

PART III. SRI'S GOODIES

Even SRI's enemies are quick to point out what appear to be its obviously constructive activities in the physical and social sciences. But, as with other SRI activities, they are not always what they seem.

No one needs be told air pollution is of serious concern in California, particularly in the Bay Area, which is cursed with the third most critical air pollution problem in the U.S. SRI began research on air pollution almost immediately after its inception, but SRI's smog research differs from its defense work only in degree: instead of conducting research aimed at protecting people from air pollution, SRI gathers information which helps polluting industries escape public condemnation and more stringent regulations.

In 1949 and 1952, SRI joined the California Institute of Technology, UCLA, and USC in sponsoring two symposiums on air pollution at which scientists, industrial representatives, and government leaders were treated to lectures dealing with smog analysis and detection methods. But SRI smog research at the time was primarily funded by business organizations from industries among the prime polluters, such as the Western Oil and Gas Association.

The November, 1948, issue of SRI's news bulletin, *Research for Industry*, cites a survey of people in Los Angeles, the greater number of whom attributed smog to industry. But an investigation at that time under the direction of SRI's supervisor of air pollution research dealt only with the impact of the Los Angeles climate on smog.

More recently, when pollution from the Pacific Gas and Electric (PG&E) plant at Moss Landing aroused a furor among citizens in Monterey County, PG&E brought in the head of SRI's Environmental Research Department, Elmer Robinson, as one expert witness. PG&E's president, Shermer Sibley, sits on the board of SRI, as do four other past or present directors of PG&E or its subsidiaries. Robinson is a member and past chairman of the Bay Area Air Pollution Control District (BAAPCD) advisory council, an agency which, by failing to enforce existing pollution regulations, often seems to be working more for the pollutor than the consumer. Much of Robinson's research at SRI is sponsored directly by the very industries the BAAPCD is expected to control.

Robinson's testimony concerning PG&E's Moss Landing plant exonerated the company and contradicted that of biologists from Stanford's Hopkins Marine Station in Pacific Grove and scientists from UC Santa Cruz and Monterey Peninsula College.

According to Ed Munson, Air Pollution Control Officer for Monterey County, the PG&E plant dumps more nitrogen dioxide into the air than all the power plants in Los Angeles county. He says PG&E is responsible for ninety per cent of the nitrogen dioxide pollution in the Monterey region, which harms crops and causes emphysema.

Smog and Gas

A research project Robinson carried out with Robert Robbins is reported in the December, 1968, issue of the *SRI Journal*. Sponsored by the American Petroleum Institute, it exonerates industrial polluters by emphasizing natural sources of pollution, such as swamp gas, decaying organic matter, and vegetation. Robinson overlooks the hydrocarbons and sulfur dioxide which are chief factors in air pollution and products of oil refineries.

At both the University and SRI, those who do smog research are often the same men who work on Chemical and Biological Warfare (CBW). Robinson worked with SRI's CBW-men, William C. Thuman and Richard D. Cadle, on building an important piece of equipment for their work, the SRI aerosol camera. In a 1954 article in the *Biological Photography Association Journal*, he described its importance: "The armed forces may use aerosols defensively as in smoke screens or offensively in chemical or biological warfare."

SRI's social science contributions are also often thought to be beneficial. These began with a 1952 conference bringing the SRI Associates together to discuss application of social science to industrial problems. Dean Ernest C. Arbuckle of the Stanford Graduate School of Business explained that "in the near future, it is possible that private business may take over from government the task of guarding the humane aspects of our industrial civilization."

What this turns out to be is guarding the boss from his employees. SRI publications document frequent calls for psychological research on worker morale, methods of screening job applicants, of increasing worker efficiency, perfecting on the job training, and the like. Social science at SRI does not generally provide models for effective labor organizing, police control boards, or self determination by students.

In fact, SRI's education research frequently appears to channel, rather than free, students. Dr. Howard Vollmer of the SRI research staff wrote in the *Daily* last fall that "the shift to social problems has taken place in the Institute in matters like educational, urban, and minority problems"—problems by the way, which industry and

government-funded researchers are most likely to see as counterinsurgency affairs. "Funds from the Defense Department," Vollmer said, "are concentrated around behavioral and social areas and primarily concerned with improving efficiency and job satisfaction."

BART Men

SRI development of designs for urban mass transit, too, seems more likely to serve the interests of the industrialists on the board than the people on trolleys. SRI did some of the feasibility surveys which preceded the creation of the Bay Area Rapid Transit system (BART). The push for BART began in the early fifties when a group of SF businessmen connected to the Blyth-Zellerbach Committee initiated the studies. The committee, a corporate group supporting urban renewal, was formed by Charles Blyth and J. D. Zellerbach, both founding directors of SRI. Blyth was also a Stanford trustee.

