



SLAC

ANFORD

OAK CREEK APTS

ENGINEERING SCHOOL

HARE BRENER KELLEY

SAN FRANCISCO CREEK

WILLOW EXPRESSWAY PLAN

SRI

SECRET

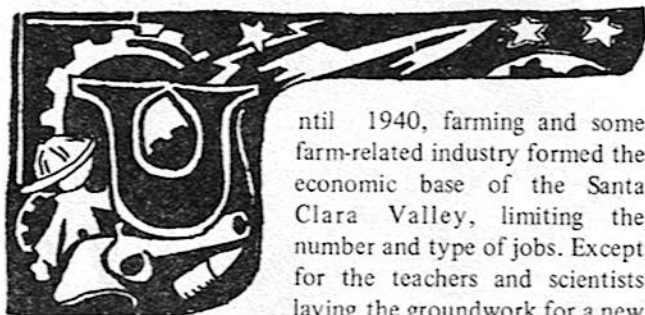
THE MIDPENINSULA
1970
"THE LOGIC OF DEVELOPMENT"
GRASS ROOTS

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.

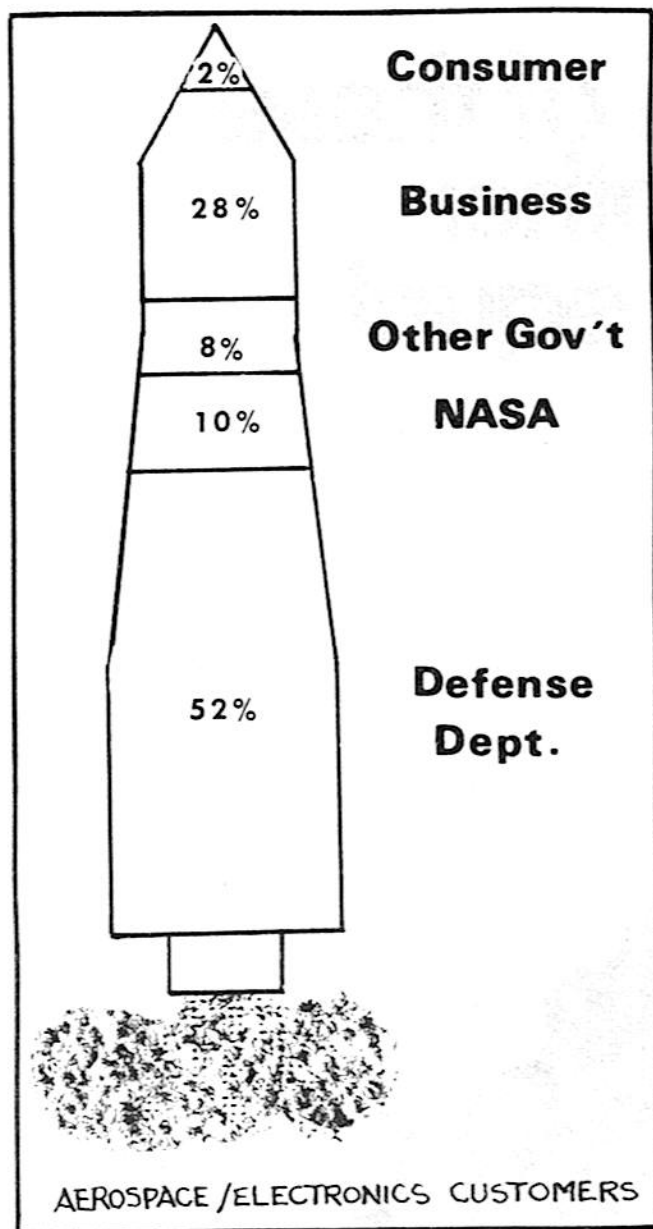
If you're doing business, or if you plan on doing business with the world's eighth richest "nation," you'll get the assistance you need from the people at Crocker-Citizens. We know as much about California as we know about banking. We have specialists in every major area of California business, industry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

