

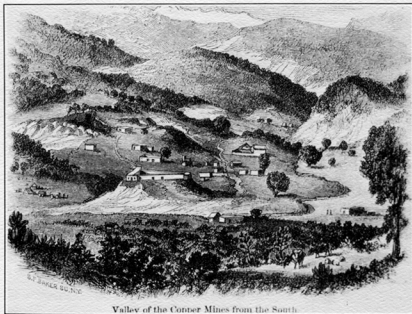
THE 'ANGLO' REVOLUTION IN NEW MEXICO PART I

by Thomas K. Simpson

"How shall I begin my story that has no beginning? . . .

Our roots go deep in this place . . . deeper than the mine shafts . . ."

*— opening lines of
Rosaura Revueltas
as Esperanza Quintero
in Salt of the Earth*



Valley of the Copper Mines from the South

Drawing of the valley of Santa Rita del Cobre, 1851. From Personal Narrative of Explorations and Incidents in Texas, New Mexico, California, Sonora and Chihuahua by John Russell Bartlett. Courtesy, New Mexico State Archives.

The first difficulty is the term "Anglo": we certainly mean something by it, but we don't mean "Englishman."

Ed. Note: This is the first in a three-part series of case studies tracing the impact of the "Anglo revolution" on New Mexico. The second and third of these articles, to appear in Volume 3, nos. 1 and 2, will deal with the Maxwell Land Grant and with the Navajo Mine. We have taken the articles from an "Occasional Paper" presented by Thomas Simpson at St. John's College in Santa Fe

in March of 1976. Naturally, the situation at Santa Rita has changed since Simpson wrote this essay. However, the principles he investigates have not changed, and those are an important part of his analysis.

The complete manuscript of the Santa Rita del Cobre story, with more extensive footnotes, is available from the author.

Introduction

Some time ago, I was asked by St. John's College to prepare a contribution to a discussion of the American Revolution Bicentennial, in its relation to New Mexico. I understood my assignment to be something like this: I should try in a brief space to state some truths about the overall effect of the arrival of the "Anglo" in New Mexico. I was in no way well-prepared to make such a statement; I am not a practicing historian, I am new to New Mexico, and I am deeply confused by the question. But I could not resist the invitation, because it is a problem about which anyone who lives in New Mexico must be concerned; we live here in the midst of a process of transformation, a turmoil of the land and the spirit, which we must attempt to understand. There is always the hope that a new point of view, however naive, will prove helpful. Of course, as a tutor at St. John's, I bring the conviction that the liberal arts, and the authors of our "great books," have something to contribute to any discussion in which justice and the principles of the human polity are at issue. But virtually everything I offer here in the form of an assertion must be understood as really a question, to which I hope others will respond.

The first difficulty is the term "Anglo": we certainly mean something by it, but we don't mean "Englishman." Some representative "Anglos" were, in fact, Mexican, French, and Dutch. On the other hand, it is not an empty term. I think what it really means is an overall idea about the world, an idea which came to New Mexico in the nineteenth century primarily from the United States — over the Santa Fe Trail — whether it originated with the "Americanos," or only passed through their hands. The root of this overall idea, I would say, is the Cartesian revolution, that revolution of thought in the seventeenth century, epitomized in Rene Descartes' *Discourse on Method*, which turned the world into a mathematical object — an object to be analyzed by the human mind, reduced to a technology, and transformed by human reason into something new.

I think the central insight of the Cartesian revolution is that the world becomes a problem to be solved, an object of calculative enterprise, a *technology*. This central insight spawns derivative revolutions in all directions: in science, in religion, in politics, in industrial technology. In economics, it becomes the transformation from *use value* to *exchange value* — from an economic product as something to be *used*, its value being measured in

human rewards, to the same product as an object of *exchange*, something to be reduced to number, an equivalent amount of money, in the marketplace. This quantity, this money, may in turn be transformed into anything else in the world, including power.

