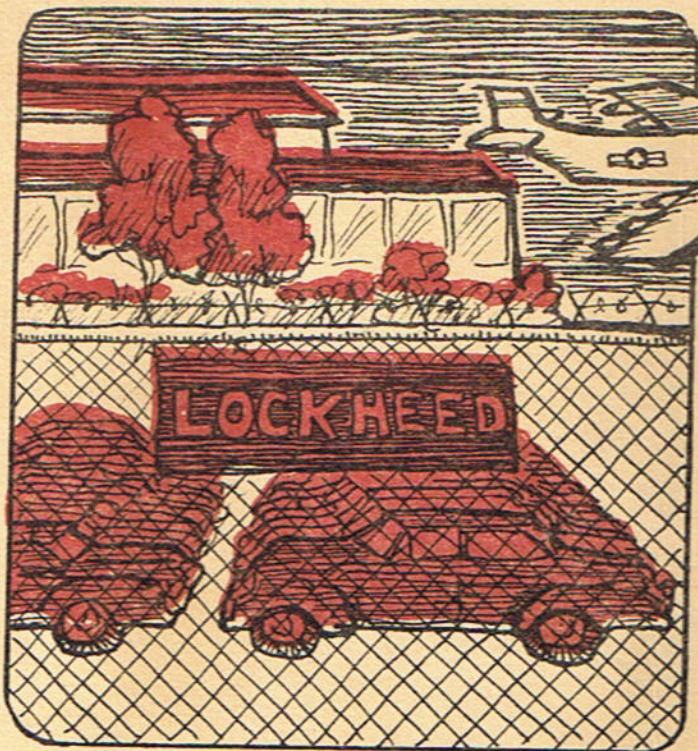
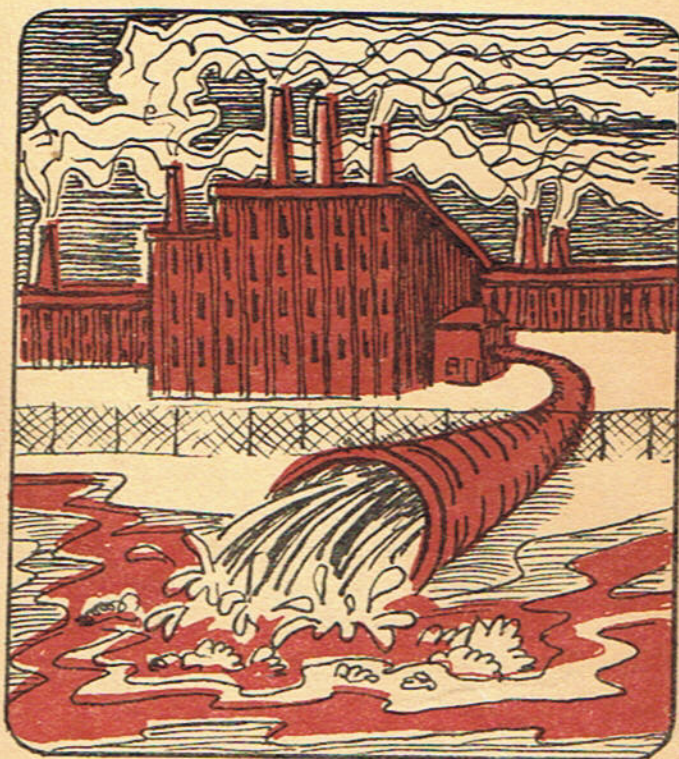


The Promised Land



A Grass Roots Report on Mid-Peninsula Land Use

This is the second edition of THE PROMISED LAND. There has been only one change in the booklet – the cover price of 25 cents. We have found that amount insufficient to cover our production and distribution costs.

Grass Roots also needs funds to continue our program of addressing the land use problem in the Mid-Peninsula, and trying to determine and then serve the needs of area people.

Therefore, we ask our friends to donate 50 cents for purchase of THE PROMISED LAND, more if possible, so that Grass Roots may overcome its publishing debt and be able to pay for leaflets, special free publications, and office costs necessary to our on-going work.

Donations may be sent to 424 Lytton Avenue, Palo Alto.

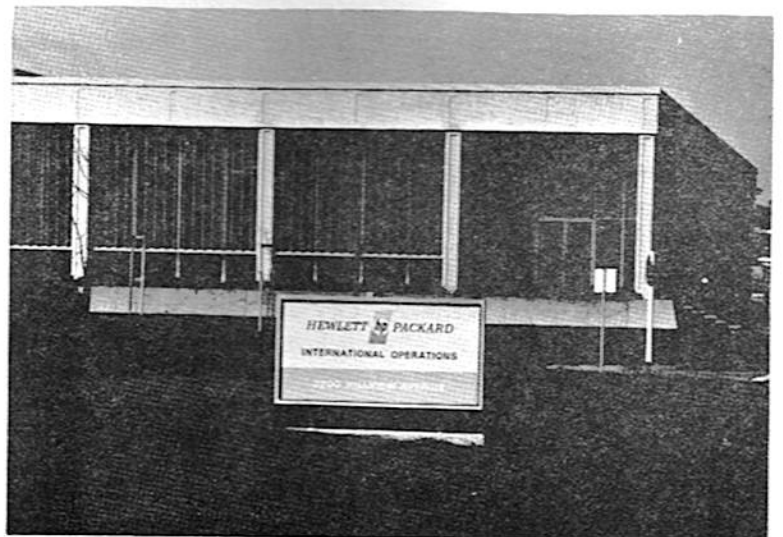
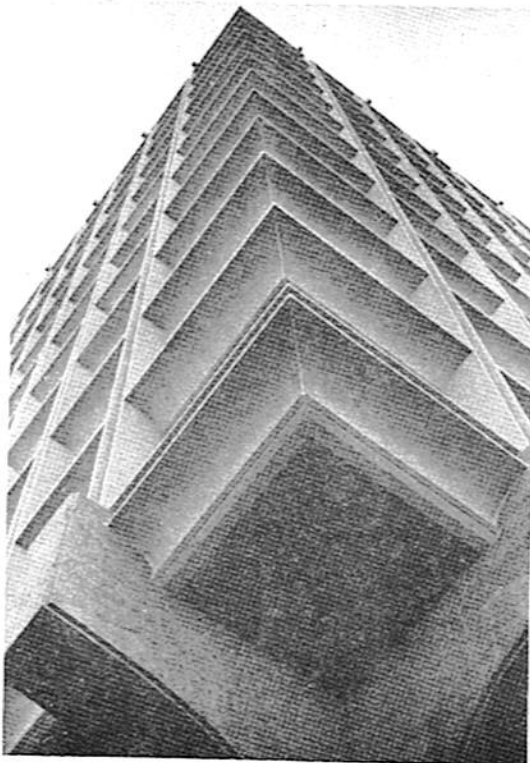
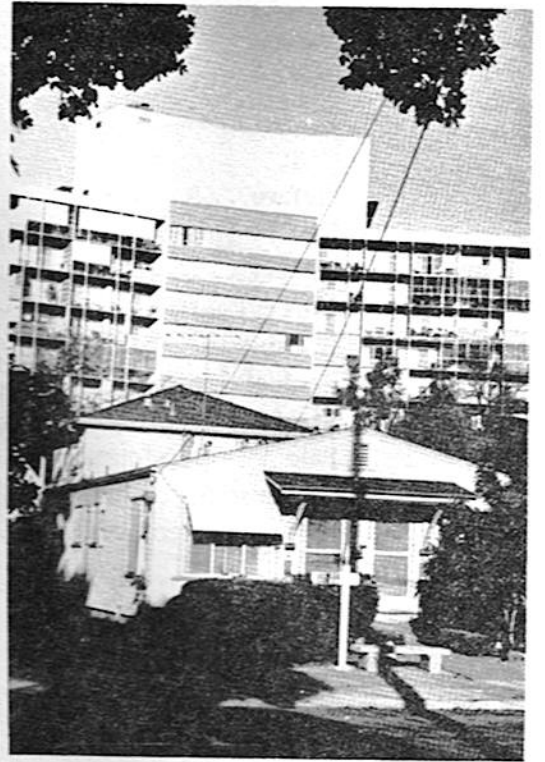
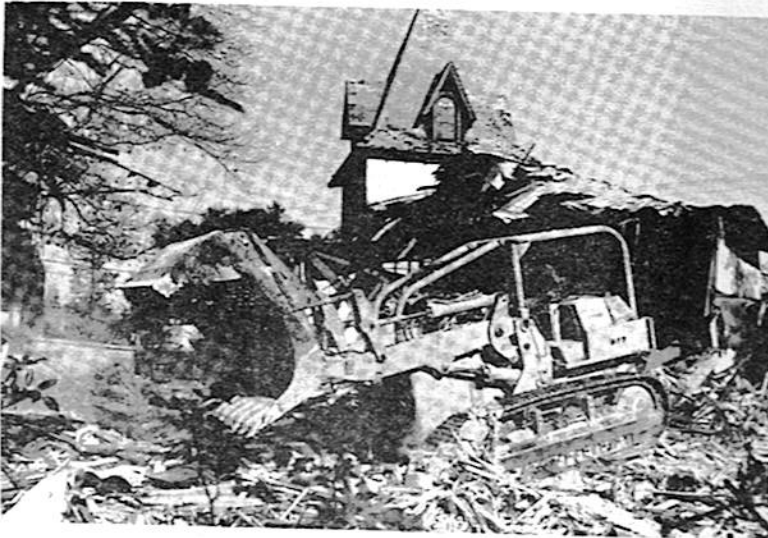
Contents

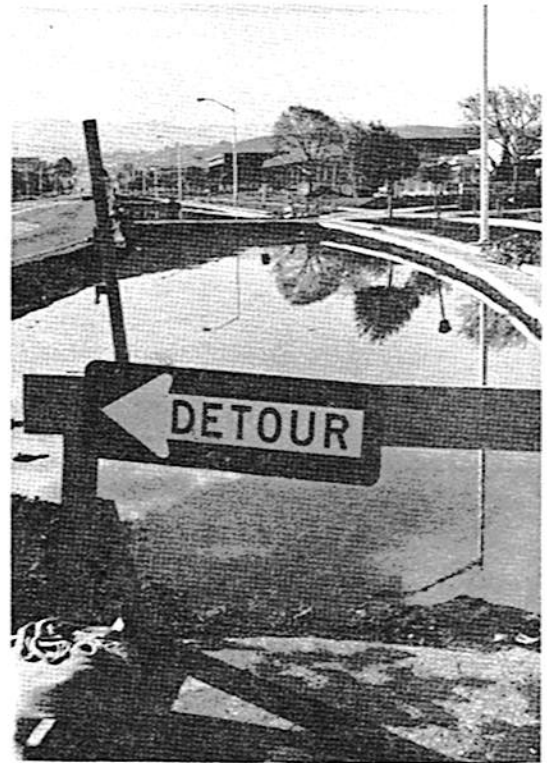
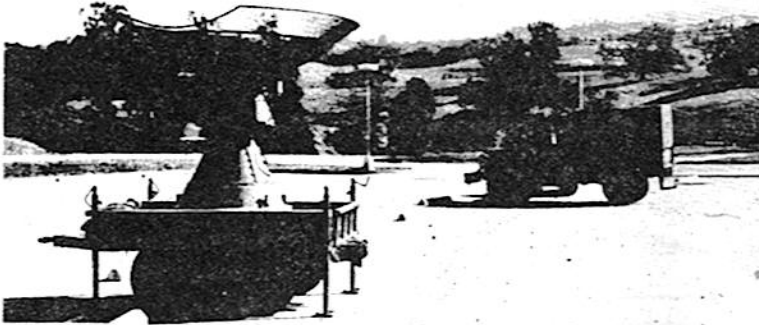
Preface	2
History Summary	5
History	6
Jobs & Population	32
Housing	36
Ecology	42
Stanford Land Use	48
Palo Alto Development	54
Conclusion	58
Selected References	60

Note: The term "Mid-Peninsula" is used throughout the booklet to describe the area between Redwood City and Sunnyvale. Since much of the discussion concerns the Stanford-Palo Alto employment center and the electronic industries to the south, most of the statistics are for Santa Clara County.

Preface

There's something happening here...



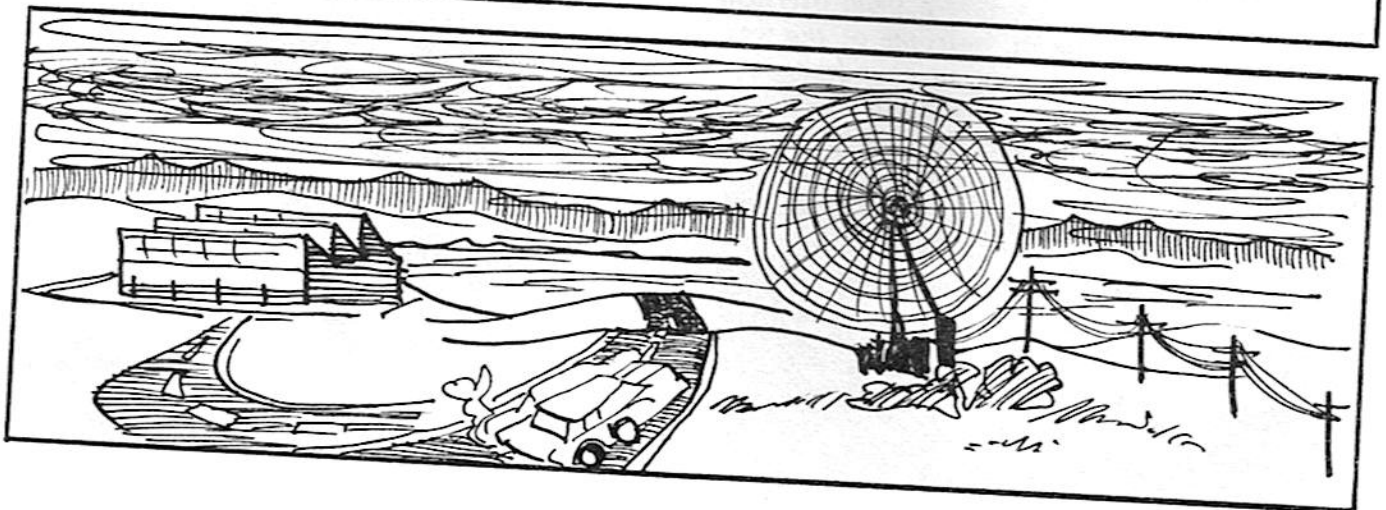
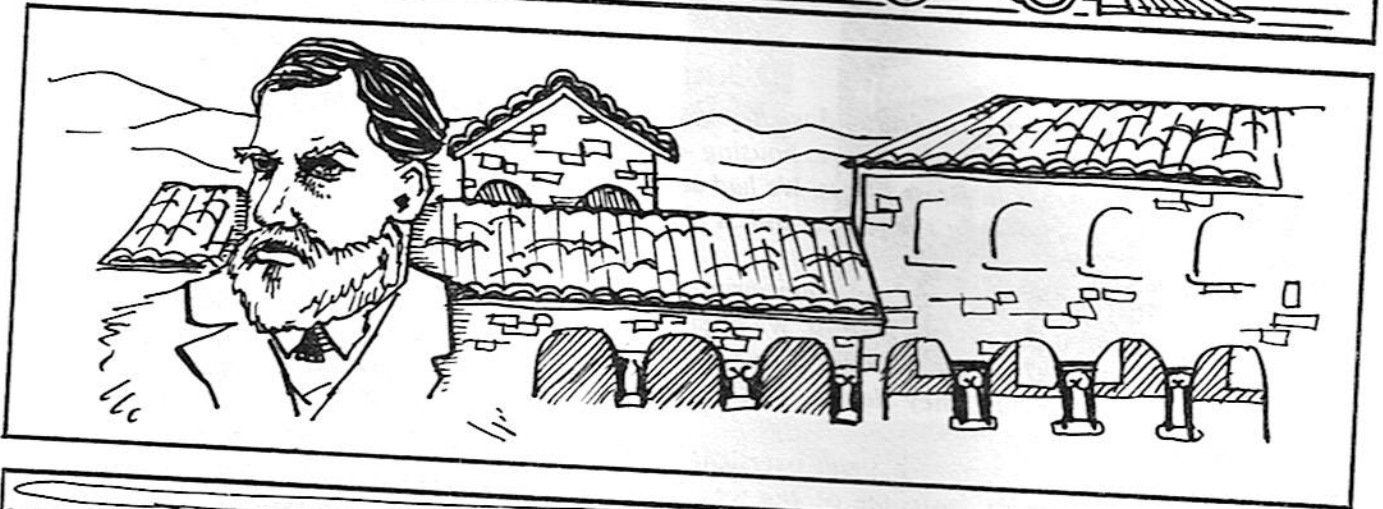
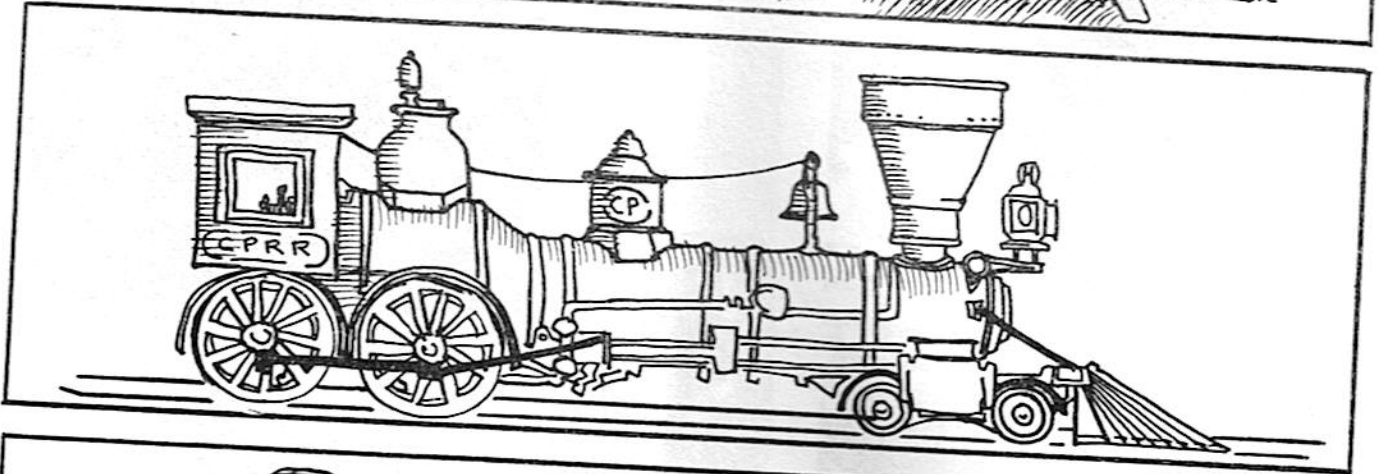
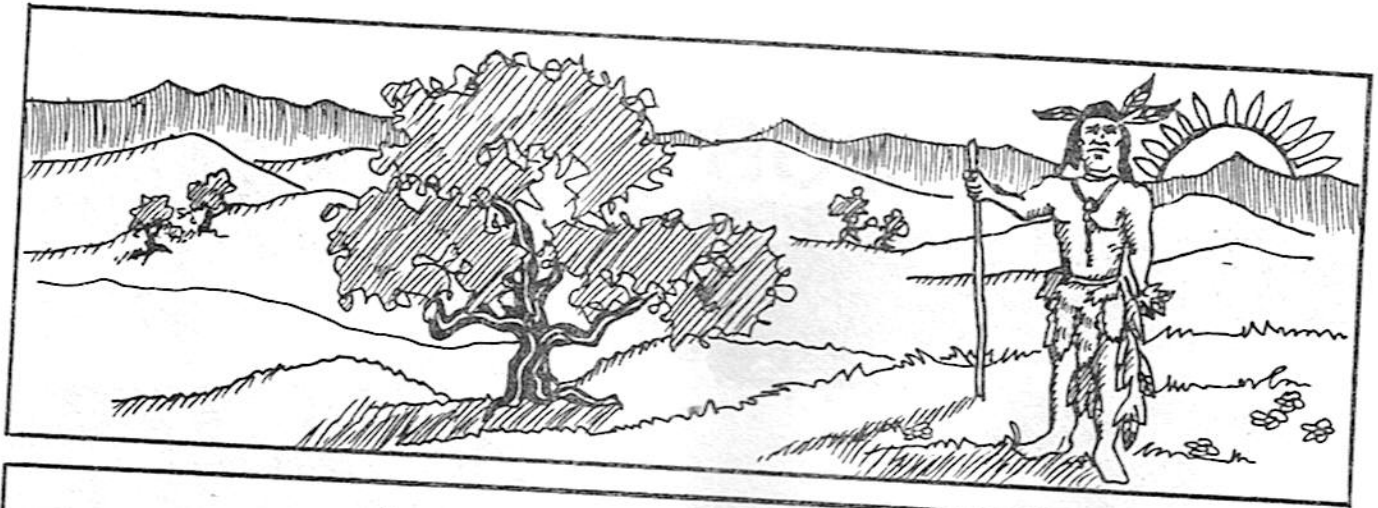


... and we are trying to understand what it is. Our awareness of the dependence of this area on war production, of the severe housing crisis and of the deteriorating environment brought us together in Grass Roots. We had an idea of the way this area developed and how it would be developed in the future, unless people decided to change the way decisions are made.

We realized that the social problems around us have a history: people chose to build all that's been built for certain reasons. We began to study the history of the area, its problems and ongoing developments, to see if our assumptions were correct about who decides the uses of land and how they decide. In the course of our research we asked a number of questions:

Is the housing shortage a small oversight which can be solved easily, or is it grave and persistent, the logical outcome of the way in which this area has been developed? Is the ecological crisis simply an abundance of beer cans and auto exhausts, or is it a larger problem, caused by the self-seeking decisions of local land developers and industrialists? Do the people in the area really control local land development through their elected officials, or do the City Councils and Planning Commissions serve the Trustees of Stanford, the directors of major corporations and the real estate kings of downtown Palo Alto?

Our conclusions are here for you to read. There are summaries at the beginning of each section which provide concise statements of the major themes. We invite your questions and criticisms. Read On!



History

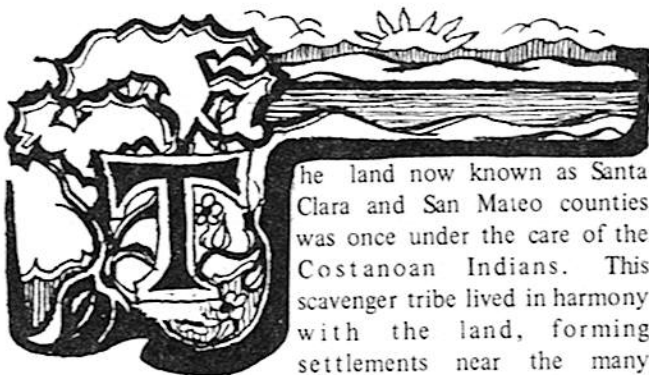
When it belonged to no one, the land of the Santa Clara Valley had a beauty that would be unrecognizable to us today. Forested ridges and grassy foothills rimmed the flatland, which joined the Bay in great marshlands full of shellfish and crab.

The history of the area is typical of California's history during the first two hundred years of settlement by European peoples. The Indian inhabitants were enslaved or driven off, and the great farms and ranches were established. A Spanish colonial government was replaced by Mexican control and finally by cessation to the United States in 1848. Each succeeding regime brought more population, more rigid concepts of property and more ruthless competition for wealth.

The modern development of the Mid-Peninsula had its origins in the career of one man: Leland Stanford. This Sacramento merchant accumulated a huge railroad fortune based on federal subsidy, brutal exploitation of Chinese workers, and a monopoly on California commerce. It is what Stanford did with his fortune that changed the history of the Mid-Peninsula. The opening of Stanford University in 1891 made research & training the area's principal economic resource.

In the 1930's, the University's engineering school began to spin off a number of industrial firms in the new field of electronics. The huge military purchases of World War II made these industries prosper, along with the University's research operations. The boom continued with the high demand for electronics hardware in the Korean conflict and the Cold War. Many corporations, including giant Lockheed, crowded onto the Mid-Peninsula to be near Stanford and its new Industrial Park. The Mid-Peninsula acquired a permanent war economy, and the last farms and orchards were paved over to provide expressways and suburban homes for those white people who could afford them.

By 1970, the people of the area were paying the costs of growth: a housing shortage, environmental blight, and the frailty of an economy based on lavish defense spending.



The land now known as Santa Clara and San Mateo counties was once under the care of the Costanoan Indians. This scavenger tribe lived in harmony with the land, forming settlements near the many creeks in the fertile valley. They did not exploit the land by farming, lumbering or mining. The Costanoans gathered fruits, nuts and berries, hunted, and harvested the fish and mussels of the bay. Everyone labored together. Food and utensils were shared. There were no rich and poor, no slaves, and no prisoners. The tribes seldom waged war; when they did it was to avenge a brother Costanoan, not to gain territory.

Probably because they lacked a sense of private property, the Costanoans did not initially resist the coming of the Spanish explorers and missionaries. The Spaniards claimed the land for the King, took the Indians' homes as their own and herded the Indians into the missions where they became servants and laborers for the Spaniards. The missionaries regarded "their" Indians as docile and obedient, forgave them their "ugliness" and "stupidity," and proceeded to teach them the lessons of "civilization."

Even in captivity, the Costanoans never could learn that land, labor, a cow or a tool belonged to someone, and not everyone. Thus they would frequently quit work when they were tired, hunt and kill the cattle from the missions, re-occupy their former homes, and walk off with tools and other objects the Spaniards left scattered around. On several occasions Indians were flogged, jailed or killed for their "insolence" and "thefts." Although there was scattered resistance, most of the Costanoans left the area without challenging the Spaniards. Those who remained

were eventually made into farm laborers. The Costanoans' failure to adjust to mission life caused their slow death. The Spaniards established the valley as their own and introduced the private ownership of the land, backed up by armed force, that we accept as "natural" today.

In 1821 Mexico declared independence from Spain and claimed the lands of California for itself, enforcing the claim with its own army. The padres of the mission bowed to superior force, and the few remaining Costanoans now served new masters. Needless to say, they were not consulted in the course of the change.

Under the Mexican reign the remaining Costanoans died off. They were hardly a model civilization; they did not have the means to support a larger population, and probably they would never have developed the continent at all. Their culture was not brilliant. But their virtues—the way they related to each other and to the land—are highlighted by the brutal side of the social order that destroyed them in the name of progress. In our present crisis, their virtues may provide us with direction.

(An expanding America fights Mexico for Texas, winning California in the Bargain.)

The new Mexican republic sparked the economic growth of the San Francisco peninsula. To break the power of the Missions, the Mexican government seized their lands, claiming they would be returned to the Indians. In fact, the land was rewarded to various faithful soldiers and public officials in large grants, the Ranchos. (One of these, Rancho San Francisquito, eventually became Leland Stanford's horse farm, and finally Stanford University.) Such granting of public resources to private men was not a custom unique to the young Mexican government, as we shall see.

During this period, 1821 to 1840, the expanding United States began to make its presence felt in California. Mexico encouraged trade, and soon ships from Boston laden with textiles and other goods landed on the West Coast to pick



up hides and tallow from the great Ranchos. As commerce grew between the United States and California, American settlers—many of them sailors who jumped ship—began to drift into Mexican territory. A similar movement was going on in Texas. In the early 1830's, large number of American settlers swarmed into the territory, squatting on the land in the face of a weak Mexican administration. In 1835 the settlers revolted, and after several battles established the Republic of Texas. The United States finally annexed Texas in 1845, when it looked as if Great Britain might try to make it a protectorate. War broke out between the United States and Mexico the following year.

Mexico feared the same thing could happen in California, with its growing American settlement. In the course of a very confusing six years, it did. A series of blunders, confusions and false starts led to the establishment of a California Republic, the occupation of California by U.S. troops, and an unsuccessful armed revolt by Mexicans in California. Finally in 1848 California was ceded to the U.S. in the settlement of the Mexican-American War.

The Treaty of Guadalupe Hidalgo, signed at the end of the war, was supposed to guarantee the property rights of all Mexicans living in California. In 1851, however, the United States Congress invalidated all land titles in California, claiming that Spanish and Mexican records were too incomplete and contradictory to establish ownership. The immense confusion which resulted jammed the courts, and many bankers and lawyers ended up with large holdings on the Peninsula. For example, John Greer had inherited nearly 3000 acres in the vicinity of San Francisco Creek through his wife, Maria Luisa Soto, the granddaughter of a Spanish soldier. In 1851 Greer lost his claim to the Soto Rancho. His lawyer, Henry Seale, fought the case in and out of court until 1865. When Seale finally secured Greer's claim, he received half of the Soto Rancho in payment—making himself and Greer the major landowners of what is now Palo Alto.

Many Mexicans who had managed to hold onto their lands through court proceedings began to sell them off in



the 1850's. The only other competition to the Americans for control of the land was the Indians. Those who had not already been killed or driven off signed treaties with the U.S. government giving up about half of California in return for perpetual ownership of seven and a half million acres. Unfortunately for the Indians, the U.S. Senate, under pressure from California politicians, never ratified the treaties. The Indian Bureau never bothered to tell the Indians, and sold off their promised lands. By 1900, the 10,000 surviving Indians were left with only a half million acres.

With the land titles squared away and the boundaries of the United States rounded out, it now remained for California to be developed. The 1849 Gold Rush brought miners and settlers in by the thousands. But before California could be fully exploited and integrated into the United States, better means of transportation than wagon trains and long sea voyages had to be found.