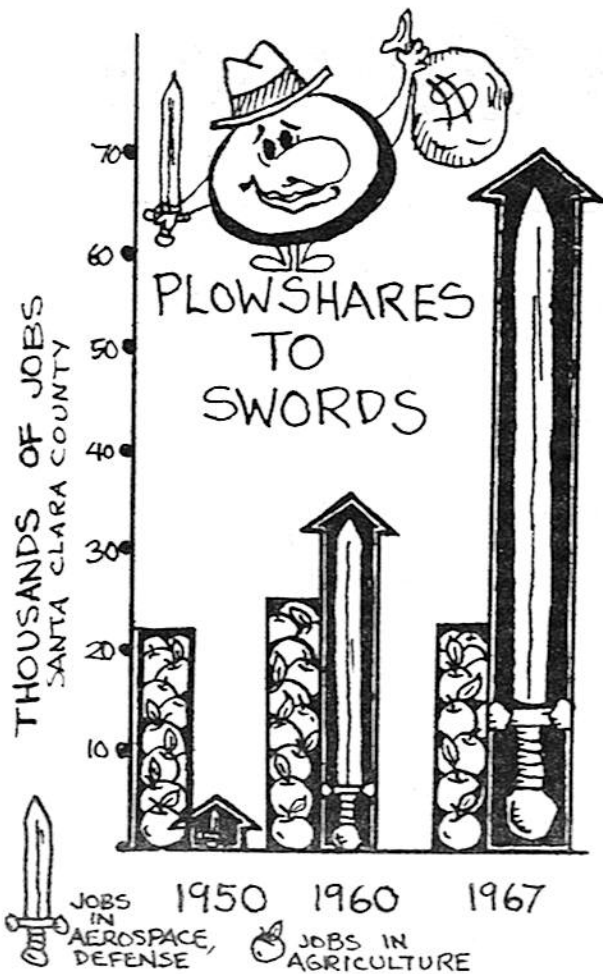
inflation and in a high cost-of-living area like the Peninsula. One of the most important effects of low wages is to set a ceiling on how much people can afford to pay for housing. Most low-income people who work in Palo Alto cannot afford to live there: in 1960, 33 percent of the people who worked in 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..."

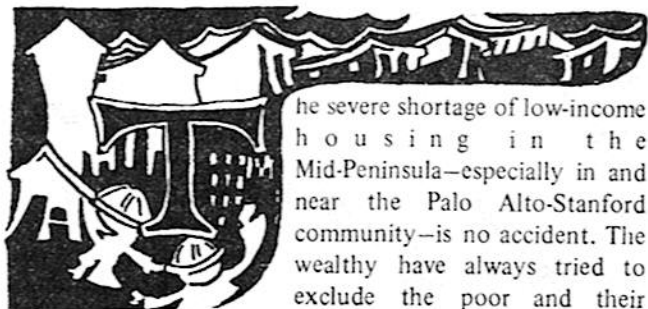
Temporary or not, a vague uneasiness troubles the area. Public pressure to reduce defense spending coupled with Nixon's budget cuts to slow the war-caused inflation threaten increased unemployment. Our local economy is



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."