It is this new world-view, then, which we mean by the term "Anglo" — the spirit of technology, the highly developed economics of finance capital in the world marketplace, the politics of development. The American Revolution wrapped all these forces into a single package; it was the bearer of all these aspects of a vast revolution in man's understanding of himself and his role on earth. The very Constitution itself is a product, perhaps one of the highest products, of this new art of problem-solving — a human invention to solve the problem of human freedom. Not only is the constitutional form of our government, with its structured balance of elements and forces, a rational solution to the problem of liberty under government, but this very solution is one which frees the human

significant. There seems to be some truth in the story that the resistance to American occupation was in part bought out in advance by a covert operation, arranged at the highest levels — a political methodology recognizable today.¹ More significant, I hope, is the fact that Kearny proclaimed a version of the new political idea from the rooftops in the villages as he came down the Trail.² But most important of all is the fact that his military operation was — like nearly every military scouting or pacification operation in New Mexico for years afterward — a kind of real estate investigation. With Kearny's outfit came a tiny detachment of military engineers, geographers in effect, equipped with two numbered chronometers, two sextants, and a syphon barometer which had been calibrated in Paris for use as an altimeter.³ Whenever Kearny stopped, they took bearings. They navigated their way to Santa Fe, not in order to find it, but to know where they were on the face of the earth, to place Santa Fe and the Santa Fe Trail on the grid system.

The "Anglo" spirit, then, is really the spirit of the American Revolution, which had been infiltrating New Mexico in various ways for decades before Kearny arrived in 1846 to make the take-over official.

mind to solve new problems by rational debate and untrammled right to revise and overthrow any tyranny of custom. The Revolution, then, guaranteed the right to these new energies, these new possibilities of human reason to work themselves out, as they have in the modern corporation and our technological society. This is what I think we really mean by the term "Anglo" when we look at New Mexico, where the new energies met not only the past from which they had just freed themselves in Europe and the Colonies, but still another world-view, that of the American Indian, which was neither old nor new, and for many held the attraction of an opposite.

The "Anglo" spirit, then, is really the spirit of the American Revolution, which had been infiltrating New Mexico in various ways for decades before Kearny arrived in 1846 to make the take-over official. Kearny's expedition was not exclusively military — the fact that it had no opportunity to fire a shot was

Mapping is the first stage in real estate development. And one of the early moves of the new American government, once the dust had settled after the Taos Revolution, and New Mexico had been admitted as a Territory, was to appoint a Surveyor General to lay out a rectangular coordinate system over the mesas and arroyos of the Territory. Notice that this is precisely the first move which Rene Descartes, who was the "inventor" of analytic geometry, prescribes: begin by laying out a coordinate system, by which the world may be reduced to a system of numbers. Two

¹See Warren A. Beck, *New Mexico: A History of Four Centuries* (Norman: University of Oklahoma Press, 1962), pp. 117 and 132, for the story of James Magoffin as advance agent for the federal expedition.

²See Lt. W.H. Emory's notes on Kearny's Las Vegas speech in *U.S. Army, Corps of Topographical Engineers, Lieutenant Emory Reports: a reprint of Lieutenant W.H. Emory's Notes of a Military Reconnaissance* (Albuquerque: University of New Mexico Press, 1971).

³*Ibid.*, pp. 22-24.

Mining in New Mexico

● Santa Rita del Cobre

Map courtesy of:
New Mexico Bureau of
Mines and Mineral Resources,
from Bulletin No. 87, 1965.

leaving stone monuments of the official mileage. When he got back to Santa Fe, he found that the instructions for the new Federal chain had arrived. Under the new regulations, you didn't measure from end to end of the chain, but from a copper rivet to a copper rivet. So back he had to go, over the 108 miles, not only marking the new intervals, but systematically knocking down the monuments of the first measurement. In this tormented measurement, I suspect we have a revealing symbol of the arrival of the Cartesian Revolution in New Mexico, and the frustrations it was doomed to meet.



centuries after Descartes, this was embedded in the American psyche as if it were the natural thing to do.