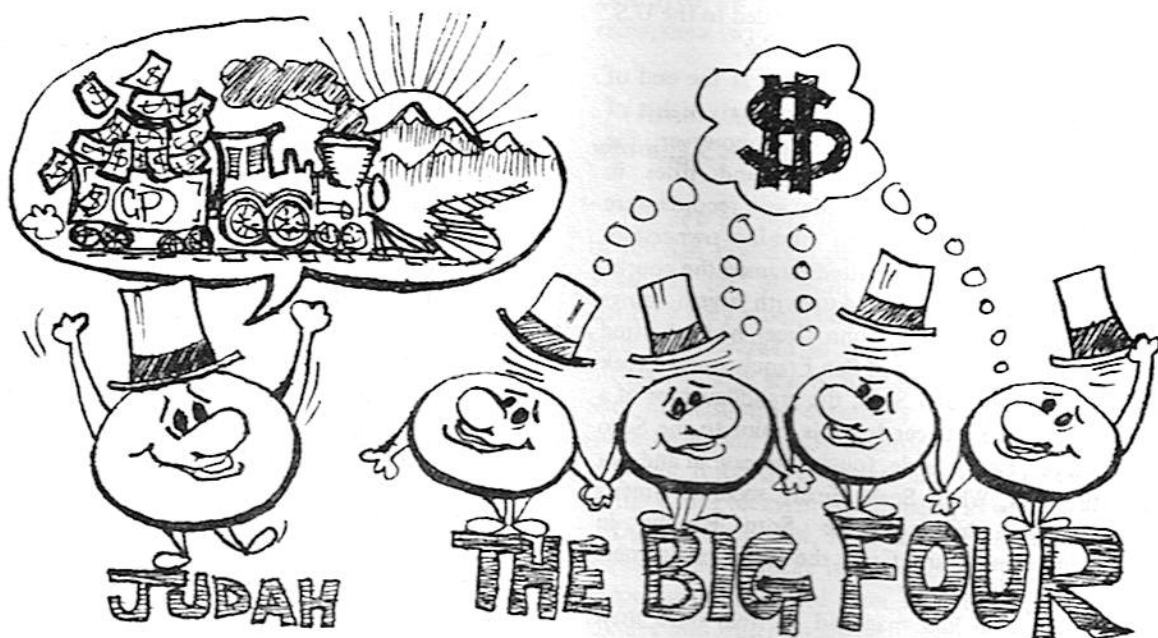
(The legendary "Big Four" set out to build the Great Transcontinental Railroad, and secure a Monopoly as well.)

In 1854 a brilliant young engineer with the building of several Eastern railroads to his credit, accepted a call to California to build that state's first railroad. Although the project itself was a modest line—extending a mere 21 miles from Sacramento to the Sierra foothills—Theodore Judah was a railroad visionary. His enthusiasm and creative energy were always directed toward the railroad that would one day span the continent. This vision obsessed Judah when he finally arrived in California, and the penniless engineer began the endless discussion, writing and propositioning that he hoped would enlist the necessary financial support to transform the dream into a reality.

During the fifties California was prospering—at least for some people. The Gold Rush subsided but trade and light

Pacific Railroad of California, and went in search of stock subscriptions. He needed pledges of \$115,000 before he could incorporate the company with the announced goal of building a railroad to the state line 115 miles distant.

Judah raised a third of the money from small mountain towns. In Sacramento, he made his appeal to a small group of merchants in an attic above the prosperous hardware store of Collis Huntington and Mark Hopkins. Leland Stanford and Charles Crocker, the other two men who would soon come to be known as the Big Four, were among the group of potential investors. Judah did not propose the building of a transcontinental railroad. He knew these men were hard-headed practical merchants and traders, so he slowly explained to them, as Oscar Lewis says in *The Big Four*, "what they as merchants most wanted to know: how to sell more of their goods, how to make their property more valuable, how to expand their businesses and stifle competition. "Help me," he asked, "to run my survey over



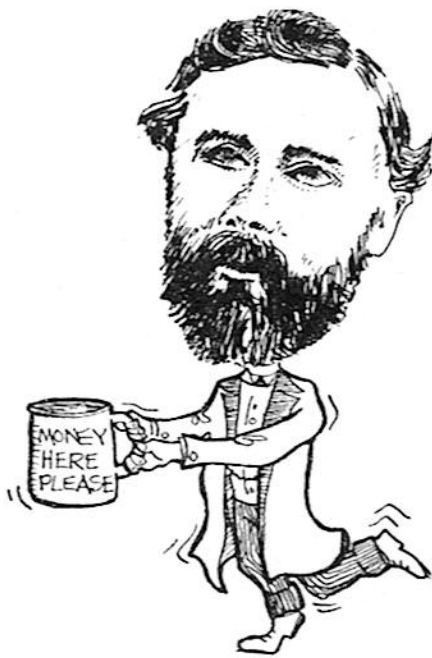
manufacturing began to build a strong local economy. On the Peninsula, sawmills produced lumber for the thousands of new structures in Northern California, and the Ranchos and a growing number of small farms marketed food and hay. There were even silver mines in Southern Santa Clara County.

Theodore Judah set up his offices in the lively trading town and capitol of Sacramento. In September of 1859 he represented Sacramento at the Pacific Railroad Convention in San Francisco which sent him to Washington to lobby for federal funds for the railroad. He lobbied endlessly throughout the session, but the issue of slavery dominated the Congress and would soon help lead the country into Civil War. Few minds besides Judah's were on the great railroad. He left Congress empty-handed in the spring of 1860 and returned to California.

Undaunted, Judah started to survey a route through the Sierras, drew up the Articles of Association for the Central

the mountains. With this we can get government support for the company—and you can control the company. If you get control of the traffic to the Nevada mines, you, and you alone, will control that market."

The thought of controlling the trade route to the newly discovered and prospering Nevada silver mines was enough to convince his listeners. The Big Four and several others bought enough stock so the company could incorporate, and the shrewd Huntington saw that Stanford was made the Railroad's president, himself vice-president and Hopkins treasurer. Judah had his money and went off to survey, oblivious of the others. But as frontier merchants the Big Four had already experienced the joy and profit of having a temporary monopoly on nails or some other rare commodity. They approached the railroad as a possible source of control and profit. California would soon be at the mercy of these men.



(Theodore Judah journeys to Washington seeking a vast federal dole for his railroad and succeeds Admirably.)

In October of 1860 Judah sailed again to Washington to lobby for the Central Pacific. It was clear to him that no such undertaking could occur without a liberal federal subsidy—and the more liberal, the better. The main obstacle had always been the sectional split in the Congress: Northerners would not support a road through the South, and Southerners voted in bloc against a Northern route.

By the time Judah reached Washington, the sectional rivalry had erupted into war. The Confederacy had been formed, a sense of emergency gripped Washington and Congress was in a state of disarray. It proved a perfect time to propose the railroad: its construction was a fully logical war measure, and Judah re-worked his approach accordingly. He pointed out that the railroad would help keep the distant states of Nevada and California attached to the Union, and certainly a country at war would not want to lose its silver and gold-producing states. He rightly assumed that in times of war vast resources will be granted with few questions asked. But even war did not guarantee the subsidy. To expedite matters, Judah got himself appointed Secretary of the House and Senate sub-committees which had to consider the bill, as well as secretary of the House committee on railroads. Such power would not have been given to him so easily in a more peaceful period, but Judah's time had come. The Union was trying to wage war and consolidate its shaky territory. It was not prepared to lose the South or the newer Western States: it would pay the necessary price to keep them.

Even with these advantages, Judah's plan for a huge public subsidy met strong opposition. But in 1862 the bill

was finally passed and President Lincoln signed it on July 1. The bill commissioned two companies to build the line from the Missouri River to Sacramento. It granted a strip of land for right-of-way, and also gave ten alternate sections of public land per mile to the railroad companies. In addition the bill offered 30-year low-interest loans to the companies in the amount of \$16,000 per mile on flat lands and \$48,000 per mile in the mountains. The bill which Judah had helped to write was extremely generous. The Railroad promised to be a profitable venture.

With the bill passed, Judah returned to Sacramento. Surveying was completed, and in January of 1863 California's recently elected governor, Leland Stanford, made a short speech and broke ground for the Central Pacific line out of Sacramento. Judah prepared to devote himself to the building of the road and decided to leave the financing up to his partners. But as it turned out, questions of finance and control of construction would soon destroy the partnership.

The Big Four were most interested in getting a line built rapidly and at great profit. They wanted the first forty miles built cheaply so that they could qualify for the federal subsidy, and they wanted it built by a construction company formed under their own Charles Crocker to ensure that building profits accrued to them as well. Judah wanted to build the first link of his great vision and wanted a quality construction outfit which was responsible to him to do the building; money and speed were not so important to him. Other Californians distrusted the motives of the shrewd Sacramento merchants, and Judah soon learned to agree.

The conflict lasted less than a year, with Judah losing most of the skirmishes. He finally sold his interest for \$100,000 and retained an option on the Central Pacific if



he could raise the money to buy out his partners. He left for New York in October of 1863 to find these buyers, full of his usual optimism. He caught yellow fever on the voyage and died a week after arriving in New York.

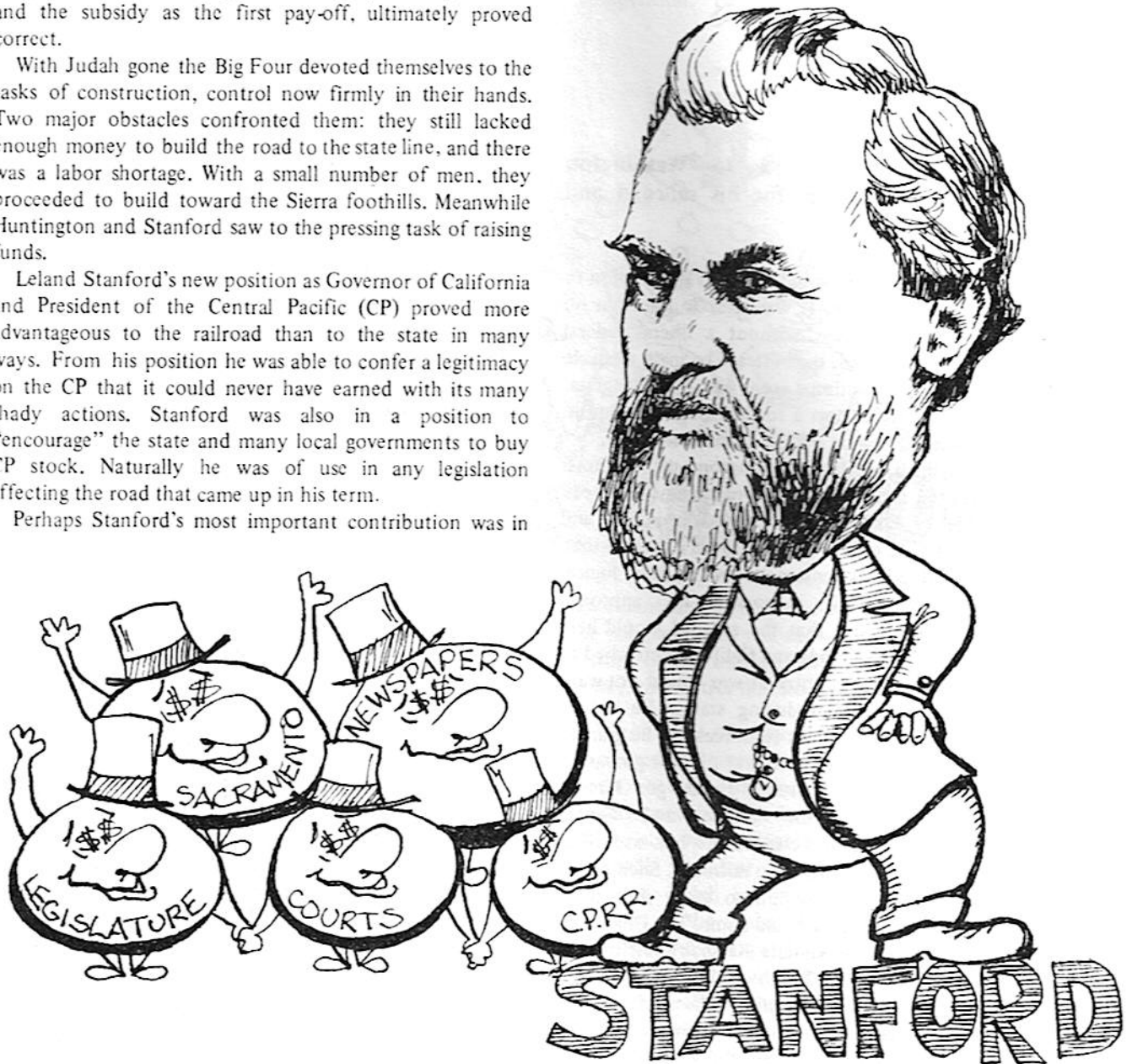
With Judah's death, the dream of the Great Transcontinental Road was left in the hands of less visionary men. This particular loss in the perennial battle of the businessman versus the "genius" was to prove very costly indeed to the people of the West Coast. It reflected a basic difference in the conception of the line and of the public trust which the subsidy represented. Judah wanted his road to serve the people of the state and nation—indeed of the world—by allowing speedy and inexpensive travel and shipping across the U.S. He asked the government for the vital subsidy in the public interest. The growing suspicion in California circles that the Big Four differed sharply with Judah, using the road as a possible gold-mine and the subsidy as the first pay-off, ultimately proved correct.

With Judah gone the Big Four devoted themselves to the tasks of construction, control now firmly in their hands. Two major obstacles confronted them: they still lacked enough money to build the road to the state line, and there was a labor shortage. With a small number of men, they proceeded to build toward the Sierra foothills. Meanwhile Huntington and Stanford saw to the pressing task of raising funds.

Leland Stanford's new position as Governor of California and President of the Central Pacific (CP) proved more advantageous to the railroad than to the state in many ways. From his position he was able to confer a legitimacy on the CP that it could never have earned with its many shady actions. Stanford was also in a position to "encourage" the state and many local governments to buy CP stock. Naturally he was of use in any legislation affecting the road that came up in his term.

Perhaps Stanford's most important contribution was in

building the large cadres of "railroad men" inside the legislative, administrative and judicial branches of government, and in developing the string of "railroad newspapers" that faithfully promoted the CP's interests and defended them from the frequent public attacks. A talker and freespender, Stanford understood that effective political power often lay in a man's ability to buy elections, judges or specific acts of legislation. The history of the growth of the CP and later the Southern Pacific (SP) and the maintenance of the great monopoly is marked by the expensive purchase of many vital favors. The friends Stanford developed for the Central Pacific in the crucial years as Governor and struggling railroad pioneer did not desert the railroad when Stanford left Sacramento. Their services spanned thirty years, and they supported not just Stanford, but the even more powerful Huntington.

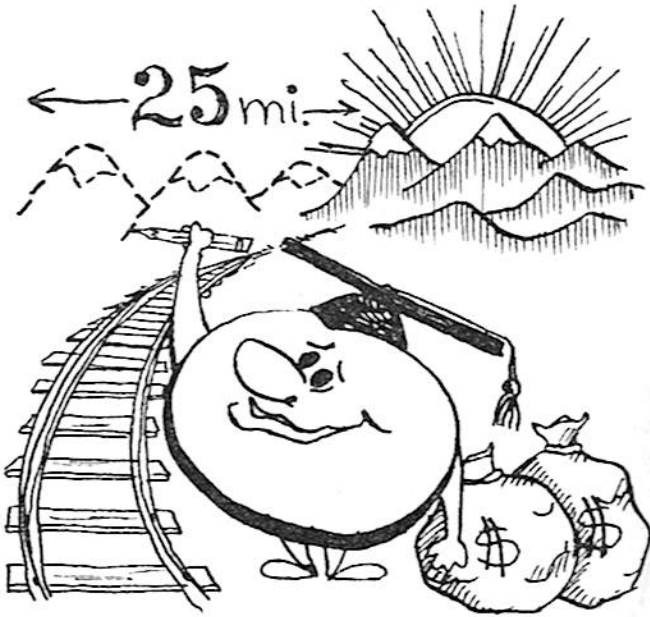


was shocked when the government paid the extra money, but had to confess a grudging respect for any men who could move the Sierras twenty-five miles West.

(Governor Stanford, desperate for workers, finds it Expedient to change his views on Chinese immigration.)

While Huntington was lobbying, partners on the coast were dealing with one of the most volatile elements in the grand scheme: labor. California was the new home of thousands of adventurers and prospectors, but not wage laborers. The railroad's demand for cheap, docile employees was not to be satisfied easily—and this first attempt to recruit a large labor force illuminated a problem that would dominate California industry and agriculture for generations to come. Characteristically, the CP's solution would also establish an enduring precedent.

The central problem for the CP was that white laborers in California insisted on and organized themselves for reasonable wages and good working conditions, if they did wage labor at all. They preferred to strike it rich. Thus many of the laborers who were recruited by Crocker in the mid-sixties took the job to get a ride part way to Nevada, make a few bucks, and go off to hunt silver in the new mining region. The Big Four then tried child labor, but there were not enough children, and parents complained of the seventy-five-cent-a-day wage. Since California was admitted to the union as a free state, Negro slaves could not be used. Oscar Lewis writes that late in 1864, Stanford and



During this early period Huntington was in the East engaged in a double mission: raising money and cutting costs. He did both very well, displaying the same ability in buying both congressmen and steel rails that Stanford showed on the West Coast with legislators and newspapers. While the Big Four's success at selling CP stock to the state, cities and private investors was impressive, it was not adequate.

Huntington won a still larger federal subsidy for the railroad in 1864. Once again the Big Four used the war crisis to bolster their arguments. Huntington told Congress that California's ties to the Union still hinged on the completion of the great railroad. Once again Congress proved ready to commit vast resources to maintain the country (and incidentally to line the pockets of the railroad kings). The amendment to the railroad act doubled the size of land-grants; made the government bonds a second mortgage on the railroad, allowing the railroad to float first-mortgage company bonds for the same amount; increased direct subsidies for the mountain stretches and permitted this money to be collected before the railroad was completed. The time limit on construction was liberally extended; the amendment allowed four years to reach the state line. Finally, public lands outside the federal grants were provided as sources for lumber, fuel, and coal needed in construction and operation.

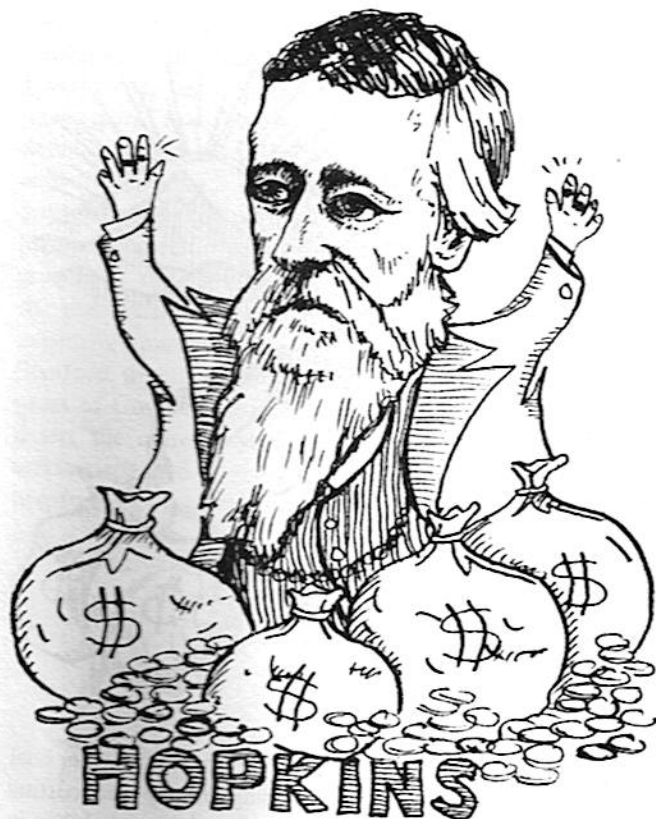
Soon afterwards, Congress was persuaded to increase the subsidy for the line by a half-million dollars when the railroad group, backed by a squad of well-paid geologists, contended that the mountains began not where the flatland became foothill, but 25 miles earlier at the Arcade River where the soil changed color. This meant that those 25 miles would receive the \$48,000 a mile mountain subsidy rather than the \$16,000 subsidy for flatlands. California



Judge E. B. Crocker of the CP's legal department "petitioned the War Department to send out five thousand Rebel prisoners to be put to work under the guard of a few companies of Union soldiers. But the war ended and the scheme had to be dropped." The Big Four considered importing Mexicans, but thought they were too lazy—a view that prevailed in California until the early 20th century when startled growers discovered that Mexicans could work hard and well and came to rely heavily on their labor for California's vast farms.

According to Lewis, it was Governor Stanford who first suggested the idea of using the Chinese, small numbers of whom lived around San Francisco. As Governor, Stanford had earlier discouraged immigration because there could "be no doubt but that the presence among us of numbers of degraded and distinct people must exercise a deleterious influence upon the superior race..." But now he was president of a railroad that needed laborers. Many doubted that the "rice-eating weaklings" could do the job, but Charles Crocker had a good Chinese servant and recalled that their ancestors had built the Great Wall of China—and he was willing to try them. Furthermore, Crocker's white crews were threatening to strike, and that proved to be the deciding factor.

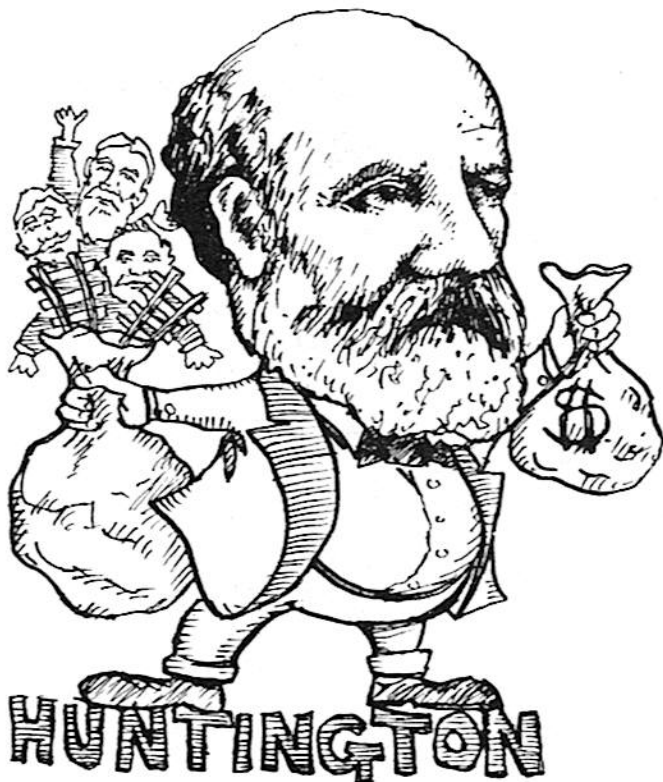
Fifty Chinese were hired as an experiment in 1865. They worked hard and well from sunrise to sunset, and impressed Crocker and the other engineers. More were hired immediately; soon the state was scoured for all unemployed Chinese. Stanford hoped that the force would reach 15,000 by the next year. Since there were not enough Chinese in California, plans were made to import them under a system of labor contractors. White labor leaders were furious, but



calmed down when they realized that 2,000 whites would fill the positions of authority and the skilled worker categories—and that the Chinese would live in separate camps.

Crocker rode his crews hard. He was responding not only to pressures of the deadline for completion, but also to the fact that the Union Pacific was rapidly building westward across the easy plains from Missouri, and winning the subsidy for those miles. The CP had to cross the forbidding Sierra and reach Salt Lake first if it wanted to control and profit from both the Nevada and Salt Lake City traffic. The story of the crossing of the Sierra is impressive and horrifying but we will not dwell on it. Suffice it to say that the work was dangerous, difficult and freezing cold. Thousands of Chinese died in nitroglycerin explosions, accidents, and avalanches. By June, 1868, after a staggering expenditure of human lives and money, the CP had crossed the Nevada line. The Central Pacific met the Union Pacific at Promontory Point, Utah, where Leland Stanford tapped in the golden spike on May 10, 1869.

With the road finished and the "coolies" cast adrift to compete with white labor in San Francisco, the Big Four realized that the railroad was not yet a gold mine. Transcontinental railroad transportation was expensive compared to ships, and CP business was often very slow. Crocker decided to sell out to his partners, who also considered selling their stock. But the Panic of 1873 wiped out possible buyers, and it almost bankrupted the CP as well. Huntington pulled the firm through the storm, and Crocker returned from Europe and bought back into the fold. But the slow growth of transcontinental rail traffic convinced

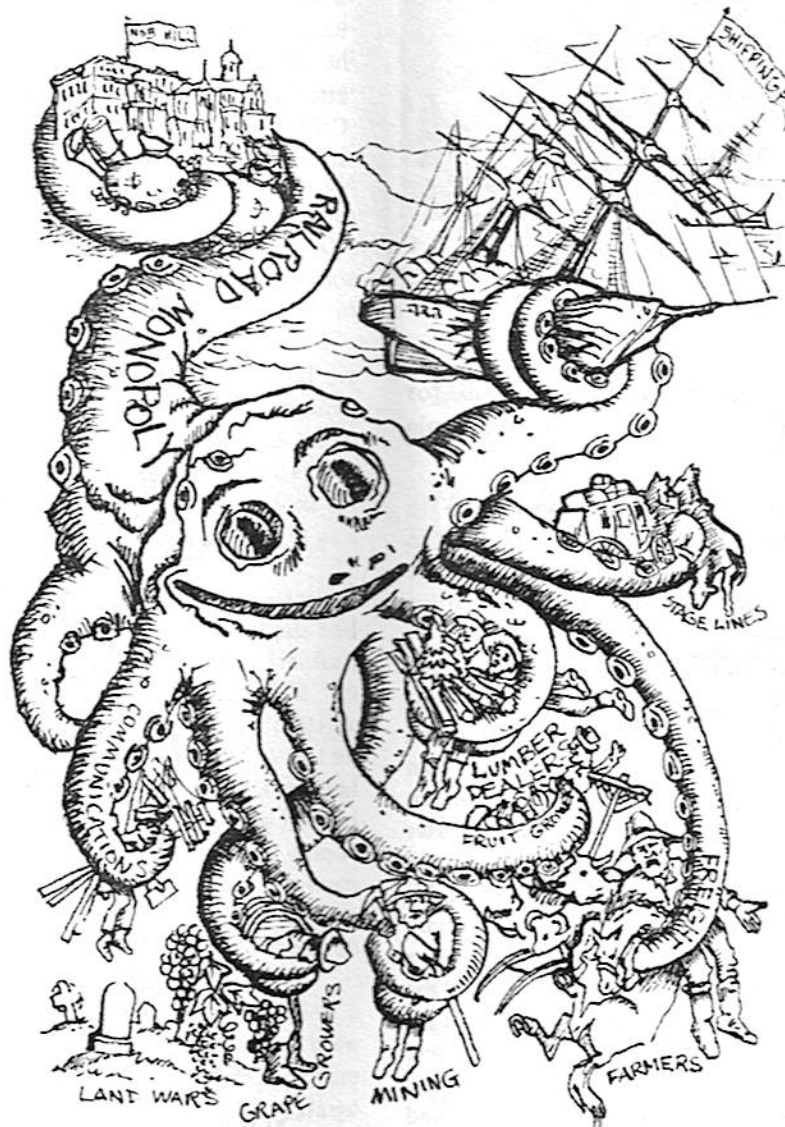


the Big Four that they needed a new strategy to assure their fortunes. They decided to acquire a monopoly on all rail traffic on the West Coast.

The details of the building of the monopoly are complex but the formula was simple: buy out or force out all the competition and then establish rates on the basis of "all the traffic will bear." The system that grew up under the name "Southern Pacific" (the SP built by the Big Four eventually bought the CP) came to be hated throughout California, but people were trapped. The SP set its rates to allow each shipper to make an adequate profit to stay in business, no more. If a man had a bad year, his rates were lowered, but in a good year it was the SP that reaped the extra profits. If a shipper did not like this system he did not have to ship his goods—but there was no alternative railroad within the state, and the SP slowly bought up water traffic as well. The grip of the monopoly destroyed businesses, stunted growth, and led to social chaos. But this seemed to be of little concern to the barons of the railroad. They claimed to

be serving the people well after risking their fortunes earlier. They felt they deserved the growing return.

The profits of the monopoly were, in fact, enormous. They came from railroad tariffs, the sale of lands granted by the government as part of the CP subsidy, and growing investments. Thousands of Californians and several powerful newspapers fought the SP, but the Big Four had the power that comes with extraordinary wealth: they could buy off almost any threat, including competitors, legislators, railroad watchdog committees, judges and many newspapers. The public, whose taxes and labor had built the road, felt that a public trust had been betrayed, that a great asset and service bought and built by the people had been corrupted and made into a form of oppression. They were right, but they failed to organize themselves to secure their interests, and in that way proved virtually helpless. Stanford and Huntington made no such mistake, and their early efforts to organize on behalf of their interests gave them fortunes of tens of millions of dollars.



"THE CURSE OF CALIFORNIA" - AFTER AN 1882 S.F. NEWSPAPER CARTOON.



The Stanfords spent lavishly on their son's education and frequent trips to the East and Europe. They moved East so that they could be near Leland Jr. when he entered Harvard. But the year before he was to begin his studies, he caught typhoid fever on a family trip to Europe and died in Florence in March of 1884. Leland and Jane decided to make a fitting memorial to their son, perhaps a museum or a technical school.

(Stanford University is founded to serve poor people and maintain a pleasant harmony with the natural environment.)

It was several years until Leland Stanford Junior University was founded, and the original concept changed several times. Once a school had been chosen over a museum, Stanford thought about a technical school. He had always been interested in engineering and various inventions and distressed by people he felt lacked "useful skills." He desired above all to train people who would be useful to the society and to themselves and so stressed what he called a "practical" education. For a while he thought of attaching a technical school to the new University of California at Berkeley, but he abandoned this idea shortly after the California legislature refused to confirm his

(Leland Stanford decides to buy a farm for horses and his son, and chooses a peninsula Rancho.)

Leland Stanford's great wealth now enabled him to indulge his every wish. He had said once, "It is pleasant to be rich . . ." and now that the SP guaranteed his wealth, he took great pleasure in playing the role of late-Victorian political and financial king.

The birth of Leland Stanford, Jr. in May, 1868, gave the Governor great joy, and a reason for even greater extravagance. He and his wife Jane decided that their son should be brought up in San Francisco rather than provincial Sacramento. They built a huge mansion which commanded the undeveloped Nob Hill, and Stanford later organized the famed cable car system to make access to the steep hill easier. As others began to build on Nob Hill and it became "crowded," Stanford decided to buy the Rancho San Francisquito down the Peninsula. He embarked on a plan to assemble the finest stock of racing horses in the West, and spent a small fortune. Eventually he tired of his horses, and for a million dollars bought a 55,000 acre vineyard at Vina in the upper Sacramento Valley which he hoped would produce a fine domestic wine, and incidentally be a place where little Leland could spend some time learning farming.



"YOU CANNOT FASTEN A TWO THOUSAND DOLLAR EDUCATION ON A FIFTY-CENT BOY."

appointment to the Board of Regents. So in 1886, Stanford announced the founding of Leland Stanford Junior University and the dedication of his fortune to its endowment. The millions extracted from public loans and gifts, unorganized labor, a ruthless monopoly and huge land grants were to become the financial base of the new university.

