

*THE KNOXVILLE PROJECT:
WESTERN MINING IN THE TWENTIETH CENTURY
ORAL HISTORY SERIES*

Eleanor Swent

THE REGIONAL ORAL History Office, a division of The Bancroft Library, University of California at Berkeley, is currently documenting recent developments in the historic Knoxville area of Lake County, California where a major gold mine is operating on the site of a historic mercury mine. The four-year project will include over thirty interviews, and will result in three volumes on the history, development, and community effects of the mine. This is the latest effort in the Western Mining in the Twentieth Century oral history series, which now comprises twenty-eight volumes completed and twelve in process.

The Regional Oral History Office was established in 1954 by the Regents of the University with the charge to document by tape recording persons who have contributed significantly to the history of California and the West. The purpose is to provide eye-witness primary source material for researchers. Interviews are carefully planned, transcribed, reviewed, indexed, bound with illustrative material and placed in manuscript libraries. They are also entered in national data bases, OCLC and RLIN.

In 1954, the founding year, one of the first interviews was with William Colby, famous San Francisco mining lawyer, born in 1875, an associate of Judge Curtis Lindley, author of *Lindley on Mines*. In 1970-71, Donald McLaughlin, a protege of Phoebe Hearst, manager of Cerro de Pasco Mine, chairman of Homestake Mining Company, and regent of the University of California, was interviewed. From then, for 15 years no information was gathered on mining or earth sciences, although the idea of an oral history series to document developments in twentieth century mining was still on the drawing board.

In 1984, when gold was discovered at the historic Manhattan Mine (now renamed the McLaughlin Mine) and there was much talk of a new California gold rush,

it seemed that a California office of history without a mining component was deficient indeed. The project finally got underway on January 25, 1986, when Mrs. Willa Baum, director of the Regional Oral History Office, met with an interested group. They included Philip Bradley, chairman of the California Mining Board under four governors; Douglas Fuerstenau, professor of materials science and mineral engineering at the University of California at Berkeley; Mrs. Donald McLaughlin; and other influential members of the mining and university communities. Broad outlines of the project were planned, and Professor Fuerstenau agreed to serve as principal investigator.

An advisory committee was selected which included representatives from the materials science and mineral engineering faculty and a professor of history of science at the University of California at Berkeley; a professor emeritus of history from the California Institute of Technology; and executives of mining companies.

The project was presented to the San Francisco section of the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME) on "Old-timers Night," March 10, 1986, when Philip Bradley was the speaker. This section and the Southern California section provided initial funding and organizational sponsorship.

The Northern and Southern California sections of the Woman's Auxiliary to the AIME (WAAIME), the California Mining Association, and the Mining and Metallurgical Society of America (MMSA) were early supporters. Several alumni of the University of California College of Engineering donated in response to a letter from Professor James Evans, the chairman of the Department of Materials Science and Mineral Engineering. Subsequent support has come from 77 individuals, 4 foundations, and 11 corporations.

The oral history series on Western Mining in the

Twentieth Century documents the lives of leaders in mining, metallurgy, geology, education in the earth and materials sciences, mining law, and the pertinent government bodies. Changes are documented in the technology and technical education; in the organization of corporations; in the perception of the national strategic importance of minerals; in the labor movement; and in consideration of health and environmental effects of mining.

The first five interviewees were all born in 1904 or earlier. Horace Albright, mining lawyer and president of United States Potash Company, was ninety-six years old when interviewed. Although brief, this interview adds another dimension to the many publications about a man known primarily as a conservationist.

James Boyd was director of the industry division of the military government of Germany after World War II, director of the U.S. Bureau of Mines, dean of the Colorado School of Mines, vice president of Kennecott Copper Corporation, president of Copper Range, and executive director of the National Commission on Materials Policy. He had reviewed the transcript of his lengthy oral history just before his death in November, 1987.

