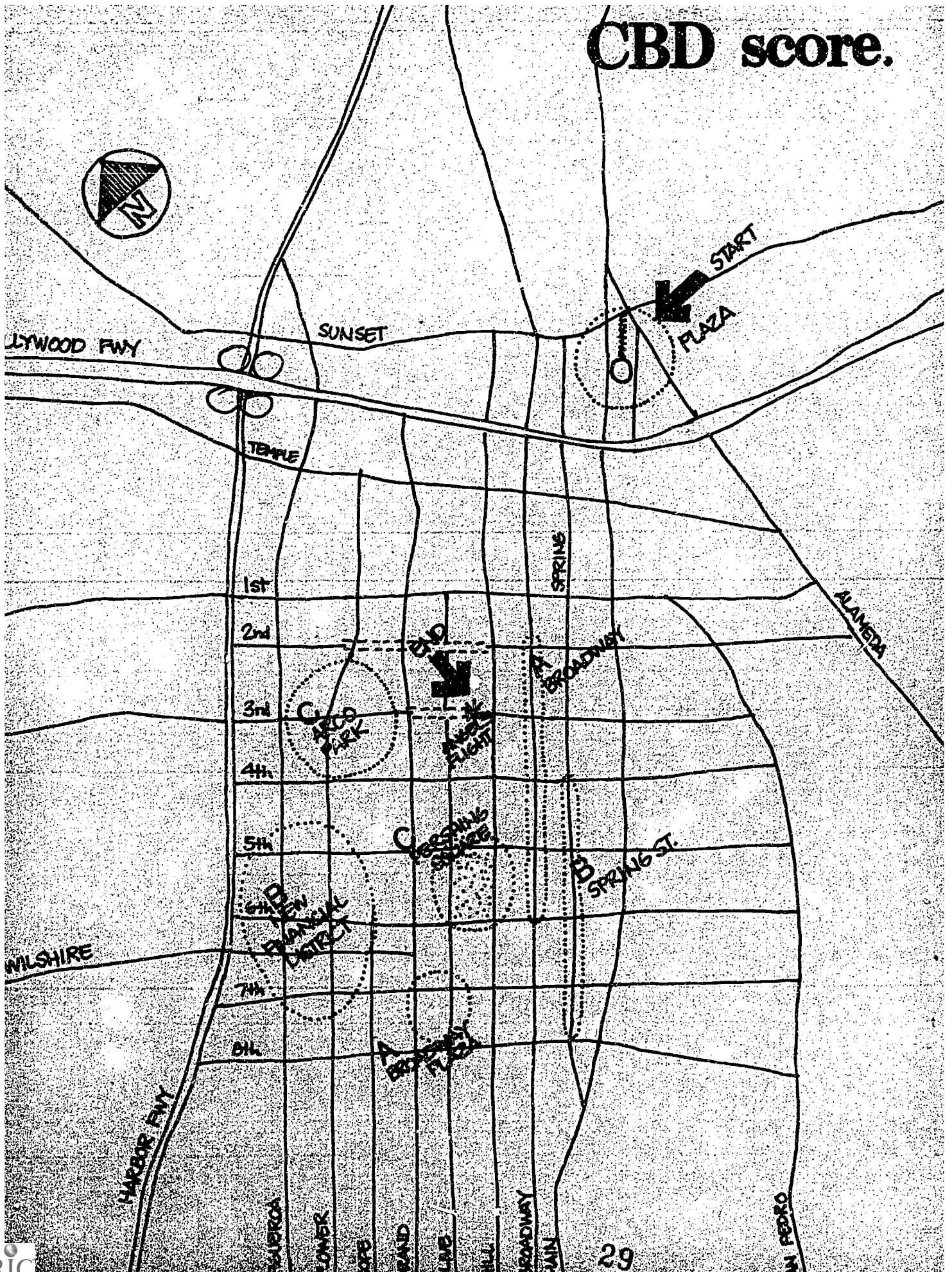
VII. Potential Problems in Eden

- A. Scale of planning for growth
- B. Downtown revitalization, renewal and/or replacement
- C. Changing vitality in Aero-space industry
- D. Response of heavy industry to environmental controls
- E. Inflation in home values and costs of urban living
- F. Impact of the Jarvis-Gann Initiative on single-family dwelling pattern
- G. Basin-wide environmental policy, controls, costs and consequences

VIII. Two Examples of Landscape Expression in Modern Los Angeles

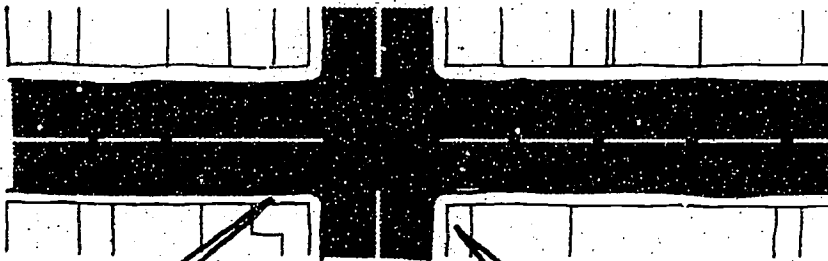
- A. Beverly Glen: A community with a cause
- B. The CBD: Renewal vs. Removal vs. Revitalization vs. The Status Quo

CBD score.



Window Shopping Survey

Find the main street of the district and make a list of all the uses of every building on both sides of the street for a two block length.



What can you tell about the area from looking at its storefronts ?

- age?
- viability?
- ownership?
- patterns of consumption?

ASK 5 PEOPLE WHAT BROUGHT THEM TO THIS PLACE AT THIS TIME!

WHY IS THIS SPACE USED SO INTENSIVELY?

ASK A SHOPKEEPER HOW BUSINESS IS GOING!

HOW MUCH ?

Make a list of things that can be purchased on the street for

- less than \$1
- \$10
- \$100
- \$1000
- \$10,000

WHO BUYS THESE THINGS?
WHICH ITEM IS MOST TYPICAL HERE?

Sit in a quiet place with a good view of the area. Relax.

Imagine what you would have seen from this spot.

- 5 years ago
- 25 years ago
- 100 years ago
- 500 years ago

WATCH A DOOR FOR TEN MINUTES AND COUNT THE PEOPLE WHO COME AND GO ...

- ... Who are they?
- Why are they there?
- Where do they live?
- What is their income?

Contrast an apparently old building with an apparently new building.

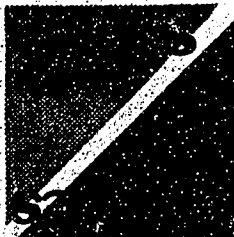
WHAT DO THE FACADES REVEAL ABOUT WHAT HAPPENS INSIDE THEM?

WHAT ABOUT THE FUTURE ?

Where is this area going in the next 5 years?
10 years?

WHAT ARE THE AREA'S MAJOR ASSETS ?

high density
old
local
multi-use
diversity
planned



low density
new
cosmopolitan
special use
conformity
spontaneous

WHAT ARE THE AREA'S MAJOR PROBLEMS ?

Values and choices.

MODERN LOS ANGELES

Inquiry

1. What role has climate played in the growth of Los Angeles?
2. What sort of a growth pattern would Los Angeles have undergone if exotic water had not been available?
3. Why has Los Angeles developed such an expansive, fragmented pattern of settlements?
4. What significance have the Santa Monica Mountains had on the growth and change of Los Angeles?
5. What processes are operating to encourage people to return to the Downtown area for residential purposes?

Speculation

1. What would have happened to the growth of Los Angeles if the Second World War had been fought only in Europe?
2. What would happen to Los Angeles if the price of gasoline rose to \$5.00 a gallon?
3. What would have happened in Los Angeles history if America had been discovered by the Chinese in 1450 as they landed near Santa Monica Bay?
4. What patterns of Los Angeles growth would be different if private automobiles cost \$35,000 each?
5. What changes in the landscapes of Los Angeles would be generated by a law allowing communities to set their population limits at some specified number by a community majority vote?

DYNAMICS OF AIR QUALITY IN LOS ANGELES by David J. Healy

Children's and adults' eyes water, the sky darkens, the Southern California Air Quality Management District has forecast another warning of unhealthy air. Air pollution in Los Angeles has been recognized as a problem for many years. The dynamics of the basin's meteorology and human activities coupled with mountain borders makes Los Angeles one of the world's air pollution capitals. The natural environment of Los Angeles is a fixed commodity. The basin can only accept certain amounts of pollutants into its air before becoming overloaded. The basin is now exceeding this level on one half of the days of the year.

The principal sources of pollution are combustion of fuels, industrial processes, and to a small extent, vegetation. The distribution of these sources affects the air quality near the site for certain pollutants and many miles away for others. There are six basic pollutants which are the subject of most attention: photochemical oxidant (O_x), carbon monoxide (CO), nitrogen oxides (NO_x), sulfur oxides (SO_x), hydrocarbons (HC), and total suspended particulate matter (TSP). Lead (Pb), sulfates (SO_4), and other materials released into the atmosphere are now also receiving attention. O_x , NO_x , TSP, and SO_x directly affect our lungs; CO and TSP components enter the blood stream and affect our well being.

Air quality in Los Angeles has improved for some pollutants and worsened for others in the last twenty years. For example, O_x levels have almost been cut in half, while SO_x levels have increased over the last five years alone. The geographic area subject to unhealthy air, however, has expanded in the same period.

Los Angeles County established the first air pollution control agency in the nation in 1947. Since that time the regulation of polluters has become a local, state, and national concern. The way in which air pollution is now controlled is by a multi-government effort of regulation, inspection, and enforcement procedures. The regulatory approach to pollution control has been the principal focus of the American effort to clean up the air. Regulations alone, however, are not of themselves effective in this effort. The historical regulatory approach does not recognize that the total problem is the result of the sum of individual actions. Reaching individuals by edicts has not been terribly successful. Stationary sources of pollution were the first polluters to be controlled. Automobiles came next, followed by attempts at regulating personal activities. This last effort has been a failure so far. The reasons for this failure are complex, but it can be conjectured that unless the individual acknowledges that his or her activities contribute to the problem then there is really no acceptance of responsibility at the source of the trouble. Changing this general condition requires new alternatives to the regulatory approach of government.

Annotated Bibliography

U.S. Congress: Clean Air Act Amendments of 1977. (PL 95-95), August, 1977. These amendments were the first major overhaul of the Clean Air Act of 1970. Changes in administrative remedies, extension of deadlines, clarifying language, and preservation of pristine air areas were the major amendments made in this version. Details were spelled out on transportation and criteria for approving new sources of pollution.

U.S. Environmental Protection Agency (EPA): Criteria Documents for Oxidant, Sulphur Dioxide, Carbon Monoxide, Nitrogen Oxides, and Particulate Matter. (Washington, D.C., U.S. Government Printing Office, 1970). These five detailed reports are the basis for the National Ambient Air Quality Standards.

U.S. EPA: Smog, Health, and You. (Washington, D.C., EPA Office of Public Affairs (A107), February, 1977). Pamphlet describing the facts about smog.

_____ : Health Effects of Air Pollutants. (June, 1976). Pamphlet describing the impact of the various pollutants on health and well-being.

_____ : Common Environmental Terms. (November, 1977). A sixteen page booklet describing environmental terminology from A to Z. A very useful resource for the student interested in exploring government documents on environmental policy.

South Coast Air Quality Management District: Summary of Air Quality in the South Coast Air Basin, 1977. (El Monte, California 91731, May, 1978). A summary of air quality for thirty-four air quality monitoring stations in the air basin

_____ : Pollutant Standards Index vs. PPM. (February, 1978). This book explains the new SCAQMD system for reporting air quality, and includes tables used to calculate the Pollutant Standards Index for the South Coast Air Basin.

_____ : Source Receptor Areas. (May 25, 1976). A map and guide to the thirty-five different source receptor areas in the South Coast Air Basin.

South Coast Air Quality Management District and the Southern California Association of Governments: Future Air Quality: What are the Options? Working Paper No. 4. (Los Angeles, California 90012, SCAG, June, 1978). A current analysis and evaluation of ninety-seven tactics for reducing air pollution are described in this report. These tactics cover traditional technological controls for stationary, area, and mobile sources, and also non-technological controls.

For inquiries for additional copies of the material in this bibliography or for new publications, the addresses of the organizations are: U.S. Environmental Protection Agency, Office of Public Awareness, Washington, D.C. 20460; California Air Resources Board, 1709 11th Street, Sacramento, California 95814; South Coast Air Quality Management District, 9420 Telstar Avenue, El Monte, California 91731; Southern California Association of Governments, 600 S. Commonwealth Avenue, Los Angeles, California 90005.

Topic Outline

- I. The nature of air pollution
 - A. Factors affecting air quality
 1. Meteorology/climatology
 2. Terrain
 3. Capacity to pollute
 - B. Sources of air pollution
 1. Human
 - a. transportation
 - b. stationary sources
 - c. pattern of habitation
 2. Natural
 - a. earth
 - b. vegetation
- II. The pollutants and their health effects
 - A. Photochemical oxidant (O_x)
 - B. Carbon monoxide (CO)
 - C. Sulfur oxides (SO_x)
 - D. Nitrogen oxides (NO_x)
 - E. Total suspended particulate matter (TSP)
- III. Air quality in Los Angeles
 - A. By pollutant by contributor
 - B. By location
- IV. Efforts to reduce pollution
 - A. History
 - B. Local legislation
 - C. State legislation
 - D. Federal legislation

V. Nature of the problem solution

- A. Attitude/level of acceptability
- B. Lifestyle/consumption
- C. Patterns of development and urbanization
- D. Dependencies
- E. Education
- F. Economics

VI. The future air quality prospects for Los Angeles

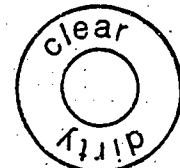
- A. Continued present
- B. Voluntary efforts
- C. Regulatory efforts
- D. Media
- E. Education

Air Quality

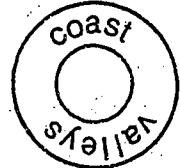
Los Angeles is a contained air basin. The pollutants trapped by inversions result in poor air quality. Air quality effects people differently. People develop various adapting mechanisms to live with this condition. Few people know what the daily health warnings mean. Personal understanding of the nature of the Los Angeles air quality problem can help living with and improving this condition.