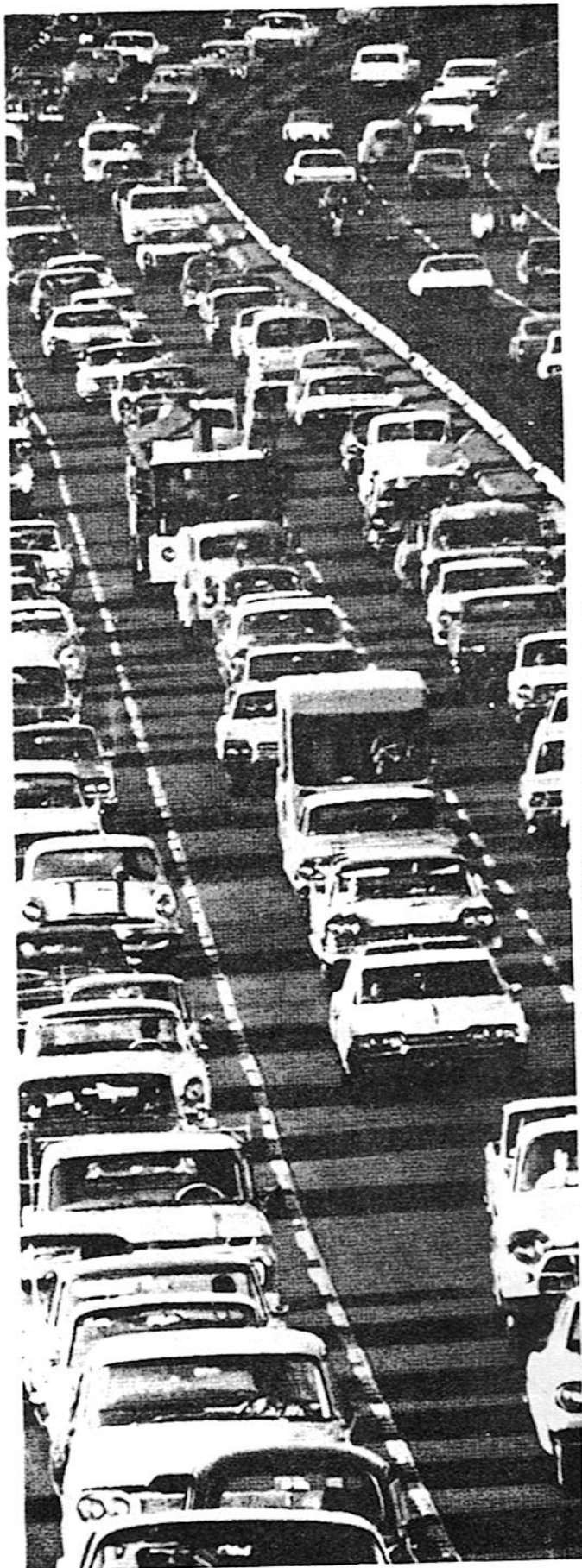
Stanford Sets the Tone

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.

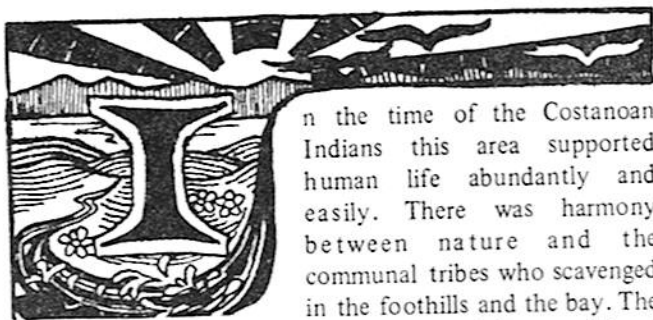
This is not to say that these groups should not build housing. It is simply to say that their limited efforts will not be enough. Stanford's on-going development of the Coyote Hill Industrial Park and the Palo Alto Square financial center will fill their projects with some of the 4500 to 6000 new employees. 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

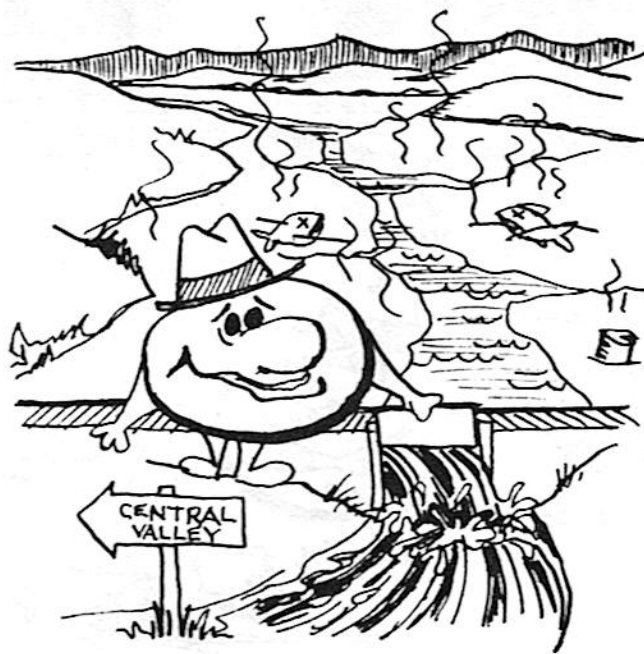
suffer from their choice.

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.