He and Jane set out to talk with educators back East to clarify their education goals and to find a president for the school. They were impressed with the abundance of research at Johns Hopkins and with the importance of the applied sciences at MIT and Cornell. They tried to persuade Andrew White, ex-president of Cornell, to come West and build Stanford University. He refused, but recommended David Starr Jordan, then president of Indiana University, whom he called "one of the leading scientific men of the country." Jordan was favorably impressed by Stanford, and wrote later in his autobiography: "He hoped to develop in California a university of the highest order, a center of invention and research, where students should be trained for 'usefulness in life.' His educational ideas, it appeared, corresponded very closely with my own." Jordan accepted the job as president, and prepared to move West to begin the task of recruiting a faculty.

By this time Stanford's ideas had matured and his vision of the new university was fairly clear. It would provide tuition-free education to as many students as possible with emphasis on practical training. The President of the CP, who had amassed great wealth, now intended "to provide primarily for the masses. The rich can take care of themselves, but will always be welcome here."

Stanford envisioned more than a university: he told the San Francisco Examiner in March of 1891 that "... in time the University will be complete from the kindergarten to the post graduate course, but that can only be after a village has grown up around the University." Thus Stanford set out to build his university and the area surrounding it as a model to the state, nation and world.

His typical desire to build "the best" and "the greatest" showed itself in two areas: the design of the campus and the creation of the university town. He and Mrs. Stanford wanted the campus well planned, and retained an architectural firm and the landscape architect, Frederick Olmsted, to suggest a coherent proposal. Olmsted sought an ecological balance, with plenty of open space and a rational plan for the development of homes, buildings and limited roads. (Such care for the environment was certainly unique in the West and, as we shall see, has not persisted through the present time.) His basic proposal for the style and form of the main Quad was accepted, and has influenced all subsequent building at Stanford.

The university that Olmsted was designing needed a town that could serve it. The Mid-Peninsula area had been developing slowly through the late 1800's. Agriculture dominated the economy of the Santa Clara Valley; large and small farms extended far up the Peninsula. After the SP connected San Francisco with the Peninsula, many wealthy

businessmen established country estates in Southern San Mateo County. The village of Menlo Park, just north of the Stanford's farm, served some of these estates. The town of Mayfield, beginning south of the Palo Alto Farm at El Camino and Page Mill Road, supplied the farmers of the area.

Stanford originally planned to have the university front on the village of Mayfield. But when the Stanfords insisted that the 13 saloons in the town be closed to protect the morals of the students and faculty, the saloon-keepers responded in a language Stanford should have understood: we won't close down the source of our profits.

Stanford retaliated by locating the campus as far from Mayfield as possible, at the north end of the farm, and asked his good friend Timothy Hopkins (adopted son of Mark) to buy land nearby for a new town. In 1887, Hopkins bought 700 acres east of El Camino Real from John Greer and Henry Seale; the next year, he began renting lots for the town of University Park. The name was soon changed and land was offered in circulars advertising "Palo Alto: the business and residence town of the Leland Stanford Junior University." By the time the university opened its doors only a few houses, a boarding house and a general store had been built—but they were to the Stanford' liking.

PALO ALTO!

THE BUSINESS AND RESIDENCE TOWN
OF THE
LELAND STANFORD, JR., UNIVERSITY

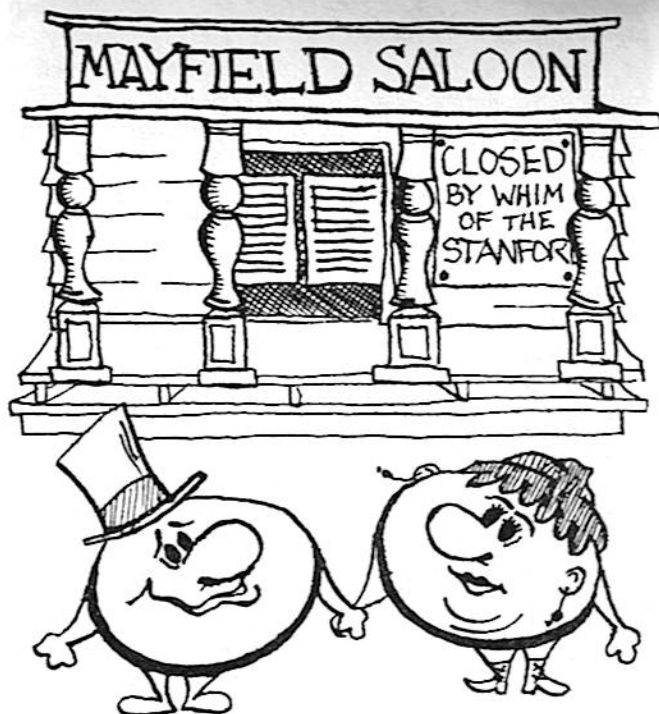


1,000 BEAUTIFUL LOTS,
AT AUCTION, ON THE GROUNDS,
THURSDAY, MAY 3rd, 1888,
AT 12 O'CLOCK M.

SPECIAL EXCURSION
Trains will leave: San Francisco: Fourth and Townsend Streets, 10 A.M., sharp; Valencia and 26th Streets, 10.10 A.M., sharp.
\$1.00—ROUND TRIP TICKETS—\$1.00
San Jose: S. P. R. R. Depot, Broad Gauge: 10.30 A.M., sharp.
50 Cts.—ROUND TRIP TICKETS.—50 Cts.

TERMS OF SALE, ONE-THIRD CASH.
Balance in Equal Payments, in 12 and 18 Months Interest, 6 per Cent per Annum

N. C. CARNALL & CO.
WM. BUTTERFIELD, Auctioneer. 624 Market Street, San Francisco.



With the Grant of Endowment passed, the campus built, and President Jordan hired, Stanford University began classes in the fall of 1891 with 415 students and a faculty of twenty. Within two years, the new school was in financial trouble. Leland Stanford's fortune rested on the railroad which was not firmly in Huntington's control. Huntington was never fond of Stanford's excessive spending, political ambition and inattention to the problems of the railroad. He became furious when in 1885 Stanford had himself appointed Senator from California, at the expense of Huntington's own nominee. Stanford built the university with borrowed funds, expecting to repay the debts with railroad profits, but Huntington refused to pay out the necessary dividends. Then Stanford died in June, 1893, leaving his stocks and money tied up in probate court.

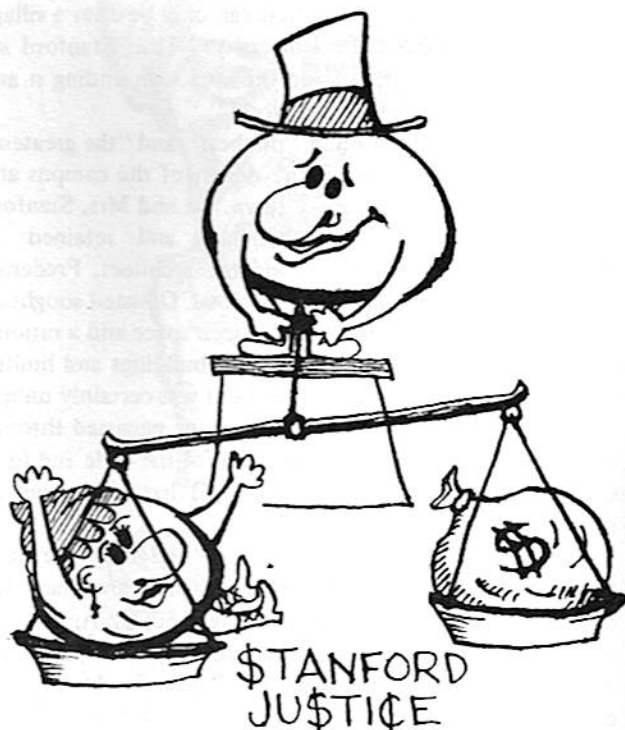
The strong-willed Mrs. Stanford pledged to keep the university open and to continue as sole governing Trustee. (The Board of Trustees provided for in the Endowment—businessmen friends of the Stanfords—was not to exercise power until the Stanfords died.) She set out to raise the necessary money, a task made more difficult by the Depression of 1893. A sympathetic probate judge stretched a few legal points and declared the President and staff of the university her personal servants, awarding her \$10,000 a month from the estate for their salaries. This amount, bolstered by a registration fee, sale of race horses, salary cuts and great frugality, enabled the university to survive.

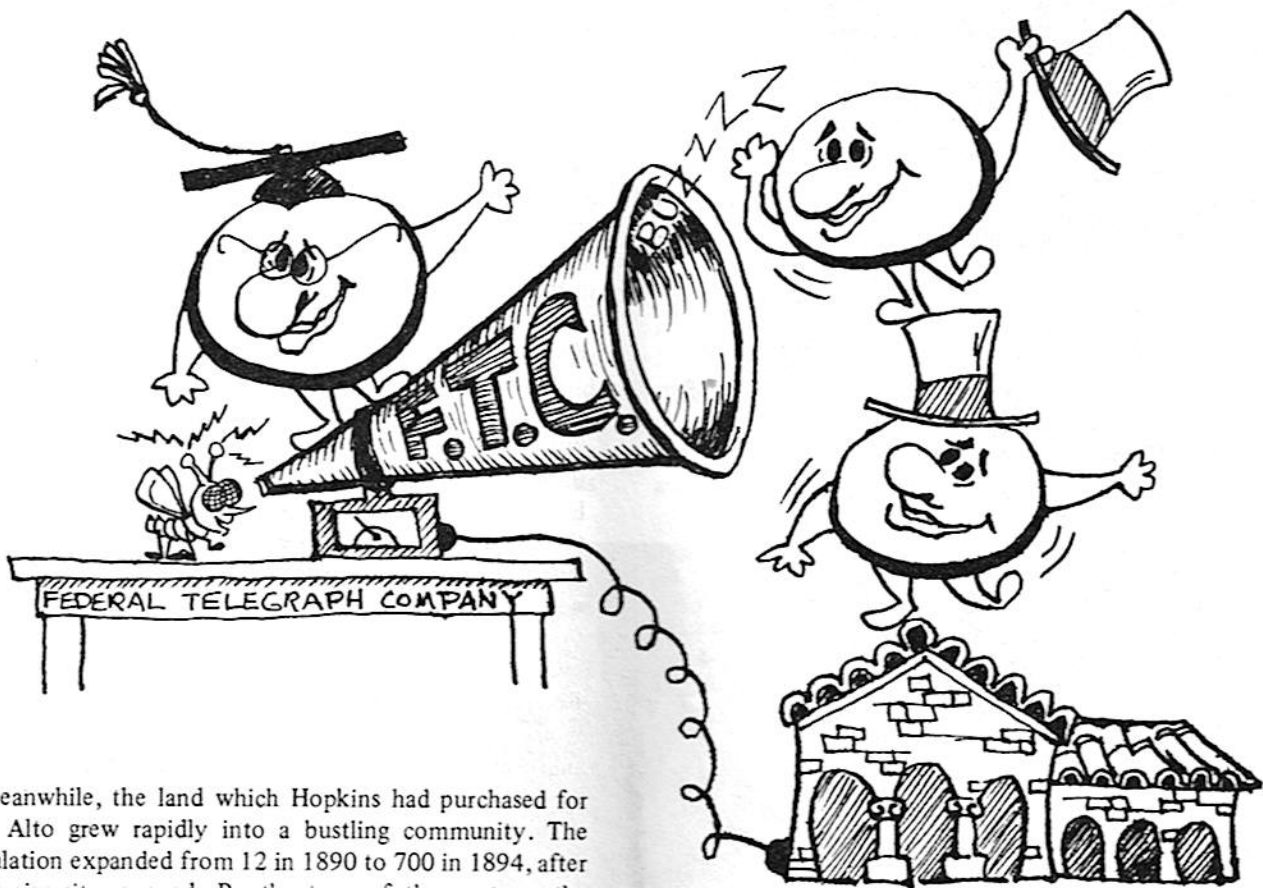
But in 1894 a greater threat appeared. The U.S. Government attached Stanford's estate for the re-payment of \$14 million worth of the bonds and interest that had built the Central Pacific. Under California law in the

1860's, when the CP incorporated, the Big Four were personally responsible for the CP debt—and they had often justified their vicious monopoly as the only way to earn the money necessary to repay the enormous, threatening deficit. But when the bill came due, the argument changed rapidly: now Stanford's lawyers argued that the SP as a corporation, not the Big Four as individuals, should bear the costs. The personal fortunes should remain untouched. Huntington was glad to see the Government sue Stanford's estate because it made the Stanford estate bear the legal costs of the case. Eventually the Supreme Court decided in favor of the Stanfords and the university's endowment was saved. Once again the Government was the loser, and both Stanfords died never knowing who, if anyone, would pay the enormous debt. (The Government was finally able, after much time and effort in various courts, to force the SP to pay in 1908.)

By 1899 the financial crisis was over. But the university had come to realize more clearly than ever the frailty of a private educational institution in a society which encountered frequent economic crises and which seldom gave money to a venture unless there was a clear profit in it.

In 1903 Mrs. Stanford turned her powers over to the Trustees and in 1905 she died. The Trustees' first crisis, the earthquake of 1906, forced them to rebuild much of the university. But generally speaking, the beginning of the 20th century was a time of retrenchment and quiet building at Stanford. The major new undertaking was the acquisition of the San Francisco-based Medical School, a valuable but very expensive addition that greatly increased pressure on an already tight budget.





Meanwhile, the land which Hopkins had purchased for Palo Alto grew rapidly into a bustling community. The population expanded from 12 in 1890 to 700 in 1894, after the university opened. By the turn of the century, the population was 1650, there was a severe housing shortage, and no rentals were available. Palo Alto far outstripped both Mayfield and Menlo Park, which began to regret their refusal to bow to Leland Stanford's wishes. By 1906, Palo Alto dominated the Peninsula.

Palo Alto had virtually no industry, but the university provided a sound and genteel economic base. Palo Altans prided themselves on the quality of their town—a quality Leland Stanford would have approved. There were no saloons, an abundance of trees, and a minimum of Orientals. The town remained dry for decades, largely due to restrictions on the deeds Hopkins sold, which provided that the property would revert to the university if alcohol was ever sold on the site. (This restriction still governs some of the property in downtown Palo Alto.)

As there was only one Negro in the area, E.B. "Sam" McDonald, who had worked for Stanford tenant farmers and for the university itself for years, there was no virulent anti-Negro sentiment. However, Orientals were seen as a threat to the high quality of Palo Alto. One historian says, "During the first decade of the twentieth century there existed in Palo Alto an Anti-Japanese Laundry League whose sole purpose was to persuade citizens to patronize laundries using only non-Oriental workers. In referring to the Chinese, newspapers invariably called them Chinamen, Chinks, Celestials and Pagans. Restaurants and laundries proudly advertised that they had no "coolie" help. Permits to open businesses in Palo Alto were denied the Chinese

Housing for them was limited to hovels."

Before World War I, two major events in Palo Alto occurred to tighten the bond between university and university town. In 1912, Lee de Forest and other employees of the tiny Federal Telegraph Company on Emerson Street heard a fly's footsteps amplified by de Forest's new invention, the vacuum tube. The company for which de Forest worked has been heralded as "the prototype of the close interrelationship between industry, the university and the entrepreneurs in developing the science-based electronics complex in Santa Clara County." When the company was started in 1909 by Cyrus Elwell, a Stanford graduate in electrical engineering, neither the word "electronics" nor the burgeoning development of Santa Clara County could be imagined. Elwell demonstrated a transmission system which could send both voice and telegraph signals to David Starr Jordan, and the Stanford president volunteered \$500 to help capitalize the new company. Dr. C.D. Marx, head of the civil engineering department, and other faculty members, also put money into the venture. Within a few years, discovery of new uses for the vacuum tube guaranteed the success of the new company. While FTC employees could hardly realize what they were starting, the discovery would set the model for the transformation of the still agricultural and residential Mid-Peninsula into a heavily populated industrial center.



(America joins the Great War and Stanford University enlists enthusiastically.)

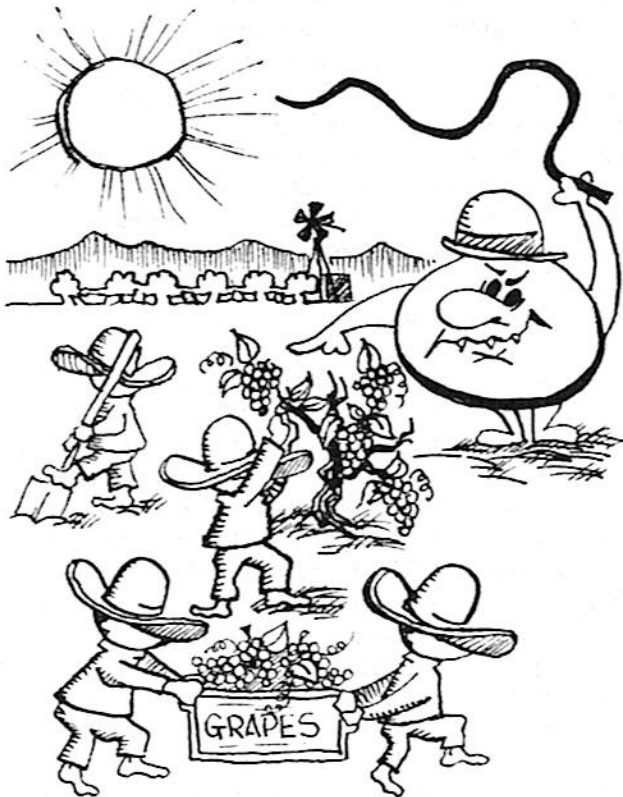
The United States entered World War I after the brief Stanford Presidency of Dr. Branner (1913-1916) and the appointment of Dr. Wilbur as President. Stanford responded fully to the call with the notable exception of ex-President and then Chancellor Jordan, who was preaching pacifism. Jordan's opposition to war and imperialism dated from 1899, when he was active in the Anti-Imperialist League opposing the U.S. seizure of the Philippines.

Stanford's student body and faculty were greatly depleted in World War I, a struggle known to millions as "the war to end war" which was actually fought to save our shipping and restore an acceptable balance of power in Europe. President Wilbur went to Washington to serve in the Food Administration under the successful Stanford graduate and dynamic new Trustee, Herbert Hoover, who was to gain fame later in the war as the director of the Commission for Relief in Belgium. Students enlisted, several hundred went through the newly established Reserve Officers Training Corps (ROTC), and men and women volunteered to form an Ambulance Corps. The university gave faculty leave with partial pay and opened up the university laboratories to the government. The medical school trained corpsmen. ROTC quarters were constructed on the campus, including stables for about 200 horses belonging to a student cavalry unit which was not disbanded until the 1940's.

The area around Stanford tooled up for the war as well. Camp Fremont in Menlo Park had as many as 43,000 men at a time in basic training. A hospital was built on Willow Road and a shooting range and artillery range were built near Page Mill Road. Merchants prospered as they filled the needs of the temporary population. The influx of soldiers once again strained the housing market. The first apartment house was built in Palo Alto in 1918-20 units on the corner of University and Cowper designed to meet the housing needs of Camp Fremont officers and wives. Many local residents took up vegetable farming, to supplement their own incomes and aid the government effort. Timothy Hopkins invited area residents to use his remaining lots for their gardens. Women, including some Stanford volunteers, helped with the county's harvest during the labor shortage following full-scale mobilization.

But the increased demand for farm products had an even more important effect on the area's economy. The war introduced Mexican farm labor into California. Myths about the laziness and ineptitude of the Mexicans—like the earlier myths about the "weak Chinese coolies"—gave way as the laborers proved diligent and effective. The use of Mexican labor continued after the war, and is still widespread throughout the state. The pay and working conditions of these laborers are different but not much better than those endured by the Chinese before them.

After World War I, life returned to easy "normalcy."

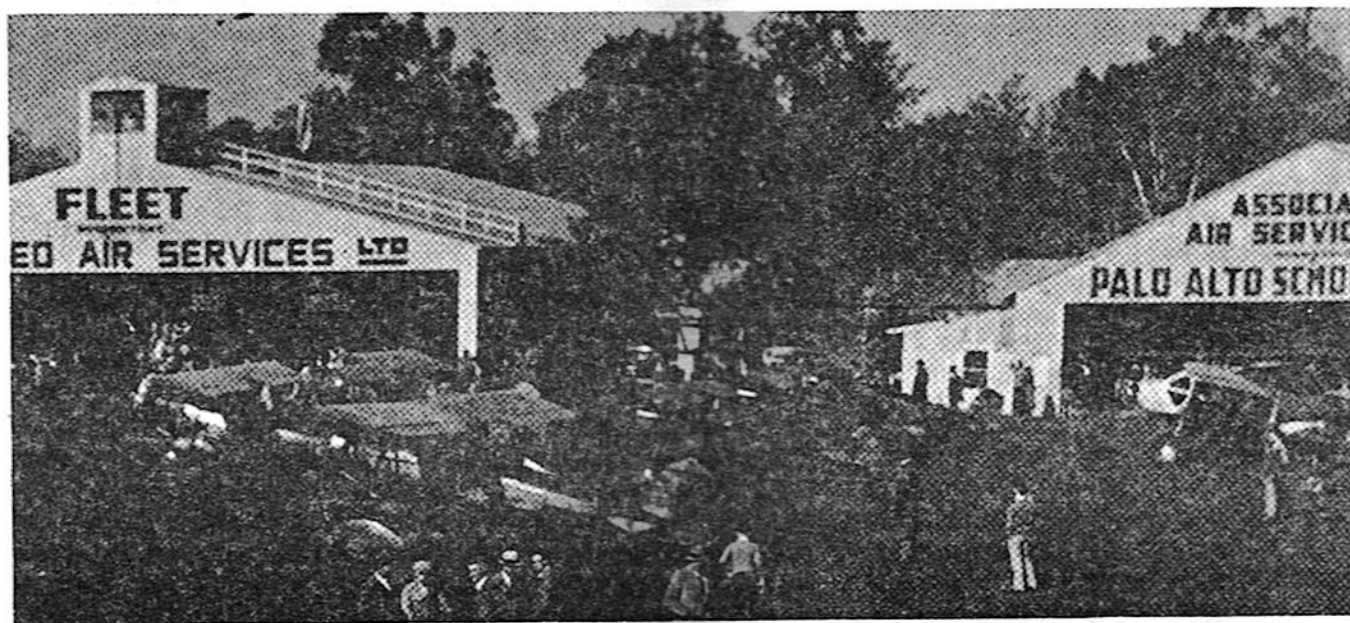


The war left little permanent mark on the area, unlike World War II, largely because it was primarily a European war fought with conventional weapons. The greatest activity took place on the more populous and industrialized East Coast.

Soon after Armistice, the trustees began to make major decisions relating to the use of Stanford lands. Deciding that farming was no longer profitable, they first liquidated all the remaining farm leases. Although farming no longer brought income to the university, the war had made it clear to the Trustees and the government that certain forms of cooperation might be mutually profitable. As Edith Mirrielees says in *Stanford: Story of a University*, "World War I had shown both government and business the uses of universities. And a university surrounded by empty acres had more uses than most. Throughout the over-prosperous

Financial relief also came in the form of tuition. Stanford had never really been a school "for the masses," and the introduction of fees in 1919 merely recognized the fact that most Stanford students were well off. But the rising tuition would eventually become a barrier to most poorer students. Leland Stanford's goal of building a university that would serve the needs of his workers' children grew more and more illusory.

As the Mid-Peninsula grew and changed through the 1920's, the university maintained the controlling hand it had as the area's major landowner and corporate power. Stanford's control extended even to determining the municipalities that would border on its land. In 1925, the old town of Mayfield voted its desire to be annexed to Palo Alto. Stanford owned land in both towns, and favored annexation so that it could deal with one municipality



The Palo Alto Airport stood on Stanford land now occupied by Escondido Village.

twenties, applications for the leasing of land came from many quarters..." The available land, laboratories and faculty at Stanford were a powerfully attractive combination, and the development during the twenties of several key departments and schools guaranteed Stanford's future success as the center of a wealthy Santa Clara County.

Three of the leases which Stanford accepted for its land during the twenties are representative. One was to the U.S. Government for an agricultural experiment; the second was to the Carnegie Foundation for a laboratory of Experimental Taxonomy and Genetics; and the third went to a privately-owned school of aviation which needed open land for runways. Government, foundations and private business—these were the groups which would help Stanford over its financial hurdles in the future in return for services rendered.

instead of two. But many Palo Alto residents were not so sure that annexation of Mayfield would benefit them. A lively campaign by opponents of annexation pointed out that taxes would be likely to rise with the incorporation of older, shabbier Mayfield. Also, annexation would diffuse the small-town character of Palo Alto, and lessen the influence that individual citizens had on municipal affairs.

The campaign against annexation was smashed by a threat from the university to withdraw the trade that provided Palo Alto's economic base. "One thing is certain," announced a university official, "if Palo Alto declines to annex further territory for the reasons urged by those who oppose consolidation, then the university will have no choice in the matter and will be compelled to develop its own municipality." In July, 1925, Palo Altans voted almost three-to-one to annex Mayfield. Stanford had once again kept its town in line.

(The Stirrings of Stanford's future Greatness.)

In the twenties, Stanford University started to grow along the lines that would one day transform the sleepy little school into a cornerstone of the American empire. The growth came in two professional schools: business and engineering. Behind each school was a dynamic personality: Herbert Hoover in business and Frederick Terman in engineering.

Hoover, of course, was a Trustee, just back from his relief work in Europe. An engineer by training, Hoover had been a very successful businessman with extensive mining operations in China, Australia, South Africa and Russia. He came to Stanford to affect it, and he did. The most powerful Trustee of the period, he helped establish the Food Research Institute under a Carnegie grant and he saw that academic rank was given to visiting fellows at the Institute—a practice that would be greatly expanded in later years. He convinced many Trustees, academicians and businessmen of the importance of teaching business skills and principles as an academic discipline, and saw the Stanford business school prove very successful at its task. He also raised money for the construction of the Hoover Institution, which housed the vast records he and his staff had gathered during their service in Europe on the causes of the Great War. He left the university to serve as President of the United States in 1929.

Engineering Prof. Frederick Terman was not a powerful figure like Hoover in the twenties. But Terman, who would rise to become Stanford's provost, was an exciting instructor and available to students. With the establishment



of the "communications lab" in an attic above Terman's office, a cluster of young engineers began to form around him. While he was inspiring these promising students with his teaching, few people could foresee that his genius would help to speed the total economic transformation of the area.

Even after the boost of the First World War, the economy of Santa Clara county remained agricultural, with only some industry in canning, processing and farm machinery. The future growth of the area would come from electronics industries, spawned or attracted by the engineering expertise at Stanford University. Terman could see the model for this growth in the Federal Telegraph Company of Palo Alto. Founded by Stanford engineers before the war and capitalized by professors, Federal Telegraph had found a lucrative market for its transmitters and receivers at U.S. Navy bases. By the twenties, a productive cooperation had grown up between the engineering school and Federal Telegraph. The bright young engineers and physicists who gathered at Terman's lab were naturally attracted to the dynamic electronics company. Many Stanford graduates went to work for Federal. By the mid-Twenties, the company was the world leader in the design and manufacture of high power apparatus for international communication.

Soon industry was giving money to Stanford to provide the engineering research it needed. General Electric, Pacific Gas & Electricity, and other firms paid for the Ryan High Voltage Laboratory in 1926, to improve the transmission of electric power over long distances. Contributions from the Daniel Guggenheim Fund for the Promotion of Aeronautics enabled engineering professors to establish a laboratory that

would do important work for military and aircraft manufacturers.

These early projects did not immediately spark the growth of an electronics industry around Palo Alto, and the Federal Telegraph Company moved to New Jersey in 1932. But they showed Federick Terman the potential for a university-based industrial center which he would later bring to fruition. Many years afterwards, Terman noted that industry had learned that "for activities involving creative work, location near a center of brains—that is, near a university with a good graduate program in engineering and science—is more important than location near raw materials, transportation, factory labor, or even markets."

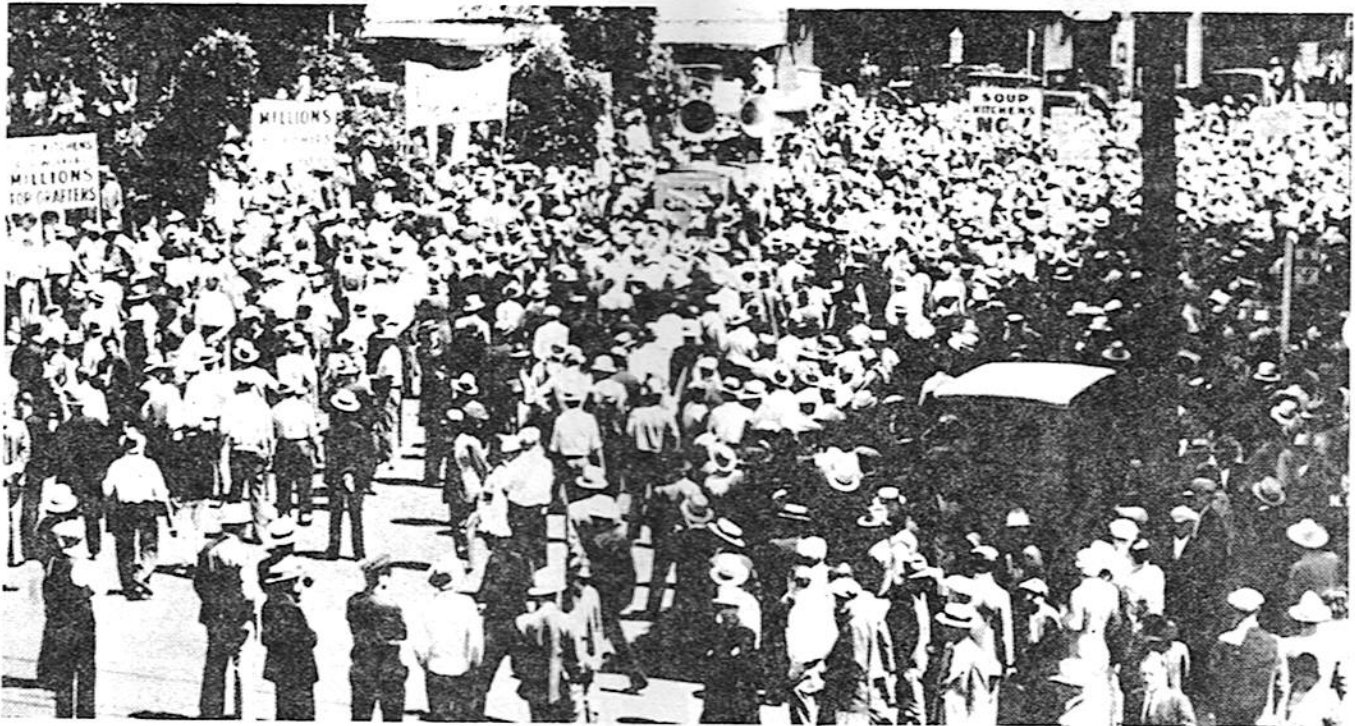
The electronics technology that Terman and others were developing in the twenties held out great promise for the betterment of human existence. But the Great Depression and World War II intervened. These upheavals in American capitalism would first stunt the growth of electronics, and then warp its development into a dependency on military contracting.