Viewing The Condition

- List the ways that you use to determine the quality of the air where you live.
- If visibility was listed, what landmarks do you use to determine the air quality condition?
- Did air quality enter your housing location choice? If so, how important was it?
- If you had the opportunity, where would you prefer to live in the Los Angeles area?
- Do you ever curtail your or your children's activity due to air quality warnings on the radio? Why or why not?



Picture



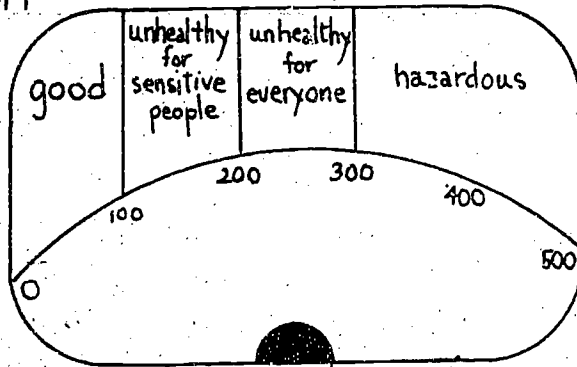
Location

Determining The Condition

The Pollutant Standards Index (PSI) is the system now used for determining the condition of air quality for a particular place. How does today look?

w. los angeles upland

O ₃					
CO					
SO ₂					
NO _x					
TSP					



Fueling The Condition

DAILY TRAVEL HABIT

	trips	miles
Home to Work		
Work to Home		
Home to Other		
Other to Home		
Other to Other		
Work to Other		
Other to Work		

If you drive more than five trips per day and more than 30 miles per day you are contributing more than the average Angeleno to air pollution and energy consumption.

COULD YOU CUT THIS BY 25%? HOW?
COULD YOU CUT THIS BY 50%? HOW? HOW WOULD YOU FEEL ABOUT IT?
WHAT OUTSIDE ACTION WOULD HELP YOU ACCOMPLISH THIS?

...walking
 ...bicycle
 ...mail
 ...bus
 ...telephone
 ...home delivery

aware		desensitized
large scale		small scale
industry		individual
government		private
clean		convenient

1. What would be the social and political ramifications of a sophisticated system for pinpointing and identifying all air pollution sources?
2. What would happen if all sources of air pollution were responsible for policing themselves?
3. What would be the implications of a wide scale use of videophones on a business level? On a personal level?
4. What would happen if no new polluting industries were allowed to locate in Los Angeles?

Water has always served as a prime locational feature in the siting of a city. From the oasis to the ocean port, the availability of potable water has been one of the very first concerns of an initial settlement process. In the case of Los Angeles the original settlement was made by the banks of the Los Angeles River, a water source that now serves as a massive flushing system for occasional heavy rains and constant lawn irrigation runoff. In the case of the San Fernando Valley, the very first settlement site was abandoned in 1769 because the waters of the spring near the corner of Balboa and Ventura Blvds. were too alkaline. The valley mission was sited in the far northern edge of the Valley at the springs of the current San Fernando Valley Mission. Water made the site possible. Water was the catalyst for growth.

It is not adequate, however, to just find a source of water. All expansion must be predicated upon the constancy of the source as well as its capacity to provide continually increasing amounts for new demand. The development of water resources, then, must involve exploration, extraction and delivery, augmentation, quality control, and continual maintenance. And all of this service must be done at a socially acceptable cost. This complex task of water management has spawned social theories of entire civilizations being great because of their ability to control water resources. The Oriental societies of East Asia, the Nile Valley civilizations, and the various Middle Eastern cultures between the rivers in Mesopotamia all are described as "hydraulic societies" who learned social management through water management. Perhaps Los Angeles should be considered in the same manner.

The initial needs of the original Los Angeles population were met by the natural flow of the Los Angeles river and, to a much lesser degree, the well water of the San Fernando Valley and other areas of the broad Los Angeles Basin. It was not until the great drought of the mid-1860s that water supply was seen to be inadequate for the growth that some thought this city might potentially experience. Near the turn of the century a process of exploration external to Los Angeles began and by 1913 the Owens Valley-Los Angeles Aqueduct was completed as a consummation to the process of buying up nearly an entire valley (larger than the 460 square miles of Los Angeles). Water was delivered to the city by a unique gravity-flow aqueduct, canal and tunnel and conduit system. With the completion of this project, the real growth of Los Angeles and southern California was initiated.

In 1941 the Colorado River aqueduct project was completed and with it came the new importance of the Metropolitan Water District. This project gave the city the capacity to accommodate the massive expansion of population and settlement and industry that followed the Second World War. The final leg of searching for water in Los Angeles was completed in the late 1960s and early 1970s with the arrival of water from the northern part of the state and the Feather River via the California Water Project. The combination of these three unprecedentedly expansive water-control and delivery schemes was supposed to give Los Angeles all of the water it could possibly require for economic growth and demographic infilling. That is, that was the assumption until the drought of the mid-1970s. With the decreases in the snow pack on the Sierra Nevada Mountains, the social disinclination of the Owens Valley courts and people to allow expanded pumping to supply water to Los Angeles, and the specter of Arizona's much expanded use of the Colorado River water, our city found itself looking into a nearly empty well. Conservation has followed and new views on potential city growth are being entertained. There may be no solution to this anxiety about the search for water for Los Angeles.

Annotated Bibliography

- Nadeau, Remi A.: The Water Seekers (Garden City, New York: Doubleday and Company, 1950). This is the leading history of the efforts by Los Angeles and other Southern California communities to import water into the region from distant water sheds. The first part deals with the people and activities surrounding the tapping of the Owens Valley water by the city early in the twentieth century. The second part deals with the formation of the Metropolitan Water District and the securing of Colorado River water. This is the first source to turn to for an appreciation of the Southern California struggle to secure an adequate water supply to support its rapid growth and development.
- Ostrom, Vincent: Water and Politics: A Study of Water Policies and Administration in the Development of Los Angeles (Los Angeles: The Haynes Foundation, 1953). This book provides an in-depth and authoritative look into the politics of water supply in Los Angeles. Stress is placed on political institutions and political processes, as these have influenced the legislation, funding, and administration of the Owens Valley, Colorado River, and other water projects.
- Cantor, Leonard M.: "The California Water Plan," Journal of Geography, v. 68, 1969, pp. 366-371. This article offered a brief preview of the massive project that would soon be bringing Northern California water south to the San Joaquin Valley and on to urban Southern California. The article provides a clear geographical and technological description of the project. There is also a brief discussion of criticism of the project, focusing on the magnitude of the undertaking and on the problems of financing it.
- Caughey, John and Laree: Los Angeles Biography of a City (See Modern Los Angeles for a full bibliography and annotation.) There are a number of short essays on getting water to Los Angeles in this collection. It is useful for color on the water question.
- Bowman, Lynn: Los Angeles: Epic of a City (Berkeley, California: Howell-North Books, 1974). This volume should be added to a general bibliography because it is a reasonable history of the city. It is added in this particular niche because it has some sections on water and, more interestingly, numerous entries on William Mulholland and the Los Angeles River.
- Wagner, Richard: Man and Environment (New York: W. W. Norton & Company, 1978). This Third Edition of this basic environmental text is well-written and would be helpful to any teacher or student attempting to do a broadly conceived water unit. Wagner treats water and its urban uses and misuses in much detail, with examples from California and San Diego given special importance.

Topic Outline

- I. Water and the Geography of Urban Siting
 - A. Water as a prime locational factor in most urban settings
 - B. The social, technological and economic implications of exotic water
- II. The Patterns of Urban Water Needs
 - A. Residential uses: necessary and ornamental
 - B. Commercial and Industrial uses
 - C. Historically a resource with a no-cost image
- III. Fluctuations in Demand
 - A. Summer vs. Winter needs
 - B. Daily flux with morning and evening peaks
 - C. Long-term correlation between economic growth and increase in water needs
 - D. Requirement for urban water delivery systems to deal with periodic high needs during fires, drought periods, and seasonal and daily peak-need hours
- IV. Sources of Water
 - A. Rainfall and the city in the desert
 - B. Surface runoff derived from streams
 - C. Ground water from natural aquifers
 - D. Systems of non-local water delivery
 1. The California Water Project
 2. The Los Angeles-Owens Valley Aqueduct
 3. The Colorado River Aqueduct
 - E. Storage systems in Los Angeles County
 - F. Fragile nature of the entire man-made system
 1. Variability in precipitation and runoff and snowmelt
 2. Lowering of water table
 3. Difficulty in accurately predicting demand and supply levels

LOS ANGELES AND THE SEARCH FOR WATER

G. The technology of matching supply with demand in Los Angeles

V. Figuring the Costs of Water in Los Angeles

A. Capital costs are increasing

B. Changing climate of social opinion vis à vis water transfers

C. Demographic and economic growth and the relationship to water supply

D. Is there a potential price on water that would reduce consumption?

E. Is there an economic value to healthy, water-consumptive landscaping?

F. Are industrial water needs price-elastic?

G. Can society afford the single-family, heated swimming pool?

H. Should the water supply be the ultimate determinant to the size of the population in Southern California?

VI. The Impact of the mid-70s Drought

A. Realization that the California Water Project could not handle crisis needs

B. Realization that authority in Owens Valley is limited

C. Realization that Los Angeles was able to cut consumption of water by approximately 20 percent without significant social or economic disruption

D. Curiosity of the fact that heavy rainfall in Southern California did little to relieve the drought conditions. Exotic source dependency.

E. Future dislocations to be caused by competing uses of the Colorado River resource. Other states' water rights.

F. 1977 drought year initiated the first-ever conservation campaign by the Metropolitan Water District. Advertising against the use of its own product. Energy similarities.

VII. Water Cults

A. High pay for water management

B. Ocean focus in images of Los Angeles

C. The swimming pool as a ceremonial center

D. The cost and convenience of dishwashers, long showers, washing driveways, and car washing

E. The surface appearance of rivers in Los Angeles

Values and choices.

LOS ANGELES AND THE SEARCH FOR WATER

Inquiry

1. Why would people want to settle at a site that does not have adequate water for the growth of a city?
2. What kinds of problems must be overcome in the transfer of significant amounts of water from one area to another? Are these problems made more complex if the water is moved across state lines? Why?
3. What are the positive lessons that might be learned from the drought of the mid 1970s?
4. Would it be fair to limit the growth of the size of Los Angeles because of the impact of water extraction from distant areas? How would you justify your answer?
5. What are the ways in which you think school children could help to teach others to conserve water?

Speculation

1. Suppose that Los Angeles had not been able to transfer water from any additional, external source. What would have been the history of this city?
2. Suppose that water shortages disallowed the watering of lawns and other ornamental areas in Los Angeles. Describe the changes that would take place in the city's landscape.
3. What would be the consequence if there were no concrete channels for the various rivers of the Los Angeles Basin?
4. How high do you think the price of water has to be in order to make people seriously change their water use patterns? \$15.00 a month for a household? \$50.00 a month? \$100.00 a month?
5. Suppose you were a judge during a drought and a housing development sued a city for not giving it water in adequate amounts to fill a recreational and scenic lake. The development people claim that they stand to suffer serious economic losses if they cannot complete the lake. What would the arguments on both sides be and how would you make your final judgment?

Energy.

A PROBLEM IN RESOURCES--A PROBLEM IN CREDIBILITY

The most significant aspect of the energy problem that we all face is one of disbelief. Although fossil fuel resources, for example, are finite and are being depleted at an increasing rate, the more critical component of our fuel shortage is the popular assumption that most crisis talk is rigged by oil companies and massive public utilities. One of the most pressing needs, therefore, of environmental education is to make clear the reality that the United States faces a bona fide energy problem. Let me outline the nature of this by three simple but significant facts:

1. The per capita daily petroleum consumption in the U. S. currently is 57 barrels. The average for developing countries is 3 bbl. per person per day.
2. In 1950 American consumption of petroleum was 16×10^6 bbl/day; in 1960 it was 21×10^6 bbl. and in 1970 it totalled 32×10^6 . The consumption doubled in those two decades. U. S. population increased only 35 percent in that period.
3. The average passenger load in a vehicle on a Los Angeles freeway is currently 1.14 persons. If that was increased to just 1.3 persons it would free up congestion, and if the average were increased to just over 2.0 people, there would be a national petroleum savings of 440,000 bbl. daily.

The ramifications of these three facts have potentially profound impact on Los Angeles as well as the rest of the nation.

Fact 1. This imbalance of consumption and population is politically dangerous. In a time of apparently unlimited resources there is little concern about the ultimate consumers of a resource, but with the finite nature of fossil fuels--especially petroleum--the U. S. position will grow increasingly untenable. Initially the sheer dollar cost of increasing fuel imports will have negative impact on the rest of our economy. This cost crunch goes directly to the inner city.

Fact 2. This rapid increase in energy consumption may be charted in another way as well. In the decade of the 1950s, more energy was consumed than in all prior history. In the 1960s, enough more fuel was used to eclipse all prior use totals including the 1950s. The slight jog in our use patterns engendered by the oil embargo of 1973-74 only modified this progression modestly. The steady increases in consumption relate to a growing number of electrical "necessities" in urban life and the universal use of cars for ever-increasing daily circulation in American cities. With an urban setting like the Los Angeles basin, the energy costs for the transportation system, air conditioning, and the generally electrically-dependent life style makes our city play a role of special responsibility in attempts to diminish increases in energy-dependence.

Fact 3. The automobile in America uses more than 50 percent of all the oil imports. Getting people out of single-passenger cars and into mass transit is a social problem rather than a technological problem. Los Angeles is the classic and critical case for experimentation in this environmental problem.

Power to the people was a rallying cry in the 1960s because of urban unrest. We are speaking of a different power now, but the city and the nation face a very real threat because of a need for conservation (education), new transport patterns (education and technology) and new energy sources (research and technology). To use the class-

Annotated Bibliography

Many of the sources cited in Modern Los Angeles have passages, sections or even chapters on the providing of power to Los Angeles. In addition, sections on Los Angeles and the automobile frequently cite statistics on the cost of the single-passenger car in this city. Additional items with a focus on energy are listed below. A number are not specifically Los Angeles in their content.

Asimov, Isaac: "The Nightmare Life Without Fuel," Time Magazine (April 25, 1977), p. 33. This one-page essay is a good beginning point for attempting to get students to begin to think what it would be like to be truly denied adequate sources of electricity and petroleum. Asimov is very effective in making clear the complex linkages that exist between energy and virtually all components of urban life.