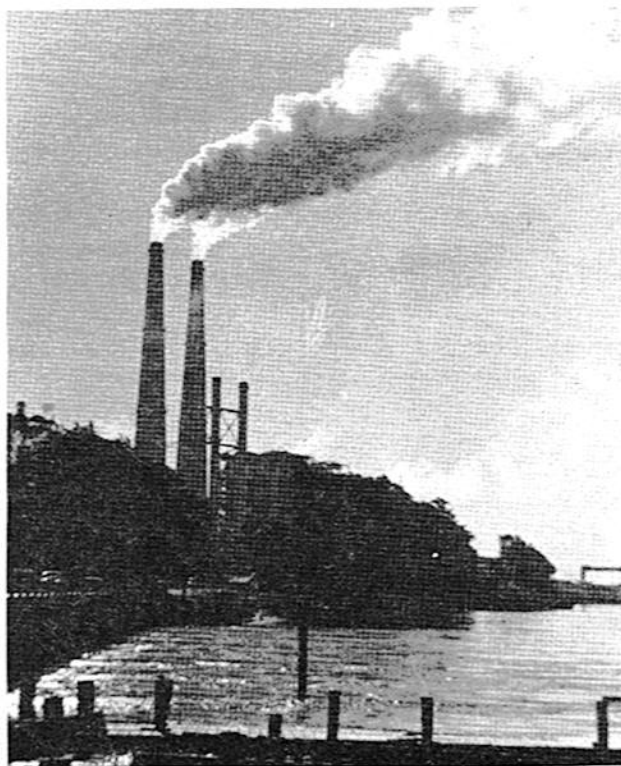
In the Bay Area, as we mentioned earlier, the filling of marshlands has destroyed a major source of oxygen. The only process which removes the plentiful carbon dioxide from the atmosphere is photosynthesis by plants. The marshland, smothered by trash alone, could have removed two-and-a-half million tons 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.

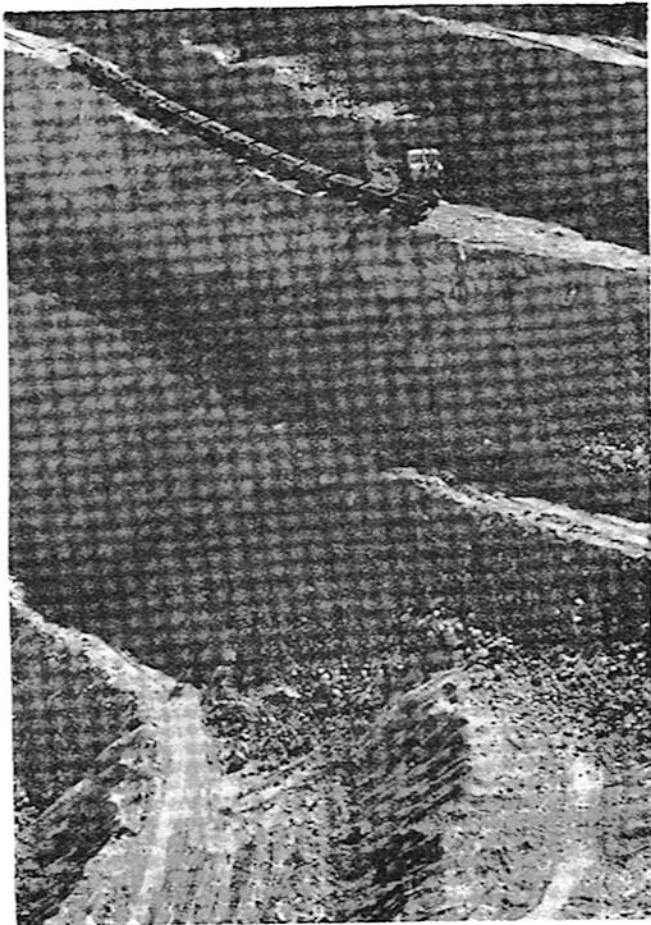
In the Mid-Peninsula these industrial polluters exist alongside the so-called “clean” industries, like semi-conductor plants, which emit no visible pollutants. The most noticeable pollution attributable to these plants takes the form of the automobile exhaust which their commuting employees produce every 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