There is a story about that first surveying operation which tells so much about the new "American way" that it demands retelling.⁴ The first step was for the Surveyor General to drive a stake as the origin of coordinates for the Territory; he chose a point on the west bank of the Rio Grande a few miles north of Socorro. He then let a contract to lay out the New Mexican prime meridian through this point. In a spirit of precision, the United States government had instituted a set of new Federal chains which were to be used in the territorial surveys. But the new chain had not arrived. After a delay, the surveyor sent his own messenger to El Paso for an official chain, and, when it was brought, went to work laying out the first straight line in New Mexico since Pueblo Bonito — 108 miles of prime meridian, measured under the most difficult circumstances, over mesa tops, up and down whatever cliffs the direction demanded, and everywhere

Santa Rita del Cobre

The Santa Rita del Cobre copper mine is a little east of Silver City, in the lower-left-hand corner of what is now the state of New Mexico. We should think of it initially, however, as in the north, some three or four hundred miles up from Chihuahua, a hundred miles north-west of El Paso del Norte. The region was known and valued by the Indians as a source of native copper — outcroppings of the pure metal. It seems probable that the Indians had a form of "lost-wax" process for casting small copper bells out of Santa Rita copper for perhaps hundreds of years before the Spanish first saw these artifacts at El Paso.⁵ It was not until the beginning of the nineteenth century that the Spanish were led to Santa Rita by an Apache Indian, and for the Spanish, too, it

⁴My account of the survey of the prime meridian is taken from Victor Westphal, *The Public Domain in New Mexico* (Albuquerque: University of New Mexico Press, 1965).

⁵Margaret Meaders, "Copper Chronicle, Part I," *New Mexico Business*, XI, No. 5 (May 1958), p. 2; John M. Sully, "The Story of the Santa Rita Copper Mine," *Old Santa Fe*, III (1916), pp. 134-5.

was a source not of copper *ore*, but of copper itself; native copper has occurred at Santa Rita in masses as large as a ton. It was called "El Criadero de Cobre," with the Aristotelian sense that the metal was a natural product of the earth. For the Spanish, mining was a form of harvesting.⁶

It is interesting to consider the degree of technology with which the Spanish merchant-banker of Chihuahua, Don Manuel Francisco Elguea, developed the mine during the first years of the nineteenth century, as this gives a measure both of the capabilities and the limitations of the methods which the modern revolution has displaced. This may help in identifying the sense in which "Anglo" technology is indeed something radically different and new. Don Manuel first obtained a grant of the property from the Spanish crown; he was himself a sub-delegate to the court. He then obtained a contract to supply copper to the Mexican mint for coinage. He was granted military protection for the mine, and for his convoys, and was provided a free labor force of some five hundred convicts. A fort was constructed at the site to keep the convicts in, and the Apaches out. (It should be noted that mining is said to have begun with the concurrence of the Indians. Later in the nineteenth century, however, they frequently disturbed or closed down the operation.) As the trails did not permit wheeled vehicles, Don Manuel used caravans of mules to haul the copper to Chihuahua and Mexico City; each mule was loaded with two balanced pieces of copper, carrying a total of three hundred pounds. The chunks of copper were wrapped with wool to protect the mules during the long trip, but a technological improvement came when the copper was first melted at the mine and cast into ingots to make transportation easier.

Santa Rita was one of the principal sources of copper nearest Mexico City. Production is reported to have been 20,000 mule-loads, or some three hundred tons, per year — an amount of copper which would be worth about

\$3.6 million at 1975 prices. It is interesting that this production figure comes originally from the report of Zebulon Pike, whose account of his findings in Mexico, published at Philadelphia in 1810, stirred the imagination of readers in the United States, that is, vividly depicted Mexico as a land of opportunity for development and profit.⁷ Don Manuel Elguea died in 1809, after about five years of operation of the mine, and the property remained in the possession of his heirs, who leased it to a succession of operators, until 1873. We will not review that history here, though perhaps it is important to record that Santa Rita was a Civil War prize; it was seized, together with some ninety tons of copper of great military value, by the Confederacy. War is the silent impresario, managing the fortunes of Santa Rita, as it does those of all human industry. It is only necessary to point out that in classical gunfire, copper, whether in its own right or alloyed in brass, is a principal raw material of the ammunition. In modern warfare, in its capacity as electrical conductor, copper bears the signals of destruction as well.