Philip Bradley, Jr., mining engineer, was a member of the California Mining Board for thirty-two years, most of them as chairman. He also founded the parent organization of the California Mining Association, as well as the Western Governors Mining Advisory Council. His uncle, Frederick Worthen Bradley, who figures in the oral history, was in the first group inducted into the National Mining Hall of Fame, Leadville, Colorado, in 1988. Mr. Bradley continues to serve as an advisor to the oral history series.

Frank McQuiston, metallurgist, vice president of Newmont Mining Corporation, died before his oral history was complete; thirteen hours of taped interviews with him were supplemented by three hours with his friend and associate, Robert Shoemaker.

Gordon Oakeshott, geologist, was president of the National Association of Geology Teachers and chief of the California Division of Mines and Geology. He continued to serve as an advisor to the oral history series until his death, in December 1993.

These oral histories established the framework for the series; subsequent oral histories amplified the basic themes.

As of January, 1994, twenty-eight volumes have been completed in the series (this number does not include the Colby and McLaughlin memoirs, which were recorded for other series). Nine other individual oral histories are in process. Two of the narrators in the series are women. Worker recollections include mine hoist operator, contract miner, stamp mill operator, and laborer in a copper smelter. Narrators were born in

Australia, Austria, Canada, England, Russia, and Scotland, as well as the United States. Most, but not all, had family connections with mining.

These volumes are available for research in libraries in the U.S. and abroad, and are also catalogued in national data bases OCLC and RLIN as well as the National Library of Congress. They have already been the basis for articles in trade publications, professional journals of the earth sciences, and regional historical journals. In addition, the interviews stimulate the deposit, by interviewees and others, of a number of documents, photographs, memoirs, and other materials related to twentieth century mining in the West. This collection is being added to The Bancroft Library's extensive holdings.

In 1993, quite a different oral history project was conceived. It was decided to document, not a significant personal career, but the development of a major new mine in a historic mining district, in all of its ramifications: links to past history, impacts on the community, and ramifications for the future.

To date, grants have been obtained from a foundation and a professional organization which allow work to begin on phase one of this four-year project. The working title is: "The Knoxville, California, Mining Region: A Model for Resource Development, Environmental Protection, and Regional Cooperation."

These mines had been a source of mercury for amalgamation of gold and silver in the California and Nevada mines from about 1860. Environmental protection was not of concern, and routine procedures were used which have long been outlawed. More recently, mercury mining gave way to reclamation of mercury from batteries and other industrial sources. Interviews of former mercury miners who still remember the mining methods used earlier in the century will document this technology as well as the economic impact on the community of the decline of mercury mining, before the discovery of gold there in 1978, at the Manhattan Mine, now renamed the McLaughlin Mine.

The project will continue with documentation of the development and impacts of the McLaughlin gold mine. When construction began on the mine in 1983, after five and a half years of planning, Homestake Mining Company officials at an annual meeting rolled out a heavy-duty dolly bearing the four-foot stack of paper which comprised 327 permits required for approval of the mine's development. Located in Yolo, Lake, and Napa Counties, each with its own distinct constituency, and with the environmentally aware San Francisco Bay Area nearby, the McLaughlin Mine necessitated careful pro-active planning to defuse community hostility and insure minimal environmental impacts. For their part, the three counties came to cooperate to simplify the permitting process and plan for the impacts the mine

would bring.

The mine is also of considerable interest because of new geologic concepts utilized in the discovery of gold in this area and the new technologies involved in its mining and milling processes. Now in full operation, this open-pit gold mine employs more than 300 workers and has brought major changes to the economy of the surrounding communities. The McLaughlin Mine has been an environmental success story: it has received a commendation from the Sierra Club for mitigation of environmental damage, and, when mining operations cease, the property will become a University of California nature reserve and research facility.

To document this significant event in California history, oral history interviews will be conducted with representatives of the corporation and several government agencies, former and present mine and construction workers, and members of the local communities and environmentalist groups.

An advisory committee has been named, consisting of Mrs. McLaughlin; a grandson of one of the original mercury mine owners in the district; the president of the Mining and Metallurgical Society of America; representatives of Homestake Mining Company; a representative of the Institute for Urban and Regional Development; and three university professors: one of materials science and mineral engineering, one of environmental history and conservation and resource studies, and the associate dean of the College of Natural Resources.