"Opening the Debate": Time Magazine (April 25, 1977), pp. 27-32. In the same issue as Asimov's essay is a detailed story on the 1977 Time Energy Conference. This issue is helpful because it shows how difficult it is for representatives of the oil industry to get members of congress and other leaders to accept the reality of diminishing energy supplies. The article is also good for the classroom because it discusses the potentially beneficial aspects of a real energy crisis for American society. It will show the people that they can still cope with shortages.

"Power Lifelines for Los Angeles": Department of Water and Power, Los Angeles, 1976. This short pamphlet prepared for the Los Angeles Unified School District and other student populations is clear, graphic and informative. It could be used directly by some of the classes taught by Institute Participants, or modified for others.

"Power Supply for Los Angeles": Department of Water and Power, Los Angeles, 1976. This is similar to the item immediately above. This is written for a slightly older audience, has more site photographs and has an interesting map on the back cover. There are also some graphics showing DWP's concern for landscaping some of its facilities.

Fabun, Don, Dimensions of Change (Los Angeles: Glencoe Press, 1970). This fascinating book is a set of six essays on environmental and ecologic themes. Energy is one of the essays. The ideas in Fabun's work are always provocative and even elementary school students would find the graphics of the book exciting and educational. Teachers will find a world of distinct approaches to ecologic topics from food to population. This is a book worthy of purchase if environmental education will be a part of your life beyond the Institute.

Topic Outline

- I. The relatively short history of significant energy utility to human society
 - A. Fire not a tool until approximately 250,000 years ago
 - B. Horse collar not effectively designed until a thousand years ago
 - C. Steam engine in 1769
 - D. Locomotive in first quarter of 19th century
 - E. Oil near Titusville, Pennsylvania in 1859
 - F. Automobile not effectively available until beginning of 20th century
 - G. Consumption of petroleum between 1950-1960 surpassed total use of petroleum up to that point in history
 - H. Considerations and concerns about nuclear, geothermal, solar energy
- II. The city as a focus of energy expenditure
 - A. City as maximally artificial landscape, hence high energy needs necessary to power this particular ecologic adaptation
 - B. Images of a city and its power consumption: "city lights" "the charge of the city," "city nightlife and the denial of the solar clock..."
 - C. Circulation within and around a city as one of the major causes of soaring energy consumption as well as source of environmental deterioration
- III. Conservation as an approach to energy savings
 - A. The convenience of environmental ignorance, or the ignorance of consumer convenience and its environmental costs
 - B. Patterns of consumption in contemporary America: urban and suburban scenes
 - C. Environmental education as having a significant impact on development of potential consumer patterns
 - D. The urban scene as diminishing the individual's sense of significance and the associated impact on resource utilization
- IV. The Los Angeles landscape and energy use
 - A. Sources of electrical energy tied to exotic and local sources
 1. California power sources: Owens Gorge, system on the L.A. Aqueduct, Castaic power plant, Seal Beach, Scattergood, Valley generating plant, Harbor, San Onofre Nuclear Plant

A PROBLEM IN RESOURCES--A PROBLEM OF CREDIBILITY

2. Outside-California systems: Hoover Dam on Colorado River, Pacific Intertie System from Pacific Northwest, Mohave Power project in Southern Nevada, Navajo Power Project at Page, Arizona
- C. Petroleum as a local resource. Oil found near Elysian Park in 1890s and then in the Fairfax area near Farmers' Market. Major finds in the 1920s.
1. Venice as a case study of impact of oil on an urban landscape
- D. The automobile and energy costs/demands in contemporary Los Angeles

Values and choices.

A PROBLEM IN RESOURCES--A PROBLEM IN CREDIBILITY

Inquiry

1. Why are so many Americans so disinclined to believe that there is really an energy shortage?
2. Why has the use of coal decreased relative to the use of petroleum in America's mix of energy resources?
3. What role has the automobile played in the changing nature of an energy crunch in the United States?
4. Is energy consumption increasing more or less rapidly than the growth of population in the United States? How can you explain this fact?
5. Why has there not been a more widespread use of nuclear power in the United States energy system?

Speculation

1. If you were ordered to organize a 25 percent decrease in energy use in the cities of America, where would you make your cuts? How would you convince people that those were the areas to reduce energy consumption in?
2. Suppose gasoline rose in price to \$4.00 a gallon. What would be the impact of such an increase on the Los Angeles landscape?
3. What are the ways in which a society can effectively encourage people to carpool? How could Los Angeles bring about a significant increase in the number of people who travel at least two-to-a-car during commuter hours?
4. Speculate on what the positive benefits might be of another severe oil and gasoline shortage like the one in 1973-74. Could such a shortage have any lasting impact on patterns of energy consumption in the United States?
5. Suppose that you were the president of an oil company. How would you get people (and congressmen, especially) to believe that there is truly an energy shortage in the United States and, potentially, in the world?

Landforms.

URBANIZATION AND LANDFORMS IN LOS ANGELES

Although much of the impact of landforms and landform processes on the city is of a direct physical nature, there is everywhere a necessary cultural dimension which must be understood before the full implications of the city-landform relationship can be known. Landforms may present barriers, stopping or guiding urban growth, yet the growth itself is a cultural phenomenon. Earthquakes or landslides may bring destruction to the structures of the city, yet the quality and placing of the structures is a decidedly cultural consideration. To understand urbanization and landforms fully, we must know both the form and processes of the land, and the nature of man's behavior in the city.

Los Angeles presents a spectacular natural environment, composed of steep mountains, broad plains, and a lengthy shoreline. Each of these features impinges on the city in positive and negative ways, just as the city in turn alters the qualities of the land itself.

Because of the prospects of combining urban amenities with scenic beauty and privacy, the mountains have become desirable places of residence and recreation. The mountains have also presented serious barriers to urban growth and communication, given the large size and sprawling nature of the metropolis. And at times, the forces creating the mountains of Southern California exert tremendous impact on the metropolis through the medium of earthquakes. The earthquake hazard cannot be avoided in this region, and its potential for death and destruction is terribly great, yet steps can and are being taken to lessen the potential severity of the hazard by altering the way in which we build and locate structures in the city.

The coast has developed into a similarly attractive place for residence and recreation, though it is a resource which is becoming scarcer and more expensive with the passage of time. The coast is particularly attractive because it is associated with generally cleaner air and cooler summer temperatures than occur elsewhere in the city. Problems along the coast include accelerated beach erosion due in part to flood control and urbanization throughout the inland areas, slope failure on the cliffs which occur along much of the coast, and transportation dislocations because of the difficulty in maintaining the Pacific Coast Highway.

The broad plains of the coastal plain and the interior valleys have proven particularly amenable to urban settlement. The city has sprawled unimpeded across these generally flat areas, where streets, utilities, and homesites can be efficiently and economically maintained. This very sprawl, of course, is often cited as one of the negative aspects of the Los Angeles environment. It is here, too, that much of the prime agricultural land of Southern California has been lost to urbanization. It is also in these areas where major Army Corps of Engineers Flood Control Projects have made major landscape impact, such as the 2,000 acre Sepulveda Dam and Flood Control District.

Nature is modified in a massive way in Los Angeles and one goal of environmental education is to see where such programs have proven to be well-conceived and well-implemented---but we are also to explore the environmental mismoves that have been made in the growth of Los Angeles.

Annotated Bibliography

- Legget, Robert: Cities and Geology, (New York: McGraw-Hill). This book is an outstanding treatment of a set of important, interrelated themes connecting urbanization and environment. It offers readable, well illustrated discussions of such topics as urban growth, construction, and hazards in relation to the geologic structure, processes, and landforms upon which the city is located. Although the perspective is world-wide, most of the themes and examples are readily applicable to Los Angeles.
- Sharp, Robert: Geology Field Guide to Southern California (Dubuque, Iowa: Wm. C. Brown, 1972). This combination geological introduction and field guide for Southern California is aimed at a general audience, and specifically is intended to serve the needs of high school and college field trips. Although none of the field trips deals specifically with the Los Angeles Basin, there is a highly readable and informative general introduction to the structure, processes, landforms, and hazards of the Los Angeles Basin, as well as the surrounding Transverse and Peninsular Ranges, on pp. 11-28.
- U. S. Geological Survey, Professional Paper No. 733: The San Fernando, California, Earthquake of February 9, 1971, Washington, D. C.: U. S. Government Printing Office, 1971). Although many of the papers published here are of technical or narrow interest, the overall message of this volume is a clear sense of the power and drama of Southern California's most recent, moderately severe earthquake. The photographs alone provide powerful evidence of the destructive force of this earthquake and of the specific way in which it affected various urban structures and facilities. This is not a political document--it is a cool, professional assessment of an actual earthquake. By neither overstating the seriousness of the hazard, nor seeking to alleviate public fears, this document creates a strong sense of the very real and very serious earthquake hazard in Southern California.
- Lantis, David W. et al, California: Land of Contrast (Dubuque, Iowa: Kendall/Hunt Publishing Company, 1977). This regional geography of California does a good job of setting the elements of the natural landscape into perspective. There are a number of sections that deal with Los Angeles and its physical as well as economic and social geography. This book would be a good inclusion in the library of any teacher who wishes to relate environmental conditions of Los Angeles to the broader context of the state of California.
- Durrenberger, Robert et al: Patterns on the Land (Palo Alto: Mayfield Publishing Co., 1976). This Atlas of California is a good companion volume to the Lantis geography cited above.

Topic Outline

I. Major Landform Features

A. Mountains and Hills

1. Transverse Ranges have an east-west orientation
 - a. Santa Monica Mtns. b. San Gabriel Mtns. c. San Bernardino Mtns.
2. Peninsular Ranges have a northwest-southeast orientation
 - a. Santa Ana Mtns. b. San Jacinto Mtns.
3. Various minor ranges break up the lowlands into valleys
 - a. Verdugo Hills b. Puente Hills c. San Jose Hills
 - d. Baldwin Hills 3. Dominguez Hills f. Laguna Hills
(San Joaquin Hills) g. Palos Verde Mtns.

B. Lowlands

1. Los Angeles Coastal Plain is relatively extensive for California
2. Inter-montane basins and valleys comprise much of the lowlands
 - a. San Fernando Valley
 - b. San Gabriel Valley
 - c. Inland valleys around San Bernardino and Riverside

C. Coastal Landforms

1. Unstable cliffs and narrow beaches
 - a. Pacific Palisades and Santa Monica
 - b. Palos Verdes Peninsula
2. Broader Beaches and lower terraces in other areas

II. Landform Dynamics

- A. Tectonic activity within the earth results in uplift
 1. Mountain ranges are still actively being uplifted
 2. In most instances, the coastline is also experiencing uplift
- B. Erosion and deposition actively alter the surface of the land

URBANIZATION AND LANDFORMS IN LOS ANGELES

1. Canyons are cut as running water removes material from the mountains
2. Coarse, heavy material is deposited on alluvial fans at the mouths of the canyons
3. Other sedimentary deposits create the loosely consolidated plains farther out from the mountains
4. Wave action and ocean currents erode away sea cliffs and beaches
5. Sand washed down from the mountains is needed to replenish the beaches

III. Landforms and Communication Outside the Region

1. Entrances into Southern California are relatively few in number
2. San Geronio Pass - I-10 and S.P.R.R. provide relatively low level pass to Palm Springs, low desert, Arizona, and southern United States
3. Cajon Pass - I-15, U.P.R.R. and Santa Fe R.R. - major transportation corridor to Las Vegas and the Northeast
4. San Fernando Pass via Soledad Canyon and Tehachapi Pass S.P.R.R. to Central Valley and Northern California
5. San Fernando Pass via Cajon Pass and Grapevine - I-5 - to Central Valley and Northern California
6. Low passes and tunnels connect Los Angeles with coastal plains and valleys to the west and south

IV. Urban Settlement and Growth Involves the Evaluation, Alteration, and Utilization of These Landforms

- A. Initial Settlement of Los Angeles-see discussion of early Los Angeles
- B. Subsequent Growth
 1. Growth favors lowlands
 - a. Ease of access
 - b. Lower site preparation and construction costs
 - c. Lower utility costs
 2. Growth avoids poorly drained areas
 3. Growth avoids areas known to be vulnerable to flooding
 4. Canyons and hillsides attracted some higher-income residential development

URBANIZATION AND LANDFORMS IN LOS ANGELES

- a. Cultural differences in defining the desirability of hills for settlement
 - b. Provision of urban services a necessary prerequisite
 - c. Privacy, view, and scenery are valued
 - d. Accessible canyons closest to the city center are first to be settled intensively
5. Sea cliffs and beaches attract specialized settlement, but they are generally too remote for intensive urban settlement until relatively recent times
6. Landforms function as barriers to settlement and communication
- a. The Santa Monica Mountains and the San Fernando Valley
 - b. Cahuenga Pass and Sepulveda Canyon are now crossed
 - c. As various valleys are settled, settlement leap frogs into more distant valleys such as Simi Valley
 - d. The coast, in recent years, has become a major barrier to the growth of settlement
 - e. The metropolis remains fragmented by landform barriers

C. Alteration of Landforms

1. Cutting and filling in general
2. Altering sites for construction
3. Stabilizing slopes
4. Protecting flood plains
5. Lowering mountain passes
6. Sanitary landfills

V. Problems Related to Landforms in Los Angeles

- A. Interface with natural erosion and deposition
- B. Elimination of Agricultural Soils
- C. Beach Erosion
- D. Coastal Landslides

URBANIZATION AND LANDFORMS IN LOS ANGELES

1. Avoid building above unstable slopes
 2. Obtain a geologists report before building or buying
 3. Avoid over-watering or grading too steeply
- E. Land Subsidence because of excess removal of petroleum or groundwater
- F. Earthquakes
1. Historic earthquakes and the certainty of future earthquakes
 2. Causes of earthquakes in Southern California and their severity
 3. Movement along faults is localized and can cause severe damage
 - a. Avoid faults for building locations
 - b. Protect utilites where they cross faults
 4. Ground Shaking causes widespread damage
 - a. Avoid unstable ground subject to liquefaction
 - b. Utilize flexible construction such as wood frame or steel frame. Avoid rigid masonry construction
 5. Earthquake Prediction

The natural setting.

While the natural environment of Los Angeles is indeed vulnerable to the impact of human activities, it still accepts and even invites multiple interpretations, uses, and manipulations from those of us who occupy it. We can "read" the local landscape for cues to understanding the influence natural environmental factors have had in our cultural development. We can also observe the development over time of our cultural attitudes and values in the way the environment has been added to, depleted, or changed.

History

Find pictures of your community that go as far back as possible. Prepare a display or exhibit showing the changing landscape over time.

Do any of the pictures reveal the natural landscape?