Before investigating the impact of "Anglo" thought and technology at Santa Rita, an attempt should be made to characterize that technology which was not "Anglo," the initial Spanish operation of the mine. First, I think we notice the human scale of the enterprise; magnitudes — mule-power, man-power — are measured by the human or animal frame. We retain that measure in words when we speak of the "horsepower" of a locomotive, or of a giant shovel such as those which now dig Santa Rita, but we realize that we do not mean what we say — we have essentially lost touch with the measures. Second, Don Manuel's operation is at every stage manifest, overt; we can see, if we wish, precisely what is happening. I do not mean that, probed deeper, it might not have involved secret purposes or covert arrangements, but essentially it can be conceptually grasped, it is what it appears to be. Earth's wealth is visible metal; the exploitation of forced labor is overt; the owner and harvester of the profits is a human being, who can be clearly identified. Third, the operation as a component of human

⁶The early history of Santa Rita has been told and retold in many places. See, for example, Thomas Rickard, *History of American Mining* (New York: McGraw-Hill, 1932) New York: Johnson Reprint Corporation, 1966; John M. Sully, *New Mexico, Land of Opportunity* (n.p.), 1915; A.B. Parsons, *The Porphyry Coppers* (New York: The American Institute of Mining and Metallurgical Engineers, sponsored by the Rocky Mountain Fund, 1933).

⁷Zebulon Montgomery Pike, *Journals* (Norman: University of Oklahoma Press, 1966), p. 48.

society is factorable; we can separate the mining of Santa Rita as an intelligible object for the mind — not, certainly, without connections, historical or social, with other topics, but with the separable unity of a story, with a beginning, middle, and an end. Finally — and perhaps this merely epitomizes the others — extraction of the copper at Santa Rita, and disposition of it, is primarily a qualitative problem, one to be met by human devices, human resourcefulness, one whose outcome is very much a function of the ingenuity of the person to whom the challenge has come.

I think that in each of these respects, the situation at Santa Rita reverses with the next turn of our history. The scale leaps beyond human bounds. The object becomes no longer visible copper, but a hidden principle, a mere trace of ore in otherwise worthless rock, to be transformed by technology into the metal. The ramifications of the operation become almost literally untraceable, and, what is most revealing, the trails do not fade with increasing distance from Santa Rita itself; this



Santa Rita del Cobre in the late 1940s. Department of Development Collection, State Records Center and Archives, Santa Fe, New Mexico.

is precisely what characterizes the unfactorable problem — society's institutions, and their forces on one another, become strongly and boundlessly interactive. The mode of operation at Santa Rita, from the decision whether to invest in the mine at the outset to the decision to shut it down altogether under market vicissitudes, becomes a quantitative, mathematical problem — a matter not for the merely intelligent human mind, but for the highly trained expert. It becomes a true technology, an algebraic problem with one precise solution. These are the transformations which, I think, will help to define for us that rational thrust which, finally, we call "Anglo."

In 1899, a group of America's greatest capitalists took a lease on Santa Rita and bought bonds in the enterprise. The group included Henry H. Rogers, a vice-president, director, and one of the principal stockholders of the Standard Oil Corporation, and William G. Rockefeller, John D. Rockefeller's brother. These were investors who had under their control not only vast wealth, but the full momentum of the methods of finance capital and the trust which had proved so powerful since the formation of the Standard Oil Trust 17 years earlier, in 1882. The \$1.2 million invested at that point in Santa Rita was for them only a minor matter. Henry H. Rogers was at that time using Standard Oil wealth to engineer a new trust, the Amalgamated Copper Company, by the usual ruthless methods, including, we are told, the watering of \$35 million in stock and the destruction of the Globe Bank in Boston. He had, by approximately the time of the Santa Rita investment, spent some \$19 million in buying up metal-smelting firms, and had achieved a combination with the Guggenheim brothers which gave Amalgamated Copper a firm grasp on the American copper industry. By 1901, Amalgamated Copper controlled one-fifth of the world's production of copper, the price of copper had been forced up 50%, and the price of Amalgamated Copper stock on the New York Exchange had more than doubled. Another of the Santa Rita purchasers was Thomas W. Lawson, a Boston banker and broker who was handling the sale of the Amalgamated Copper securities. He achieved fame by the promotion of Yukon gold, and by

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writing a history of the Republican Party of which he had a limited edition of four copies printed on satin, one of which was presented to President Benjamin Harrison. This group formed the Santa Rita Mining Company.