An initial field trip was made last fall, with university professors and graduate students who may be participating in the analysis and interpretation of data if necessary funding is obtained. Interviewing is underway now, beginning with the geologist who made the initial discovery of gold in 1978, and the first project manager of the gold mine. Concurrently, interviews are being conducted with the former owner of the mine when it was being mined for mercury, as well as other former mercury miners.

One of the challenges in conducting the interviews is that so many of the people have scattered widely. The geologist, who lives in Reno now, was interviewed once when he was in the Bay Area en route to a job in Kazakhstan, and again when he was passing through en route to China. The project manager is now based in Vancouver, and another interviewee now lives in Arizona, but fortunately they both come to the Bay Area regularly in connection with their work. This is the bad part of trying to interview people who are still young and active; the good part, of course, is that their minds are still in top condition and the memories are fresh.

The interviewees are selected, then, not in order of significance as much as in order of availability. First priority is given to those who are at actuarial risk: those in their 80s. Next are those who happen to be passing

through town, and finally, those who reside in the area and are younger and in good health.

Funding is a basic consideration. Original funding was only for the development of the gold mine, including the permitting process and the pro-active work with environmentalist opponents. Funds obtained later allow interviews of more mercury miners. Funds requested, but not yet received, would enable exploration in depth of the impact of modern large-scale mining and industrial activity on the rural community, and particularly to find out how land-use decisions are made.

Current interview plans are proceeding as follows:

Phase I, Sept. 1993-Sept. 1994:

Beginning to interview from the following groups:

I...DEVELOPMENT OF THE MINE

exploration geologist
former owner of the Manhattan Mine
Homestake chairman
Homestake environmental manager
Homestake mechanical engineer
rep. of construction contractor
first general manager, McLaughlin Mine
planning supervisor, Napa County
Yolo County supervisor
Napa county supervisor
representatives of environmentalist/anti-mining groups

II...GOVERNMENT AND COMMUNITY CHALLENGES

local school superintendent
Anheuser-Busch rep
officials of 3 counties
Caltrans rep
Capay Valley, Yolo County, farmers group
Napa Valley opponents
UC Davis biologist
Hill & Knowlton representative
Sierra Club representative
representatives of HMC legal, governmental
affairs, land management staffs
Solano Irrigation District
Bureau of Land Management

III...MINE OPERATION NOW AND IN THE FUTURE

UC Nature Reserve
HMC current manager
representative worker from locality
representative worker who immigrated
labor union representative

air & water quality board members
 local realtor
 local worker who received job training
 worker who came in from outside to get work
 current McLaughlin manager
 representative of UC Nature Reserve system
 members of local water, air quality boards
 local law enforcement officials
 Interviews will be transcribed and lightly edited for clarity concurrently throughout the project.

Phase II, Sept. 1994-1995:

Some interviews from Phase I will be continued, and others will be added as possible.

Editorial tasks: divide transcripts into chapters with headings and sub-headings; prepare table of contents; begin indexing; begin to select photos and write captions.

Phase III, Sept. 1995-1996:

Continue and complete interviewing and editorial tasks as above.

Phase IV, Sept. 1996-1997:

Complete editorial tasks: final typing, proofreading, cataloging, entering in national data bases, assembling volumes, advising libraries nationwide of completion of volumes, turning over archival materials to The Bancroft Library. Present complimentary volumes to narrators.

At the conclusion of this project, the three-volume set of oral histories will provide a vertical case study of technological change, local and regional land-use planning processes, and responsible resource development. It will provide valuable primary documentation for scholarly researchers, as well as a guide for corporate and government planners.