The stability and prosperity of the twenties rested on a shaky foundation, and finally proved illusory. The U.S. economy had suffered crises in irregular cycles before, such as the Panic of 1873 which almost wiped out the Central Pacific and the Depression of 1893 which threatened to close Stanford in its early years, but these threats to the social order were generally short-lived and usually followed by a long period of recovery and growth. The U.S. had never experienced a protracted crisis like the Great Depression of the Thirties, and certainly did not expect such a basic threat to its survival as the leading capitalist nation.

With the startling crash of the Market on "Black Friday" in October of 1929, the Great Depression struck the nation. The consequences are familiar history: unemployment, poverty, hunger and fear which led to intense social struggles. But such struggles did not mark the Mid-Peninsula.

The Depression affected the Santa Clara Valley and Stanford University more by limiting growth than by causing the death of either industries or educational institution. In fact, there was still very little industry around to die. Population growth slowed—Palo Alto grew by only 3,000 people during the decade, despite the migration to California of many poor whites fleeing the dust bowl in the Southwest. Poor whites could no more find work and afford to live in respectable, suburban Palo Alto in the 1930's than they can now. The "Okies" became migrant farm workers, competing with Mexican-Americans in the lower Santa Clara, San Joaquin and San Fernando Valleys. With the slow population growth, construction on the Peninsula fell to a bare minimum, and the one remaining manufacturing plant in Palo Alto, the Boden Automatic Hammer Factory, died a Depression death.

The University itself scraped through the Depression with a minimum of damage. It made 10 percent salary cuts in 1933, but ended the year with a \$2000 working surplus. By 1935, the Trustees were able to raise salaries slightly, although not back to 1932 levels. With the help of a committee formed during the thirties to solicit alumni gifts, Stanford survived the Depression in far better financial condition than one might expect from its rocky financial history.



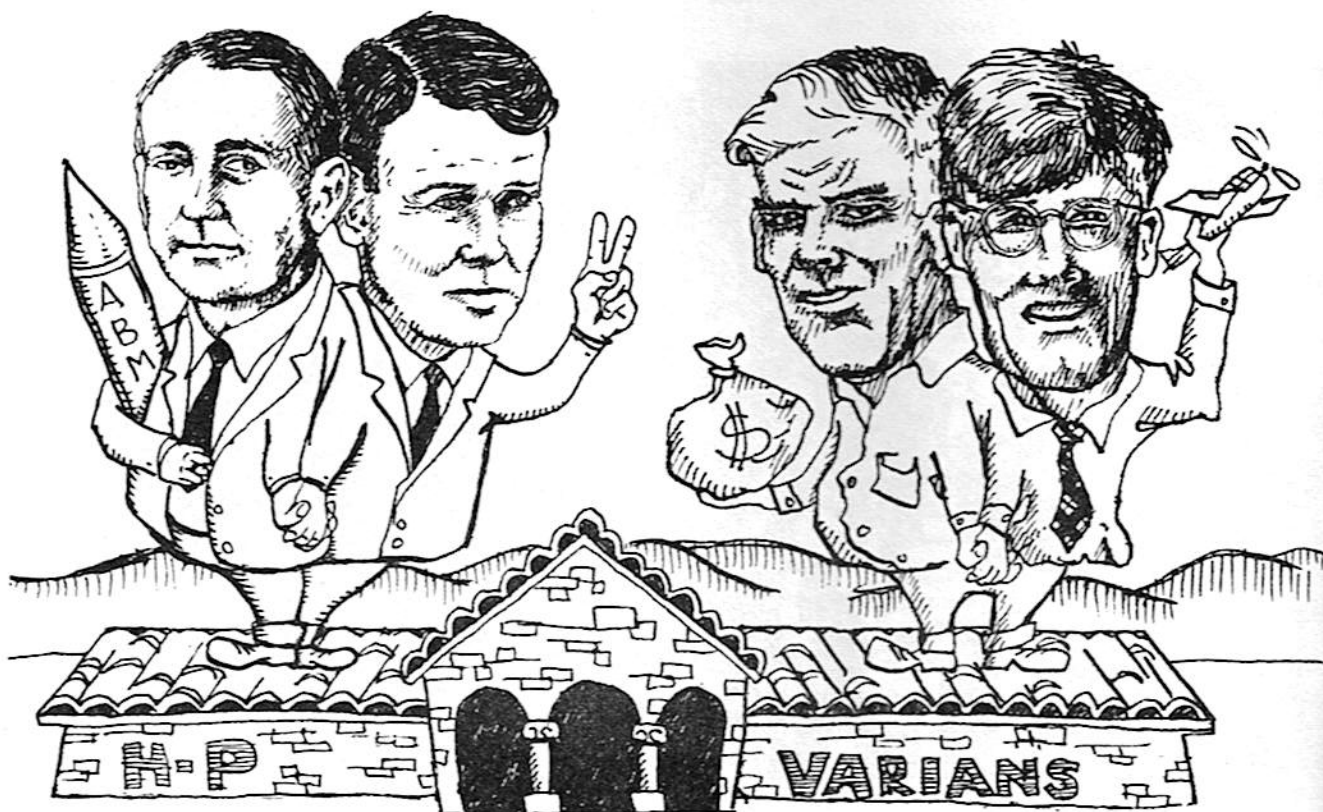
Masses rally during Depression.

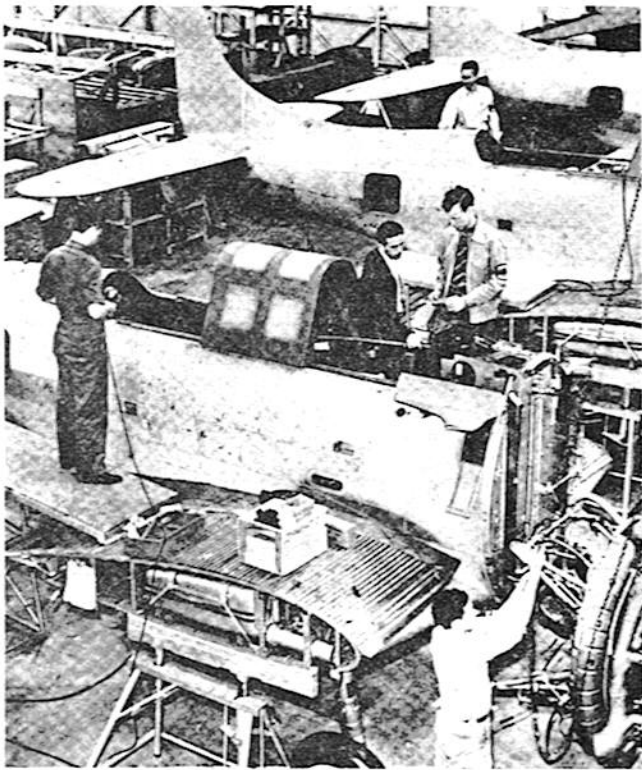
With a stagnant American economy, many Stanford graduates were unable to find employment that utilized their skills. The university, however, continued to foster the infant electronics industry. Future entrepreneurs like William Hewlett, David Packard, John Kaar and the Varian brothers kept one foot firmly planted at their alma mater as they started their fledgling enterprises.

Amateur radio grew as a hobby even in the darkest days of the depression, and provided a market for electronics hardware. Frederick Terman had built an amateur radio station in Palo Alto with Herbert Hoover, Jr., in the Twenties. His students joined in the tinkering and experimentation. In 1936, a year after earning his electrical engineering degree from Stanford, John Kaar opened a small radio shop in Menlo Park. First catering to Stanford engineers, radio hams, and repairmen, Kaar Engineering rapidly grew into a mobile communications business. When the huge military orders came with America's preparation for World War II, the company became the largest West Coast manufacturer of two-way radio telephone equipment. Terman helped two other students, William Hewlett and Dave Packard, start a part-time enterprise in a garage on Addison Avenue in Palo Alto in 1938. Their product was an audio oscillator invented by Hewlett. The first big order came from Disney Studios, which wanted nine oscillators to produce the stereophonic sound for "Fantasia." Encouraged, the two men formally organized the Hewlett-Packard Corporation in 1939, coincidentally the beginning of the war that would catapult them to fantastic

wealth and power.

The University had an even more intimate involvement with the founding of Varian Associates. In 1937, physics professor William Hansen persuaded the University's president, Ray Lyman Wilbur, to provide laboratory facilities for Russel and Sigurd Varian. Together with Hansen, the Varians were experimenting with devices which might make possible the detection of enemy planes from the ground, at night and in bad weather. Wilbur said that the university couldn't afford to put the Varians on salary, but he appointed them as research associates and gave them full use of the Stanford physics labs and \$100 to help pay project expenses. "In return," writes historian Jane Morgan, "the University was to share with the Varians and Hansen any financial return that might come of the research." The Varians developed the klystron tube, an essential component in radar. Commercial development was farmed out to Sperry Gyroscope, where the Varians worked and Hansen consulted until they founded their own company. In January, 1939, a proud President Wilbur announced the invention and its uses to the public. The university would receive more than two million dollars in royalties in return for sponsoring the early research. Other entrepreneurs would pay back the university for some of the benefits it gave them. Jack McCullough of Eimac, a San Bruno firm started in 1934, gave money and his name to the McCullough Engineering Building that houses much of Stanford's sprawling electrical engineering department today.





(America goes to War to overcome Fascism and Depression, and the Mid-Peninsula is never the Same.)

The late 1930's were not a good time for American capitalism. The Depression persisted and unemployment was rising again. Riots, strikes and sit-ins became commonplace as workers battled for union recognition. Radical socialist beliefs were making headway among American intellectuals. While America and her capitalist allies in Europe stagnated, the overtly fascist states of Germany and Japan mobilized for war. Germany threatened the balance of power in Europe, which the U.S. had fought to preserve in World War I. The Japanese had set out to create the Greater East Asia Co-Prosperity Sphere in the Pacific, a blunt denial of America's economic interests.

The eruption of war was widely heralded as a disaster, but its benefits for the men of wealth and power in this country were great. Not only did the war eventually expand their power in Europe and Asia, but it also managed to break the grip of a depression which was beginning to seem endless, and therefore very dangerous. With the coming of war, economic growth resumed and surged forward—especially in California.

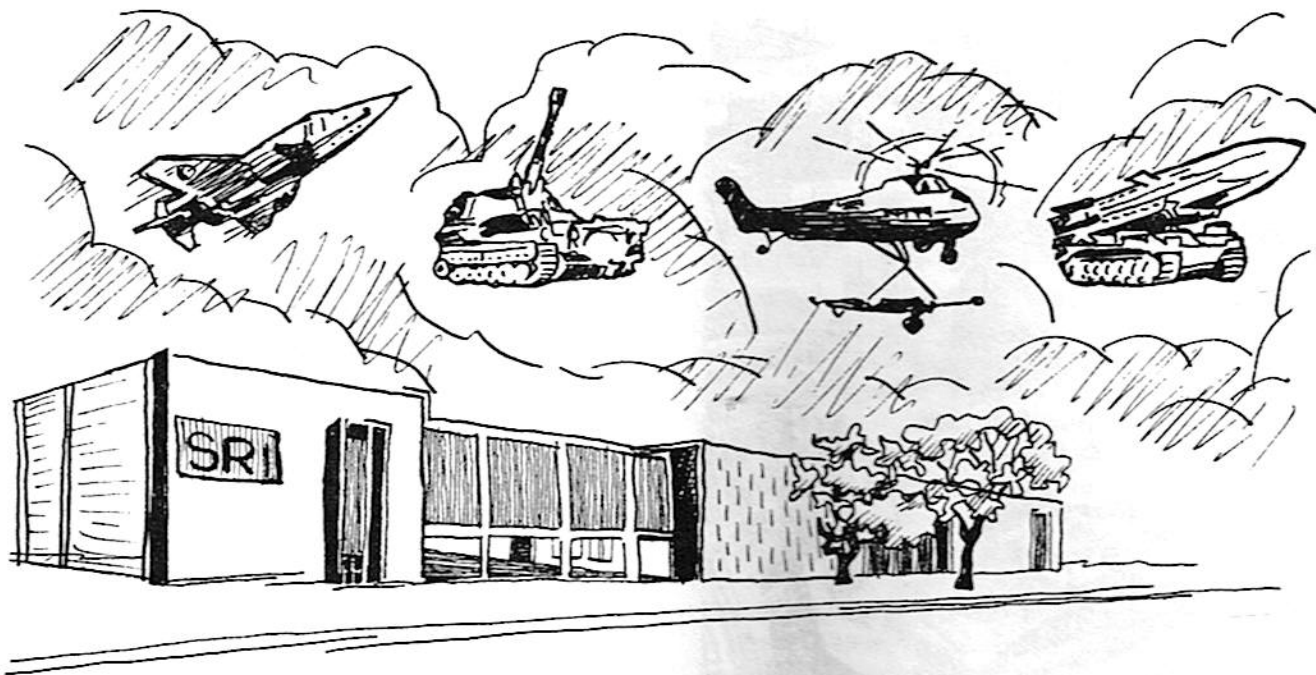
Unlike World War I, the second World War had a Pacific theater. The task fell to California of outfitting, dispatching and supplying the armed force that would seize the Pacific from the Japanese. The state was still primarily agricultural, with only light manufacturing; there was no steel plant in California until Kaiser built his Southern California works during the war. Soon, however, major manufacturing and

port complexes grew in the north as the government spent lavishly for war.

World War II created thousands and thousands of new jobs, which led to increased population and higher personal incomes. In the Santa Clara Valley farming intensified, and jobs opened up in the canneries and in industries like FMC as the country geared up for war production. The new electronics firms in the area grew rapidly as their products such as radio and radar proved crucial to the war effort. A great migration of people into the area followed, reversing a forty-year pattern which had seen the population of Santa Clara Valley fall further and further behind that of the state as a whole.

With the compulsory draft, manpower for jobs at home became scarce. Industries throughout the country, including the Peninsula, began to hire women as laborers, and found that it was possible to pay them less than men had been paid for the same jobs before the war. Blacks migrated to California during World War II from Texas and Louisiana. Many settled in Hunter's Point, south of San Francisco, working at shipbuilding for extremely low wages. Once again the growers who ran California's vast farmlands needed a large supply of cheap labor. They turned to Mexico, as they had done in World War I, importing thousands and thousands of laborers under a labor contracting system similar to that used by the Central Pacific in importing Chinese labor to build the railroad.





Although wages for some people were low during World War II, profits for defense industries were high. Hundreds of thousands of men sacrificed their lives, rationing was common and strikes were outlawed—but war profiteering proceeded smoothly. In this war, as in the Civil War which allowed lavish subsidy for the building of the Central Pacific, a federal government spent liberally to finance the growth of new industrial empires in electronic and other fields. Universities stood to gain from war as well. Government research contracts poured into laboratories across the nation. Electronics research by Stanford professors and students continued at a furious pace during the war, concentrating on solutions to military problems posed, and paid for, by the government. Frederick Terman, for instance, was on leave for the duration of the war and headed the Radio Research Laboratory at Harvard, where nearly 1,000 people worked on researching and developing radar countermeasures—a field in which the Stanford engineering schools would later excel through the war in Vietnam. The Engineering School itself took on a heavy load of training soldiers and students, particularly in the Specialized Army Training Corps and the Engineering Science Management War Training Program. The programs brought thousands of soldiers to campus for instruction in engineering.

The tremendous productive effort of the United States in this period was unsurpassed in world history. The full-scale mobilization of the labor force and the full use of existing factories and fields supplied the military and civilian population of this country and the needs of many of our Allies. New industry had grown up and a new, stronger partnership between the government, universities

and industry had formed. This powerful combination enabled the U.S. and its dependent Allies to vanquish Germany and Japan—leaving the United States as the most powerful nation in the world, in control of the former colonies of the enemies and in a superior position to the weakened allies. America alone had escaped massive destruction.

With the end of the war, the millions of men in the armed forces returned home. A larger number than ever before remained overseas to man our vast new network of bases, but the war-time civilian labor force was now unnecessary. Thousands of blacks who worked in the shipyards and other war industries were soon displaced by whites. The women who had worked in great numbers were relegated once again to the home. The only significant group of “war workers” which was retained was the Mexican farm laborers, who continued to do the low-paying, difficult jobs for which there was little competition.

When the war was over, men in industry, government and the university realized that the sort of cooperation which won the war could continue to profit the country—and industry, government and the university. In 1946, representatives of West Coast industry and Stanford University founded the Stanford Research Institute to do vital applied research. SRI, not coincidentally, found many of its research contracts coming from industry and government, particularly the Department of Defense. Until new laboratories could be constructed for the scientists, engineers and, ultimately, social scientists who worked on these contracts, the Institute was housed in temporary quarters at the university and in Menlo Park.

Researchers were not the only people who found themselves, after the war, in temporary living space. Once again, Stanford and Palo Alto were caught in a housing crisis. Population influxes caused by increased employment opportunities during the war, and veterans returning from overseas taxed every available housing facility. In August, 1944, there were, once more, no available rentals in Palo Alto. Stanford purchased war surplus quonset huts and turned Dibble Hospital, in Menlo Park, into Stanford Village to house its students. Soon the students found themselves sharing the Village quarters with SRI employees doing research. The construction industry, of course, prospered. Between 1943 and 1950, 490 subdivision developments were opened in the Santa Clara Valley, generally on orchard land.

The war economy would not prosper, however, without war. The new electronics-aeronautics industry around Stanford was threatened with a slump in the late forties. Like American industry in general, it had depended on World War II to provide the market for growth and expansion. With the restoration of peace, American capitalism was again faced with the challenge of providing full employment and technological progress without wasteful military expenditures. But war—first hot and then cold—intervened to rescue capitalism from the discomfort of facing this challenge.

The "loss" of China to the Communists in 1949 came as a great shock to the United States, which had other plans for Asia. America had been involved in trade in China, Japan, and the rest of Asia for a half-century. We were re-making Japan at the time with our military occupation, and we had placed military bases strategically throughout the area. The success of the Chinese revolution meant that the major Asian nation would now be hostile to American

business and serve as a model for socialist economic development to the colonies of Southeast Asia. In the American mind, China was the first Asian domino. The Korean War was the first major attempt to prevent the spread of this latter-day Yellow Peril. Many felt the war should expand to full-scale attack on China, but the most militant cold warriors did not carry the day. The nation had to settle for keeping half of Korea for free enterprise when the Korean and Chinese troops secured the North.

Korea was a high technology war. Widespread use of jet aircraft, better communications equipment, more highly developed radar and small missile guidance systems marked the war. These were the specialties of the growing electronics firms of Santa Clara and San Mateo Counties. The boom was on. The paving over of the Valley's orchards and farmland to meet the needs of industry became a steady trend from the Korean War to the present. Over 330 new industries located in the Santa Clara Valley between 1945 and 1960. Among these were Varian Associates, which the Varians opened in 1948 in San Carlos. By the mid-fifties, Ford, IBM, Lockheed, General Electric and Sylvania had joined Varian and Hewlett-Packard in bolstering the county's economy. The population of Palo Alto alone increased by almost 10,000 between 1940 and 1950. Homebuilding activities accelerated to keep pace with industrial expansion. In 1950, Palo Alto's residential community extended to include the Boulware Tract, seventy acres in the vicinity of Embarcadero and Newell Roads. During the fifties, new tracts opened in Palo Alto almost every six months, with as many as 200 homes in each, covering the orchard lands south to San Antonio Road with houses and streets. To serve these newcomers, the Town and Country Shopping Center opened in 1953 at El Camino and the Embarcadero.



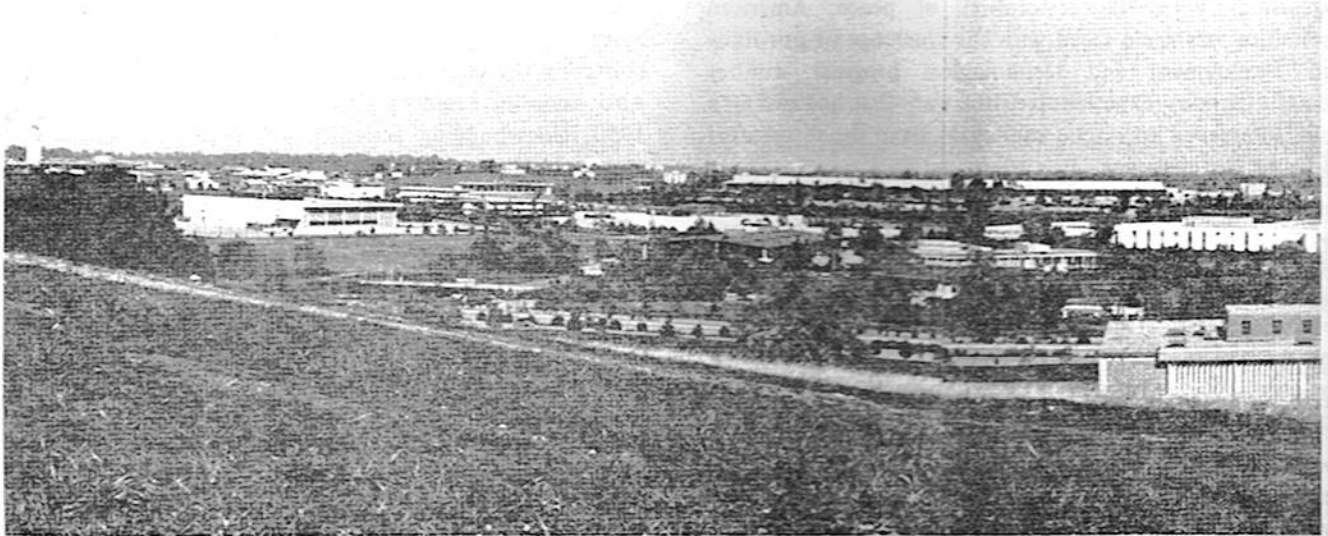
(Terman invites Industry to make the Most of Stanford.)

At Stanford, Frederick Terman's vision became a reality. Terman's post-war rise to dean of the engineering school and provost gave him the power to build around Stanford the "community of technical scholars" which had been forming in his mind during his early years at Stanford. As he would tell the Palo Alto Chamber of Commerce in 1965, "Such a community is composed of industries utilizing highly sophisticated technologies, together with a strong university that is sensitive to the creative activities of the surrounding industry." His desire for industrial development near the university meshed neatly with the Trustees' desire to find new sources of income from the leasing of Stanford lands to some of the familiar electronics firms in the area.

The first corporations to lease were Varian in 1951 and Hewlett-Packard a year later. The Stanford Industrial Park

surrounding area, and moved to the Park when they could afford it. Many of the firms in the Park located their R&D work in the Park and their production plants nearby: Lockheed is a case in point.

Lockheed opened new facilities in the Industrial Park in 1956. The story of the move, as told by a Lockheed public relations man, indicates the extent to which Terman's vision is shared by corporate executives. In the mid-fifties, Lockheed planned to set up a Missiles and Space division, including a new research facility. The federal government likes to see defense spending spread throughout the country for political reasons. Lockheed decided to locate its new division outside of Burbank, where it already controlled 25-30 percent of the local economy. According to Lockheed, four factors influenced the company's decision to locate its research laboratories on Stanford land. First, land was available at Stanford in a developed industrial park which was attracting similar R&D facilities. Second, location near a major university facilitates interchange between industrial researchers and university scholars.



was born. It was in 1954 that the Board of Trustees formally announced the policy that would govern the development of Industrial Park and of Stanford lands in general, saying, among other things, "The aim of the development shall be to produce in the ultimate a community of which the University Trustees and all those who have its welfare at heart can be proud and that will, by reason of the fact that it is a university project, serve in an important way as an educational example in the field of community development."

The Park proved an incredible success. The Stanford labs and SRI proved to be a powerful attraction. As Terman himself said "It is not just a coincidence that most of this type [of research-oriented] industry in the Bay Area lies within a 15-mile circle centered on Stanford..." These industries came to be near Stanford. There is a clear hierarchy in that fifteen-mile radius, with the choicest lots right next to the campus. Newcomers often settled in the

Many Lockheed researchers work or teach part time at Stanford; and Stanford engineers consult heavily at Lockheed. The environment of the Mid-Peninsula provided the third factor affecting the move. Palo Alto and its surrounding communities are full of attractive homes on tree-lined streets. The area, with its pleasant climate and the stimulating culture which has developed around Stanford, is conducive to creativity. The final factor inducing Lockheed to move its facilities to the Stanford Industrial Park was personal: its director of research at the time wanted to live in the Mid-Peninsula.

Lockheed decided to locate a manufacturing plant in nearby Sunnyvale in 1957, and bought 700 acres of inexpensive land. A major reason for settling in the Santa Clara Valley, besides closeness to the Stanford-based research facility, was the concentration of colleges where employees could continue their education, Stanford being the most attractive. The area was also not heavily developed

at the time, and the clear air and pleasant climate and the availability of land in the Santa Cruz mountains for a 4000-acre test facility, influenced the decision.

It was the year of Sputnik and the aerospace industry became our national saviour in the Space race. Lockheed was at the forefront, and soon the small agricultural community of Sunnyvale gave way to the community of tens of thousands of aerospace workers who put in their day at Lockheed, the Mid-Peninsula's largest employer, or the flock of smaller firms that surrounded it. With the Cold War in the background and the Russian missile and space "threat" in the foreground, money flowed fast and freely into the Bay Area. The circle of R&D-oriented firms filled in, with the Stanford Industrial Park growing steadily while other firms located in southern San Mateo County and the northern portion of Santa Clara County. Thousands and thousands of persons migrated to California to fill the new, higher-skill, higher-paying jobs. Between 1955 and 1963 Santa Clara County experienced a yearly increase in jobs and population of over 7 percent. The firms in the area and

subsidized by the lucrative military and space contracts which guaranteed profits—managed also to have much of their research subsidized as well: the government paid the University to do the desired research projects and equipped the labs. In the year 1958-59, the government gave Stanford six-and-a-half million dollars in contracts and overhead. That amount has since tripled, and the gain to the corporations and the university—or at least some departments of it—is great. Once again the public subsidy, given in the name of National Defense or the Space Race, ends up in private hands, for the benefit of the few.

The early sixties were the years of PACE, a drive by Stanford and the Ford Foundation to raise \$100 million to push Stanford "over the edge of greatness." In this decade, which began expecting a mild recession and ended anticipating another, Stanford prospered along with the rest of the area. The Medical School moved down from San Francisco on a site with the new Palo Alto-Stanford Hospital. Stanford won an intense competition with 125 other universities and towns for the Atomic Energy



the new population stimulated growth in other manufacturing industries, in housing construction, and in services such as banks and shopping centers.

Stanford was not standing still during this period. New buildings for research began to fill out the science and engineering side of Stanford's Quad. The number of faculty and graduate students increased throughout the university, but growth in engineering was most dramatic. As Terman was able to point out in 1965, "... Stanford with 1400 graduate students in engineering, is, after MIT, the largest producer of advanced engineering degrees in the country... This is of real significance in the research-oriented industries, whose success in the market place is a function of technological competence. On the average, the local companies have been able to recruit better brains than their competitors in other areas, and have in general been more successful as a result."

Thus industrial firms—which were already heavily

commission's linear Accelerator—a multi-million dollar research facility for which Stanford leased several thousand of its precious acres at no cost. The staff of the university grew accordingly, reaching over 8,000 persons by the end of the decade.

The Industrial Park had twenty-five tenants in 1961, with a total of 11,000 employees. The cluster of firms in Palo Alto's own industrial park and in the rest of the city grew even more rapidly. In the early sixties it was already clear that the Palo Alto-Stanford area was becoming the major employment center in the Mid-Peninsula.

The impact of this development on Palo Alto and the surrounding communities was profound. As Terman told a grateful Palo Alto Chamber of Commerce, "There was a time when unless you were connected with the university, or were a local merchant taking in your neighbor's wash, you had to commute to San Francisco to earn a living." Palo Alto-Stanford now had enough jobs not only for many

old residents of Palo Alto and several surrounding towns, but it caused thousands of persons to migrate into the area from other states. The structure of employment and the availability of jobs in the country drove many people to this area. This area's industries were currently the "growth industries"—they were the likely place for new jobs. Thus people who had lost jobs elsewhere, or whose own industries or towns were slowly dying, tore up their roots and moved West in the hope of something better.

The structure of the aerospace-electronics industry complicated this traditional chaotic aspect of our economic system: the jobs here generally required some training, if not extensive education and advanced degrees. Not everyone could work in the area. Higher paying jobs and the best housing went to educated whites at one end of the scale. At the other end were the marginal people in the newly transformed area: the blacks who had emigrated from the South or from earlier war-time employment in San Francisco and Oakland and the Mexican-Americans whose jobs on area farms had disappeared with the farms. These people and the badly educated whites were left to compete for the limited unskilled work and the more limited cheap housing. Throughout the fifties and sixties, the people of the area could only respond to forces beyond their control as the economy dictated where they would work and live—and for how much and how long.

Palo Alto and the surrounding hill towns became the plush, tranquil homes of the upper classes, a few minutes from work and the excellent schools and shopping facilities these people could afford. Less than a third of the people who worked in Palo Alto in 1960 lived there. The rest lived in less prosperous communities from San Jose to Daly City and across the Bay. New ghettos—created along class and race lines—formed throughout the area. The wealthy ghetto of Los Altos Hills, the poor and heavily black ghetto of East Palo Alto typified the split. The institutional racism of the Mid-Peninsula's development remained rigid throughout the Civil Rights movement of the sixties. In 1968, Stanford University belatedly announced that it would give preference to black and brown job applicants in an attempt to expand minority employment. But Stanford ironically had difficulty in finding minority people who could find housing within a reasonable distance of the university.

With the need for more and more workers to live farther and farther away, the Industrial Park employers and the Palo Alto city government pushed for the building of the Oregon Expressway to connect the Park to the Bayshore Freeway—and incidentally cut a wide swath through a heavily residential area. A strong campaign ensued, pitching the "residentialists" who wished to retain Palo Alto's small town character against the "commercialists" who saw the expressway as a necessary link in the further commercial and industrial development of Palo Alto. The issue went to the voters in 1962 and was decided in favor of the commercialists by a few hundred votes. These same groups fought again over a master plan for Palo Alto which set policy guidelines for the transformation of downtown Palo

Alto into a mall, surrounded by high-rise offices and expressways. The residentialists won a temporary victory in 1962 when this plan was set aside. But the "commercialists" won control of the City Council in a special recall election in 1967, and the essentials of the old plan have now been approved by the new council, as the Palo Alto Downtown Plan.