A railroad had just been put through capable of moving quantities of ore to a smelter, and production began running at about 120 tons of ore per day. The real technological future of Santa Rita had not yet come into focus, but a watershed had been crossed; control and profit at Santa Rita had been taken decisively and finally out of New Mexican hands.⁸

There are two aspects of the brilliant technology which caught Santa Rita in its net at the turn of the century. We have seen the initial stages of a sequence in which Santa Rita was drawn into the processes of huge, interrelated financial empires. But Santa Rita also illustrates, even more vividly, the way in which this financial technology was interweaving with scientific and industrial technology to produce a unified whole. Shortly after the turn of the century, an experienced mining engineer, John M. Sully, a graduate of the new Massachusetts Institute of Technology, was asked to appraise the Santa Rita district. By taking some 4,300 borings, he was able to establish with true precision the nature and

minimum extent of a vast orebody — a mass not of copper ore in the traditional sense, but of a widespread dispersion of copper averaging not much more than a trace, a little over two percent. It could be profitable, Sully recognized, only if it could be mined by a massive, open-pit technique. Such an approach would require heavy capital investment, and draw to the full upon available techniques of powered earth-moving and rail transportation. Such a bold approach was just then for the first time being undertaken by the Guggenheim brothers at Copper Mountain, Utah, in a project based on even more extensive explorations and geologic and economic analyses by the nation's foremost mining engineers. Thus Santa Rita was precipitated into the very forefront of American mining and financial technology.

The process by which the necessary convergence of capital investment and industrial engineering was brought about is itself instructive, though it, too, involves complications which cannot be fully discussed here. In brief, the president of Santa Rita Mining was Albert C. Burrage, a Boston lawyer and Harvard graduate, who had been an organizer and director of Amalgamated Copper, and who shortly afterward organized the strikingly analogous exploitation of the Chilean copper mines for the Guggenheims. He took the project for the transformation of Santa Rita to Charles Hayden, another Massachusetts man, who had majored in both economics and mining engineering at M.I.T. specifically in preparation for a career in copper finance. His firm, Hayden, Stone and Co., had just underwritten an issue of \$1.5 million in securities of the Utah mine for the Guggenheims. Hayden sent D.C. Jackling, yet another expert, a graduate of the Missouri School of Mines and the engineer who had first visualized the open-pit possibility and brought it into finely-tuned operation in Utah; Jackling confirmed the Santa Rita project from a technical point of view. By the time these analyses were completed, there was no question whatever of a mining risk or a

⁸ The group which formed the Santa Rita Mining Co. is identified by Parsons (p. 208) and by Sully (pp. 137 ff.). The formation of the Amalgamated Copper Corporation is described in O.C. Herfindahl, *Copper Costs and Prices, 1870-1957*, (Baltimore: Published for Resources for the Future by Johns Hopkins Press, 1959), p. 80; Edwin P. Hoyt, *The Guggenheims and the American Dream* (New York: Funk and Wagnalls, 1967), pp. 114 ff.; Harvey O'Connor, *The Guggenheims: The Making of An American Dynasty*, (New York: Coward, 1937), pp. 104 ff. The formation of American Smelting and Refining was a parallel enterprise. The Guggenheims, with the Philadelphia Smelter at Pueblo, Colorado, were originally at war with Amalgamated and ASARCO, but by 1901 had formed the combination which effectively controlled much of United States production. There was a larger overall combination, the American Producers Association, which with the European Producers Association controlled three-fourths of the world's output (Herfindahl, p. 77). Control was fragile, and the degree of effectiveness is debated; the trust was fought in court at the point at which it was proposed to merge with Guggenheim, but effective combination resulted nonetheless (with five Guggenheim brothers on ASARCO's board). Collapse of the Amalgamated Copper trust was apparently a major cause of falling metal prices which precipitated the 1907 panic. In general, the situation is far too complicated to summarize satisfactorily.