WESTERN MINING IN THE TWENTIETH CENTURY ORAL HISTORY SERIES

Interviews Completed, January 1994

Horace Albright, *Mining Lawyer and Executive, U.S. Potash Company, U.S. Borax, 1933-1962*, 1989

Samuel S. Arentz, Jr., *Mining Engineer, Consultant, and Entrepreneur in Nevada and Utah, 1934-1992*, 1993

James Boyd, *Minerals and Critical Materials Management: Military and Government Administrator and Mining Executive, 1941-1987*, 1988

Philip Read Bradley, Jr., *A Mining Engineer in Alaska, Canada, the Western United States, Latin America, and Southeast Asia*, 1988

Catherine C. Campbell, *Ian and Catherine Campbell, Geologists: Teaching, Government Service, Editing*, 1989

William Clark, *Reporting on California's Gold Mines for the State Division of Mines and Geology, 1951-1979*, 1993

James T. Curry, Sr., *Metallurgist for Empire Star Mine and Newmont Exploration, 1932-1955; Plant Manager for Calaveras Cement Company, 1956-1975*, 1990

J. Ward Downey, *Mining and Construction Engineer, Industrial Management Consultant, 1936 to the 1990s*, 1992

Hedley S. "Pete" Fowler, *Mining Engineer in the Americas, India, and Africa, 1933-1983*, 1992

James Mack Gerstley, *Executive, U.S. Borax & Chemical Corporation; Trustee, Pomona College; Civic Leader, San Francisco Asian Art Museum*, 1991

John F. Havard, *Mining Engineer and Executive, 1935-1981*, 1992

George Heikes, *Mining Geologist on Four Continents, 1924-1974*, 1992

Helen R. Henshaw, *Recollections of Life with Paul Henshaw: Latin America, Homestake Mining Company*, 1988

Lewis L. Huelsdonk, *Manager of Gold and Chrome Mines, Spokesman for Gold Mining, 1935-1974*, 1988

James Jensen, *Chemical and Metallurgical Process Engineer: Making Deuterium, Extracting Salines and Base and Heavy Metals, 1938-1990s*, 1993

Arthur I. Johnson, *Mining and Metallurgical Engineer in the Black Hills: Pegmatites and Rare Minerals, 1922 to the 1990s*, 1990

Evan Just, *Geologist: Engineering and Mining Journal, Marshall Plan, Cyprus Mines Corporation, and Stanford University, 1922-1980*, 1989

Robert Kendall, *Mining Borax, Shaft-Freezing in Potash Miners, U.S. Borax, Inc., 1964-1968*, 1994

Plato Malozemoff, *A Life in Mining: Siberia to Chairman of Newmont Mining Corporation, 1909-1985*, 1990

James and Malcolm McPherson, *Brothers in Mining*, 1992

Frank Woods McQuiston, Jr., *Metallurgist for Newmont Mining Corporation and U.S. Atomic Energy Commission, 1934-1982*, 1989

Gordon B. Oakeshott, *The California Division of Mines and Geology, 1948-1974*, 1988

Vincent D. Perry, *A Half Century as Mining and Exploration Geologist with the Anaconda Company*, 1991

Carl Randolph, *Research Manager to President, U.S. Borax & Chemical Corporation, 1957-1986*, 1992

John Reed, *Pioneer in Applied Rock Mechanics, Braden Mine, Chile, 1944-1950; St. Joseph Lead*

Company, 1955-1960; Colorado School of Mines, 1960-1972, 1993

Joseph Rosenblatt, EIMCO, *Pioneer in Underground Mining Machinery and Process Equipment, 1926-1963, 1992*

Eugene David Smith, *Working on the Twenty-Mule Team: Laborer to Vice President, U.S. Borax & Chemical Corporation, 1941-1989, 1993*

James V. Thompson, *Mining and Metallurgical Engineer: the Philippine Islands; Dorr, Humphreys, Kaiser Engineers Companies; 1940-1990s, 1992*

Interviews In Process

Donald Dickey, Oriental Mine

Robert Haldeman, Braden Copper Company, Chile

Wayne Hazen, metallurgical research

Homestake Mine workers: Wayne Harford, hoist operator; Kenneth Kinghorn, miner; Clarence Kravig, mine superintendent

Frank Joklik, Kennecott

John Livermore, geologist

McLaughlin Mine, model for resource development

Langan Swent, San Luis, Homestake, uranium mining