Can you construct an image of pre-settlement days?

Survey

Ask people in the community what natural features in the environment they value,

like

- BEACHES
- HILLS
- TREES
- CLIMATE

Ask if there are consequences of natural features that they value, such as

- PRIVACY
- VIEW
- PROXIMITY TO THINGS

Compare this with feelings of residents in a dramatically different environment.

Experience Banham

SURFURBIA Visit Ocean Front Walk in Venice and look for indicators of urban development.

AUTOPIA Look at the intersection of two major freeways (like the San Diego and the Santa Monica) from as many points of view as possible. Experience it as sculpture. What is the view from the road?

FOOTHILLS Find a place where urban development ends in the mountains. What is the boundary? Why does it stop here? What are the conflicts?

PLAINS OF ID Visit a place that grew from someone's fantasy, like Watts Towers, St. Elmo's Village, the Big Doughnut, the Brown Derby, Disneyland. Speculate on what made this possible.

THINK OF OTHER EXAMPLES IN YOUR AREA.

Open Space

Plot on a map the open space in your community that might be used for

- PARKS
- GARDENS
- URBAN FARMING
- FUTURE DEVELOPMENT

WHO OWNS THE LAND?
WHAT IS THE CONDITION OF THE SOIL?
WHAT IS GROWING ON IT NOW?
WHAT WOULD IT TAKE TO MAKE IT INTO
USABLE OPEN SPACE?

Design for Climate

Trace the range of housing design in your community that shows how it is adapted to the local climate. Look for

- COURTYARDS
- VERANDAS
- WIDE OVERHANGS
- IRRIGATION SYSTEMS
- THICK WALLS
- SLEEPING PORCHES
- WINDOWLESS WALLS
- ORNAMENTAL PLANTS

Climatic Factors

What climatic factors were important in encouraging settlement in your community?

FIND EXAMPLES IN YOUR COMMUNITY OF INDUSTRIES, SERVICES, OR ACTIVITIES THAT ARE UNIQUELY DEPENDENT ON L.A.'S CLIMATE.

Maps

Make a map of the major landforms in the Los Angeles region.

WHICH OF THESE IMPACT YOUR COMMUNITY? HOW?

Show how landforms help to define your community.

Show how they help to divide your community.

Find examples in the field.

Mental Maps

Ask people to draw a map of the community on a blank piece of paper. See what features they put on the map first.

Native Vegetation

What is the native vegetation in your community? Does any still exist? Where?

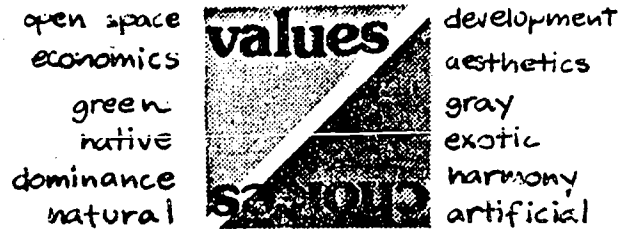
Find examples in your community where vegetation functions...

- ...AS A BARRIER
- ...TO DENOTE A PLACE
- ...AS A SIGN OF ABANDONMENT
- ...AS A SIGN OF AGE

Values and choices.

URBANIZATION AND LANDFORMS IN LOS ANGELES

As you investigate your community and consider the questions below, you might be prompted by these thoughts:



Inquiry

1. What would happen if Los Angeles disallowed future residential land use in the hills and canyons of Los Angeles county?
2. Why do you think people have been willing to risk disaster by placing homes at the edge of the sea? Should L.A. taxpayers be required to subsidize such settings by allowing fire department personnel to help shore up such homes during floods?
3. Why are the Santa Monica Mountains so unusual? What is their unique relationship to an urban center?
4. How does the topography of the Los Angeles Basin have an influence on the air quality of the county?
5. What are the special problems municipal services have in an urban area with the pattern of landforms characteristic of Los Angeles?

Speculation

1. Suppose the rainfall patterns of Los Angeles changed from 13 inches annual precipitation to 40 inches. What would be the resultant landscape changes?
2. What would be the result of an announcement "The San Andreas Fault will rupture tomorrow at 4:45 P.M. This information is brought to you by the Los Angeles Mayor's Office and is deemed quite reliable."
3. If Los Angeles did not have any of the present mountain systems, how would its settlement history be different?
4. Cities are the most highly artificial environment that society has created. Draw up a list of the artificial landscape elements of Los Angeles. Speculate what the city would be like if such human modifications had not been created.
5. Explain why people are willing to live in an environment that is threatened with earthquakes, fires and floods.

Architecture.

ORIENTATION TO THE BUILT ENVIRONMENT OF LOS ANGELES

Architecture in Los Angeles, as in any major city, can be considered from either of two perspectives: from the characteristics of the design of its individual buildings, or from the overall form given to the city by the sum of its parts. Kevin Lynch provides us with a convenient vocabulary for understanding this latter view, allowing us to see the structure of urban form through the disposition of the city's physical elements as barriers, edges, paths, and even whole areas where the physical organization alone could serve to make them separately identifiable or "legible." Importantly, Lynch also talks of a city's imageability, a term that serves to help us see the way in which the visual characteristics of its architecture defines a city and its parts as well.

Architecture, of course, is far more complex than mere visual analysis. Analyzing a city as vast as Los Angeles or studying the simplest shelter involves many of the same questions, differing primarily by factors of scale. Of foremost concern in architectural analysis is the matter of function and its complex interrelationship with physical form. All architecture, from the prosaic to the ceremonial, shelters behavior, is designed to facilitate behavior, and in some instances modifies or stimulates behavior, for good or ill. Since behavior follows certain culturally predictable patterns, so do the physical forms which house it. Thus, in Western Culture, we have come to expect that certain types of buildings will house predictable types of activities. With rare exceptions often deliberately designed to prove the rule, we can instantly recognize a residential structure for what it is, as we can a commercial or institutional structure. Our perception of these differences grows from our experience of the physical components involved in each environment.

The raw material of architecture is space. Every architectural decision is made to support the formation of space that articulates the needs of the people who use it. These decisions include the textural qualities of the materials, the volumetric relationship of solids to voids, the sources and quality of light, the organization of its structure, its color, or the rhythm of its parts. Architecture must be experienced in its context: its compatibility with the scale of its built surroundings, its response to the natural climate or landforms it occupies, and the social and cultural attributes of its users. Finally, architecture may be seen as a means of communication whose medium is the image it projects, aided in part by its architectural "style." Inhabitants of the nineteenth century could recognize a bank by its Greek revival style, or a church by its Gothic. While this dogmatism has not survived our century, we do still rely on the architect's ability to suggest a building's purpose through the use of imagery.

The architecture of Los Angeles has been important in the development of modern architecture for several reasons. Its broad, limitless expanse of low-rise residences (that Banham calls "the Plains of Id") resembles Frank Lloyd Wright's idealist Usonian schemes where the home is the castle and everyone has one. No single design tradition has prevailed, although two have dominated. Romantic images from the days of the missions have continued to feed the fantasies of Angelenos at the same time that modernists like Neutra and Schindler found acceptance for their bold and influential experiments. A third force, outside of these traditions and only recently influential in the world of serious architecture, is the architecture of the strip--the gas station and the taco stand. As we move toward the end of this century, all three forces converge to form a unique and vital Los Angeles urban landscape.

Annotated Bibliography

- Gebhard, David and Robert Winter: A Guide to the Architecture of Los Angeles and Southern California (Santa Barbara: Peregrine Smith, Inc., 1977). Here is an indispensable guide to the built environment of Los Angeles, to be kept in your glove compartment or, if it is big enough, your hip pocket. While the catalog itself is catholic in its inclusions, and the style glossary in the back both informative and amusing, do not overlook the introductory essay. Written with wit and insight, it covers Southern California architecture from its beginnings through its postulated future.
- Rasmussen, Steen Eiler: Experiencing Architecture (Cambridge: MIT Press, 1959). An excellent introduction to the kinds of things a good architect keeps in mind as he or she designs, and hence a useful guide to unraveling architectural intentions through experience of the architect's works. The author explains the principle devices available for the designer's environmental manipulations and offers comments to help enlighten one's experience of any environment, with little hints thrown in on what to look for. Rasmussen writes with a light touch and the book is satisfying throughout, although he sacrifices some subtleties for clarity of message.
- McCoy, Esther: Five California Architects (New York: Reinhold Publishing Corp., 1960). Architecture as High Art is the theme here, and handled by one of Southern California's most distinguished architectural historians and critics, it is a revelation of the innovations in the first half of this century by five influential pioneers. Of particular interest to us in Los Angeles is the work of Charles and Henry Greene of Pasadena, primary exponents of the Craftsman style of residential design. Also covered are Irving Gill, whose independent work anticipated the Modern Movement in Europe, and Rudolph Schindler, a European who provided Los Angeles with some of its most provocative modern images.
- Venturi, Robert and Denise Scott Brown: Learning from Las Vegas (Cambridge: MIT Press, 1972). Not exactly Southern California, but close enough in conceptual space to the Plains of Id to give us insight into some of the flashier aspects of our own setting. The authors tell us there is much to be learned from what we laugh off as junk (Architecture as Low Art?), and their classical architectural analysis of the Vegas Strip shows that indeed there is. We can do the same for Ventura Boulevard or the Imperial Highway.
- American Institute of Architects, Environmental Education Committee: Built Environment (Washington, D. C., American Institute of Architects, 1975). Three excellent booklets published by the professional association of architecture and directed at the needs of public school teachers. The first book, "A Teacher Introduction to Environmental Education" presents a thorough review of projects and focuses that can be taken from the built environment and shows ways for organizing lessons around such activities. The other two books, "Environmental Activists and Current Projects" and "Environmental Education Teaching Tools" are a catalog of projects nationwide and an annotated bibliography respectively. While the former is somewhat outdated now, both offer good commentary and are a valuable source of ideas and potential contacts.

Monday, July 10, 1978

Topic Outline

- I. Rationale for study of architecture in environmental education
 - A. Most manipulable aspect of urban environment
 - B. Architecture as environmental cues
- II. Elements of architecture and development of an architectural vocabulary
 - A. Type
 1. Delineation of function and the emergence of form
 - a. Patterns
 - b. Cultural types
 - residential
 - commercial
 - institutional
 2. Relationship of function and scale
 - B. Space
 1. Multi-sensory dimensions of space
 - a. volume
 - b. rhythm
 - c. texture
 - d. light
 - e. color
 - C. Context
 1. Built--scale
 2. Natural--climate-landform
 3. Social--function/culture
 - D. Image (or Style)
 1. Mode of communication
 2. Relationship to cultural/historical context

ORIENTATION TO THE BUILT ENVIRONMENT OF LOS ANGELES

- a. relationship to building type
- b. regional expression

III. Los Angeles Architecture

A. Style: Gebhard and Winter's taxonomy

- | | |
|-----------------------------|------------------------------|
| 1. Hispanic tradition | 15. Spanish Colonial Revival |
| 2. Greek Revival | 16. Pueblo Revival |
| 3. Italianate | 17. Monterrey Revival |
| 4. Gothic Revival | 18. ZigZag Moderne |
| 5. Carpenter's Gothic | 19. Streamline Moderne |
| 6. Eastlake | 20. PWA Moderne |
| 7. Queen Anne | 21. Hollywood Regency |
| 8. Richardsonian Romanesque | 22. International |
| 9. Colonial Revival | 23. Corporate International |
| 10. Beaux Arts | 24. Brutalism |
| 11. Late Gothic Revival | 25. New Formalism |
| 12. Craftsman | 26. Sea Ranch |
| 13. Mission Revival | 27. Cut-into Box |
| 14. Prairie | |

B. Architecture as High Art

1. The Modern Movement in Los Angeles

- | | |
|----------------------|---------------------------|
| ● Frank Lloyd Wright | ● Harwell Hamilton Harris |
| ● Richard Neutra | ● Charles Eames |
| ● Rudolf Schindler | |

C. Architecture of the streets

1. Decorated Sheds: the Dingbat
2. Ducks

D. Architecture as Romantic Illusion

1. The period of Mission Revival (Ramona and Helen Hunt Jackson)
2. The Golden Age of the Duck
3. New Urban Influences: the Coming of Respectability
 - a. Pickle Bill's
 - b. Air Lanes Bar

Values and choices.

ORIENTATION TO THE BUILT ENVIRONMENT OF LOS ANGELES

Inquiry

1. What architectural decision has had the most profound impact on the shape of the Los Angeles landscape? How might this be changing?
2. What has been the strongest influence on the image of institutional architecture in Los Angeles today? How is this different from past influences?
3. What is appropriate or inappropriate about the materials used in Los Angeles building? What might the city look like if its buildings were built primarily from "indigenous" materials?
4. Los Angeles is said to be a city inhabited by people on wheels. Are there any good walking streets here? What makes them this way?
5. Compare and contrast the shopping environments of Broadway downtown and a typical suburban shopping center. What similar functions do they serve? How are they uniquely different?

Speculation

1. If you could show only one picture illustrating Los Angeles to someone unfamiliar with the city, what would it be? How would this image characterize the city? What would be missing from this image?
2. Suppose the city, in a giddy moment, voted to build a theme structure to represent the spirit of Los Angeles. Would this look more like the Brown Derby or the ARCO Towers? Where would you propose to locate it?
3. What might Los Angeles look like today had there not been a building height limitation ordinance prior to 1960? How would the city look if this ordinance were still in effect?
4. The average lifespan of a building is 40 years, and perhaps even shorter than that in Los Angeles. How will your community age? What will it be like in 40 years? In 15 years? Why?
5. How does the architecture of your classroom influence the behavior that goes on in it? What kinds of simple modifications can you think of that would help alter that behavior?

Transportation.

IS THIS TRIP NECESSARY?

"Is this trip necessary?" is the most essential question to answer in terms of discussion of any transportation system. If one were to analyze the bona fide necessity for each of his or her auto trips around an urban area, it would quickly be apparent that a major theme in transportation problems is the cultural and individual inclination to idle away time behind the wheel of a nearly empty automobile, going places you really needn't reach in person at that particular time. The concept of movement has become important as a status symbol, a personal escape mechanism, and an essential component of the consumer society. This is an environmental problem of the greatest magnitude.