What has the State of New Mexico today that it would not have if Santa Rita had been planted in China instead?

corporate miscalculation; the entire operation had been reduced to a matter of precise calculation. Risks there certainly were, but they were at the level of the national economy, the world copper market, and the tensions tearing at the structure of the trusts — in this sense, New Mexico has indeed for almost a century been the victim of wild fluctuations in circumstances outside her borders and outside her control. In 1913, Santa Rita was swinging into high-powered operation, with ten powerful steam-shovels, twenty-one locomotives, ninety million tons of fully-assured copper ore, and copper prices rising rapidly out of the low which had resulted in 1907 from the collapse of the Amalgamated Copper trust. At this point, fortune favored New Mexico and, like all Guggenheim operations, Santa Rita flourished on the crest of World War I.

We cannot trace here the paths by which Santa Rita shifted by a series of mergers, all managed by Hayden, Stone and Company, from the Chino Copper Company, established in 1909 to initiate open-pit mining, into a division of the Kennecott Copper Corporation — still a Guggenheim interest. Today Kennecott is a world-wide corporation, with some fifty subsidiaries, mostly wholly-owned. Their names evoke the span of the Kennecott empire: *Minerales Peruanes*, Peru; Kennecott *Mineraçao*, Brazil; Kennecott *Italia*; P.T. Kennecott, Indonesia; Quebec Iron and Titanium; Chase Brass and Copper; Peabody Coal Company . . . It lists assets of \$2.2 billion, sales of \$1.7 billion, dividends of \$74 million in 1974. In 1972, Kennecott produced a total of 461,000 tons of primary copper. Of this, Santa Rita accounted for 73,000, or 16% of the corporation total. On the Standard Oil model, Kennecott is vertically integrated, sending Santa Rita's copper to the Kennecott smelter at Hurley, New Mexico, and the blister copper from Hurley to refineries such as the giant new electrolytic refinery in Anne Arundel County, Maryland. The refined metal in turn goes to Kennecott's own fabricators, such as Chase Brass and Copper, and the fabricated product to its own sales corpora-

tions throughout the world. Santa Rita is important to Kennecott, but it is evidently only a very small element in the giant structure. If Santa Rita were to close down, Kennecott could readily adapt — it has done so in the past. In response to a successful labor organizational effort, and in the face of the Depression, Kennecott closed the mine and removed all of its valuable equipment. This threat is always present, and insures that there is no way in which New Mexico as a political entity can bring any significant weight to bear against a much more decisive force. As has often been suggested, the corporation when it reaches such a scale becomes the dominant political entity, and if so, certainly a form of tyranny.⁹

We are omitting from this history the similarly fascinating story of Kennecott's neighbor in Grant County, Phelps-Dodge, which has recently re-opened its copper mine at Tyrone and invested in a giant smelter at Animas. Phelps-Dodge is a comparable corporate giant, with assets of \$1.5 billion, and 1974 operating profits of \$148 million.¹⁰ A Senate investigating committee once found technical evidence that Kennecott and Phelps-Dodge belong, in practice, to a single overall interest group.¹¹

I think it has been necessary to look at this picture in some detail — though indeed we have really only suggested the directions a

⁹ *The proposal that the corporation be acknowledged as a major political entity I take from Scott Buchanan, Essay in Politics. Incidentally, the political role of the corporation is acknowledged by Kennecott, which says in its public-relations paper, "We also must be active in the public area to pursue a knowledge of taxes. Our people analyze county and school budgets and attend public hearings. We deal directly with state agencies when necessary . . . And, finally, through active membership in such organizations as the New Mexico Mining Association, the Taxpayers Association of New Mexico. . . we join with others to express our views on legislation dealing with our taxes." (Chinona, Fourth Quarter, 1970). Kennecott's is no ordinary citizen's voice in such matters!*

¹⁰ *In general, corporation data cited are from current and past volumes of Moody's Industrial Manual (New York: Moody's Investors Service, 1946 --).*