(Vietnam Arrives and History is just about Through.)

— We have seen that the history of Mid-Peninsula development is largely the history of America at war. Vietnam is no exception. This latest conflict began to escalate at about the time that the post-Sputnik spurt of growth and economic health was giving way to another recession. The exotic technology and research purchased by the Defense Department brought yet another boost to the Mid-Peninsula R&D economy, propelling the area's expansion into the new decade of the seventies.

Along with narrow economic gains, the war brought intense domestic conflict. Early teach-ins about the war on college campuses gave way to protest demonstrations. But the war continued to escalate. As students and others sought to understand the reason for our involvement in Vietnam, the Cold War myth of American defense of "freedom" was shattered by accounts of the tyrannical government of South Vietnam. The argument was advanced that America fought in Asia not to free it, but to control it for its own economic interests. If there was a military-industrial complex, it was the industrial side that was calling the shots, at home and abroad. This analysis of American foreign policy began to spread on college campuses. A large and active student movement—fueled by opposition to racism and imperialism—brought conflict to campuses throughout the country. The Mid-Peninsula, seat of a major portion of the war economy, did not escape the conflicts. Teach-ins and demonstrations against the war began at Stanford in 1965. Educational campaigns and demonstrations led to a series of sit-ins in the spring of 1969 aimed at controlling the war research of Stanford and SRI and to directing the university's research toward the country's vast social problems. The growing number of blacks and Mexican-Americans at Stanford pushed in the wake of Martin Luther King's assassination for increased minority admissions and a program of study that would meet their needs.

It was not only draft-age students and blacks who were beginning to resist war and racism. The prosperity which came with the war soon overheated into inflation, bringing higher taxes and finally the threat of a recession. Unrest and militancy in the form of wildcat strikes and strong union demands on wages and working conditions began to sweep the labor movement. Radical new organizing began in previously unorganized sectors of the work force, and black caucuses began to form in white-dominated unions.

At Stanford, the unorganized university employees formed organizing committees of the Union of Stanford Employees and the Teamsters. A growing number of students left the campuses and took jobs in surrounding industries as workers instead of employees.

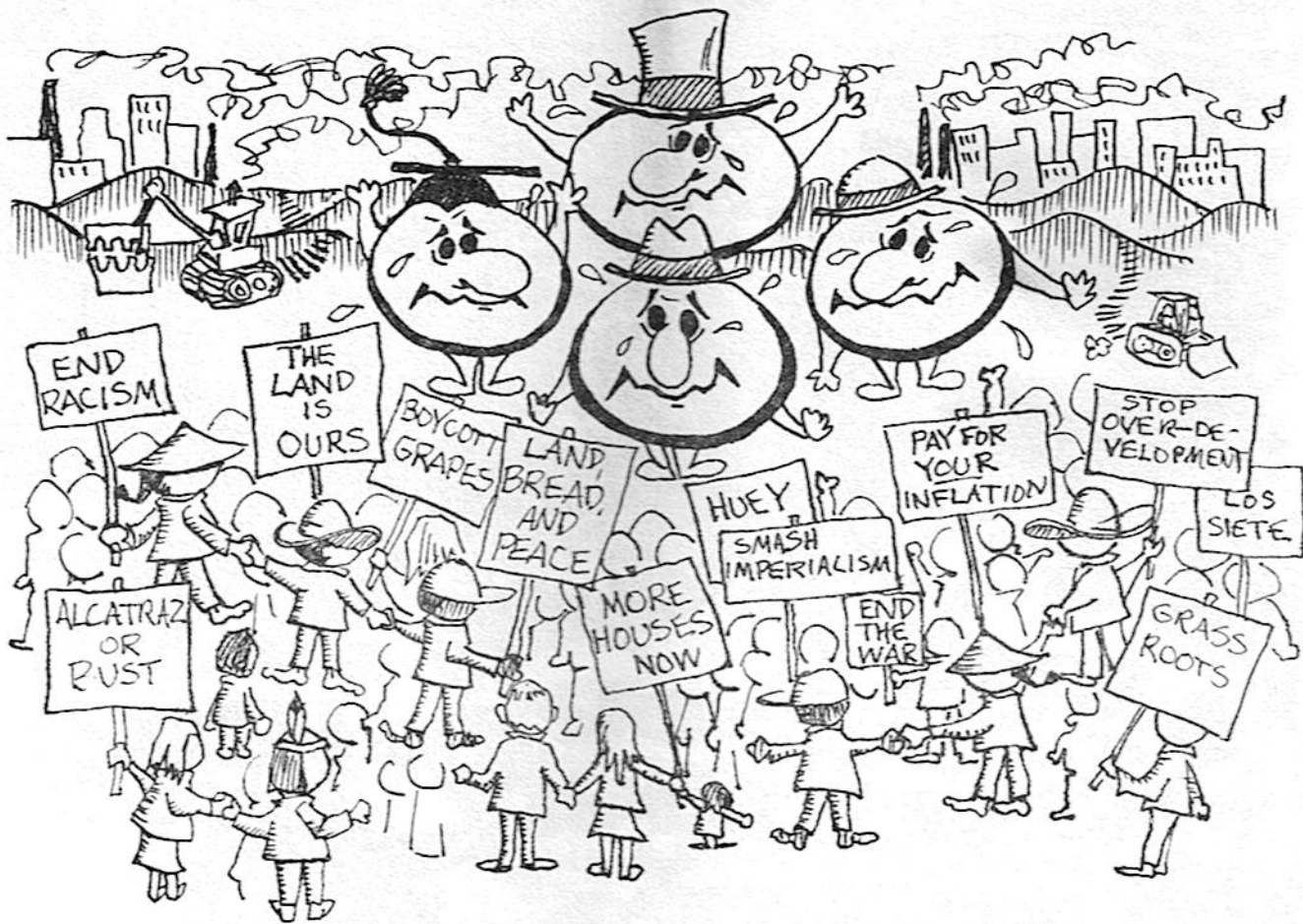
Amid growing dissent, the Mid-Peninsula discovered that industrial development had brought harsh social problems and visible decay to the environment. The Industrial Park had expanded to sixty firms with over 19,000 employees. Stanford built several new science and engineering buildings in the late sixties, bringing in still more workers. The housing crisis worsened in the area, and bigger highways were put through to handle the expanding commuter traffic. Route 280, the Junipero Serra Freeway, was cut through the foothills to help workers travel more easily from farther away to their jobs in the Mid-Peninsula. Despite protests which are reminiscent of the Oregon Expressway fight earlier in the decade, the Willow Expressway—linking the East Bay to 280 and providing easy access to downtown Palo Alto and the industry along Sand Hill Road—has been approved.

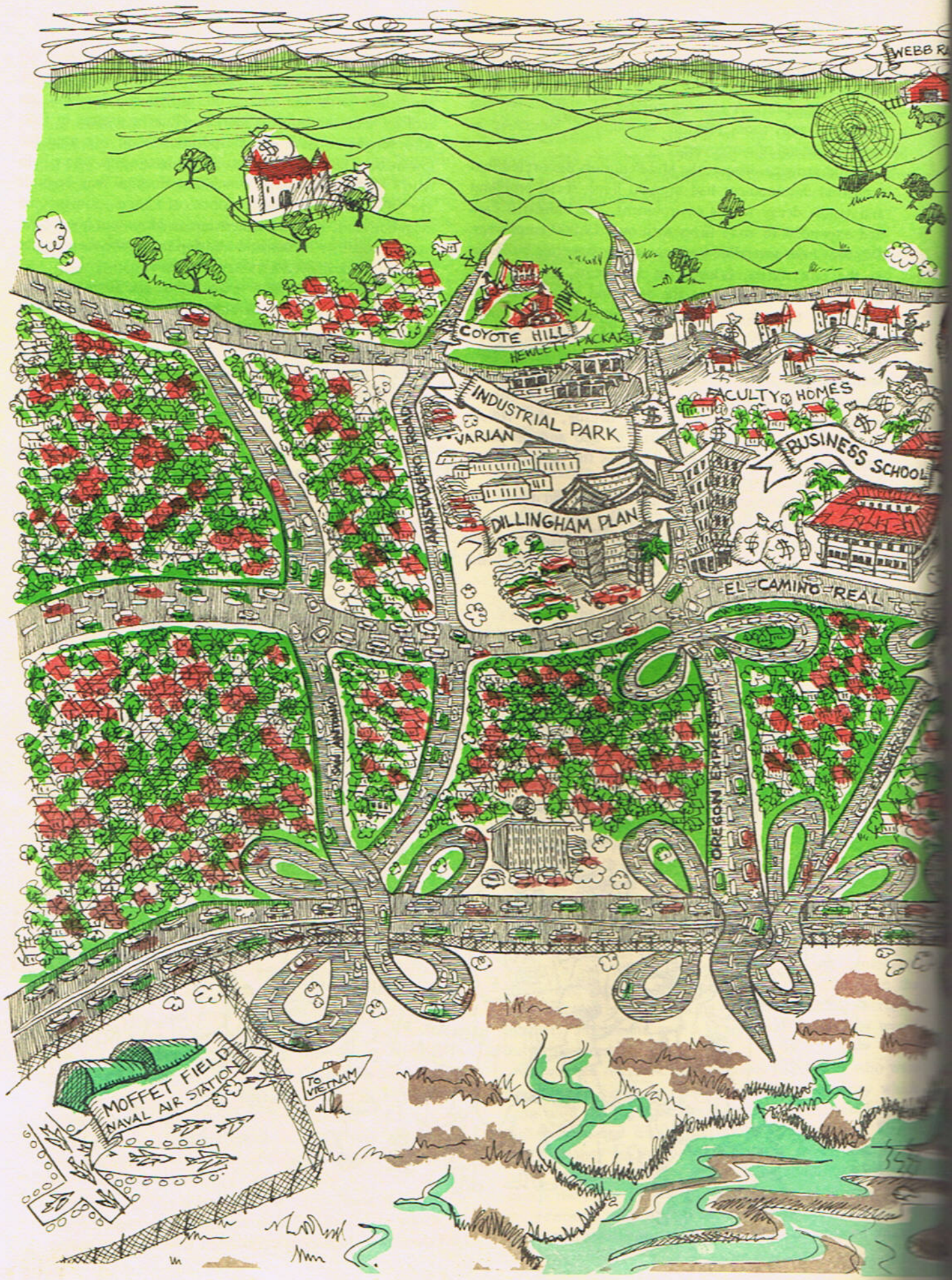
The rapid development of Stanford lands and downtown Palo Alto shows little sign of abating. But opposition is growing from many quarters. The expansion of the Industrial Park into Coyote Hill and recently the

Dillingham Corporation's Palo Alto Square project on Stanford land have encountered opposition from persons concerned with the effect of further development on ecology and the housing market. Housing groups in Palo Alto fought to have the Corporation Yard site used for low-income housing, and lost. People in the area where Palo Alto's Medical Research Foundation Hospital may be built are fighting the destruction of their low-income neighborhood. Mexican-Americans in Mountain View have banded together to demand housing to replace their homes which were destroyed by a new expressway.

But the men who make the decisions in the Mid-Peninsula continue to build. The new Palo Alto Civic Center is testimony to plans to make this area a major office and financial center. Palo Alto's future growth appears to be linked to the needs of West Coast-based corporations that are planning to expand business in the Asian markets which have been defended in the Vietnam War.

The nature of the social chaos we have created by our rapid and unplanned development at home and abroad has only begun to be clear in this decade. The remaining sections of this pamphlet are an attempt to examine some of the current problems more closely and to suggest how our future development can benefit the many, not the few.







SLAC

ANFORD

OAK CREEK APTS

ENGINEERING SCHOOL

HARE BRENER KELLEY

SAN FRANCISCO CREEK

WILLOW EXPRESSWAY PLAN

SRI

SECRET

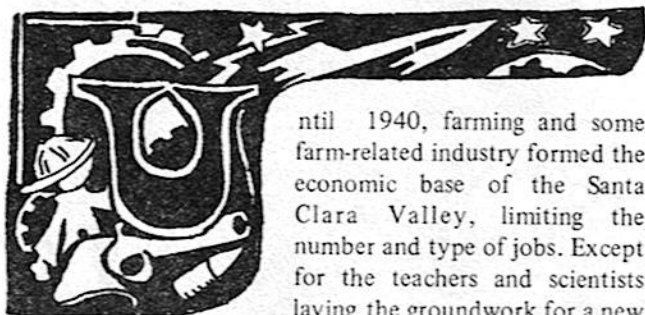
THE MIDPENINSULA 1970
"THE LOGIC OF DEVELOPMENT"
GRASS ROOTS

EAST PALO ALTO

Jobs and Population

Defense spending built the aerospace and electronics industry of the Mid-Peninsula, and defense spending maintains it. A huge influx of people came to the area to serve the needs of war-related industry. The good life has come to wealthy suburbia, but the working class has had to bear the social costs of inadequate housing and severe inflation. Black and brown people have suffered from discrimination in employment and institutional racism of local schools.

The Bank of America forecasts continued growth for the Mid-Peninsula if the government keeps buying the "specialties" of local industry. Inflation, heavy war taxes and the horror of Vietnam cast a pall over the Bank's sunny prediction.



Until 1940, farming and some farm-related industry formed the economic base of the Santa Clara Valley, limiting the number and type of jobs. Except for the teachers and scientists laying the groundwork for a new electronics industry near Stanford, most of the modest population of the area worked in the fields, the canneries, or the stores. Normal growth of such a population creates new needs and thus new jobs which in turn may bring new people to an area. But large and rapid growth in the population of an area will occur only when new industry is built, and this has been the case on the Peninsula.

As described in the previous section of the booklet, World War II helped develop both manufacturing in the Mid-Peninsula and research facilities at Stanford primarily in the electronics and aerospace fields. The post-war growth of Stanford's research capacity and the founding of the Stanford Research Institute attracted industries which grew and multiplied as the government spent heavily during the Cold War era of Korea, Sputnik, Cuba and Vietnam.

Farms gave way to factories as the population of Santa Clara County soared from 174,000 in 1940 to over 1,000,000 by 1968. Over three-quarters of the population increase was due to new people coming into the area to meet the needs of industry. The town of Sunnyvale, for example, grew from a population of 10,000 in 1950 to over 90,000 today largely because Lockheed located its massive production plant there in 1957. Agricultural land was developed for factories, homes, services and highways throughout the county. In a world plagued by hunger only 77,000 acres of the rich land in Santa Clara County

remained as farms in 1968, a significant drop from the 130,000 acres in 1950. The number of agricultural jobs dropped from 16,000 to 7,000 in the same period.

When we look for the source of this incredible growth process, we realize that Santa Clara and Southern San Mateo counties have grown up on the massive contracts of the U.S. government, especially the Department of Defense. As the Bank of America says in the report **Focus on Santa Clara County**: "Thus far, the economic growth of the county [Santa Clara] has been heavily dependent on federal defense and space expenditures. The following statistics gave some indication of the degree of this dependence:

1. Today about 60 percent of total manufacturing employment is in the aerospace-electronics industries; in 1950, the share was only 13 percent.
2. Nearly seven out of every 10 new manufacturing jobs since 1950 were in these industries.
3. Santa Clara County firms in fiscal 1968 received approximately \$1.1 billion in defense and space prime contract awards, or 17 percent of the California total."

And the Bank of America adds later, "In the same year (fiscal 1968), more than one-third of the military prime contracts awarded for research and development in California (the nation's top R and D state) went to firms in Santa Clara County." An accompanying chart in the Bank of America report shows that the government buys 70 percent of the output of the county's aerospace-electronics industry, with 52 percent going to the Defense Department. Farming has given way to the era of weapon-building; the plowshare has been pounded into the sword.

Uneven Prosperity

Santa Clara County is now the 44th richest "nation" in the world, if its yearly GNP is measured as a country's instead of a county's. However, this vast wealth is not evenly distributed throughout the area. In San Mateo and

Put the wealth of these 13 nations together and it's almost equal to California's.



With an annual gross output of nearly ninety billion dollars, California not only outranks most of the world's major countries, but outranks many of them combined. Indeed, if this state were a separate nation, its wealth would make it the eighth richest in the world.

Most of California's growth has taken place over the last hundred years and during these years Crocker-Citizens has helped it grow, and grown with it. Today, we have over 270 offices throughout California, a wholly-owned banking subsidiary in New York, a full-service office in London and rep-

resentative offices in Brussels and Manila. Crocker is California's second largest statewide bank, with assets of almost \$5 billion, and capital accounts exceeding \$300 million.

If you're doing business, or if you plan on doing business with the world's eighth richest "nation," you'll get the assistance you need from the people at Crocker-Citizens. We know as much about California as we know about banking. We have specialists in every major area of California business, industry and agriculture. Our officers are widely regarded within the state's financial community as

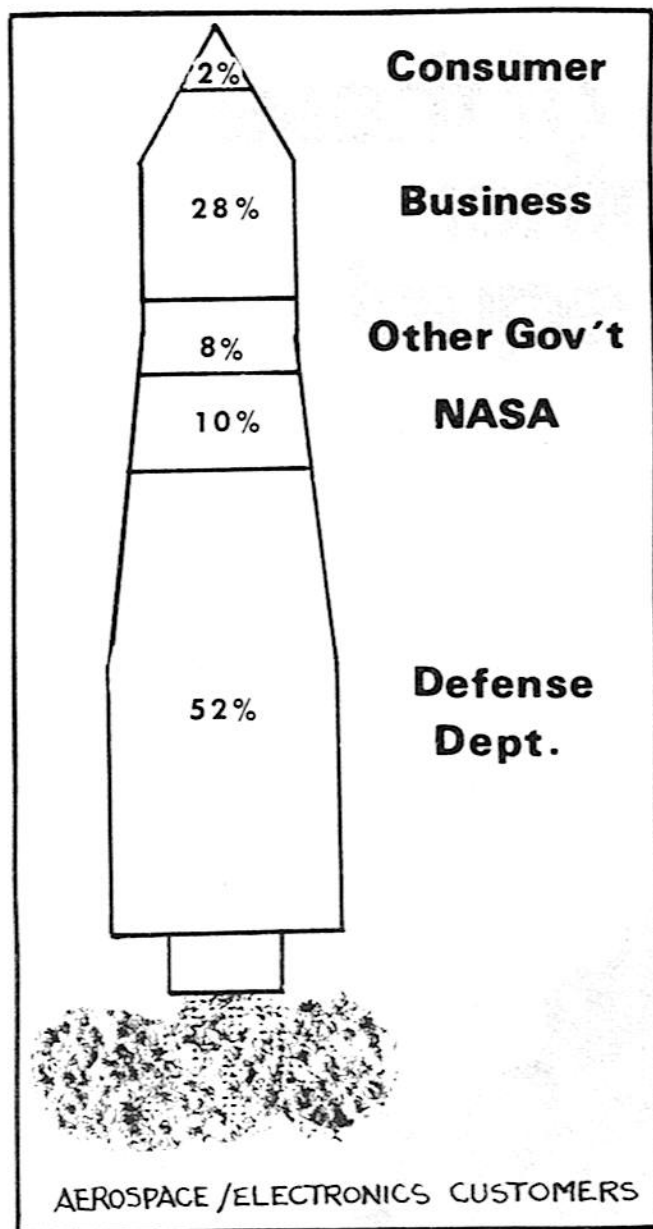
authorities on the California economy. We think you'll find their reputation well founded.

Write, call or visit our National Division at 1 Montgomery Street, San Francisco, or 611 West Sixth Street, Los Angeles.

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Santa Clara counties, as in the rest of the country, extreme wealth exists alongside widespread poverty.

By far the larger part of the work force does not live as well as the capitalists in Atherton or the executives and scientists in Palo Alto. Two-thirds of the families in Santa Clara County make less than \$10,000 a year. A closer look at Stanford and its Industrial Park shows similar figures. While Stanford's President receives \$60,000 a year and the faculty average \$18,000 a year, estimates of staff income indicate that 50 percent of the staff make well under \$8,000 a year—with many in the \$4,000-\$6,000 range. William Hewlett and David Packard have fortunes in excess of 300 million dollars a piece, and they reportedly pay their executives well, but a recent study of this representative Industrial Park firm showed that 43 percent of the employees earned less than \$8,000 per year.

These wages make life oppressive for many of the families forced to live on them, especially in a time of rapid

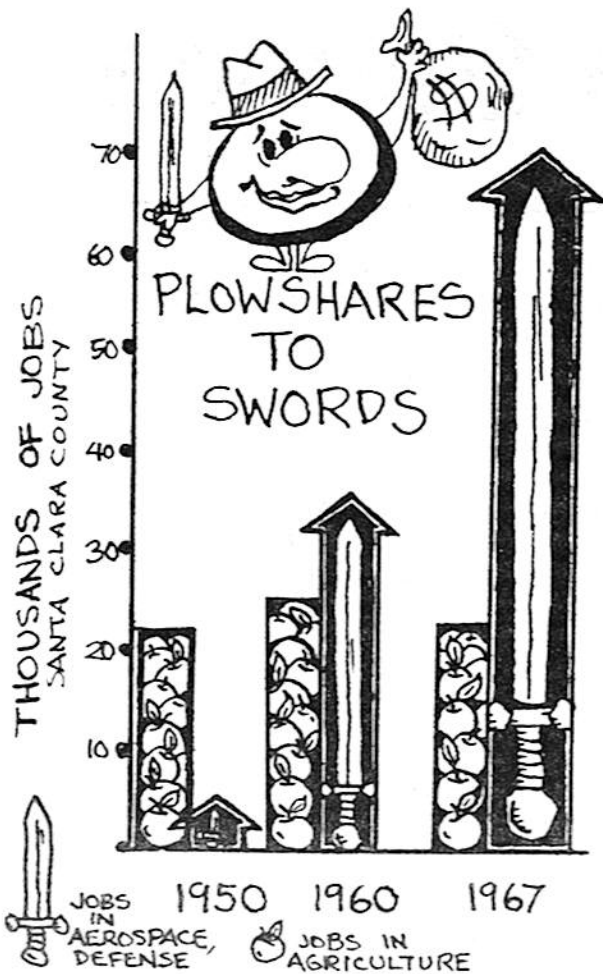
inflation and in a high cost-of-living area like the Peninsula. One of the most important effects of low wages is to set a ceiling on how much people can afford to pay for housing. Most low-income people who work in Palo Alto cannot afford to live there: in 1960, 33 percent of the people who worked in Palo Alto lived there, but by 1968 only 22 percent did so. A survey of Stanford Industrial Park employees showed that 45 percent live south of Mountain View or north of Redwood City—areas where housing is cheaper than in Palo Alto or the Foothills. There are simply not enough houses in the immediate area for the jobs Stanford has generated by increasing its staff to over 8,000 persons, by leasing its lands for the Industrial Park (19,000 employees), Welch Road Professional Area (4,000) and the Stanford Shopping Center (1,500) and by developing SRI (3,000). The plans to continue developing lands for the Coyote Hill Industrial Park (3,000 to 4,500) and the Dillingham Financial Center (1,500) will aggravate the problems and force employees even further away, and there is still more Stanford land to develop.

We will deal with the critical question of housing more fully in the next section. There are other problems created by workers being forced to live so far from their jobs. The lack of a rational public transportation system means that a family needs at least one, and usually two cars, a tremendous expense for a low-income family. There are differences in tax-rates and in the quality of schools and services that come with living in towns that do not have a developed or commercial tax base. A combination of all these factors leaves little if any income beyond the family's basic needs.

Discrimination in Jobs

If there are problems for the white worker in the area, the obstacles to employment for the unskilled or uneducated blacks and Mexican-Americans are even more extreme. The problem is partially rooted in education. Local community groups, such as Mothers for Equal Education in East Palo Alto, have formed to fight for control of their schools. These groups want to overcome the rampant institutional racism which sends the non-white poor to be "educated" as cheaply as possible in bad schools, often by racist teachers. There they are discouraged from finishing school or going on to college, and therefore excluded from well-paying jobs in an accreditation-oriented market. The cycle is completed when the poor parent, who chooses to live with his own people or is excluded from the affluent school district, is forced to send his child to the same kinds of schools that put him where he is.

Many of the blacks and Mexican-Americans who are now unemployed migrated here during World War II, or worked on the farms of the area. Often they found work when labor was scarce, only to be laid off as the economy slowed down. Now, as then, the society uses them as they are needed, but seldom helps to retrain them in a period of forced unemployment. The highly technical nature of the area's industries usually means that if a new job is created it



vulnerable; jobs are not secure. There is a growing feeling that this war, and similar wars to secure resources and cheap labor for American corporations are not in the interests of the great majority of the American people. People are realizing that it is the common man, the working man, whose taxes pay the war machine's bills, whose sons are its fodder and whose families suffer the deprivations of its travelling companions: inflation and social decay.

The Bank of America is confident, however, that war and imperialism will endure. Defense industry is expected to continue to expand throughout the seventies. The population of Santa Clara County is programmed to grow by 500,000 people in the next decade—a fifty percent increase. Says the Bank, "The population projection is based upon the outlook for job growth in Santa Clara County. Obviously if the projections on job growth turn out to be too high, then the county's increase will be commensurately lower."

The decision to expand the war-based economy, to aggravate the housing problem, and to further damage the environment has already been made by the logic of the system. Under capitalism growth is a value in itself, a guarantor of greater profits. The economy will not provide a decent income for many members of a growing population except by creating more jobs to fill artificial demands. We detail the problems of such growth in the following sections, recognizing that the only thing that can come between the system and its awful logic is the people, whom we ask to read on.

will attract a skilled person to the area before it will provide a job for one of the area's many unemployed. Corporations have done little to really solve this problem, despite the highly-publicized programs of the past few years, and the present slowdown promises to make things worse.

The problems of low wages, inadequate housing and racism are not confined to this area; they exist throughout the country. But the industry of this area must face a more fundamental criticism: because it is war-based it has a questionable stability and purpose. The Bank of America realizes that this area faces unique problems when it says, "Since the aerospace-electronics industries comprise such an important segment of the county's economy, long-term forecasts of defense expenditures are important, but are difficult to make. This difficulty is compounded by uncertainties created by the Vietnam war and by the growing demands on the federal budget, which has diverted some funds away from programs in which Santa Clara County specializes. Most observers believe this is a temporary phenomenon..."

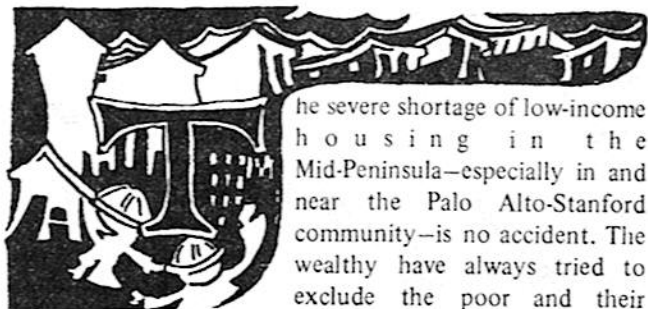
Temporary or not, a vague uneasiness troubles the area. Public pressure to reduce defense spending coupled with Nixon's budget cuts to slow the war-caused inflation threaten increased unemployment. Our local economy is



Housing and Services

A housing crisis isn't some natural disaster beyond the control or comprehension of man. In the Mid-Peninsula, a housing shortage was deliberately created by the decisions to build up the electronics-aerospace industry around Stanford while providing no new housing within the means of the average employee. The shortage became chaos when the Vietnam War drove interest rates so high that the profit was taken out of most housing construction. Real hardship is being inflicted on workers who are being forced to commute long distances so they can find housing at rents low enough to squeeze into their inflation-racked budgets.

The flurry of talk among municipal governments, corporations and the University about providing some low-income housing seems likely to result in nothing but token gestures. The forces that created the housing crisis will remain until land development is controlled by the people.



The severe shortage of low-income housing in the Mid-Peninsula—especially in and near the Palo Alto-Stanford community—is no accident. The wealthy have always tried to exclude the poor and their problems from their neighborhoods; the wealthy residents of this area have been very effective in achieving this goal.

In the late 1800's the Mid-Peninsula was filled with luxurious estates, often the summer homes or farms of San Francisco's wealthy class. The few low-income homes were for servants, gardeners and other attendants. Leland Stanford's farm dominated the area, and when it became a university its founders, and later its wealthy trustees, had no intention of turning its vast lands over to the masses.

Stanford created Palo Alto as a town of "high quality" when the boorish inn-keepers of Mayfield refused to close their saloons. Palo Alto proved perfectly willing to exclude the poor and the non-white, as their Anti-Chinese Laundry League and their resistance to annexing the "inferior" Mayfield showed in the early 1900's. The town continued to grow as a sparsely populated, well-to-do residential community throughout the Thirties. It responded slowly, if at all, to the many housing crises that gripped the area after 1900, preferring to house only those who could really afford it.

Planned Exclusiveness

When Stanford decided in 1951 to help build the new electronics industry and its own engineering school (and

earn a modest income as well) by leasing part of its land for the Industrial Park, the population of Palo Alto expanded as new employees built homes. In her paper *The Effects of Stanford University on the Local Housing Market*, Patricia Wilson says, "Although employment projections were made during the planning of the Industrial Park, there was no concern over the predictable increase in demand for, and lack of supply of, lower income housing. As Alf Brandin, vice-president for Business Affairs and a prime mover of the Industrial Park development, pointed out, both Stanford and Palo Alto wanted to keep the quality of housing in the area as high as possible. Their wishes were completely fulfilled."

A comfortable alliance of the wealthy residents of hill towns, the trustees of Stanford and the vigilant City Council of Palo Alto controlled a huge portion of land through ownership or the power of zoning. The resulting high prices of land and the low-density zoning created a wealthy class enclave stretching from the foothills through central Palo Alto. The very wealthy could afford Atherton or Woodside, the middle income faculty and Industrial Park employees got Stanford land for housing or a pleasant place in the hills or central Palo Alto, and the rest were squeezed north or south or to the east of Bayshore Freeway. High prices, and occasionally blatant discrimination and outright eviction of the poor, enforced the class separation.

Of course this separation means more than just differences in housing. The industry and commercial developments on Stanford land are a major source of tax revenue. It is the industrial tax base plus the comparatively strong personal tax base of this wealthy enclave that provides for much better services—education, utilities, parks—than in the rest of the Peninsula. The greater number

of elderly persons in this area and the generally smaller size of families means that there are fewer demands on these services. This increases the disparity even more. As the Urban Coalition points out, "There is an active effort on the part of many of the cities to improve their tax position by increasing the industrial and commercial tax base, which are net tax benefit land uses, while keeping down residential uses for families with children, especially at higher densities than single-family zoning . . . [when one of these communities] actively seeks and solicits industrial development it is doing so on the assumption that some other community will have to assume the burdens of providing the housing and education necessary to provide a work force for the desired industry, but the tax benefits the industry produces will remain with the first community. That assumption, whatever its moral implications, is in any event not well taken in the context of the Mid-Peninsula area because every other community is trying to do the same thing."