The technology of transportation--particularly with reference to the city scene--has a very curious history. For the great bulk of mankind's history and prehistory, there have been very few options for the movement of goods and people. The travois came first, then the wheel and then draft animals to increase motive power. The pace of the change within the last 5000 years is reflected in the observation that ton-mile costs of freight were approximately as much in 1820 A.D. as they were in 1820 B.C. It was not really until the first quarter of the 19th century that the revolution in modes of movement got underway. The railroad with its steam-powered might began to link city to distant city; rural grain-producing areas to urban markets.

Then, within a century came the horse-drawn trolley, the cable car, the interurban railways and, finally, the automobile. With the advent of the inexpensive car the whole pattern of American urban spatial systems began to change dramatically. With that innovation in transport technology people began to measure their distance between home and work or home and shopping not in distance or stops, but in minutes. The complete adoption of the car (and highway trucks) led to the destruction of private railway companies, trolley lines and virtually all private mass transit for many cities. This was particularly true for newer, rapid growth cities which made their design reflect the predominance of the automobile. Sprawling and expansive with many nearly self-sufficient suburban centers, these urban organisms were unlike the turn of the century cities which have given us so much urban lore.

Transport technology has continued to shape cities. Airports can create commercial centers and destroy residential neighborhoods by their presence and their expansion. Freeways establish barriers between sections of once-cohesive communities. Whole cities live in a shroud of foul air generated largely by devices of transport technology--yet these same cities have populations which are able to enjoy a diversity of commercial, recreational, and vocational options of unprecedented variety because of this same technology. Immense quantities of our hydrocarbon resources are expended in the propelling of single-passenger cars, all moving in approximately the same direction. Urban images of any city are filled with visions of being caught in this mass, this mess.

Finally, few systems of constraint and control have as much impact in the shaping of our private lives as do traffic laws and traffic policemen. We are servants of transport and the transport militia. This begins with our fear at our first crossing of the street and concludes in an equally unsatisfactory sense of not being aware of the red lights we go through (legally) enroute to our burial.

The questions that we must answer in terms of urban transport are: (1) How high a cultural price will we pay for our one-person, one-car syndrome?, (2) How much will we pay for additional speed (the Concorde)?, (3) How much commuter pressure can we tolerate as we all flock cityward at dawn and suburbward at dusk (vs. a staggered workday)? and, (4) Is the daily circulation we all involve ourselves in really necessary? The answers will involve transport systems, resources, the city, and cultural value systems.

Annotated Bibliography

- Fabun, Don: Dimensions of Change (Beverly Hills, CA.: Glencoe Press, 1971). This book is a composite of six trade booklets done by Don Fabun for Kaiser Aluminum. It is brilliant in its conception and designed with much graphic excellence. The chapters include Ecology, Shelter, Energy, Food, Mobility, and Telecommunications. The Mobility chapter is a particularly strong comment on the high energy costs (social as well as physical) in contemporary American urban transit. There are also good cross references within the Mobility chapter and the rest of the book for additional sources.
- Reichart, Barbara K.: "Improving Urban Mobility," (Washington, D. C.: U. S. Department of Transportation, May, 1975). This is a simple and clear message from the U. S. Department of Transportation on the engineering technology readily available to facilitate movement of cars, busses and people in American cities. In well-illustrated and concise form, the variety of options open to city planners and traffic engineers is displayed with comments on successful (and some not-so-successful) experiments with traffic islands, counter-flow lands, car pooling projects, dial-a-ride, bike lane, and other projects. The booklet points out the importance of social change and public acceptance of responsibility for trying new modes of movement.
- Blanchard, Robert et al.: "Ideas on Public Transportation" (Los Angeles: Atlantic Richfield Company, 1975). Under this title there are four booklets done by ARCO in response to the 1973-74 energy crisis concern about American automobile dependence. The titles are: "Speed, Comfort, and Fear," "Paying the Fare," "Technology and the City of the Future," "Childrens' Thoughts on a Public Dilemma." This series is important because most of the ideas come from the travelling public as opposed to academic and research sources which are more inclined to be unrealistic in the expectations they have for social change. The first two have little new in them, but the third booklet is provocative in its view of transit systems of the future, and the fourth should be especially important to us because of the attitudes shown by youth regarding transit. We should attempt to figure out what happens from the keen importance given to bicycles as youth and the quick and nearly complete dependence placed upon cars so soon thereafter.
- Packard, Vance: A Nation of Strangers (New York: David McKay Company, Inc., 1972). Although this book is not about urban transportation systems in any explicit way, it is a book about the mobility syndrome of American society. Packard spends a good deal of time talking about the motivations which lead to such active movement and it is not difficult to draw inferences from cross-country moves and make them relate to daily circulation within an urban system. The book is a polemic on the virtues of roots and maintenance of a greater permanence than we now have. It is a good discussion book, particularly for a California readership.
- Stone, Tabor R.: Beyond the Automobile: Reshaping the Transportation Environment (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1971). This is a reasonable general book on the benefits of turning to mass transit rather than making massive new investments in our highway network. It is still another comment on the critical thinking we have to do about continued adulation on the private automobile.

Topic Outline

- I. The Necessity and Cultural Role of Urban Transportation Systems
 - A. Movement of goods
 1. Urban market concentration and inflow of goods
 2. Urban manufacturing and the outflow of products
 3. Urban ability to generate "need" for extraordinary amounts of goods
 - B. Population circulation
 1. Transportation. cause or end result of urban congestion
 2. Transport congestion technology and the lateral expansion of the urban scene
 3. The car and its status role as a stimulant to expansion and improvement of urban transport systems
 - a. The car-as-therapy syndrome
 - b. Car pool vs. car as ultimate tool of independence
 - C. Residential mobility
 1. Increasing societal acceptance of intensified individuality and associated transport systems ramifications
 - a. Does "Doing Your Own Thing" have impact on the urban transport scene
 - b. Release valve for urban pressures?
 2. Would deterioration of urban transport systems retard residential mobility?
 - D. "Is this trip necessary?" as a cultural quandary.
- II. Los Angeles as the most dramatic example of a city born of transport technology
 - A. Water delivery systems
 - B. Agricultural product dispersal systems
 - C. Goal area for migrants of all classes
 - D. Local petroleum resource and clement weather responsible for early infatuation with automobile
 - E. Early history (pre-auto) already has evidences of social dependence on urban transport systems

IS THIS TRIP NECESSARY?

Tuesday, July 11, 1978

1. Pre-1870's - a pedestrian city
 2. 1870's - early omnibus line as slow
 3. 1874 - first horse car - real estate promotion
 4. 1885 - cable car - also real estate promotion
 5. Early 1890's - streetcars and interurbans that linked CBD and also tied in Pasadena & Santa Monica
 6. 1911 - Huntington-Pacific Electric opens: an extraordinary urban transport system
- F. 1923 as watershed year in Los Angeles transport
1. Traffic volume decreased on Red Car
 2. Autos become much more prevalent
 3. Pacific Electric Subway and the problems of poor maintenance
 4. Pacific Electric as important freight carrier and relatively efficient as commuter line, but trucks and cars began to ascend in importance
 - a. Ruination of Pacific Electric
- G. Additional System Innovations
1. Boulevards
 2. Pasadena (Arroyo Seco) Freeway
 3. Hollywood, San Bernardino, Santa Ana and Harbor Freeways
 4. Ventura, San Diego Freeways
 5. Planned but aborted freeways
- H. Curious space configurations and their uses created by freeways
1. Windowless apartment zones
 2. Storage areas
 3. Miniature golf

III. Social costs of freeway network

- A. Neighborhood disruption
- B. Barrier creation

IS THIS TRIP NECESSARY?

C. Catalyst for tract housing intrusion into farm land and open land

IV. Los Angeles as a model for future urban areas

A. Mass Transit?

B. Sprawl

C. Social cohesion and neighborhood - important?

Paths and networks.

Transportation Inventory

List as many kinds of transportation as you can think of that are important to your community at present. Circle the 3 most important; then indicate the most frequent users of each system (by age, sex, ethnicity, occupation, etc...). Are there factors which help explain why a particular group relies on a particular means of transportation? Are there alternatives for this group?

System

Users

Factors

Alternatives

Paths to the Future

Suggest 5 alternative transportation schemes for the future and consider their possible impact on your community.

Scheme

Local Impact

Classroom Survey

Survey everyone in the classroom to find out how they journey to school.

Then plot each route on a large map.

Interview

Interview 5 people in the community:

WHAT MEANS OF
TRANSPORTATION DO YOU USE
MOST FREQUENTLY? WHY?

WOULD YOU CONSIDER
ALTERNATIVES?

What factors seem to influence transportation choice?

distance? home location? income? age? personal preference?

Trip log.

Complete a log for each trip you take.

Date _____	Day _____		
ORIGIN	DESTINATION	PURPOSE	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
MODE	Beginning Mileage	End Mileage	TOTAL DISTANCE
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
No. of ignitions	<input type="checkbox"/>		

Date _____	Day _____		
ORIGIN	DESTINATION	PURPOSE	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
MODE	Beginning Mileage	End Mileage	TOTAL DISTANCE
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
No. of ignitions	<input type="checkbox"/>		

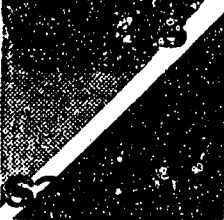
Date _____	Day _____		
ORIGIN	DESTINATION	PURPOSE	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
MODE	Beginning Mileage	End Mileage	TOTAL DISTANCE
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
No. of ignitions	<input type="checkbox"/>		

Date _____	Day _____		
ORIGIN	DESTINATION	PURPOSE	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
MODE	Beginning Mileage	End Mileage	TOTAL DISTANCE
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
No. of ignitions	<input type="checkbox"/>		

Values and choices.

"IS THIS TRIP NECESSARY?"

As you investigate your community and consider the questions below, you might be prompted by these thoughts:

personal convenience		public interest
low speed		high speed
neighborhood concept		regionalism
energy conservation		productivity
environmental quality		access to work

Inquiry

1. What was the impact of the Red Cars on the development of the Los Angeles landscape?
2. Trace the social costs and benefits of increased mobility made possible by improvements in transportation facilities over the course of the past century.
3. What incentives have influenced people's urban movement and prevented them from consciously reflecting on the question "Is this trip necessary?"
4. What were the issues that led to the failure of the Diamond Lanes experiment?
5. What are the factors preventing a mass transit system similar to BART from being implemented in Los Angeles?

Speculation

1. Speculate on the implications of a high speed mass transit system along the Wilshire corridor running from downtown to the ocean.
2. What would Los Angeles be like if the freeways had never been built?
3. Trace what you think would be the impact on Los Angeles if the price of gasoline rose to \$1.50 a gallon (include impact on housing patterns, employment opportunities, racial distribution, centralization, growth, neighborhood concept, pollution, and energy consumption).
4. What would be the impact on the air quality of the Los Angeles Basin if trucks, automobiles, and busses were inoperative for one day?
5. Think about some ways that transportation might be used to enhance public education. Could there be some bonus benefits hidden in school bussing?

Housing.

RESIDENTIAL ENVIRONMENTS OF LOS ANGELES

Observers of the urban landscape are well advised to learn the basic principles of housing for several reasons. Few other human requirements are so elementary and basic as the need for shelter, and yet in America this important life decision is strongly affected by economic and cultural forces beyond individual control. At the same time, housing represents our smallest habitable domain and the one sector of our physical environment over which we have some influence. Thus, housing is a medium of expression that we use to show the world around us who we are and what we think is important. By learning to read the language of housing, we can explore any community with far greater insight into the socio-economic status, taste, and even values of the people who live there.

The private housing market mediates between the supply of housing and the demand for this housing, establishing a value on the dwelling units that exercises a considerable constraint on the individual family's ability to improve its housing situation. In theory, value is established through the aggregate effect of huge numbers of individual housing transactions. These transactions are systematically related to each other, so that the amount paid for housing in one part of the city affects the value of other housing units in the city. If the market is working properly, new housing is constructed in sufficient quantity to prevent shortages and resultant inflated values. The market does not necessarily function well with respect to low-income housing, and new housing tends to be built for only the higher socio-economic levels. Even families at these levels have only a limited and indirect influence on the characteristics of the housing which is provided for them. Important decisions concerning the nature of urban housing rest with the builders' perception of the demand for new housing and with the financing agencies.

In Los Angeles, as in most large cities, housing built to satisfy the relatively narrow range of demands from earlier eras comprises the majority of the housing stock today. Most contemporary urban families and households must manage to fit their housing needs around the availability and adaptability of this older housing. The dominant housing type in Los Angeles is the single family dwelling, and this derives from a long history of small-scale residential environments that culminated in the adaptation of the bungalow to the Southern California lifestyle.

Much can be told from the condition and appearance of houses in a neighborhood. The style and kinds of materials used can give quite accurate indication of when the house was built, and the type of housing (single-family, duplex, multi-family) and the density of the area can often be an indicator of the socio-economic status and even vocational associations of the residents. The condition in which the building is maintained and the extent to which the inhabitants have personalized their domain and defined their territories can indicate whether the neighborhood is comfortably settled or in a state of transition. Finally, there are numerous indicators of the cost of housing beyond the above, such as its proximity to amenities or the elevation of its site. Every community has its own characteristic housing, and understanding how to interpret the signs that housing provides is one of the strongest and most reliable tools for judging the community's health.

Annotated Bibliography

- Abrams, Charles: The City is the Frontier (New York: Harper and Row, 1965). This is one of the outstanding treatments of the economics and politics of urban housing. It contains both a historical perspective and a contemporary (mid-1960's) overview of urban housing problems. The primary focus is on the housing problems which afflict inner-city areas, including an intelligent and readable discussion of urban renewal and rehabilitation.
- Housing, Real Estate and Urban Land Studies Program, Graduate School of Business Administration, University of California, Los Angeles: Report on the Housing Element for the General Plan of the City of Los Angeles, 1970. Out of the planning jargon and formalities of this extensive report emerges a thorough review of Los Angeles housing. There is a review of the state of the city's housing stock, housing trends, and the recent performance of the housing market. There is also an assessment of planning strategies, problems, goals, and policies designed to improve the Los Angeles housing environment.
- Moore, Charles, Gerald Allen, and Donlyn Lyndon: The Place of Houses (New York: Holt, Rinehart and Winston, 1974). This book is both an elegy to housing design in America and a guide to the potential house builder and owner on things to consider in designing a personal habitat. It is also a portfolio of house designs by Moore, one of America's premier architects, and as such is rather far removed from housing that is within reach of most of us. But it provides insights that help enrich our perception of residential environments.
- Newman, Oscar. Defensible Space (New York: MacMillan, 1972). A landmark study in the design of urban housing, initiated in New York in response to the problem of crime in public housing. Newman's research reveals principles of surveillance and territorial identification that are particularly well-suited to adaptation in Los Angeles. His findings are applied in a project that shows the impact of personalization on the social climate of a neighborhood.
- Olgyay, Victor: Design with Climate (Princeton, N. J.: Princeton University Press, 1963). This is a somewhat technical book written for architects as a guide for design, but it is fascinating in its use of cross-cultural examples and in its implications for housing. The book was written some time ago, but its message is loud, clear, and utterly in line with today's interests in appropriate technology and passive solutions to energy conservation.