¹¹ *U.S. Temporary National Economic Committee, Investigation of the Concentration of Economic Power, 77th Congress, 1st Session (Washington: Government Printing Office, 1941). Kennecott and Phelps-Dodge were among forty-one corporations identified as belonging to the "Morgan-First National" interest group.*

... it is important to record that the Santa Rita del Cobre mine was a Civil War prize; it was seized, together with some ninety tons of copper of great military value, by the Confederacy. War is the silent impresario, managing the fortunes of Santa Rita, as it does those of all human industry.

serious investigation might take — in order to better understand what the “Anglo” revolution in New Mexico truly entails. We can only wonder how New Mexico fits into the picture of this vast technical structure, at once a magnificent and a frightening creation of the human mind working in history. In a classic work on *The Porphyry Coppers*, A.B. Parsons asks a question which he may, when he wrote in the 1930s, have intended as merely rhetorical, but which today takes on new earnestness. Contemplating his own engineer’s review of such vast works as Santa Rita, he asks:

Now what evidence is there of the part that these expenditures have played in building up the West? What benefits has Chile enjoyed as the result of the exploitations of her copper deposits? What has the State of Arizona today that it would not have if her Porphyry mines had by some twist of Fate been planted, say, in the interior of China instead . . . ?¹²

I would not have ventured, as Parsons has done in a less sensitive age — one less experienced in the methods of American business and government in Latin America — to group Arizona and Chile in the same question, and to put that question so bluntly in terms of common “exploitation.” But Parsons has written dispassionately and carefully of the Guggenheims and the porphyry coppers, and he has seen no disparity between their approach to the earth and the people in Grant County and their approach to the Braden mine in Chile. Old New Mexico is in essentially the same position in economic terms as new members of the Third World. Its resources have been stripped away, and it has received in return the remuneration in minimal payrolls, taxes, and royalties which Parsons

carefully totals. But the essential point, which everyone in business knows, is that far greater amounts have been shipped away during these long years over the state borders — in the purchase of technological equipment which is not made in New Mexico or Chile, and in vast profits, which even to the extent that they are reinvested, are seldom reinvested here. We have seen from the outset who claimed the profits of Santa Rita, and how that situation came about. So we must repeat Parsons’ question, applying it to our own case:

What has the State of New Mexico today that it would not have if Santa Rita had been planted in China instead?

There is a further point which must be kept in mind. As we have seen, extraction and primary refining of copper is only the beginning of a hierarchy of processes, each of which supports industry, adds value to the product, and permits additional profit. Until very recently, New Mexico has been confined to only the lowest rung of this ladder. In recent wholesale price quotations, when domestic primary refined copper was quoted at \$.64, copper mill shapes, sheet or strip, were quoted at \$1.16. Eighty percent had been added to the value of that copper in processes which occurred after it left New Mexico. To speak with an “Anglo” tongue, New Mexico’s copper ore, in the ground in Grant County, represents an opportunity for economic activity, labor and profits. What we have seen is that almost half the process (even if we ignore the manufacture of products from copper) takes place outside New Mexico’s borders. There is no mystery about this, nor indeed any ground for complaint; the profit has merely gone, and the surplus been reinvested, where the capital came from. And we should remember that the porphyry rock of

¹²Parsons, pp. 542-3.

The copper of Grant County has never, since modern technological extraction began, belonged to the people of New Mexico . . .

Grant County, with its trace of copper, would have had no value whatsoever without the technical skill, imagination and desire for gain of the men from M.I.T. and the great banking houses. What this means in the simplest economic terms is that there has been life, but little growth or accumulation of wealth within New Mexico. The life has, indeed, advanced in quality, but always with a dismal lag behind national norms.