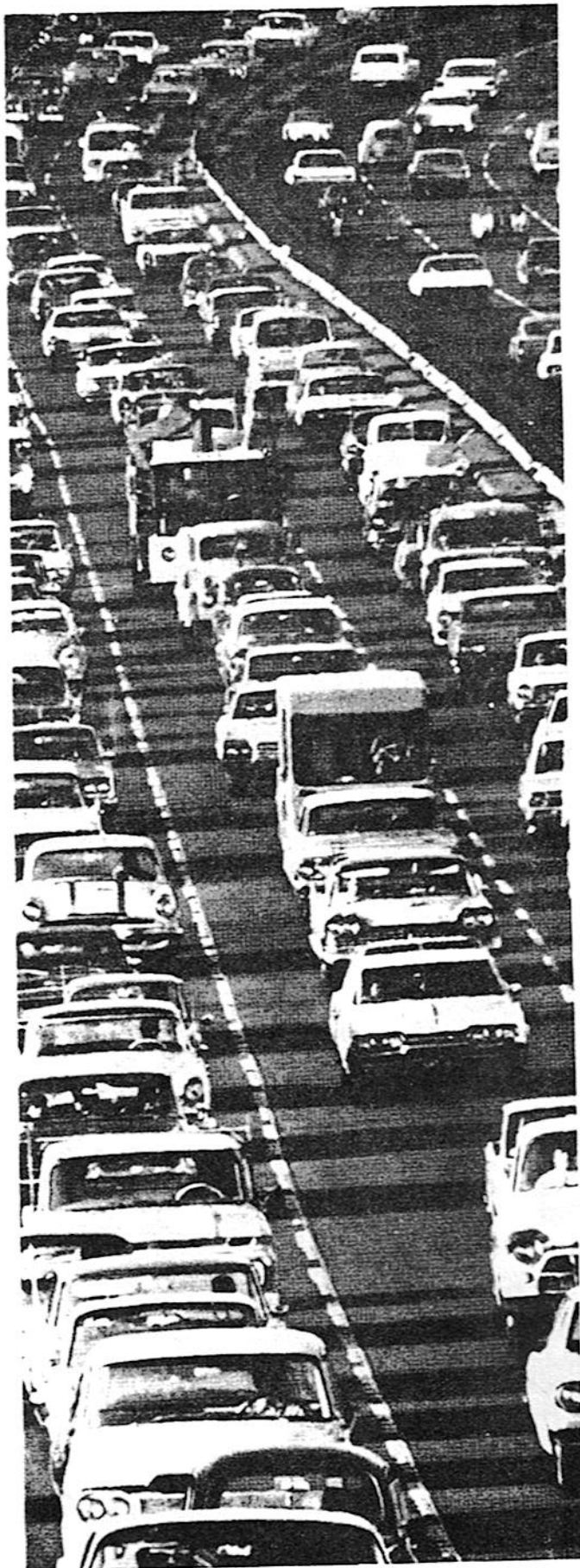
Stanford Sets the Tone

While all communities may try to do the same, the Palo Alto-Stanford community has clearly succeeded, and the poorer communities around it have had to try to pick up the burdens. The key to the Palo Alto-Stanford area's success has been the power and resources of Stanford. It has been able to offer its lands for industry and deny them for housing, except the most expensive. It has been able to be selective about which high quality industries and luxury stores it allows access to its lands and facilities, thus recruiting only the best of firms. It has been able to work with cooperative and often dependent Palo Alto to maintain the "high quality" of the area. This means that in

a typical year (1966-7) Stanford and firms on its land paid \$3.5 million dollars to the Palo Alto School District—28 percent of the schools' total support. In addition, these lands (which comprise only 8.1 percent of the city's total geographic area) generated \$2.3 million in tax revenue for the City of Palo Alto—or 35 percent of its total budget. Almost all the workers in these industries live in much poorer cities and reap none of the benefits. The fruits of their labor go to the profits of the men who live in Palo Alto or the hills, to new investments, to high executive salaries, and to taxes that don't serve them. These workers and the lower-income staff of Stanford are supposed to take their inadequate wages and look for homes and decent schools for their kids in the surrounding towns.

One such worker called the Mid-Peninsula Citizens for Fair Housing last year to ask for help in finding a home. He worked in Palo Alto and earned \$130 a week, before deductions. He lived in San Jose with his wife and six children in a 3-bedroom house for \$165 a month rent. (This was well over the 25 percent of gross monthly-income recommended as a rent ceiling, and the house was clearly overcrowded). He was commuting 54 miles daily, which forced him to get a second car and to pay for gas and maintenance. Then his rent was raised—a common occurrence in this area—and he could no longer afford the house. He couldn't find another house for 8 people at less than \$235 a month, and he knew he couldn't afford the \$600 in deposits even if he found a house. He earned too much to qualify for a County Housing Authority subsidy. He was afraid he would lose his job and any chance at a better-paying job if he didn't get housing. He told the fair housing office, "At last I have a good job that can lead





somewhere, but it looks like I can't keep it if I can't find a place to live. My wife and kids and I are so tense we can't even listen to each other any more. What are we supposed to do?"

A Typical Story

This man's income is approximately \$6,000 a year. There are several thousand Stanford employees and Industrial Park employees who earn about the same amount.

As we noted in the last section, two-thirds of the families in Santa Clara County make less than \$10,000 a year, and about 20 percent make less than \$5,000. The median yearly income of the 13,400 "head of households" in the Stanford Industrial Park is \$8,900. A person with an \$8,900 income can usually afford a rent equal to 25 percent of his income—or about \$185 a month. He could afford a house that cost no more than 2½ times his yearly wage—or about \$22,000. The 6,700 Industrial Park employees earning less than \$8,900 a year could afford proportionately less. Thus a person earning \$5,000 a year—the breaking point between low-income and moderate income—could pay rent of \$100 a month, and could buy a house for no more than \$12,500.

There are virtually no available rental units or housing in these low price ranges in Palo Alto. Furthermore, as the war-induced inflation continues and interest rates remain extremely high, the cost of new housing and the value of old housing are skyrocketing. The Urban Coalition's recent report on low and moderate-income housing shows that there is little housing being built for under \$30,000 and hardly any under \$25,000 in the Mid-Peninsula. They add that the used home market is not much better: "A study of the appreciation of single-family housing stock in the Palo Alto-Mountain View-Sunnyvale area of the Mid-Peninsula (plus some neighboring areas) shows that the proportion of homes under \$20,000 declined from 63 percent in 1960 to only 29 percent in 1969 . . . And those under \$20,000 tend to be too small for most families, or in poor condition." There is no discussion of rental units because most housing for families in the Bay Area consists of single homes, not multiple units. The Urban Coalition notes that this housing shortage drives up the price of all housing in the area, adding: "It is apparent from market prices that most moderate income families could not afford to purchase their own homes at current prices."

Pay, or Move Out

These costs mean that workers must find housing farther away from the high cost area they work in, or spend a higher proportion of their limited income for rent, or leave the area entirely. In recent years the pattern has been one of intense competition for available units in the immediate area and a growing trend to live farther north or south or across the Bay. Although 33 percent of the employees in the Palo Alto-Stanford area lived in Palo Alto in 1960, only 22 percent could do so in 1968. The Moulton Committee on Low Cost Housing which studied the housing needs generated by Stanford found that there was a clear correlation between income and the distance one lived from Stanford. Only 10.4 percent of those earning over \$20,000

a year lived north of Redwood City or south of Mountain View, while 38.2 percent of those earning \$6-8,000 and 34.5 percent earning under \$6,000 lived that far from their jobs. As the Industrial Park grows and the rest of Palo Alto expands commercially, new expressways are being built and planned to handle the thousands of commuters who come from as far away as Los Gatos, Daly City and Hayward. Housing is supposed to be cheaper in these areas, but housing costs there are skyrocketing as well.

Stanford and firms on its land generate the majority of the jobs in the Palo Alto-Stanford area. In addition to the great demand for low and moderate-income housing for many of these workers, there is a significant demand for such housing for its own staff and junior faculty, and for thousands of its students. The Moulton Committee Report of April 1969 indicated a deficit for 4,000 units of low-income housing (they described "low income" as under \$6,000) generated by Palo Alto-Stanford employment, with 70 percent (2,900 units) attributed to Stanford. The Committee observed that if the need for moderate income housing were added (their "moderate income" being under \$8,500), the total housing need would be 10,000 units with 7,000 serving Stanford-related needs. If the Urban Coalition figure of \$10,000 as the moderate income upper limit is used, the need is for several thousand more units.

In the face of this crisis, people in the area are acting in several ways to meet their housing needs. Several groups have begun to form tenants unions which can organize rent strikes against profiteering landlords. Others are putting pressure on the cities, local housing authorities, Stanford University and other corporations to meet the needs which they have tried to ignore. Some cheap housing will be available, of course, because, as the Urban Coalition notes, civic leaders "recognize the need for and growing shortage of low-income workers as domestics and gardeners." (Rather than lose their servants, the wealthy will put up homes for them.) But generally there has been little response to the housing crisis.

If you ask any of the area rulers—be they corporate chiefs, university officials or city councilmen—why they don't build low-income housing, they cite three factors: the high price of land, the high cost of money and the high cost of construction. They see no solution, except lots of federal money. We contend that there are solutions to the problems of the area, and particularly to the housing problem. But first the real origins of the problem and of the high costs must be established. Moreover, any solution requires primary commitment to human need, not to maximizing profits.

The first obstacle to building low-income housing is the



A large realtor and a bulldozer continue the Palo Alto pattern of demolishing old, low-rent homes.



shortage and cost of land. There is, in fact, a "land bottleneck" in this area. The rapid development of the area has used up most available flatland and significant portions of the foothills. The great demand for land naturally has driven up land prices. Most housing reports suggest that there are four remaining sources of residential land: bayfill, the foothills, rezoned industrial areas, and Stanford University. A serious effort to develop low-income housing on these land areas would meet opposition, and in several cases has already. The arguments against bayfill are numerous, especially the ecological argument. The Palo Alto City Council is presently giving some consideration to high-density foothill development, and is meeting strong resistance from conservationists and the wealthy and class-conscious residents who don't want poor people in the hills. The idea of re-zoning areas set aside for tax-paying industries would encounter strong opposition from most, if not all, city councils, which have control over the zoning procedures. Stanford remains as an option, and it is considering a small-scale, mixed-income project—but there is opposition to the very idea of low-income housing from several Stanford trustees. There would certainly be serious resistance to any large scale project that tried to fill a significant portion of the need Stanford's land use has created.

The power to determine land use—and thus, to a great extent land costs—resides partly in the various city governments' control of zoning. The zoning process is supposed to regulate, on behalf of the public interest, the anarchy of private exploitation of the land, but it doesn't

always work that way. For instance, a city could be persuaded to re-zone industrial land for housing, but it would also face the counter-pressure of real estate agents and landowners. As more and more of us are coming to realize, the power of a major landowner or corporation can be greater than that of the "public interest"—even when the people bring tremendous pressure to bear. The land developers and their allies often have firm control over municipal governments.

Recent housing studies, recognizing Stanford's role in intensifying the housing crisis and noting that Stanford has much empty land, have suggested that this major landowner could make a real contribution by offering free land for a large housing development. Stanford's own Low Cost Housing Committee, in the words of its report last year, "agreed unanimously that Stanford should establish a low-rent housing development of significant size on its campus . . . (and) that the land required be made available at no cost." A large development might require a change in Stanford's industrialization plans and some housing construction in the foothills. Both of these ideas would meet heavy resistance from the men who run Stanford. They, like landowners throughout the area, wish to maximize profits and to avoid having to pay the social costs which their private gain incurs. But growing pressure from employees, other community people and students may eventually force a change against the vested interests of those wealthy and powerful men. Such a victory will not come easily.

Vietnam War Inflation

Once land costs are reduced or eliminated, the next major problem is the cost of money. The Vietnam war inflation has driven interest rates so high that financing any building project is difficult. The normally unprofitable low-income housing project often needs a subsidized interest rate. Since the most common source of subsidy is federal money, and that money has gone to fight the war, the problem is compounded. Obviously a first step would be for the war-making institutions of this area to demand an end to the war, and stop producing for it; but it is unlikely that they will do so, unless they are made to.

If the war ever ends, housing programs might be funded again and city housing development corporations could begin to attract federal money. Stanford University might try to arrange cheap loans through a banking consortium made up of banks run by Stanford Trustees and their friends. It might go further and respond by tapping the revenue from its land leasing to provide a subsidy. However, it is unlikely that Stanford or any other corporation will make significant sacrifices voluntarily to solve the housing problem, any more than they will raise the wages of their employees as a way of easing the crisis. The corporations would prefer to have the federally-financed programs—in this way, tax money goes solve the problems created by private industry. The fact remains that the corporations could, and probably should pay. Whether they will or not depends on what the people finally decide.

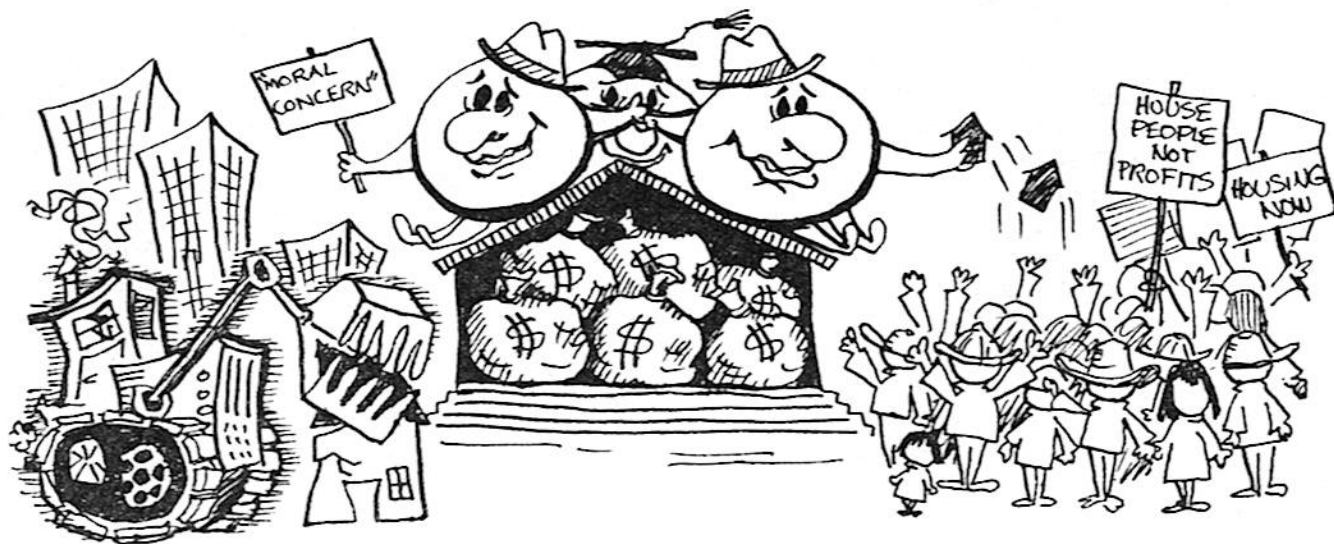
The last factor is the cost of construction. Landowners, banks and corporations are always anxious to point the finger at the "tyrannical unions" and their "outrageous ways" as the great roadblock to cheap construction. They are currently heralding "manufactured housing," in prefabricated units, as the answer to the housing crisis. The city of Mountain View's recent report on the problems of building housing for low-income people in that city points out that "this technique will probably reduce the cost of actual construction by as much as 15 percent to 20 percent. It should be emphasized that the major costs involve the cost of money and the cost of land. The 15 percent to 20 percent savings in the actual housing unit would bring an overall net reduction of less than 10 percent. This would be very helpful; however, manufactured housing is not going to be a panacea." Not only will it not be a panacea, but it will mean the elimination of thousands upon thousands of construction jobs. Of course, corporations would like nothing better than to reap the profits of such manufacturing as well as the regular profits on building materials and the contracting jobs. If that means unemployment, it is all right with them. As pointed out before, social costs are not their costs, unless people choose to make the corporation pay. In any case, it is a spurious argument to blame high construction costs on high wages. If land and money are available, and construction profits checked, there need be few obstacles to building low-income housing.

But, of course, this is not the situation. The few cities, institutions and organizations which are trying to build housing are not talking about projects of any significant size, nor are they about to challenge the wealthy and powerful of the area to see that real needs are met. The Urban Coalition has proposed a very small project for Mountain View, and a modest development to Stanford's Wright Committee. Given its reliance on major corporations for support and its assumption that existing programs and procedures can meet the need, there is little likelihood that

the Coalition will be able to break through the political opposition and financial dilemmas it constantly bemoans.

The Palo Alto Housing Development Corporation, formed under building contractor-City Councilman Jack Wheatley, is presently negotiating for purchase of the Lytton School property in Palo Alto for low-income housing for elderly persons, who do need the housing. However, the city does not seem to be too anxious to undertake the kind of projects necessary to meet the most pressing need—housing for thousands of local workers. Stanford's Wright Committee is an advisory committee on housing which has heard several proposals for projects. Its mandate limits it to a relatively small development, probably no more than 800 units. Groups like the United Stanford Employees and the East Palo Alto Information Center have presented proposals for several thousand units, but the committee lacks the power to deal with such a project. It will probably accept the small Urban Coalition development. Other official agencies and groups exist and are forming, but they all share the basic problems of these groups: they do not involve people who need the housing in the decision-making, they do not intend to meet the real needs of people, nor are they prepared to attack powerful institutions to solve social problems.

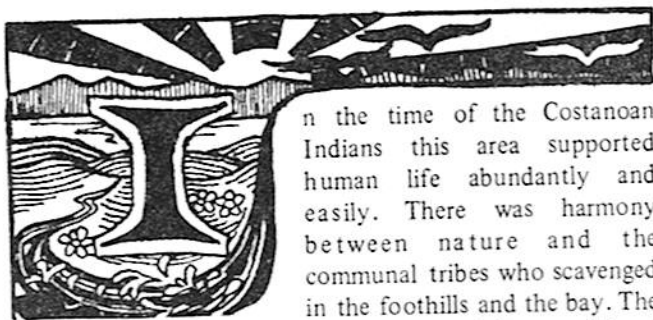
This is not to say that these groups should not build housing. It is simply to say that their limited efforts will not be enough. Stanford's on-going development of the Coyote Hill Industrial Park and the Palo Alto Square financial center will fill their projects with some of the 4500 to 6000 new employees. The logic of the profit system calls for such growth with all its inherent crises and problems. The Palo Alto-Stanford area plans to continue growing as a wealthy metropolis while it recruits more and more workers from the "underdeveloped" areas around it. It will take a major struggle in the area to solve the present housing crisis—an effort to change the way land and resources are used in the Mid-Peninsula.



Ecology

The growing Mid-Peninsula shares ecological disaster with the rest of the country. Its developers have shown no more concern for the Bay, the air and the land than their corporate friends elsewhere. Consequently, there is a growing movement to stop pollution, but it has failed to focus on the industrial sources of pollution thus far.

A close look at the local giants reveals that their impact is not limited to the area ecology. They have branches abroad which affect the resources and environments of Third World countries, and the products of local weapons-makers have helped bring a major "eco-catastrophe" to Vietnam.



In the time of the Costanoan Indians this area supported human life abundantly and easily. There was harmony between nature and the communal tribes who scavenged in the foothills and the bay. The missionaries and ranchers who later settled the area did not disturb the ecological balance with their limited farming and cattle-raising, nor did the lumbermen who worked the foothills through the end of the nineteenth century. When Leland Stanford—whose railroad helped open up California to industrial development—decided to build a university on his beautiful ranch, he hired Fredrich Olmsted to design a campus that would enhance rather than violate the environment of the area.

The Santa Clara Valley underwent only slight development until the late Thirties when the pioneering Stanford engineers laid the basis for the phenomenal process of growth which began in World War II and accelerated through the Cold War era. When the Stanford Trustees helped launch the aerospace-electronics industry by opening the Stanford Industrial Park, they paid lip-service to Olmsted's environmental concern (and to the taste of wealthy residents) by insisting that the Park be well-landscaped and pleasing to the eye. But such window-dressing could not obscure the basic threat to the ecology of the Mid-Peninsula posed by the rapid, profit-seeking development that followed. As the Sixties came to a close, it was becoming clear to area residents and to people throughout the country that our whole life system was in danger: the land, air, water and other natural and human resources which make it up might well become the victims of over-development.

Probably because smog, water pollution and mounds of

garbage have become so visible recently, the fight to save our ecology has taken on the aura of a national crusade. It is not surprising that politicians, corporate leaders and university presidents are hailing ecology as the issue that will unite us in the Seventies—especially after the bitter conflicts over racial oppression, the Vietnam War, and the distribution of wealth which marked the Sixties.

But it is already apparent that this unity cannot last long, because it rests on both a tendency to consider clean air and clear water the full province of ecology, and a failure to realize or admit that the United States is really the seat of an international system which pervades the lives and environments of many other countries. This narrow approach cannot really grasp the extent, the nature and the source of the ecological crisis, and thus cannot begin to suggest a full solution. Any adequate study of this area's impact on our own and the world's ecology requires greater scope of subject and clarity of analysis than popular ecologists and politicians will offer.

The most apparent problems in the Mid-Peninsula's ecology are the decline in the quantity and quality of the land; the pollution of our waters and the growing demand for more water for commercial and personal use; the accumulation of solid wastes and garbage; the pollution of the air; and the tremendous growth in population. Naturally these are interrelated, but we shall try to deal with them one at a time before going on to broader ecological concerns.

Population Boom

The vast farm lands of the Santa Clara Valley rapidly gave way to factories, homes, highways and stores during and after World War II. Thousands of people came to the area seeking jobs in the war economy during the transitional period when the economy of scarcity was replaced by an economy based on genuine and stimulated demand for cars, appliances and services. When the population increases in a society based on massive consumption, development is very rapid: the private car

requires hundreds of miles of highway, shopping centers spring up near housing tracts, and factories settle in former orchards. Farm land becomes too valuable to farm, and disappears under asphalt or concrete. Developers go on to fill the bay and gouge out the foothills.

The farm land that remains undergoes a marked change. It is increasingly centralized and intensively farmed to produce food for the growing population and to guarantee the great profits of agri-business. Artificial fertilizers and pesticides are used to increase the yield, but their effect over time is to rob the soil of its nutrients, to harm and destroy animals which would naturally control insects and to endanger human health. Thus, the quality of the soil in Santa Clara County is rapidly deteriorating, while much of the best soil is paved over—all to insure the short-run profits of the owners.

This continued covering of the land with asphalts and buildings affects the soil that remains. Run-off water which cannot soak into the ground carries with it the life-giving topsoil and humus from surrounding land. Eighty million gallons of this water run into the San Francisco Bay each year, changing both the quality and humidity of the soil. Logging and development in the foothills have intensified run-off and made the dry hills of the Mid-Peninsula the fourth most dangerous of the state's 121 fire districts. The hardy chaparral, which quickly replaces water-starved growth, adds to the fire hazard.

Of course run-off water threatens us in more direct ways than soil depletion and firestorms. The eighty million gallons of Bay Area water lost to the water table each year are enough to fill all the reservoirs in the Bay Area. Because the Mid-Peninsula goes without rain for most of the year, there is an increasing demand for water, and a decreasing ability to fill even part of our needs from local sources. It is clear that run-off should be stopped, and it is possible to catch the water. But this cannot be done cheaply, so the major water-users look to other sources.

While the average American consumes 145 gallons of water a day for domestic uses, the water shortage which plagues this area is due primarily to government and industrial uses which average 1800 gallons per capita per day. Thus the industrialized city of Palo Alto consumes 630 million gallons of water in one month. In the past, underground water supplied the Peninsula, but wells have run dry and saltwater now fills the once fresh water source. Consequently, the water used in Palo Alto and twelve other Peninsula cities and water districts is purchased from San Francisco, which obtains most of its water from the Sierra Nevada mountains via the Hetch Hetchy aqueduct which begins in Yosemite National Park. Ecologists point out that a growing demand on this water source will contribute to the disturbance of an intricate life support system hundreds of miles away. While it is possible to meet a significant portion of the present and future demand for water by re-cycling used water, this process, too, is very expensive. The major industrial and municipal water-users prefer to develop cheaper sources with tax money, and let the Sierras

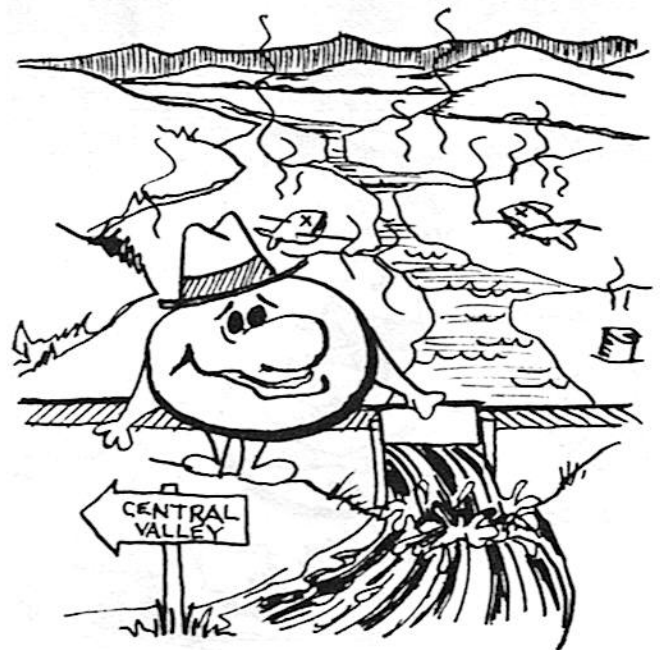
suffer from their choice.

The Great Water Theft

The State Water Project has recently come under attack because it plans to supply vast quantities of Northern California water to Southern California (primarily for the growers of the Central Valley who will use much of the water for irrigation to increase their vast profits) without considering the impact of this water drainage on the Delta and the rest of the area's ecology. One of the casualties of such short-sighted water policies has been San Francisco Bay. The Bay is supplied by fresh water from the Sacramento-San Joaquin water system. Diversion of this water to agricultural and industrial consumption is the direct cause of stagnation of our polluted Bay. Only 17.5 million acre feet of water per year flow into the Bay now—significantly less than the flow of twenty years ago. The State's Master Water Plan intends to cut this flow to 2.5 million acre feet per year in the next fifty years. Yet, is this flow of fresh water alone which flushes out pollutants and holds back the salt waters of the Pacific to preserve part of the Bay as a fresh water habitat for birds and water life.

Flow reduction has proceeded so far already that the Bay south of Palo Alto is virtually stagnant. For health reasons, human contact with the Bay is prohibited over forty percent of its area. The pollution itself is a product of area development. In some parts of the country industry and municipal sewage plants turn lakes and rivers into cesspools; here the Bay is used for the same purpose. Over one-billion gallons of liquid waste are discharged into the Bay each day, one-quarter of it coming from Santa Clara County. Two-thirds of this impressive total is dumped by industry, a

THE SHRINKING DELTA



by-product of profitable businesses which would prefer to avoid costly treatment. The rest comes from personal and municipal uses, and is largely sewage. Often cities lack an adequate tax base to pay for treatment. Thus, virtually none of this liquid is disinfected. These liquid wastes can be broken down over time, but the process requires oxygen. In 1966, wastes consumed 112,500 pounds of oxygen every day in the South Bay alone. Palo Alto creates an oxygen demand of 106 milligrams per liter of waste, yet most of the Bay contains only seven milligrams of oxygen per liter of water. South of Palo Alto, the average oxygen content is less than four milligrams per liter of water; there is no oxygen in the slough which receives San Jose's liquid waste.

This means simply that there is not enough oxygen to break down the vast quantities of waste, and as the volume of waste increases, the oxygenating capacity gets worse—until the Bay does end up as a mere cesspool. Area governments have determined that two milligrams of oxygen per liter of water must remain in the Bay to prevent the botulism which breeds rapidly in polluted waters. But even the minimum "standards" are repeatedly violated—as are most other standards set to control Bay Area pollution. There is little power of enforcement in bodies such as the San Francisco Regional Water Commission, and members of such commissions are often friends or employees of the major industrial and municipal polluters. Because they are not forced to pay for adequate controls, the major polluters naturally choose growth and profits over a clean Bay.

A further effect of oxygen depletion and pollution is the elimination or near extinction of much life that used to exist in the Bay. Costanoans may have lived on Bay shellfish, but few persons could today. Shrimp production

of nearly three-and-a-half million pounds per year in the 1920's has declined to 10,000 pounds today. At the turn of the century fifteen million pounds of oysters were taken from the Bay each year; the oysters which still survive in the Bay are now poisonous to humans. Herring, smelt, king salmon and harbor seals have virtually disappeared from Bay waters. While these foods may not be necessary to the survival of human life, they are critical food sources for the birds. Natural bird life is in turn a far more efficient and less harmful form of insect control for California farms than the poisonous insecticides that are replacing the birds. The insecticides in turn are washed into the Bay and rivers and do further damage to water life.

FILLING IN THE BAY

An even greater threat to the Bay is the continued filling of the marshlands, swamps and mud flats, which are the most productive life-supporting areas of the Bay. Birds feed on the marshes, flats and swamps, and these heavily vegetated areas produce oxygen needed in the Bay and in the air. Three "popular" ecological concerns—garbage, air and population—intersect in the filling of the marshlands. The major fill is solid waste; one effect is to destroy the oxygenating capacity that replaces carbon dioxide in our air; and filled land is used for new homes and industry for a growing population. We shall try to deal with these problems in order.

A year's solid wastes from the Bay Area would form a wall thirty-six feet wide and thirty feet high from San Francisco to San Jose. A consumption society produces a massive amount of waste, and it must be put somewhere. Usually it is dumped and often it is burned; in this area forty percent of the region's wastes are deposited in the Bay as fill. Attempts to dump garbage in the ocean were abandoned when it began to wash upon the beaches. Plans to ship it by train to less populated states have been shelved temporarily because it is too expensive; it is cheaper in the short run to fill the Bay. The dumping and filling—much of which recently has been garbage—have reduced the Bay from its 700 square miles in 1850 to 435 square miles today. As more waste is deposited, that area will shrink—and the 20 percent of the original marshlands that remain will probably disappear.