Topic Outline

- I. Importance of housing for reading urban landscape
 - A. Every community has a characteristic housing stock
 - B. Selection of housing is a major decision in life
 - C. Housing choice is severely constrained by external forces
 - D. Housing is most individuals' only opportunity to manipulate their environment in an expressive way
- II. Housing economics places constraints on choice
 - A. Housing is the province of the private sector
 - B. Determinants of housing cost
 1. Size, condition, and availability of housing stock (supply)
 2. Economic and physical mobility of population (demand)
 3. The cost of money
 - C. Interdependencies of the housing market
- III. Characteristic housing types in Los Angeles
 - A. Single-family dwellings
 1. Evolution of the bungalow
 - a. scale
 - b. availability
 - c. climate
 - adobe, stucco, and heat lag
 - frame, timber, and earthquakes
 - B. Multi-family dwellings
 1. The bungalow court
 2. The duplex
 3. The dingbat

RESIDENTIAL ENVIRONMENTS OF LOS ANGELES

IV. Housing as a social and cultural indicator

A. Indicators of socio-economic status

1. Location
2. Size
3. Type
4. Age
5. Density
6. Materials
7. Condition

B. Indicators of cultural preference and taste

1. Age
2. Style
3. Type
4. Condition
5. Territory
6. Personalization

Places to live.

Habitat. The choice of a place to live ranks high in life's decisions. In Los Angeles, the range of choices is vast, although the availability of choice depends on a person's circumstances. The great number of single family dwellings and soaring real estate prices reinforce an image of Los Angeles as a city of an affluent middle class living on the edge of their buying power. Yet for many, a place to live in Los Angeles is an apartment house, nursing homes, hospitals, dormitories, hotels, housing projects, trailers, cars, or run-down, sub-standard housing.

Neighborhood Housing Inventory

Ride up and down every street in a neighborhood and put a mark in the box for every house that fits the description of the category.

	Totals	
single family house	<input type="text"/>	<input type="radio"/> Compare with census data for this area on density, income distribution, housing types, etc.
multi-family house	<input type="text"/>	
small apartment building	<input type="text"/>	
more than 10 years old	<input type="text"/>	<input type="radio"/> What accounts for their condition?
less than 10 years old	<input type="text"/>	
in perfect condition	<input type="text"/>	
in need of some repairs	<input type="text"/>	
dilapidated	<input type="text"/>	

Take a photograph to illustrate each of the categories and make a display of housing types and conditions in your neighborhood.

Talk to a real estate person to test you conclusions from this inventory.

Survey

Interview all of your parents and your immediate neighbors.

HOW DID YOU DECIDE TO LIVE WHERE YOU DO?

DESIGN • BILLBOARDS
• RADIO & TV SPOTS
• NEWSPAPER ADS

Use the information you get from the survey to develop an **Advertising Campaign** to attract people to your community

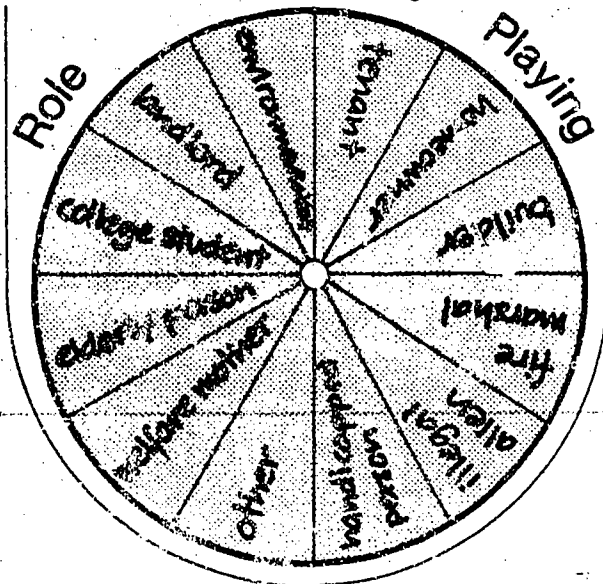
Cost Game

Find three houses in the area that are for sale or rent.

Guess the price of the houses and then call the realtors to find out how close you are.

WHAT DOES HOUSING COST TELL YOU ABOUT WHO LIVES HERE?

Take the role of one of these people or others appropriate to the community and dramatize the local housing situation.



Personalized Places

Put together a slide show of all the ways people have done things to their houses to make them their own and to communicate something about themselves. Look at:

GARDENS GARAGES
PAINT CARS
FENCES BOATS
BARRIERS NAMEPLATES
PORCHES ORNAMENT

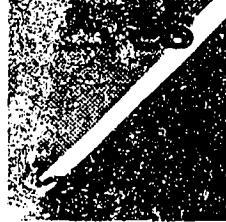
Invite someone from outside the community to see the slides, and ask what the slides tell that person about the community.

Values and choices.

RESIDENTIAL ENVIRONMENTS OF LOS ANGELES

As you investigate your community and consider the questions below, you might be prompted by these thoughts:

public
wealth
shortage
adequate
fair
development



private
poverty
surplus
substandard
unfair
no-growth

Inquiry

1. What unique housing types have evolved in response to the Southern California climate?
2. Think about the ways that housing reflects personal values and choices. List things about your own dwelling that reflect your own values.
3. What are some causes of the current rapid increases in housing costs in Los Angeles?
4. How is housing in Los Angeles and Southern California most significantly different from prevalent housing in the San Francisco Bay Area? What accounts for these differences?
5. What can the condition of a house tell you about the house's occupants? About the neighborhood it sits in? About the state of a city's housing market?

Speculation

1. Speculate on the impact of the Jarvis-Gann Initiative on the housing market of Los Angeles.
2. Speculate on what housing would be like in Los Angeles if water and transportation innovations had not allowed for decentralized patterns of development.
3. What would it take to restructure housing patterns so that, for example, racial balance in the schools might be achieved without elaborate movement schemes? What is the likelihood of such changes occurring in a city like Los Angeles? What other aspects of the city would be affected by such a change?
4. Suppose inflation in the housing market continued unchecked at the same rate it has recently in some parts of Los Angeles. What would this do to the organization of the city? Which communities would be hurt? Which communities might be helped?
5. Speculate on lifestyle changes that could influence in a positive manner the problem of a housing shortage. What implications might there be for the shape of the family unit? Is it possible to barter for housing? What sort of impact might there be on land use?

Population.

USES OF DEMOGRAPHY AND CENSUS MATERIALS

Los Angeles is a city alive; alive with not only a curious assemblage of non-European ethnic groups, but alive as well with increasing mobility and changing community images. A large black population has become the dominant group in central and south-central Los Angeles, and the Jewish population remains strong in the Fairfax district. Chinatown and Little Tokyo remind us of our Asian population, and east Los Angeles has become a haven for Chicanos and illegal aliens alike. Yet such obvious ethnic groupings are but generalizations and images that the casual observer acknowledges, but probably does not understand. In our case, we are concerned with understanding specific neighborhoods and the impact of community change. To effect such cognition, we must turn to the census--a valuable tool of demographic interpretation.

Neighborhood profiles take shape from the census data, and the rows of figures can quickly give a vivid image of ethnicity, educational background, employment and income. But in a more important sense, the census provides an image of contrast. By tracing neighborhood and geographical boundaries, one can graphically sense the "other side of the tracks" phenomenon. In addition, longitudinal data quickly shows ethnic movement and neighborhood change, while the supportive data often tells why. Yet such seemingly Orwellian documentation presents a dilemma that is particularly relevant for our emphasis. The rationale behind such documentation, when contrasted with the existing census inaccuracies within the inner-city, point to an obvious need for conceptual literacy. To this we must address our curricular interests, for census inaccuracy paints an unfortunate picture for those not correctly enumerated.

The census, taken every ten years, has grown from a constitutional mandate to a highly complex process which utilizes modern and sophisticated sampling methods. Today, the Census Bureau provides information for almost every segment of the governmental apparatus. Funds earmarked for education, health improvement, poverty assistance and urban renewal are all allocated according to figures derived from census data. Likewise, Congressional representation and indices like the Consumer Price Index have their origin in the census. The importance of accuracy, then, seems to be a moot point. Yet our inner-city and minority populations remain skeptical and/or disinterested, and tend to report inaccurate data or merely fail to comply. As a result, Federal and State funds to these communities are considerably less than would be possible with full and accurate enumeration. Our curricular focus should thus be centered on producing census literacy through the experience of demographic understanding. With such understanding and literacy, the census becomes a tool for both community appraisal and renewal.

Annotated Bibliography

General Sources

Bicentennial Statistics (74 pp. December 1976. 90¢) Presents historical time series of data on the social, political, and economic characteristics of the United States from colonial times to the Bicentennial year.

Bureau of Census Catalog (Available from GPO) The catalog is designed to give users of Census Bureau statistics a means of locating needed data. Each issue (monthly, quarterly, yearly) includes descriptions of the reports issued and other materials that became available during the period covered. This catalog is divided into two parts: I. Publications and II. Data Files and Special Tabulations.

Data Users News (8-12 pp. Monthly. \$4 for 12 issues) This monthly newsletter is designed to keep census data users informed about new Census Bureau products, services, and programs. All users of Bureau statistics, such as researchers, planners, government officials, business people, and civic leaders should find it helpful.

Environmental/Socioeconomic Data Sources (168 pp. October 1976. \$1.50) This handbook was compiled to assist the U.S. Air Force in preparing its environmental impact statements. It provides numerous data source suggestions ranging from local to Federal sources, with emphasis on data available from the Census Bureau.

Factfinder for the Nation (4-10 pp. 25¢ per brochure) A series of topical brochures put out by the Census Bureau. Each brochure describes the range of census materials available on a given subject and suggests some of their uses. The subjects include minority statistics, the availability of census records about individuals, population housing and construction, retail and wholesale trade, selected services, manufacturers minerals, foreign trade, transportation, agriculture, governments, geographic tools, reference sources, and the history and organization of the Census Bureau.

Pocket Data Book, USA 1976 (444 pp. November 1976. \$4) The fifth edition of a biennial series of this reference book commemorates the Nation's bicentennial celebration. It presents a compact selection of statistics on all major facets of the social, economic and political structure of the United States. (GPO Catalog No. C3.134/3:976)

The 1970 Census and You (13 pp. September 1977. Free.) Provides a general introduction to the wide variety of uses that can be made of the statistics resulting from the 1970 Census of Population and Housing.

Maps (95¢ each)

Statistical Maps in the United States (GE-50 Series) The series consists of a number of single sheet maps, each 30 x 42 inches, on a scale of 1:5,000,000 or approximately 80 miles to one inch. These maps generally show geographic distribution, by county, of various demographic and economic characteristics by using different colors to indicate ranges of percent distribution. In general, they are based on 1970 census data. Subject matter includes population, Standard Metropolitan Statistical Areas (SMSA's), Congressional districts, housing, education, income, age, race, urban commuting, and retail sales. (Order forms available from the Bureau of the Census.)

Urban Atlas Series (Tract data for Selected Standard Metropolitan Areas. GE-80) The atl: in this series provide a graphic representation of selected census tract statistics as reported in the 1970 Census of Population and Housing. Using the boundaries defini

USES OF DEMOGRAPHY AND CENSUS MATERIALS

the SMSA's, these maps depict the following projections: Population density, percentage of the total population under 18 and over 65 years of age; black population as a percentage of the total population; percentage of all persons 25 years of age or older who are high school graduates; median family income; percentage of the total labor force employed in blue collar occupations; median housing values; median contract rent; percentage of all housing units which are owner occupied; percentage of all occupied units constructed from 1960 to March 1970; and interrelationship of family income and educational attainment.

Each atlas also contains a table of comparative statistics for the purpose of relating the general characteristics of the metropolitan area to the nation as a whole, to the state in which the area is located, and to the counties and cities located within the metropolitan area. (GPO catalog no. C3.62/7: (No. .).) Los Angeles/Long Beach SMSA GE-80-4480 (about \$4)

Pamphlets (This is only a sample)

Census Bureau: Airtight Against Snoopers.

Census USA.

The Nation's Census Taker.

USA Statistics in Brief 1977.

Who Needs the Census? You do.

Studies (U.S. Department of Commerce, Bureau of the Census. Available as booklets.)

Census Data for Community Action. (1975)

Census Surveys: Measuring America. (Feb. 1978)

Data on the Spanish Ancestry Population. (1975)

The Social and Economic Status of the Black Population in the United States. (1975)

We, the Black Americans. (July 1972)

We, the First Americans. (1973)

Surveys (Done by various U.S. Departmental Agencies using Census Bureau data.)

Annual Housing Survey (SMSA)

Crime in the Nation's Five Largest Cities. (Available at the Census Bureau) National Crime Panel Surveys of Chicago, Detroit, Los Angeles, New York and Philadelphia, prepared by the Census Bureau for the U.S. Department of Justice: Law Enforcement Assistance Administration.

Health Characteristics by Geographic Region, Large Metropolitan Areas, and Other Places of Residence. (1973-4. 65 pp. November 1977. \$2.30) Vital and health statistics prepared for the U.S. Department of Health, Education and Welfare (Public Health Service) from information gathered by the Census Bureau and the National Center for Health Statistics.

National Crime Survey.

The Police and Public Opinion. An analysis of victimization and attitude data from 13 American cities, prepared for the Law Enforcement Assistance Administration, U.S. Department of Justice.

U.S. Chartbook: Health 1976-77. Prepared for the U.S. Department of Health, Education and Welfare.