This experiment has been going on for three-quarters of a century now, so there is no need to speculate about the results. Parsons' question can be answered on the basis of the evidence. The inhabitants of Grant County are sitting on untold wealth — "untold" not because it is unknown or beyond measure, but because it is not the habit of great corporations to reveal such proprietary information as the wealth of the earth or the cost of extraction; giants are not inclined to discuss their treasure troves with dwarfs. In terms of resources, Grant County is certainly among the wealthiest communities in the United States. We can say with confidence what the reserves *used* to be, since they cannot have been less than the amount which has been taken out. They may indeed have been underestimated originally, and "reserve" is a function of the minimal ore grade which technology and the market will accept. In any event, Grant County has yielded up from 1804 through 1972 some 3.4 million tons of copper.¹³ At 1960 price levels, with copper at about \$30 per pound, this was worth about \$2

billion. In what condition has this outflow of the earth's wealth left Grant County?

We hardly need to look at statistics to guess the answer to that question. Median family income, in the 1970 census, for Grant County was \$7,898; median family income for the entire United States in the same year was \$10,999. Grant County's family income was thus 70% of the country's median family income; for Spanish-surnamed families in Grant County, it was 65%. In 1970, 12% of the families in Grant County were living below poverty level; in the United States as a whole the figure was 7%. There were 70% more



Loading a train at Santa Rita del Cobre in the late 1940s. Department of Development Collection, State Records Center and Archives, Santa Fe, New Mexico.

¹³Data for 1804-1962 are given in U.S. Geological Survey, *Mineral and Water Resources of New Mexico*, New Mexico State Bureau of Mines and Mineral Resources Bulletin No. 87 (Socorro: New Mexico State Bureau of Mines and Mineral Resources, 1965), p. 166. I have brought that to date from data in the 1975 *New Mexico Statistical Abstract* (Albuquerque: Bureau of Business and Economic Research, UNM, 1975), p. 68, estimating Grant County as producing 96% of the state's copper, the latter figure deriving from the 1963 figure given in the first reference.

families with incomes below poverty level in Grant County than in the United States as a whole. For Grant County Spanish-surnamed families it was 85%. In terms of the American confidence in education and the promise of equal opportunity, the measure of years completed in school will be more significant: 12.1 in the United States as a whole; 8.8 for Grant County Spanish-American adults.¹⁴

The copper of Grant County has never, since modern technological extraction began, belonged to the people of New Mexico, and it has left in its wake a county and a state poorly paid, poorly fed, and poorly educated by national standards. In New Mexico we tend to take this for granted, because we understand, if only tacitly, that New Mexico is one of the underdeveloped areas, in something very much like a colonial relation to the capital centers of the nation.

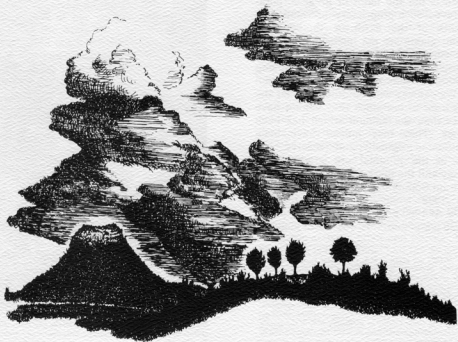
I wish that I could close this section of my study with a look at the people, the miners, of Grant County, but on the whole, the history of labor in New Mexico has not been told. We can infer, from the ruthless methods of labor

suppression used by the Guggenheims throughout the West, what it must have been.¹⁵ But there is one outstanding break in this silence, one moment in which the miners of Grant County not only told their own story, but in doing so produced one of this nation's finest and most subtle self-portraits — the film *Salt of the Earth*, recreating as a work of community drama a long strike in 1951 on the part of the Mine, Mill and Smelter Workers' Union against the New Jersey Zinc Corporation at Bayard, Grant County, only a few miles from Santa Rita. The subsequent suppression of this classic American film, and the vilification of the miners and the film makers who produced it, tell as much as the film itself about the position of labor in New Mexico, and the relation of the people of Santa Rita to the wealth it promised.¹⁶

¹⁴U.S. Bureau of the Census, *1970 Census of Population: General Social and Economic Characteristics — New Mexico* (Washington: Government Printing Office, 1971).

¹⁵See, for example, the story of Dan Jackling's handling of a strike in Utah in O'Connor's *The Guggenheims*, Chapter 19.

¹⁶See Herbert Biberman, *Salt of the Earth: The Story of A Film* (Boston: Beacon Press, 1965).



drawing by Leo Romero