It is common to think about resolving the "garbage crisis" by finding some place to put it all. Difficult as this may be, it is less disturbing to the social order than a critical look at the reasons for the creation of a growing quantity of waste in the first place. It is impossible in the scope of this section—and perhaps unnecessary in the face of growing popular awareness—to detail the reasons for and the effects of a consumer society. Planned obsolescence, disposable containers, thousands of useless commodities litter the society, bringing profits to manufacturers and huge personal and social costs to the consumer. Putting an end to advertising, re-using containers and securing quality manufacturing might be better ways to attack the garbage problem than shipping our waste to Death Valley. But profits must be retained and increased, the garbage-makers



claim. Only a powerful movement in opposition to their destructive production will be able to get to the roots of the problem of growing waste, and in the process stop the filling of our bays, rivers and oceans.

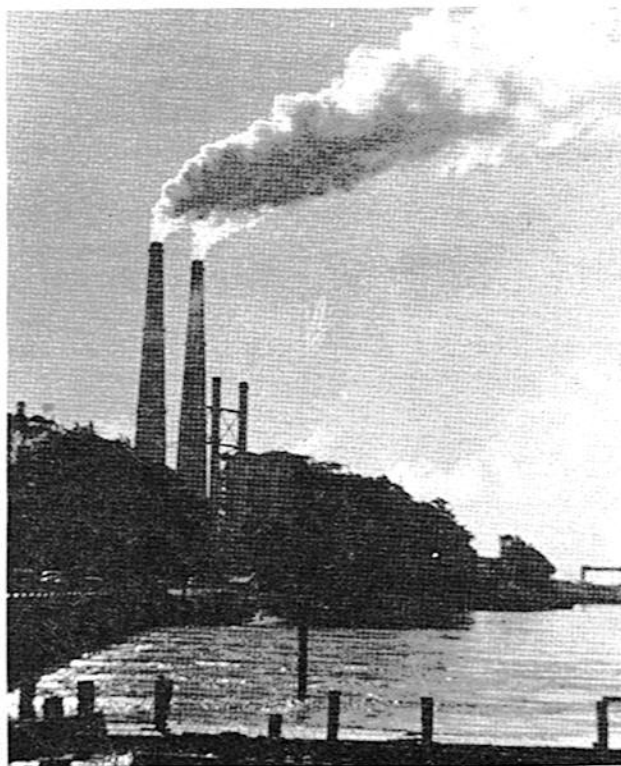
In the Bay Area, as we mentioned earlier, the filling of marshlands has destroyed a major source of oxygen. The only process which removes the plentiful carbon dioxide from the atmosphere is photosynthesis by plants. The marshland, smothered by trash alone, could have removed two-and-a-half million tons of carbon dioxide each year—the amount emitted by 57,000 people. Other marshland has succumbed to “clean” fill and vast amounts of area vegetation have been stripped away or paved over in the development of the area. The loss of all these plants and trees has made the absorption of air pollutants more and more difficult in our area which is constantly adding factories and cars.

THE AIR

Air pollution, or smog, is perhaps our most visible ecological problem in the Bay Area. The high pressure system which lies off the coast of California maintains our mild climate, but also creates a frequent temperature inversion. A temperature inversion acts as a lid and in a region between mountains—like the Bay Area—it effectively cuts the circulation of air. Thus, the pollutants from factories and cars collect in the atmosphere and become very dense. There is little need to describe the extent or hazards of air pollution; these are far too familiar.

What is needed is an understanding, once again, of the real reasons for the existence of the problem and its likely continuation. Factories are major polluters. After much public pressure, the Bay Area Air Pollution Control District—supposedly a public regulation agency—finally listed the large industrial polluters, but declined to list their individual contributions. These industries could significantly cut, if not eliminate, their gaseous pollutants—just as they could treat their liquid wastes—but they find it more profitable not to. When pressure finally becomes too great they will act—and then demand federal subsidies or pass the cost on directly to the consumer through higher prices. The cost will not come from their profits. In corporate America, they are the seat of wealth and power, and they will not allow real changes in the system if they can help it.

In the Mid-Peninsula these industrial polluters exist alongside the so-called “clean” industries, like semi-conductor plants, which emit no visible pollutants. The most noticeable pollution attributable to these plants takes the form of the automobile exhaust which their commuting employees produce every work day. In an area of suburban sprawl like the Mid-Peninsula, most people do not, and often cannot, afford to live near their jobs. Since there is no mass transportation we see the familiar scene of endless traffic jams with one person per car every morning and afternoon. We have discussed the need for housing near the work place in the previous sections, but a few words on the car are in order.



Nowhere is the waste and irrationality of American capitalism as perfectly highlighted as in the private automobile. The major industries—steel, auto, oil and glass—owe much of their vast wealth to the birth and development of the car and its attendant highways, accessories and services. The automobile also insures privacy, shields one from contacting his fellow men, and confers status. But the cost in resources, air pollution and wasted hours for commuters is staggering. Under public pressure, engines may be made smaller, lead will be eliminated from engines, and smog devices will be installed to reduce air pollution. But the private car will not be replaced without an incredible struggle. The corporations will not bow easily nor will a carefully-conditioned public easily abandon the private car as shield and symbol. If the goal is simply clean air, then perhaps the car can remain. But if we are interested in providing rational transportation, in cutting down the proliferation of highways and parking lots, in conserving scarce resources, in really caring for our ecology—then our task is much more fundamental, more radical, and thus harder.

POPULATION CURB FOR WHOM?

In the face of the overwhelming nature of the ecological problems—described by some as an impending “eco-catastrophe”—more and more people are calling for a curb on population growth, both at home and abroad. We shall take up the significance of population curbs for the underdeveloped countries at a later point. The argument for limiting population at home is straightforward. The society is too developed, the quality of life is declining rapidly, and life itself is threatened; therefore, we should stop population growth.



Anaconda mines copper in Chile

A common weakness of such discussions is to accept the current form of social organization as the only possible one, and to confer an aura of rationality upon it. Thus, many ecological critics look at the Mid-Peninsula, the Bay and the crown of smog and demand an end to population growth, predicting a catastrophe for mankind in this decade unless the growth rate evens off. But we do not know what a reasonable ceiling might be on the population of the area. We do know that under anarchic capitalism where profit and industrial growth determine decisions and the people have little control over land-grabbers, polluters, bay-fillers and auto-makers, a growth in population in this area means increased destruction and exploitation. We conclude from this that the society should be made rational, not that people should be forced to fit the irrationality. If some determination could be made about the maximum population an area could support with a rational social system, then any society would have to begin to limit population as it approaches that point. But large parts of the United States remain unpopulated and under-populated, and the heavily populated areas suffer from the effect of profit-seeking over-development as much as, if not more than, the density of the population. Simply to argue against population growth is to ignore the fact that the needs of a population, and thus the effects of its increase, are socially determined, not inherent.

The concern about the needs of a growing population comes from a recognition that the earth contains finite resources. Unfortunately, land, air and water are usually the only resources discussed. Some ecologists are concerned about mineral resources as well, but the use of irreplaceable iron, oil, coal and other natural resources does not have the immediacy and visibility of smog-ridden air and unusable bays and rivers. The fact that politicians and many ecologists do not go beyond clean air and water is not surprising, since a close look at the distribution of the world's resources and the role of American corporations in the destruction and plunder of environments around the world could turn the unifying concern for ecology into a divisive movement. Our society of waste may threaten itself with over-development, but it subjects much of the "free world" to underdevelopment and a variety of other ecological hazards which we shall discuss briefly.

As we said at the outset, the economy of this area has international extensions. Many of the firms have international subsidiaries who treat the environment of other countries as badly as, if not worse than, they treat our own. All of them rely on the mining, logging, farming and oil production of third world countries for raw materials. The weapons manufacturers and military contractors of the area contribute to the grotesque destruction of the life system of Vietnam and to the more subtle environmental threats of nuclear testing and the building of military bases and airfields around the world.

The American plunder of world resources is common knowledge to the men who extract resources and to those countries who will never see them again. Resources for the Future—a Ford Foundation-sponsored research group which grew out of the work of the U.S. President's Materials Policy Commission—published "Resources in America's Future," a projection of U.S. resource needs through the year 2000. The group recognized the fact that this country lacks many, if not most, of the resources necessary to sustain its style of living and to insure growth; but it pointed out that the world has the necessary resources and we would be sure to get them. The group warned:

It should be pointed out clearly, however, that our conclusion that there is no general resource shortage problem for the balance of the century applies specifically to the United States; it cannot be extended automatically to other countries. In many less developed countries, especially in Asia, Africa and Latin America, population presses hard on available natural resources; for them a sustained increase in living levels can by no means be guaranteed with the assurance it can be for the United States and other more advanced industrial countries.

Industry does not intend to lose control of these resources. Their answer to countries which are losing their natural wealth and suffering the underdevelopment of one-crop economies is to curb population, even though many of the richest countries in terms of natural resources are not as heavily populated as developed European nations. Thus, while corporate leaders and some concerned

people in the United States argue for birth control, U.S. corporations pump the oil, strip mine the copper and raze the forests of the timber which could be developed to solve the problems of the underdeveloped countries. The payment to foreign governments is less than they deserve, and will be of little use to the people when their natural resources are gone. Furthermore, a significant portion of it will have to go to repair the ecological damage done by strip mining, the razing of forests and the pollution of the water.

In the context of this rape of the environment, a plea to curb population growth amounts to a demand for a kind of genocide; it is to ask Third World people to stop having children and to allow us our consumption, rather than to come to grips with the real roots of the problem. Those countries which have decided to reclaim their land and resources for themselves and to develop their countries have often had to endure less subtle forms of genocide when weapons built from their own resources were rained down upon them. Vietnam is a case in point.

On February 17, 1965, Senator McGee of Wyoming said:

That empire in Southeast Asia is the last major resource area outside the control of any of the major powers of the globe . . . I believe that the condition of the Vietnamese people, and the direction in which their future may be going, are at this stage secondary, not primary.

Corporate leaders and policymakers believed the domino theory and saw Vietnam as the key to Southeast Asia's resources. "The condition of the Vietnamese people" and of their land was not a concern of these men or their generals either.

The effect of the war on the ecology of Vietnam has been massive. The weaponry of the Mid-Peninsula has helped to kill and wound millions of people, to destroy thousands of acres of forests and crops with herbicides and defoliants, to level thousands of villages, and to gut the countryside with millions of thirty-foot deep bomb craters. If there is an American "eco-catastrophe" today, its worst face is in Vietnam. The extent of the damage will not be known until the war's end, and probably not until several years later. What the herbicides and defoliants will do to the soil, the wildlife and the people after such intensive use is not known. It is doubtful that many of the rubber plantations and forests will survive. Rivers are polluted, and the waste materials of war are scattered around the countryside. Saigon suffers from serious air pollution since cars and trucks were introduced in great numbers. American banks, factories and oil refineries are beginning to move in, to continue Vietnam's development if "the Allies" win. If the people of Vietnam do finally gain control of their country and evict our occupying army, they will have to expend vast amounts of their own resources just to repair the damage of genocidal war.

The rape of the land, the pollution of air and water, the plunder of the world's resources and the devastation of Vietnam are the logical outcome of a profiteering society. But many people will not see, or will try to obscure the fact

that our ecological problems are rooted in a social system, and cannot be resolved without a radical change in that system. But, just as many people who sought an understanding of the Vietnam War concluded that the American economy and social order dictated such wars, those who examine the ecological crisis will realize that it is no accident or oversight.

As people's analysis of the forces and institutions leading us to ecological disaster become clearer, effective action can be taken. Then the present deceptive unity of a limited struggle for clean air and water at home can give way to a genuine struggle to bring the institutions of this society under the people's control and to make them serve their real needs. The great hope of the *New York Times* that "ecology may replace the war as the campus issue," and end conflict as well, will fade as people realize that the sources of pollution and of the war are the same and begin to struggle against them. There is no better place to begin such a struggle than in the Mid-Peninsula.



Stanford Land Use

Stanford University's land development has brought the Mid-Peninsula great prosperity, and great problems. Today the leasing of Stanford land for industry goes ahead at breakneck speed. Using secrecy, clever public relations, and intimate contacts in the Palo Alto City government, the university has secured approval for continued developments despite rising opposition from area residents.

Three important developments now underway are the Coyote Hill Industrial Park, the Dillingham Corporation's Palo Alto Square, and the Oak Creek Apartments. More industry is slated for the vast Webb Ranch tract, but the desperate need for open space and more housing make continued industrial development unwise.



ising behind the present Stanford Industrial Park, Coyote Hill forms the first of the foothills overlooking Palo Alto. In April 1969, to the surprise and consternation of local residents, bulldozers began to push two large roads into the Hill.

Stanford had quietly decided to open Coyote Hill for subdivision despite the fact that the current industrial park still has room for new development. It divided the 177-acre area around the hill into 12 lots for firms that will eventually bring a total of 3,000 to 5,000 people to work in the overcrowded Mid-Peninsula, according to university figures. Fairchild Corporation has begun construction of its Opto Electronics semi-conductor plant, and Stanford has leased another lot to Optimum Systems Software. Other firms, including Computer Time Sharing Corporation and an unidentified computer education company, are negotiating for sites. In its press releases about Coyote Hill, the university has been silent on issues like conservation, housing and traffic. There has been frequent mention, however, of the pitch and putt golf course that Stanford has agreed to squeeze onto 35 acres of the hillside.

The succession of events leading to the destruction of Coyote Hill is a case study in undemocratic decision-making. Citizens were given little information about the development plans and their protests went unheeded. Stanford and the City of Palo Alto, which has jurisdiction over the land, anticipated intense criticism. They defended the project with secrecy, speed and attempts at appeasement.

Developers have long eyed the foothills for development. In the late 1950's the Stanford Trustees, with the approval

of a faculty advisory committee, decided that the Industrial Park should be extended across Foothill Expressway. In 1960, Stanford asked Palo Alto to annex 280 acres including Coyote Hill and to zone it LM-5 (limited manufacturing use, five-acre parcels minimum). The City Council liked the proposed plans for a park and Ampex company facilities, so it approved the zoning change. The Ampex proposal fell through, however; zoning for manufacturing remained; and the 1963 Palo Alto General Plan showed Coyote Hill as "employment area."

In 1967 the City Council asked the Palo Alto Planning Commission to review the zoning. The chairman of the Commission was against any zoning change, but, in the first of a series of questionable political acts, he appointed himself and two others to a special committee to meet with Stanford. This committee met once, without notifying one of its members. The chairman then reported to the Commission that the LM-5 zoning should remain.

The Planning Commission still felt uneasy about industrial use of the foothills, and it asked its planning staff to consider the possibility of putting a public golf course in the area. The staff never reported back to the Commission, but Stanford picked up on the idea. At hearings in 1967, the university appeased the Commission by saying that it would pursue the golf course suggestion.

After the hearings, Stanford moved ahead in secrecy with detailed plans for subdivision. Stanford Real Estate manager Boyd Smith claims that "The University regularly consulted with the Palo Alto city staff to make certain that the design and specifications conformed to city requirements." Smith says that the city approved a tentative lot division map in 1968, but it is unclear who did the approving, and with what authority. In August 1968 Stanford asked Louis Fourcroy, Palo Alto's Director of Planning and Community Development, for permission to initially divide the Coyote Hill property into four parcels. Fourcroy mysteriously waited nine months before

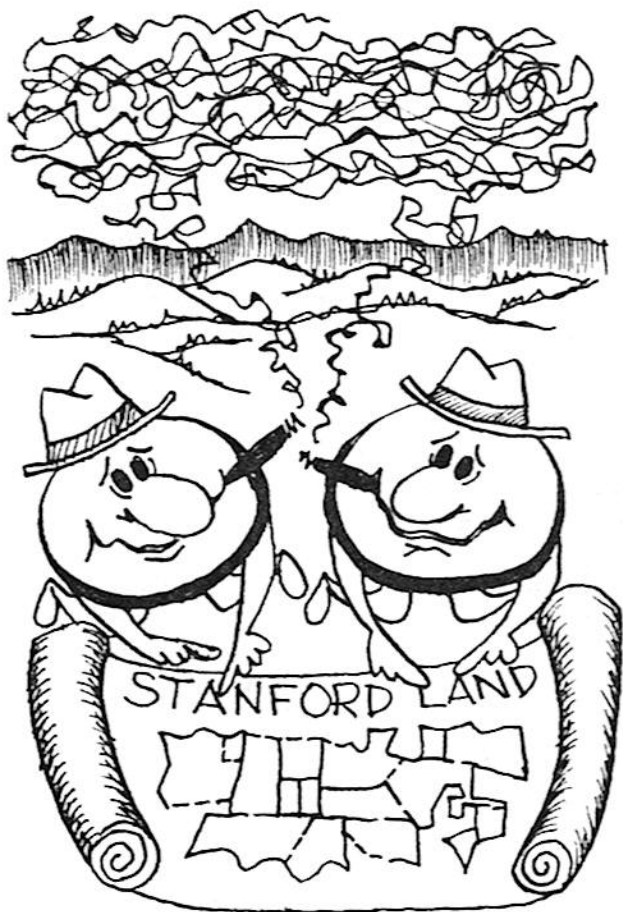
reporting Stanford's request to either the Planning Commission or the City Council. Thus, citizens remained ignorant of the planning and subdivision of the property.

Within a year—in April 1969—the bulldozers bit into the Hill. It was May before the Planning Staff formally told the Commission that construction had begun. The Staff also approved division of 177 acres into smaller lots without telling the Commission. It did, however, let the City Manager in on the secret. He wrote a letter to the Council suggesting that, since lot division had been approved, Arastradero Road should be widened to four lanes. This was the first that either the City Council or the Planning Commission heard of the new building plans.

In July the City Council ruled that both the Commission and the Council had to approve development plans for each parcel. Stanford proceeded to submit its plans to the city. The maps showed 12 lots, ranging in size from 6.1 to 15.5 acres, located in the four original parcels. At an August 27 meeting, attended by protesting conservationists who had just learned of Stanford's plans, the Planning Commission recommended approval of the tentative subdivision maps for three of the parcels. At the same meeting, the Commission rejected a proposed moratorium on foothill development.



Jack Wheatley splits his time between sitting on Palo Alto's City Council and supervising construction in the Industrial Park.



On September 8, the City Council narrowly approved the lot division plans by a vote of 5 to 4. Councilmen Frank Gallagher and Jack Wheatley provided the margin of victory. Gallagher is a full-time salaried administrator of Stanford, but he did not think it was necessary to disqualify himself from the decision, even though he had disqualified himself on earlier issues. Wheatley is an officer and principal owner of a construction firm, Wheatley-Jacobsen, which has bid for substantial construction contracts on Coyote Hill; but Wheatley did not disqualify himself either.

In November the Committee for Green Foothills, a local conservation group, filed suit to stop the excavation of Coyote Hill. The suit names the university, the City of Palo Alto, Frank Gallagher, Jack Wheatley and Louis Fourcroy as defendants. Green Foothills contends that procedures involved in setting up the subdivisions were faulty, and that the votes of Wheatley and Gallagher at the September 8 meeting were invalid because of conflict of interest. The lawsuit may well be too late. Stanford has invested \$1.2 million in road construction on Coyote Hill. This construction was planned even before Palo Alto had approved the initial subdivision of the property into four parcels. The construction was begun before final approval of lot division plans by either the City Council or the Planning Commission. The roads were complete—four lane swaths of asphalt through the rolling countryside—before the public knew what was happening.

If grass roots pressure can block Stanford's plans to lease the remaining lots, however, the harm to the environment may be lessened.



THE DILLINGHAM PROJECT

When the community is not consulted on land use, developers generally ignore community needs. In the Dillingham case, a group of real estate entrepreneurs decided that Palo Alto could use a financial center, including one of the tallest buildings yet in the Mid-Peninsula, on the corner of El Camino Real and Page Mill Road. The profiteers ignored the big-city problems already threatening Palo Alto.

Plans for the \$12 million square include two 10-story office buildings, a 17-story hotel and convention center, and several low-rise buildings. Thirteen of the 21 acres at the site will be paved over for parking, with 400 potted trees spaced around the asphalt. Tenants at the Square will give financial and professional services to local corporations and wealthy residents: banks, brokerages, advertising agencies, and so on.

By bringing an estimated 1,500 more people to work in the area, Palo Alto Square will further overload the housing market. Local residents have pointed out that the complex will drive up land values in the adjoining residential areas, thereby endangering the moderately-priced housing that is now available there. Traffic snarls, already severe on El Camino, will worsen from the addition of 8,300 automobile trips per day to the

Square, according to city data.

All these problems have been obvious since the project was first announced, but once again the people of the area were not given a chance to decide whether they wanted it approved. The Square was conceived in 1965 by real estate broker Tom Ford, the director of land development at Stanford from 1960 to 1964, who used his inside knowledge and contacts to sell the idea to Stanford, Dillingham, and the officials of the Palo Alto City government. The only hurdle for city approval was a zoning change, which was approved by the City Council on September 22, 1969 with cursory review. Not until January, shortly before the expected signing of the lease for the land, did opposition begin to organize against the Square.

Dillingham Corporation stands to make a large but undisclosed profit by bringing this blight to Palo Alto. It is a typical performance for the \$150 million dollar Hawaii-based giant. Other recent Dillingham developments include an office center that will destroy neighborhood housing in Oakland, and a luxury resort that will help pollute Lake Tahoe. Dillingham also profits handsomely from U.S. domination of Asia; it is building for U.S. industry in Thailand, Vietnam and Korea.

Recently a Dillingham spokesman publicly defended the Palo Alto project as a boon to the working men who will

get jobs by building it. He was being somewhat dishonest by pretending that the corporation was the friend of labor. On January 26, 1970, a Dillingham vice president sent out form letters on company stationary soliciting funds for a drive to smash the union shop in California by a "right to work" law.

If present trends continue unchecked, Palo Alto can expect to see its entire downtown business district transformed into a Dillingham-type complex (see accompanying section on Palo Alto development). The Bank of America has declared that there is a "paucity" of well-developed business and financial centers in Santa Clara County, and the corporate powers that run the state have chosen Palo Alto to fill the "need."

OAK CREEK APARTMENTS

As detailed in the housing section of this booklet, Stanford bears the primary responsibility for creating a housing crisis that has driven working people from the area and sent rents soaring. Stanford is building some housing on its land, however, and the kind of housing shows the University's callous disregard of social problems and friendly cooperation with private developers who want to make profit.

The development is Oak Creek Apartments, 705 units of luxury housing on Willow Road near the Stanford hospital. Rents start at \$183 a month for unfurnished studios, and rise to \$370 for larger apartments. Amenities include five swimming pools, putting greens, a closed-circuit TV station, and maid service.

Only 10 percent of Stanford's married junior faculty can afford the rents at Oak Creek, let alone the thousands of lower-paid Stanford employees. Gerson Baker, Oak Creek's developer, is advertising for tenants in San Francisco, hoping to persuade highly-paid executives from all over the Bay Area to come "live in the country."

WEBB RANCH

Coyote Hill, Oak Creek, even Dillingham—the important decision making on these projects lies in the past. Concerned local residents may attempt to undo the most harmful and irresponsible of these decisions, but the time and money expended by vested interests in these projects will make the undoing difficult at best. Webb Ranch, 465 acres of Stanford land bounded by SLAC, Interstate 280, Jasper Ridge (the biology department's preserve), and Alpine Road, will be developed in the near future—but decision-making has just begun.

Webb Ranch is now leased to a beef cattleman. It has been described by Portola Valley Councilman Robert V. Brown as "one of the most beautiful areas in this part of the country." In 1968, the San Mateo County Local Agency Formation Commission (LAFCO), after a year of debate and struggle, assigned Webb Ranch to Portola Valley's "sphere of influence." Both Menlo Park and Stanford University were expected to introduce considerable commercial or industrial development to the

area, if LAFCO assigned them Webb Ranch. The LAFCO decision was a defeat for the University and a victory for residentialists. As the *Menlo-Atherton Recorder* said, "Portola Valley . . . was attempting to insure that the area would be developed in the rural character of Portola Valley and Woodside."

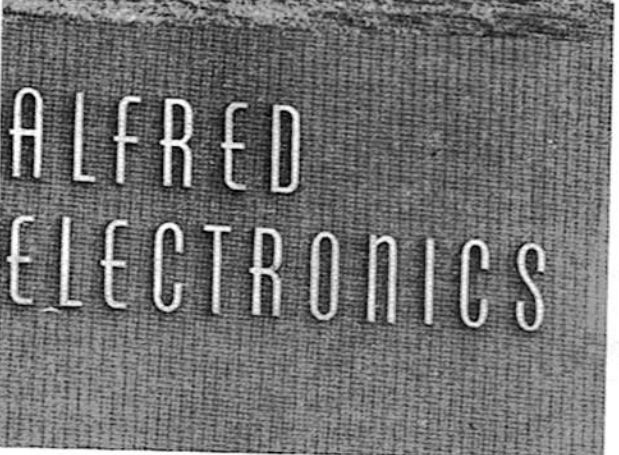
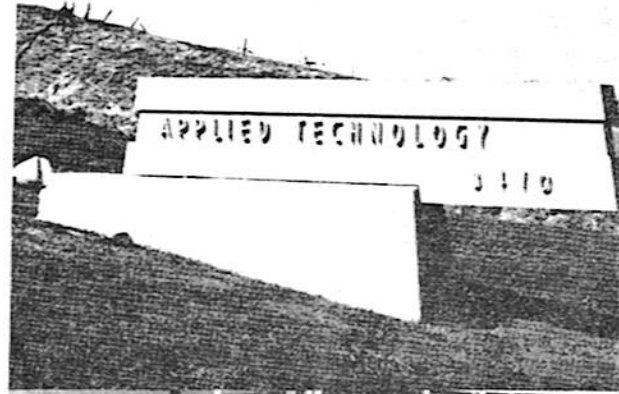
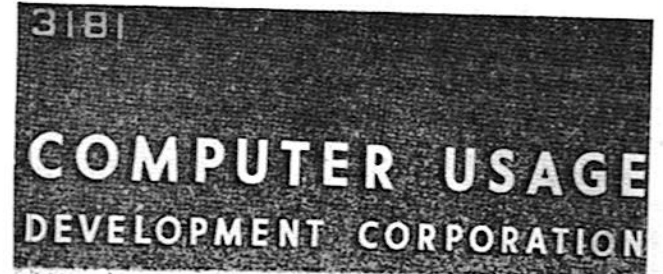
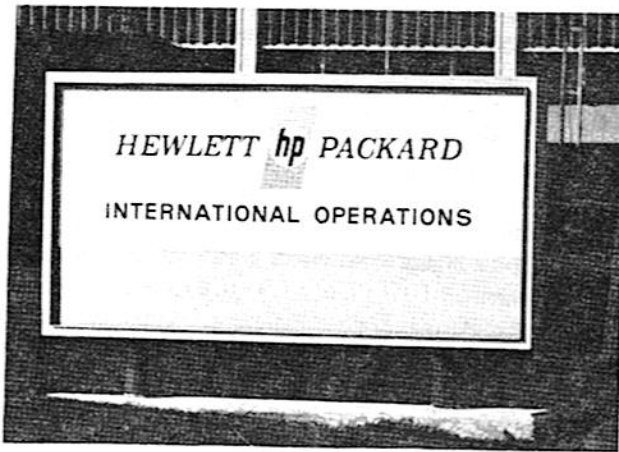
When the LAFCO decision was made, Portola Valley Councilman Nevin Heister said that the town was not opposed to highly controlled, closely restricted industrial development of the ranch. A year later—in September 1969—the Portola Valley Planning Commission approved pre-zoning plans for the area. The Planning Consultants for Portola Valley recommended that most of the ranch be preserved for recreation and open space, but it set aside 90 acres north of San Francisco Creek for "research and administrative uses." Since access to this 90 acres is limited to Alpine Road (unless Stanford provides another road from Sand Hill Road), the consultants recommended that density be limited to 10 employees per acre. They also indicated that Stanford might want to provide housing to meet the needs of the new employees.

In late October, 1969, the Portola Valley Town-Council and Planning Commission approved Councilman Brown's suggestion that low-income apartment units be included in the general plan and rezoning. The suggestion provided five acres for housing, about 60 to 100 apartment units.

The residents of the Mid-Peninsula still have a good chance to see that Webb Ranch is developed, or left undeveloped, in their best interests.



SORRY... ONLY WEALTHY PEOPLE ALLOWED (WHO DON'T HAVE A HOUSING PROBLEM).

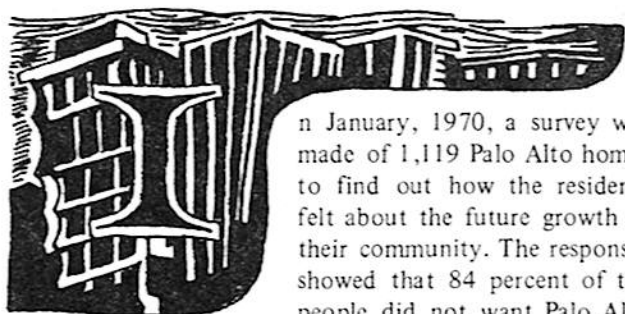


Welcome to Stanford Industrial Park



Palo Alto Development

Palo Alto is under the axe, or the wrecker's crane, to be more accurate. In the name of a "high quality" city, developers are preparing to tear up the downtown neighborhood and replace it with high-rise office buildings, a hospital for rich people, exclusive apartment towers, parking garages and big new roads. For the foothills, a dense concentration of high-priced housing is planned. The people, when asked, say they don't want any of this. But the developers control the city government.



In January, 1970, a survey was made of 1,119 Palo Alto homes to find out how the residents felt about the future growth of their community. The responses showed that 84 percent of the people did not want Palo Alto "larger in terms of population," and 81 percent said no to "larger in terms of industry." A huge majority also favored preserving the foothills as park or open space, and was willing to pay increased taxes to do so.

The poll, conducted by the Palo Alto Residents' Committee, was yet another sign of the schism between the people of the Mid-Peninsula and the governments that are supposed to serve their needs. City councils and planning commissions, controlled by the interests that will profit from expansion, are pushing ahead with developments that will make the Mid-Peninsula a radically different and more expensive area within the next decade. The downtown neighborhood of Palo Alto will have superblocks of high-rise office buildings and a huge hospital; a new expressway will cut through what is now a residential area; and the foothills will be excavated to make way for expensive housing.

DOWNTOWN PALO ALTO

In the early 1960's, a group of landowners, real estate developers, and corporation executives began to see the potential of the University Avenue district in Palo Alto as a major office center. San Francisco was overcrowded. The burgeoning electronics and internationally-oriented industry around Stanford would provide a sound base for a new management center. Landowners and developers would reap huge profits from the resulting increase in land values. Large corporations would profit from the services provided, as well as the expense of office space for their own uses.