Monday, July 17, 1978

Topic Outline

I. Population Movement to Los Angeles

- A. Major ethnic groups
- B. Geographic origins
- C. Ethnic "pockets" in Los Angeles
 - 1. Black
 - 2. Spanish descent
 - 3. Jewish
 - 4. Asian

II. Mini-workshop: Using maps and census materials to teach population movement and ethnic segregation

- A. Map-reading
- B. Importance of Scale
 - 1. Nation
 - 2. State
 - 3. City
 - 4. Neighborhood
- C. Resources and references
- D. Skills to be developed
 - 1. Map-reading/map-making
 - 2. Scale differentiation

II. The Census as a Demographic Tool

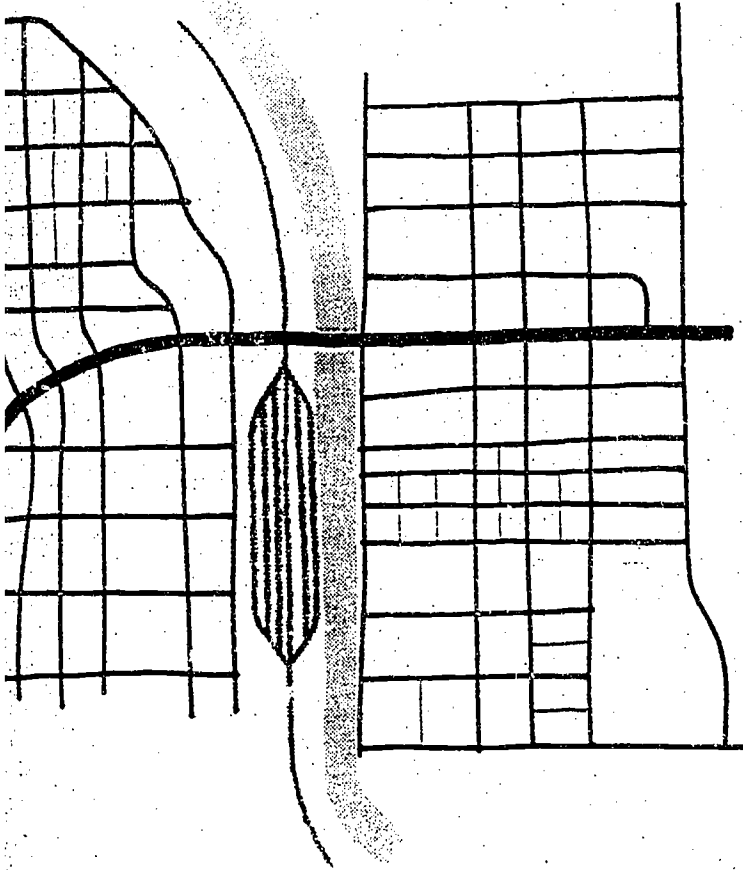
- A. History
- B. Modern day methods and problems
 - 1. Enumerated and self-enumerated census-taking methods
 - 2. Inner-city and minority skepticism
 - 3. Necessity for full enumeration

USES OF DEMOGRAPHY AND CENSUS MATERIALS

- C. Interpretation of census materials
 - 1. Available breakdowns of data
 - 2. Uses of data - purpose of the census
 - 3. Airtight clause - access to census data
- IV. Mini-workshop: Mechanics of question-asking, question-answering, data recording and data interpretation
 - A. Making a mini-census
 - B. How to fill out a questionnaire
 - C. Recording results
 - D. Interpreting results
 - 1. Pictures - graphics
 - 2. Essays
 - 3. Oral reports
 - E. Possible class projects
 - F. Resources and references
 - G. Skills to be developed
 - 1. Form completion, test-taking and making
 - 2. Recording and interpretation
 - 3. Scale differentiation
- V. Brainstorming Session - Twelve unit teacher assignment

Counting heads.

Activities



1. Questionnaire for students--school profile; questionnaire for neighborhood--community profile.
2. Mapping the community--images of ethnic pockets; graphic representation.
3. Visit the Census Bureau--have a community services worker visit your classroom.
4. Compare and contrast ethnic populations--seek out explanations and interpretations for differences and similarities.
5. Incorporate geography and math lessons into the social studies curriculum.
6. Seek attention for unique and innovative projects--the media may help spread census literacy.
7. Cooperate with a UEE participant in another area--perhaps the graphic differences can be more easily seen.
8. Can you explain bussing better with these tools?
9. What do the parents think about the census?
10. What can you do with mini-census results, your students, and a roll of butcher paper?

STATISTICS ON CHICAGO by Tamra Curtis

The chart that we've been working on, "Statistics on Chicago," shows me that the various things wrong with a city are all related to each other. For example, in all of the unhealthy districts in Chicago, people are living in older areas of the city which are run-down and cheap to rent. By them being cheap the uneducated, low-income families have no other choice. Most of these areas are predominantly black. This part of the city is extremely over-populated and the children are the victims of most of the disease, rats, etc. People live on the streets from day to day and get bored, so they steal, not only because of boredom but because they need it. When there are no jobs or anything, people get out their anger and depression. So you see it all goes together to make the inner city a bad place to live.

The outer area of the city, or the suburbs, are the newest areas of the city. These areas are where people who used to live in the inner city have moved. Now these areas are the healthy districts. Most people in the suburbs have a middle class income and also, these areas are not over-populated. Not having many people guards against pollution and disease. The people in these areas are not black and not uneducated. Compare and you will see the difference in how the inner and outer city people live in totally different worlds.

Reference

NEED EXTRA HELP?

Contact Bureau of the Census
11777 San Vicente Blvd.
Los Angeles, CA 90049

The community services section is
your best bet--try Eva Gay, 824 7542.

FACTORS OF INTERPRETATION

HAVE YOUR DATA?

Ask your students such questions as Why? Free choice? How are people affected?
Is this permanent? What might cause this? ...

DO BARRIERS EXIST?

Ask your students questions like Do geographic patterns prohibit growth? Rivers?
Railroads? What else keeps some neighborhoods separate? Race? Age? Education?

Interview

Interview five people and ask them

WHAT CHANGES IN POPULATION CHARACTERISTICS HAVE YOU NOTICED IN THIS PLACE?

- Don't forget the senior citizens!
- What about the clergy?
- Liquor store gangs?
- Store owners?

REFLECT

What can you do to further incorporate the census into demographic studies?

Values and choices.

USES OF DEMOGRAPHY AND CENSUS MATERIALS

Inquiry

1. What significance does census inaccuracy have for our study of Los Angeles?
2. Where are the four "major" minority groups geographically located in Los Angeles?
3. What other methods for estimating community needs could be used if the Census was eliminated? Would these methods be as effective?
4. Why does the Census Bureau emphasize its "airtight clause"?
5. What significance does the illegal alien situation have for census studies and the allocation of federal funds?

Speculation

1. What do you suppose warrants the skepticism with which many inner-city residents regard the Census Bureau?
2. Can you think of other methods of assessing community needs that parallel or could replace Census Bureau activities? Are the methods comprehensive?
3. Would a census held every five years help the government better assess community needs? Would it be cost-effective?
4. With the recent trend toward cutting government spending, can you justify cutting or eliminating services such as the Census Bureau provides in order to reduce federal spending?
5. Is it necessary for the government to seek a comprehensive demographic profile of its citizens?

Citizen participation in a bureaucratic republic is not always easy. It takes special knowledge of the power structure, the workings of the myriad bureaucracies, and skills which allow influencing any of these areas. If children learn about bureaucracies, and how to deal with them early in their schooling, they will then venture into the complicated maze of bureaucracies and be able to survive, participate, and not give up when things get complicated.

Nowhere is dealing with the bureaucracies more obvious than in urban planning. Any citizen who wants to be effective needs to know the skeleton of the planning process and the power which is sprinkled around through the various departments, agencies, committees, councils, managers, commissioners, administrators--to mention a few!

Planning for Los Angeles started early when the Spanish Governor for California instructed the first settlers to build their pueblo around a plaza measuring 275 by 180 feet. This first city plan for Los Angeles was to be followed by many more with the passage of time.

1849--the first map of the city was drawn by a young soldier hired to survey the city's land with the great hopes that land parcels could be sold to help fill the city's empty treasury. (Things don't change much, do they?)

1911-- a charter amendment was passed by citizens which empowered the City Council to create (by ordinance) a city planning commission.

1920--the Council passed the ordinance which established the City Planning Commission. By doing this, Los Angeles was one of the country's first cities to set up zoning laws. This commission had fifty-one members who served without salary and were aided by one paid secretary.

1925--the 1925 City Charter (which is still in effect) was established. In this Charter, the City Department of Planning was established and was to be headed by a five-member commission. At that time, zoning, height, and size of buildings were the main concerns of the Department.

1941--voters passed amendments to the 1925 Charter, among which established: Office of the Zoning Administrator, Board of Zoning Adjustment (later changed to Board of Zoning Appeals in 1963) and the Coordinating Board (which is now known as the General Plan Advisory Board) and placed a Director of Planning in control of the Planning Department. Five Commissioners, appointed by the Mayor and approved by the Council, were to serve in an advisory role. (A change from the 1925 charter where they had more power.)

1965--Los Angeles began work on a new general plan for the city. A Goals council sought citizen views on what kind of city they wanted for the future. These views were incorporated in the "Concept Los Angeles," which was adopted by the City Council in 1974. This forms the basis for the CITYWIDE PLAN. This includes all mandated elements and the community plans for Los Angeles. Community plans are developed through citizen advisory committees in each of the city's planning areas. Finally, through a long process of public hearings, the plans go to the Planning Commission and then the City Council. In late 1975 most, but not all, of the city's thirty-five Community Plans had been completed.

1972--planning for Los Angeles is done through what is known as GENERAL PLANS. In 1972, major revisions were made in the law dealing with General Plans, and conservation and open spaces were to now be considered. The Los Angeles area includes thirty-five areas, each of which is to have its own General Plan. These plans are to plan for Los Angeles up to 1999. All of these thirty-five general plans (which will become one large

general plan) are to include the following: land use, circulation, housing, conservation seismic safety, noise, safety, scenic highways and open space. Other elements suggested but not necessarily mandated are: recreation, additions to the circulation element, transportation, transit, public services and facilities, public building, community design, redevelopment, plans for the elimination of substandard housing and any elements which the planning agency believes relate to the physical development of the city. It is IMPORTANT to realize that merely planning for the physical development does not necessarily ensure a livable environment, something that planners often overlook.

There are many groups that affect Los Angeles city planning. A citizen needs a bit of information about these powerful groups in order to understand the planning process in case of involvement in trying to effectuate urban change, renewal or conservation.

1) The Director of Planning is the general manager and heads the Department of City Planning. He is hired, not elected. He is advised by the City Planning Commission and the General Plan Advisory Board. The Manager is responsible for the preparation of the GENERAL PLAN, all proposed zoning regulations and the approval of proposed subdivisions.

2) The Department of City Planning is a large bureaucracy which assists in the preparation and maintenance of the GENERAL PLAN. It prepares background materials through investigations and hearings for zoning cases considered by the Commission and the Board of Zoning Appeals. Acquisition of land by the city for public use must be referred to the Department for report and recommendation. Proposed ordinances modifying the Municipal Planning and Zoning Codes are prepared by the Department.

3) The City Planning Commission advises the Director of Planning on the GENERAL PLAN. Law requires the Commission to hold public hearings on such things as zone changes and conditional uses which affect the GENERAL PLAN. The Commission makes recommendations about the GENERAL PLAN, based upon their hearings, then this is presented to the Director of Planning who then presents these to the City Council for a vote. Zone changes can be initiated by 1) the City Council 2) the Planning Commission 3) filing of an application by the owners or lessees of property within the area proposed to be changed. If Commission recommends a zone change...Planning Department prepares an ordinance and submits it to the Council. If the Commission rejects a zone change...the Council may adopt an ordinance with a 2/3 vote.

4) The Zoning Administrator and four Associate Zoning Administrators have authority to prevent unnecessary hardship. This is different from a conditional use which is granted for a public or quasi-public purpose...and is decided upon by the Planning Commission.

The Zoning Code specifies which ordinances are under the jurisdiction of these Zoning Administrators. Citizens disagreeing with a ruling of the Department of Building and Safety (another department in the city with a large bureaucracy) may appeal their cases to the Zoning Administrators..who have the power to investigate and make a settlement. All these decisions can be appealed to the Board of Zoning Appeals. The Director of Planning appoints the Zoning Administrators.

5) The Board of Zoning Appeals is a five member board appointed by the Mayor and approved by the City Council. The members hear and determine appeals from the rulings and decisions of the Zoning Administrators. The Board's decisions are final, with the exception of certain conditional uses which may be appealed to the Council.

6) The General Plan Advisory Board is made up of 18 heads of departments who have an interest in matters affecting the GENERAL PLAN: general managers of the Departments of Fire, Police, Public Utilities, Building and Safety, Recreation and Parks, Water and Power, Environmental Quality, Traffic, the City Engineer, the Executive Directors of the Housing Authority and the Community Redevelopment Agency, the City Administrative Officer, a Council member appointed by the President of the Council and the Mayor. The Director of Planning chairs this board. The General Plan Advisory Board assists the Director of Planning in preparing or amending the general plan.

7) The City Council (15 elected law makers) have the final say on most appeals and make the final decision on the GENERAL PLAN and its elements through adoption of zoning ordinances. Any citizen advisory groups which assist on the general plans are appointed by the City Council members.

8) The Mayor can either sign or veto the General Plan.

Annotated Bibliography

League of Women Voters of Los Angeles, Los Angeles, Structure of a City (1976).

Excellent for use as a text in studying L.A. city and bureaucratic structure. Tells you everything you always wanted to know about L.A. government, history, agencies, departments, budgets, citizen roles, how to write and address city officials and list of city services. For copies of this valuable resource, write to: League of Women Voters of Los Angeles, 3660 Wilshire Blvd, Los Angeles, California 90010. The cost of the book is about \$4.00, and it is a terrific bargain!

Some City Council members publish their own guides to government and services. Call your council member and see if they have them. Often you can get class sets.

In addition to the L.A. Libraries, there are other municipal libraries that have information that might be of use to you with regard to cities and L.A.:

- o City Hall Library, Room 530, City Hall East (tel. 485-3288)
- o Police Library, 150 N. Los Angeles Street (tel. 485-3288)
- o Water and Power Library, 111 Hope Street (tel. 481-4211)
- o Planning Library, City Hall, Room 618 (tel. 485-5077)
(Police, Water and Power, and Planning Libraries are not easily accessible, but if you want to go there, be persistent and don't take "no" as a final answer!)
- o The Los Angeles Times has a terrific clipping library, with files of clippings about every subject imaginable. You need a reservation to use the library, but it is well worth your time. Call 625-2345 for information.

Fagence, Michael, Citizen Participation in Planning (Oxford, England, Pergamon Press, 1977). Gives some valuable political philosophy of democracy and participation, decision making in the planning process, impediments to participation.