There would be costs, of course. Much old, less expensive housing in Palo Alto would be demolished, and the many retired people on limited incomes would have to move elsewhere. The small merchants on University Avenue would have to be evicted. And a completely new network of expressways and freeways would be necessary to handle the influx of traffic. It was clear that the "New Palo Alto" could not be built without a struggle.

Some of the first shots came in 1962 when the Palo Alto Planning Commission made public the Charles Luckman plan for the downtown area. It advocated closing off University Avenue, converting it to a mall, and routing traffic in a one-way loop in the adjacent streets. The blocks facing University Avenue would be zoned for high-rise buildings. Before the Luckman plan was officially promulgated, it encountered a storm of opposition from merchants and residents. The plan was quietly put aside.

"Residentialist" sentiment had a strong voice on the City Council, and real estate interests were frustrated in the mid-1960's in efforts to secure road widenings, rezoning, and other city decisions that facilitated their plans. So in 1967, supported by the monopoly newspaper, the **Palo Alto Times**, the real estate men audaciously initiated a successful recall of the entire City Council. Backed by a \$21,000 campaign fund, their "Committee for the Future of Palo Alto" deceptively portrayed the issue as simple "disunity" in the City Council which caused "confrontation, suspicion and personal feuding." Voters were not given to understand that they were making a choice over the kind of future Palo Alto was to have. The developers' group won 9 of 11 seats.

With undisputed control of the city government, the developers moved quickly. The downtown traffic "loop" was instituted in late 1967, with University Avenue closed to thru traffic. (Bitter resistance from merchants was eventually successful in re-opening University Avenue, for a while at least.) Construction started on a high-rise city hall downtown. And in 1968 the "Downtown Neighborhood

Plan" was adopted, incorporating the essentials of the old Luckman plan. It zones 18 blocks along University Avenue, closed off as a mall, for unlimited height structures. Parking garages and high-rise apartment buildings are favored for the surrounding neighborhood, with the new Willow expressway cutting a huge swath nearby to provide easy access to major freeways. The proposed Medical Research Foundation hospital has a special zoning.

The developers' dream, or nightmare, is moving ahead. The 15-story Hare, Brewer & Kelley building is already completed at University and Cowper streets. Other high-rises would be under construction now, if the Vietnam War had not tightened up the money markets. Tight money has delayed construction, but the planning proceeds rapidly. A "superblock" financial center, closing off Bryant Street, is slated for land owned by Bank of America and the city. A 15-story Wells Fargo building has been discussed for the corner of Hamilton and Waverley streets. A huge concrete foundation for another high-rise is already in place next to the Hare, Brewer & Kelley building. Another superblock development is planned for the California Avenue district elsewhere in Palo Alto.

THE HOSPITAL

Basically, Palo Alto seems headed for development that will serve outside interests, profit a few local people, and harm everyone else who now lives in the Mid-Peninsula. Nowhere is this pattern shown more clearly than with the Palo Alto Medical Research Foundation's (PAMRF) proposed hospital.

After buying up the land in and around the proposed site, the doctors who control the foundation presented their plans for the hospital to the City Council in December, 1968. A 198-foot high, 18-story tower was proposed for two blocks bordered by Channing, Waverly, Addison and Bryant streets. Other medical buildings would proliferate nearby, along with high-rise apartments for elderly people who would come for special medical care.

The hospital would not have obstetrics, pediatrics or psychiatric wards. This is because it is not designed to serve the needs of the existing Palo Alto community at all. The Mid-Peninsula Health Facilities Planning Council, a neutral federally-financed body, says that the area has a sufficient number of beds at existing hospitals and that future needs would best be served by providing additional capacity at those hospitals. The PAMRF hospital would offer highly specialized care, with an emphasis on geriatrics. This kind of care has one of the highest profit margins in the medical care business. Patients who could afford it would come from all over the world to be treated. As Dr. Russel V. Lee, chairman of PAMRF, wrote in *Real Estate Investors Newsletter*, the hospital complex

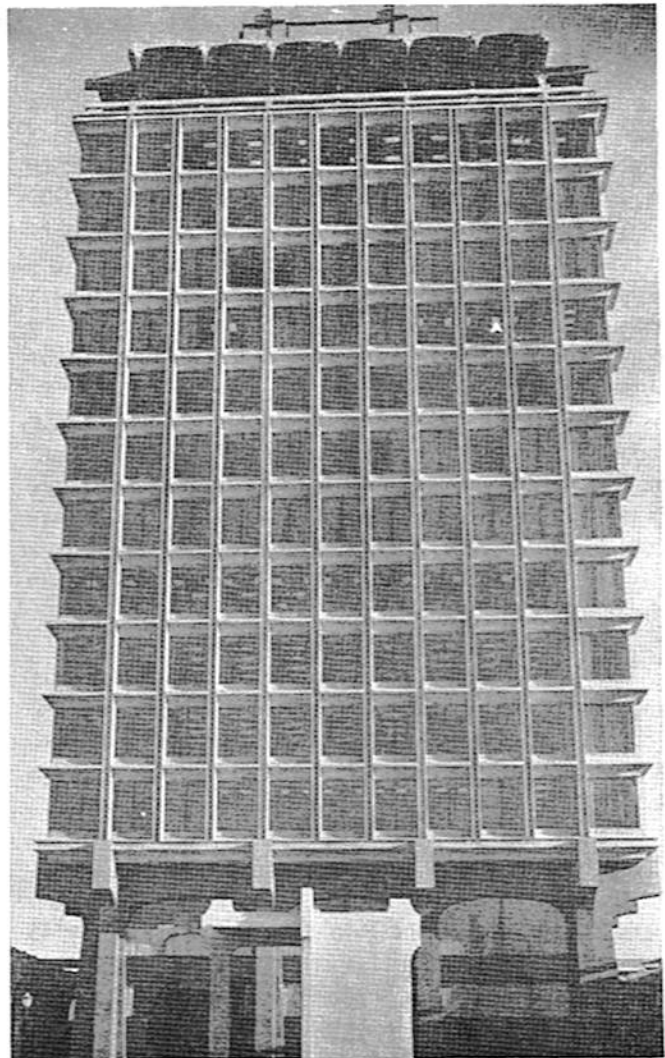
will again put Palo Alto into the forefront of communities in the United States or, for that matter, in the world in the field of producing health services of high quality . . .

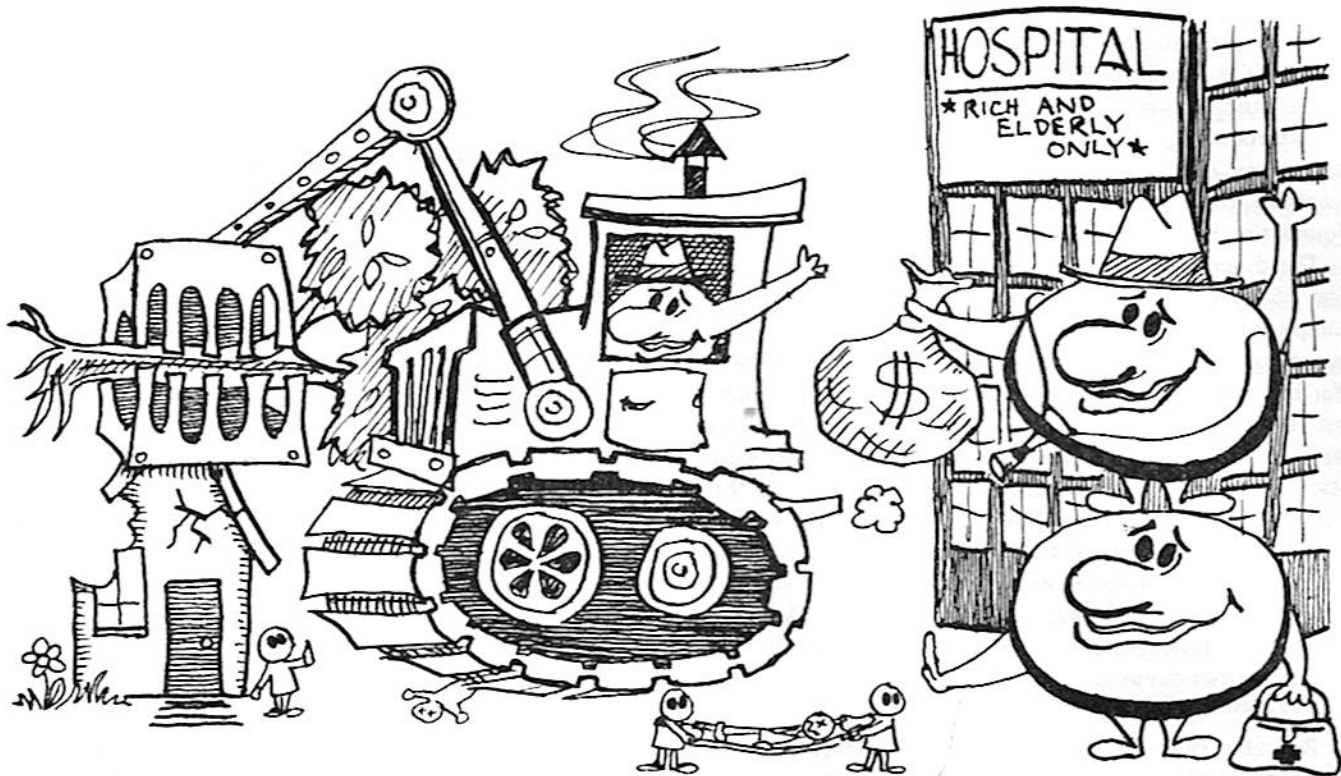
The impact of this upon the whole downtown community of Palo Alto will be immense. With the building of the new City

Hall and this new Clinic facility, the character of downtown Palo Alto will take on a distinguished and sophisticated character which will attract people of the best type to this community and will stimulate the construction of apartment houses, retirement homes and all the other things that go into a community of high quality.

The capacity of the PAMRF hospital is a matter of some question. PAMRF president Ryland Kelley, who also is a partner in Hare, Brewer & Kelley, realtors, has promised the City Council that the hospital will hold no more than 300 beds, but the 650,000 square feet of floor space could contain up to 1,000 beds, based on the layout of other new hospitals. A traffic plan for Palo Alto bases some of its estimates on an assumed 1,200 beds at the site by 1990. It seems likely that PAMRF will request approval for a larger capacity at some later date.

How would this hospital affect Palo Alto? The area around the site contains many old homes that provide some of the less expensive housing available in Palo Alto. The PAMRF would eliminate these homes, thereby adding to





the low-cost housing squeeze in the Mid-Peninsula. It would also endanger the nearby Addison Elementary School, which opened in Fall, 1969 as a multicultural educational experiment. Traffic from the hospital would exceed 3,000 trips per day, necessitating new road development at public expense. The "non-profit" hospital will drive up the city's property taxes by removing \$22,109 annually from the tax rolls. None of these problems will have much affect on the Foundation's directors. Twenty-six of the 31 directors live outside Palo Alto.

When the City Council rubber-stamped the PAMRF request for an essential zoning change, Palo Alto residents began a petition campaign to block the hospital. Organized as the Association for a Balanced Community (ABC), they collected more than 5,000 signatures in 1969 to force a city-wide referendum. The voters will decide the issue in the June, 1970 elections.

WILLOW EXPRESSWAY

The massive expansion of the Stanford Industrial Park and downtown Palo Alto would not be possible without the construction of large new roads to shuttle commuters to Bayshore Freeway to the east and Route 280 to the west. In 1962, the Oregon Expressway was proposed to cut a huge swath through a Palo Alto residential area, and it was narrowly approved in a referendum. Now the Willow Expressway has been routed down along the border between Menlo Park and Palo Alto. It would destroy 45 single family houses and 12 apartment houses in Palo Alto, and 68 more homes in Menlo Park. More homes will be destroyed when the route is extended through East Palo Alto to Dumbarton Bridge. The banks of San Francisquito

Creek, an historic and beautiful stream, will be paved for long stretches.

People who live along the route have organized in protest, but they have not prevailed against the combined power of the State Highway Commission, the downtown developers, and the corporations of the Stanford Industrial Park. Just like the residents displaced by the Oregon Expressway a decade ago, they are weak in their isolation. But a lesson is being learned. As one Hamilton Avenue resident wrote recently to the Palo Alto Times,

With people all over the country suddenly becoming aware of what we are doing to our environment, it is time . . . that we take a look at what is happening to the environment in our own area . . . We don't need this latest extension of the cement deluge that keeps rolling in every direction, and we don't need another Oregon Avenue within the city limits of Palo Alto.

THE FOOTHILLS

Ranging from Woodside through Los Altos Hills and from Stanford Ridge immediately behind the campus to Skyline Boulevard on the crest of the Santa Cruz mountains, the Mid-Peninsula foothills are owned and inhabited by the rich. Those rich have incorporated themselves into three communities: Woodside and Portola Valley in San Mateo County, and Los Altos Hills in Santa Clara County. The few thousand people in those communities have purchased the good life, and they defend it with careful planning. Planning means residential lots of one acre at minimum, no industry, and only enough commercial development to furnish the veal steak and horse feed that is consumed locally. Planning commissions are

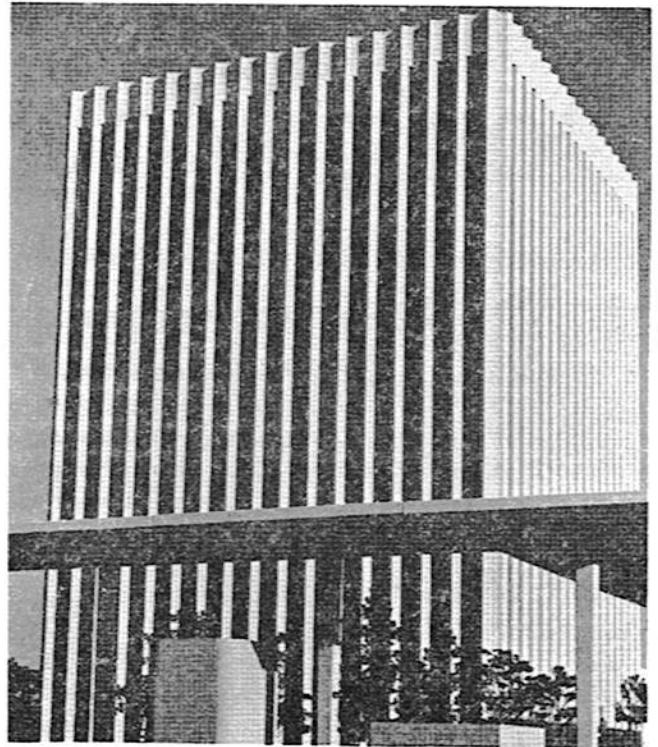
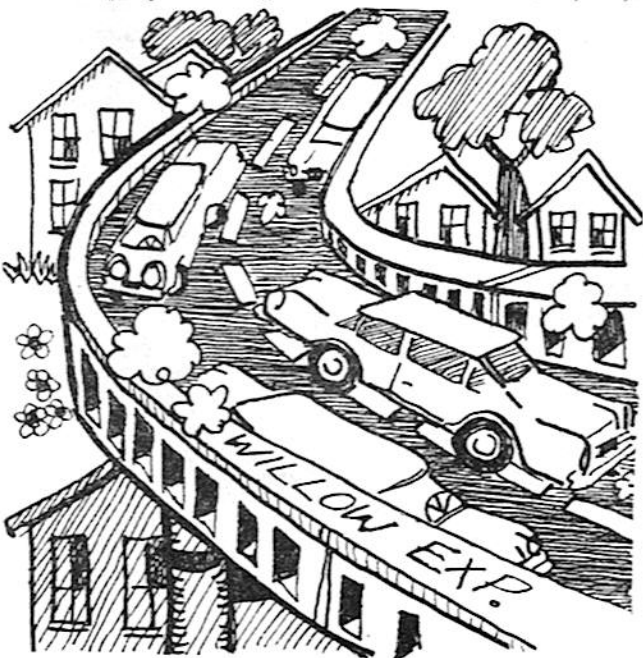
preoccupied with the development of riding trails and the preservation of open space.

All this rustic affluence is currently threatened by the fourth political entity in the foothills: the city of Palo Alto. Gerrymandered with a thin dog-leg running totally over land owned by Stanford University, the Palo Alto city limits stretch up to Skyline Boulevard, incorporating some 7,500 acres of foothill land, including a 1,400 acre city park open only to Palo Alto residents, and a private 18-hole golf course. The rest, almost entirely undeveloped, is owned by some 20 individuals and corporations, in parcels ranging in size from 100 to 750 acres.

Mindful of the despoliation that can occur when the motive for fast profit is coupled with single ownership of large tracts, a covey of Palo Alto conservationists and their foothill-dwelling friends secured in 1969 a \$144,000 "Foothill Environmental Design Study," financed by the taxpayers of Palo Alto. This study is now being done by the San Francisco-based firm of Livingston and Blaney, with reports being released one by one.

Livingston and Blaney correctly identify the key to future foothills development as the 530 acre parcel of land immediately south of the present Arastradero Road. This single parcel, lying between Stanford's Felt Lake area and the private 125-acre Palo Alto Hills Country Club, is owned by a Philadelphia firm with the double-think name of Land Resources, Inc. Who owns Land Resources, and who dictates strategy for exploitation of those resources, is not entirely clear at present. The head of Palo Alto's Planning Commission, Jack Giosso, has disqualified himself from Planning Commission votes regarding Land Resources because of his interest in the firm.

Land Resources is trying to secure approval for a development plan that calls for 1,776 high-priced residential units and store and office space to employ 1,000 to 1,250 people. To buy a house will cost over \$70,000; a

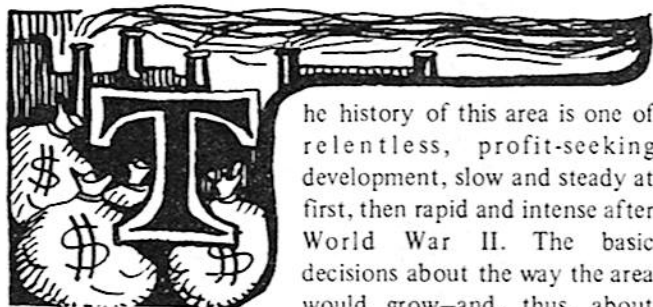


piece of a "town house" will take more than \$34,000. Apartment rents are currently scheduled at \$160 and up. Clearly, this housing would not be available to the people in the Mid-Peninsula who need it most—the low and middle income groups who are being squeezed out of the area by high rents and the demolition of old housing.

The Livingston and Blaney reports hint at the problems posed by a development like the one planned by Land Resources. The impact on the foothills would be great. Old roads will be widened to four lanes; new roads will be bulldozed out. Schools, firehouses, sewers and water to keep the lawns green will be moved in. How that water flows once it's in the ground must be learned. The burdening of slopes with new underground water can cause disastrous landslides a long distance downhill from where the water soaks into the ground. The land's potential for earthquakes poses real development problems too. The San Andreas Fault runs just south of Foothills Park, and two smaller faults criss-cross Land Resources' acreage.

Land Resources' proposal has been criticized by the Palo Alto government which asks only that the housing density be reduced. The City Council does not challenge Land Resources' right to develop the land as it chooses for maximum profit. There is a tremendous need for low-income housing in this area; a sound project could be developed in the foothills that would meet this need while respecting the natural environment. There is also strong feeling in the community for keeping some of the foothills as open space. However, Land Resources and other developers are not interested in the needs or the wishes of the people, nor is the City Council

Don't Mourn, Organize!



The history of this area is one of relentless, profit-seeking development, slow and steady at first, then rapid and intense after World War II. The basic decisions about the way the area would grow—and, thus, about

the conditions under which people would live—have been made by men of wealth and power, who control governments for their private interests. The men who first owned the missions and farms, and then the factories, banks, railroads and universities, have set the context in which we struggle to survive. Usually they have managed to rule without strong opposition, or to suppress opposition when it arose.

In the time of the Indians it was the Spanish explorers and missionaries who came to impose their will. Costanoans did not organize any resistance and were soon enslaved or driven away. When Leland Stanford and the rest of the Big Four subjected tens of thousands of Chinese to sub-human conditions to build the Central Pacific across the Sierra, hundreds perished because they did not organize themselves. All of California suffered under the grip of the Southern Pacific monopoly for almost thirty years, and with scattered exceptions, they did not bind together to challenge their wealthy predators. The only group to receive even half-decent treatment from the railroad was its own white workers, who did organize to secure some basic dignity and a moderate income.

The grip of the SP monopoly was threatened only when the muckraking and intense public outcry of the "trust-busting era" finally forced some regulation on the power of this and other monopolies. Regulation and anti-trust suits did not check the power of wealth, and the slightly fettered giants continued to grow. The labor movement that grew up early in the century never became strong enough to challenge the power of the big corporations, and was devastated in the repression that came with the First World War.

Even during the shattering, protracted crisis of the Great Depression, when people suffered starvation and endless misery while food was burned to keep prices up, corporate power withstood the onslaught of riots, sit-ins and massive organizing. When labor militancy resumed after the Second

World War, unions were purged of their most active organizers by the anti-communist hysteria of the Cold War.

The Mid-Peninsula grew up in the peaceful Fifties, the era of generous Cold War spending. There was little awareness of the monstrous problems which this vast "progress" was creating, until the Sixties. In this decade the spectre of organized opposition to racism, poverty, war, imperialism and the rape of our environment has arisen to confront the men of power: the corporate directors, the bankers, the landowners, and university trustees and their politicians. People have begun to say once again, and often in new and forceful ways, that their needs must be the basis for deciding how the land and resources shall be used, not the profit of a few or growth for growth's sake.

People have begun to realize that the decisions which are being made for them are bad decisions that are leading to the waste of lives and resources around the globe and throughout our own badly-scarred country. While many groups have come to realize their oppression in this decade, it is the struggles of the blacks at home and the Vietnamese abroad that have given fuel to the many conflicts that now rend the country.

Blacks began a drive in the early Sixties to secure their "civil rights" by petition, and ended the tumultuous decade more adamant than ever in a demand for liberation. Mexican-American farm-workers realized too, that they had to organize to break the power of the growers in order to end the miserable conditions of America's largest single-industry labor force, and ended the decade locked in a strike and boycott of grapes. A decade of labor peace began to disintegrate during the Sixties as wildcat strikes, radical caucuses, extended disputes and boycotts became more common, and organizing drives began in new fields. Teachers' unions and university employees' unions, like the American Federation of Teachers and the United Stanford Employees at Stanford, grew rapidly.

It was the powerful opposition of the Vietnamese to the American military that overshadowed the decade, and intensified and sparked many of the conflicts at home. Naked American power was confronted, stalemated, and even threatened with defeat, while at home interest rates and inflation soared, campuses exploded and repression set in. A whole generation of young people learned the necessity and value of organizing to secure the interests of the people over the power of the rulers.

Those of us in Grass Roots have learned this truth as

well: that the people of the Mid-Peninsula can gain control over their own lives only by organizing together. We know that the area has been developed and run by men with a different set of assumptions than our own, and that they threaten to destroy the future unless they are checked.

These men assume that they and other men with land and wealth should run major institutions as they see fit. They argue that they alone, are competent to make decisions that affect everyone. They claim that the greatest growth of profits guarantees the welfare of the people, and that in any conflict between the two, profits must be preserved. And they insist that social problems created by their decisions and actions are not really their responsibility.

Building on these assumptions, they have created social chaos. We cannot accept these values or the world they have built. We hold that wealth confers no right to power over the governments and institutions of the area. We argue that any institution should exist to serve the needs of

people, and that people in them can run them best on the basis of their real needs. We insist that the welfare of people here and abroad must replace the need for growing profits as the criteria for making decisions.

Whether we will allow ourselves to be pushed and molded by forces "beyond our control," or whether we will struggle together to understand our situation and act together to change it, is finally up to us. Whether the remaining land of Stanford University—the prime mover in the economic development of this area—and the lands of the surrounding areas will serve the needs of the few or the needs of the many can be our decision.

We have tried in this booklet to look at the past and present development of the area to understand who makes decisions and what their impact is—the problems they create and some tentative solutions to those problems. We ask your help in reaching the thousands of people in this area with this booklet, and we ask you to join us in the struggle to gain control over our common life.



SELECTED REFERENCES

History

- Coffman, Arthur, AN ILLUSTRATED HISTORY OF PALO ALTO
Elliott Orrin, STANFORD UNIVERSITY
Kolko, Gabriel, THE POLITICS OF WAR
Lewis, Oscar, THE BIG FOUR
Mirrielees, Edith R., STANFORD
Morgan, Jane, ELECTRONICS IN THE WEST
Peninsula Observer special issue, "Who Owns the Land?", October 1969
Wilson, Neill C. and Frank J. Taylor, SOUTHERN PACIFIC

Jobs & Population

- Bank of America, FOCUS ON SANTA CLARA COUNTY, August 1969
Santa Clara County Planning Department, A STUDY OF THE ECONOMY OF SANTA CLARA COUNTY, December, 1967
Santa Clara County, FACT SHEET ON LABOR

Housing

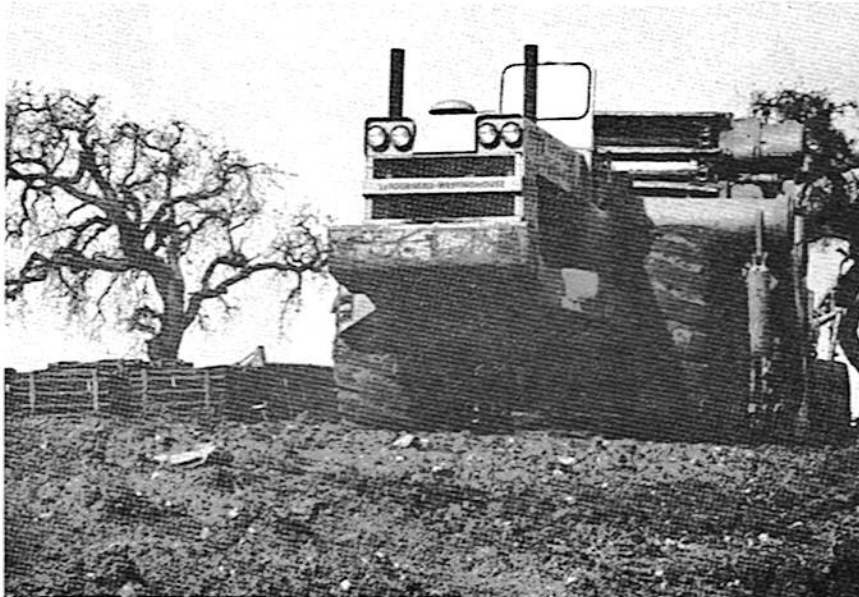
- Lockert, William H., REPORT TO THE URBAN COALITION
City of Mountain View, REPORT ON PROBLEMS OF SECURING LOW-INCOME HOUSING
Wilson, Patricia, THE EFFECT OF STANFORD UNIVERSITY ON THE LOCAL HOUSING MARKET
(unpublished thesis)

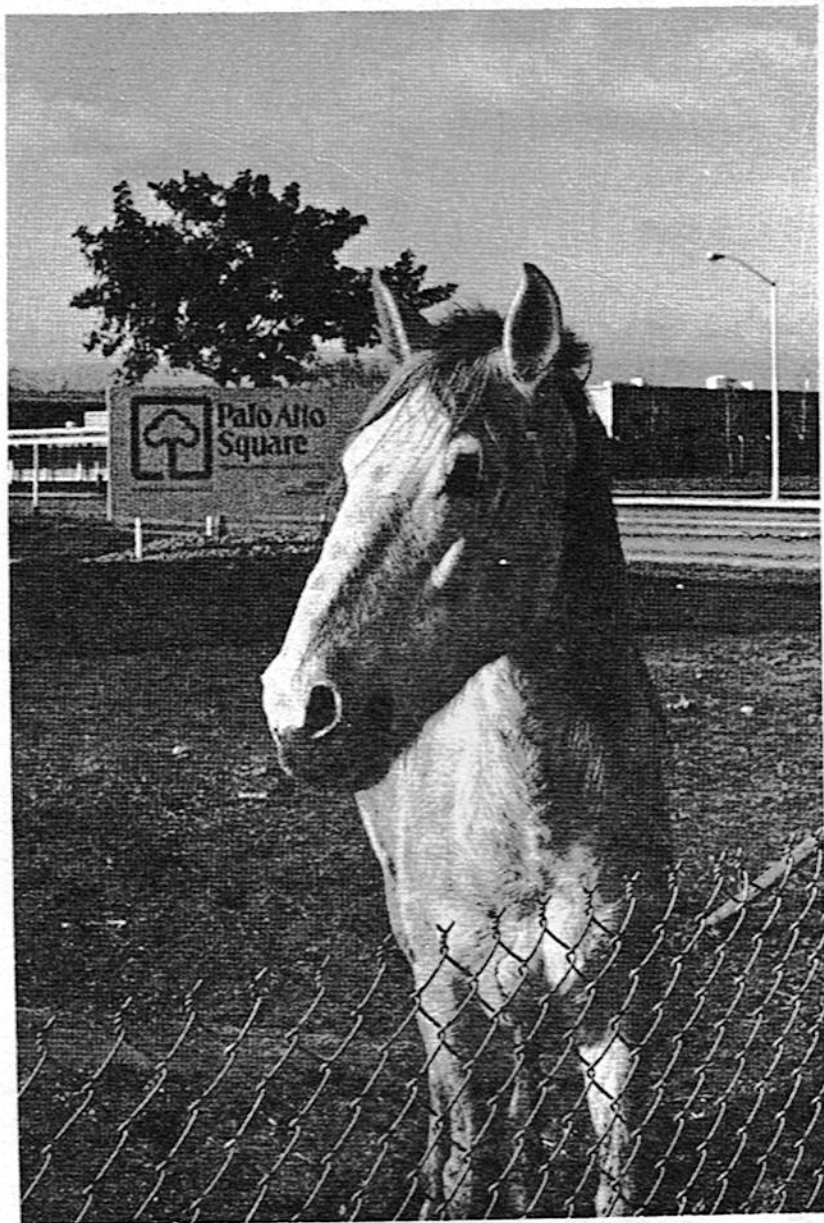
Ecology

- Anderson, Edgar, PLANTS, MAN AND LIFE
Dreisbach, Robert, HANDBOOK OF THE BAY REGION
Reinow, Robert and Leona, MOMENT IN THE SUN

Palo Alto

- Association for a Balanced Community, A MONUMENTAL DECISION
Palo Alto Planning Commission, POLICIES AND PROPOSALS FOR THE DOWNTOWN NEIGHBORHOOD, 1968





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