THE POLITICS OF LANDSCAPE CHANGE: URBAN AMERICA

- Dutch Ministry of Culture, Citizen and City in the Year 2000 (Rotterdam Chamber of Commerce, 1971). Gives some thoughts about the future. Might spark some thoughts about what needs to be done now to help prepare children for the tomorrows ahead.
- Sieder, Violet M., "The Citizen Volunteer in Historical Perspective," in Nathan E. Cohen (ed) The Citizen Volunteer: His Responsibility, Role and Opportunity in Modern Society (New York: Harper and Row, 1960).
- Sigurdson, H.R., "The Emerging Role of Youth in Community Development: A Challenge to Protocol." Paper presented at the California State Psychological Association meetings, San Francisco, 1966.
- Marx, Herbert Lewis (ed) State and Local Government. Includes information about local government today also county, state and federal government and various impacts and authorities and the right to representation.
- Hellman, Hal, The City in the World of the Future. Tells where and how new cities will have to be built as scientists and engineers try to accommodate a rising population.
- Macdonald, Austin Faulks, American City Government and Administration. Shows the organization and work of American cities, covering all aspects of their legal and social functions.
- Mead, Margaret, The Wagon and the Star. Portrays the projects, goals, and personal drive of those American citizens who work together in local community affairs and so further the process of nationwide building.

Topic Outline

- I. The key to understanding urban change is in understanding the power structure in the involved bureaucracies which deal with urban change. The following figures are for 1975-76 and come from Los Angeles, Structure of a City published by the League of Women Voters of Los Angeles.

The following agencies, departments, administrators, bureaus, councils, officers, etc., are intricately woven into the process of urban change. After looking at this you will understand the necessity of having citizens be informed about bureaucracies and how they work. Without such knowledge the citizen is easily overwhelmed and lost.

Agency or Officer	Annual Salary	Annual Department Budget
Director of Planning	\$49,047	\$5,790,764
Department of City Planning		\$5,790,764
City Planning Commission (5 members)		
Zoning Administrators (5 members)		
Board of Zoning Appeals (5 members)		
General Plan Advisory Board (18 officers)		
General Managers of the following:		
Fire Department	56,167	133,083,269
Police Department	62,598	309,388,097
Public Utilities	41,739	11,450,383
Building and Safety	54,664	17,265,443
Recreation and Parks	46,479	43,167,678
Water and Power	69,576	915,143,000
Environmental Quality	30,276	343,153
Traffic	41,739	16,138,390
City Engineer	57,712	21,000,000
Executive Directors of the following:		
Community Redevelopment Agency	32,256	3,742,365
City Administrative Officer	60,944	4,129,122
A Council Member (appointed)	30,000	6,776,209
Mayor	50,000	2,597,392
Housing Authority		

II. The Citizen in the Planning Process as outlined above.

A. Citizen input to the General Plan

1. As members of a Citizens Advisory Committee to the Planning Department, appointed by council members and usually consisting of 20 members. (Not all council members thought this input was necessary).
2. As citizens who signed petitions for various changes (or conservation).
3. As citizens who attended hearings giving the planning bureaucracy an indication of citizen concern, outrage, approval, disapproval, etc.
4. As citizens who testified in public hearings before the Planning Commission, Council Planning Committee, City Council, etc.
5. As citizens who wrote letters, telephoned, and lobbied council members.

THE POLITICS OF LANDSCAPE CHANGE: URBAN AMERICA

- III. Specific case history of a citizen involved in the Planning Process as a member of the Citizen Advisory Committee for the Palms-Mar Vista-Del Rey General Plan.
- A. Original committee of 20 dwindled to 11 permanent members after years of hassling.
 - B. Meetings started in March of 1971 and finally the General Plan for this area was accepted by the council by a 10-2 vote in August of 1976.
 - C. Value of citizen input was that without it the area would have been drastically more developed and less livable. Streets would have been widened to almost highway standards and tree-lined streets removed. After a long, bitter struggle with the pre-development council members, which was contrary to citizen desires, the community finally won out, but only because they never gave up in their fight to preserve the sanity of their residential areas.

The Planning Department, the Council, and all concerned were impressed when at one public hearing 1,000 people jammed into the hearing place: angry at proposed changes and determined to preserve the livability of their neighborhoods.

- D. How to mobilize citizens. Citizens must be informed. They cannot always rely upon the media for information. Watchdogs (citizens who sit in on key meetings) are a must so they can alert the citizens who will be affected by the changes being determined by the politicians and bureaucrats.
- IV. The bureaucracy of planning will only respond to citizens who are persistent, vocal, knowledgeable.

NEVER GIVE UP!

To be a real expert it would be of immeasurable assistance to begin learning about bureaucracies in elementary school. It will enhance public participation for a long time to come.

Experiencing community.

What is a community? A community is not an absolute thing. It exists in the ways people live and the ways people think about it. Any community is made up of several sub-communities or smaller pieces in its fabric. Each of these smaller areas may be different along many dimensions, but the two or three (or more) things they share in common help define the community as a whole. Edges are where the smaller areas meet or where the sub-communities are bounded. Often, edges are shores, waterways, railroad cuts, major landforms, flood control channels, and often freeways or streets as well.

A Windshield Survey

Locate the school you will be working with, and drive out in a sort of spiral through the streets all around it until you have covered what appears to be the entire community.

Areas: Signs of Life

What do you see as you drive that indicates the existence of different areas in the community?

RESIDENTIAL

COMMERCIAL

INDUSTRIAL

RECREATIONAL

Edges: Location and Evaluation

Record on a street map the location of boundaries or edges to the areas you discover.

How would you characterize these edges?

How do you know that?

open	—	closed	_____
soft	—	hard	_____
barriers	—	facilitators	_____
temporary	—	permanent	_____
physical	—	social	_____
young	—	old	_____
dead	—	lively	_____
past	—	future	_____
public	—	private	_____
safe	—	dangerous	_____
ambiguous	—	legible	_____
planned	—	accidental	_____
real	—	imaginary	_____

A Neighborhood Walk

Get out and spend an hour or so walking through one of the areas you identified from the car. Gather as much information as you can to make a clear, evocative image of the neighborhood using the tools on the other side as your palette.

People and Action Survey

Look for evidence in your community of people-oriented projects that improve upon the built environment (like renovations, home improvements, gardens, parks, murals, etc.) Do an investigation of projects along the lines of the one below.

Who did it? (name names) _____

- | | | | |
|-----------------------------------------|-----------------------------------------|--------------------------------------------|-------------------------------------|
| <input type="checkbox"/> Homespace | <input type="checkbox"/> Personal scale | <input type="checkbox"/> Individual effort | <input type="checkbox"/> Public \$ |
| <input type="checkbox"/> Workspace | <input type="checkbox"/> Social scale | <input type="checkbox"/> Collective effort | <input type="checkbox"/> Private \$ |
| <input type="checkbox"/> Communityspace | <input type="checkbox"/> Public scale | | |

low impact 1 2 3 4 5 high impact

Roots, motives, conditions or origin: _____

Do most efforts appear to be public or private in origin?

What is the average cost of such a project?

Does one project inspire another?

Are most projects individual or collective efforts?

What would be the effects of replication on a larger scale?

Community Resource Inventory

Institutions

Contact

Asset

Potential Use

Availability

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

People

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Things

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Methods

Street Survey: Do a door to door canvass, working outward from the school and covering as much of the community as possible.

Networking: Find out who the people in the class know, who those people know, etc., and what those people can offer as unique resources.

Case Examples: Learn from someone else's experience.

Ad Hoc: Decide on a project and build contacts as needs arise.

Planning.

PROBLEM SOLVING IN ENVIRONMENTAL EDUCATION

Planning is a process. It is a rational process that involves people, a process that is a goal-oriented, conscious effort to work within certain constraints to effect and direct change. The planning process offers a model for problem-solving that has defined steps and leads to measurable outcomes. Goals are formulated against a clearly conceived statement of a problem; the way in which solutions are derived is dependent upon how the problem is conceived. By breaking a problem statement into its component smaller pieces, partial solutions can be proposed and put into a variety of combinations to produce several alternative whole solutions. The degree to which each alternative solution satisfies the original goals and objectives formulated at the outset provides a basis for evaluation and selection of a plan to be implemented. The process is cyclical in that evaluation of plans and evaluation of programs in progress continually reveals new problems and new areas for planning or problem-solving.

We are most familiar with planning in its application to large scale problems in the urban environment. However, planning need not be limited to such a large scale context. The same process can successfully be applied to problems existing on a smaller scale. Planning as a process deals with both the physical and social aspects of problem areas. It seeks to define relationships between these aspects and to effect change by utilizing these relationships in developing solutions to the problems at hand.

The process of education is an agent of change in which planning plays an integral role. Goals must be developed, needs assessed, alternatives developed, solutions implemented and evaluated. This goes on at the national, state, and local levels simultaneously. Decisions made at each of these levels affect solutions developed and implemented at all other levels. Within this hierarchical context, the classroom teacher is left as the bottom line transmitter of solutions developed at all levels. These solutions purport to solve the problems of education and to effect change consistent with the goals at higher levels. At each grade level, the solutions take the form of curriculum demands made on the teacher. In the classroom, curriculum structures learning and becomes a part of the context in which the teacher must work. Another part of this context is the physical space of the classroom in which learning takes place.

By using a model of planning, a teacher is given a tool to assess the needs of the students in regard to mandated curriculum demands and to develop ways to satisfy these needs. The process of planning can allow the teacher to draw upon unused resources both in developing and in implementing solutions. Due to the group nature of planning, opportunities exist to use "outside" people as resources. Because planning encompasses the physical, as well as the social, the built environment beyond the classroom becomes another resource. By using these outside resources, the number of possible ways to solve curriculum demands increases.

Environmental education provides the focus for planning classroom activities that use these resources beyond the classroom. The implemented activities, by their very nature, are interdisciplinary in scope. Everyday subjects, which comprise regular classroom curriculum, rather than being taught in isolation from one another, are combined as a part of the environmentally focused learning activities. During the process of planning such activities, the teacher and those involved have the opportunity to create learning situations which take advantage of the unique setting of the school and the unique make-up of the class. Each child is exposed to various combinations of curriculum areas: reading, language arts and math in some activities, art, math, and social science in others, etc.

Reflection.

TRADITIONAL MODE

Information: lectures, discussions, Scoring Los Angeles Landscapes,
Banham, Clay, George and McKinley.

Learning:

Application:

EXPERIENTIAL MODE

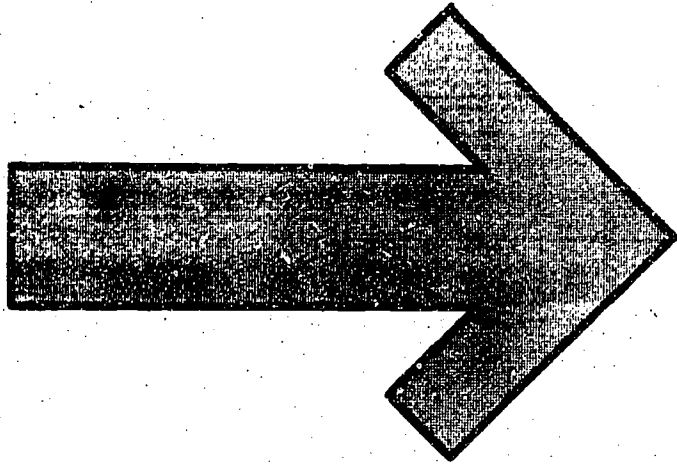
Action: field trips to CBD, Beverly Glen, Mountain Gate, Watts, Adams
Blvd., Central Ave., Hoover St., and visits to school communities.

Learning:

Re-
Application:

Theme formation.

LIST CURRICULUM AREAS
YOU WILL BE DEALING
WITH IN YOUR CLASS
DURING THE COMING YEAR.



THE FOLLOWING IS A LIST OF LEARNING TECHNIQUES
THAT MAY BE USED DURING ENVIRONMENTAL EDUCATION
ACTIVITIES.

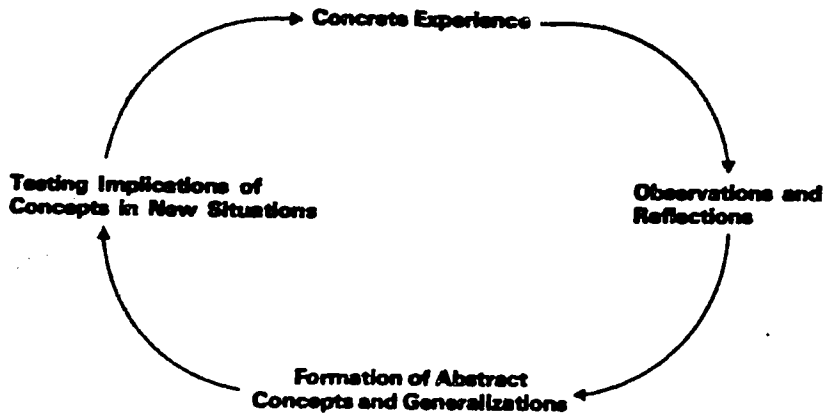
write
draw
chart
diagram
make

present
interview
brainstorm
survey
map

list
observe
research
measure
imagine

Goal setting.

The Experiential Learning Model



COMMUNITY
FOCUS

CONCRETE EXPERIENCE

OBSERVATIONS & REFLECTIONS

ABSTRACT CONCEPTS & GENERALIZATIONS

TESTING IMPLICATIONS

Activity plan.

Themes

Sep

Activities

Sep

ACTIVITY DELIVERY MODELS



teacher organized



teacher/UCLA student



UCLA student

timeline ● sequence of themes
● sequence of activities

themes ● related activities

activities ● lesson plans

curriculum ● activities plugged into a
timeline based upon a theme
sequence

ENVIRONMENTAL EDUCATION

1. Topic of activity
2. Goals pertaining to activity
3. Curriculum areas affected

Activity steps

1.	_____
2.	_____
3.	_____
...n.	_____

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Support

handouts
materials
vocabulary

Follow-up

classwork
homework

Appendix.

The bibliography, included here is an index to books and other references collected by the Project staff into a resource library available to Project participants. The entries have been divided into categories of history; natural, built, and social components of the environment; teaching aids; and pamphlets. Many of the references are entered in more than one of the categories, given the interconnections involved in environmental issues. Entries marked with an asterisk (*) are also listed with notes after units in the main body of this text.

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