As a part of the development of a downtown San Francisco business center, BART was to enable suburbanites to commute to work; but beside providing inadequate service to city dwellers (it avoids Hunters Point and bypasses the Oakland ghettos), BART financing will be a burden to those least able to pay by increasing the tax burden and by raising property values along the route.

These studies, and others regarding plans for school desegregation, protection of business investments in the city, "reverse commuter" facilities, and the development of Oakland, raise much the same questions as other SRI research: do we approach the problems from the standpoint of business or from that of those the research ultimately effects?

What we mean by constructive research is not research framed by one self-seeking interest group, which happens to have the money to fund it. The inference can be drawn that all too frequently the SRI researcher, under pressure to sell a product, has approached a problem uncritically and unable to separate himself from the view of his contractor. Unfortunately this is characteristic of most SRI activities. The quality of work at the Institute, particularly in the social sciences, declines as it aims at preserving the status quo rather than meeting people's needs.

We have discussed some research touching upon the critical problems of cities but which has not been chosen by the people of those cities. Such work is at the least irrelevant and at the most, detrimental to the needs of people. Guiding Institute research policy both to encourage self-sponsored research rather than work responding to a fluctuating market and to increase the "relevance" of such work to all people is important in redirecting policy of the future Institute.

While redirecting policy is more difficult than restricting research, we must take steps in that direction. Obviously those people affected should be asked about the needs. To ensure that SRI meet the changing social needs, we must institute continuous review and reinterpretation of policy. Only this way can we guarantee the future "benefits" of research, and a critical approach to solutions.

PART IV. SOME GUIDELINES FOR THE FUTURE

Within this framework of critical interchange and closer control, it is clear that the university community must develop guidelines and mechanisms to insure a new evolution in SRI's development and in its research programs. There needs to be some institutional means by which the university community can monitor and direct this evolution. We recommend that the form which such an institutional mechanism takes be one which can more accurately reflect the desires of an evolving community. One example might be a review body made up of elected faculty and students with knowledgeable trustees, their appointed administrators and groups affected by potential research serving as advisors.

Such a body would not provide day-to-day administration for the institute but rather the following:

1. Do projective planning for SRI as a whole, including the general direction of research, and
2. Insure that SRI research is within "moral limits" and is of "optimum social value," and
3. Monitor the technical quality of the staff and of the research.

The technical quality of the staff can best be monitored through a good personnel hiring procedure. The technical quality of the research may perhaps best be monitored through low level review committees in conjunction with relevant university departments.

The function of the second activity is to begin weeding out the morally objectionable and undesirable research which is being carried on at SRI. At present there are at least three kinds of research which seem to fall into this category and have been the object of widespread community protest:

- 1) Chemical, biological or radiological warfare research.
- 2) Counterinsurgency research.
- 3) Research directly related to the war in Southeast Asia.

We reject the contention that any research the U.S. government desires to fund is acceptable and that questions of morality and political responsibility must be directed toward the government policy guiding the uses to which the research will be put. To accept counterinsurgency research in Thailand, as SRI has done, is to actively assist in the prosecution of government foreign policy in that area. To accept the work is to endorse the policy. If one rejects the policy one must reject the work. Neutrality is impossible.

Because many of these activities are classified or secret it is difficult to phrase with precision, rules which could be counted on to prohibit these activities. One can only suggest a tentative formulation:

1) SRI shall not embark upon any research which is designed or likely to lead to the development of information or theories useful to the conduct of chemical, biological or radiological warfare. Nor shall SRI engage in any basic chemical, biological or nuclear research supported by those military agencies responsible for the development of CBR weapons systems. Examples include: development of weapon delivery systems, techniques of utilization, basic research on carriers or strains of diseases, meteorological studies for use in dissemination techniques, "riot" control applications, etc.

2) SRI shall not take any contract which has as a purpose advising on counterinsurgency, participating in counterinsurgency, or developing the capability for counterinsurgency anywhere in the world both within the continental United States and beyond its borders. Examples include: estimation of social, economic or military requirements and methods in counter-guerrilla and "pacification" programs, development of specialized techniques such as electronics intrusion detection devices, studies of population control programs such as the "strategic hamlet" plan, and ethnographies of "unstable areas." The operations of the RSSC (Regional Security Study Center) located in Bangkok should be immediately ceased.

3) During the continuation of the war in Vietnam, Thailand, Laos, and Cambodia or in the event of hostilities involving the United States elsewhere in Southeast Asia, SRI shall not take contracts from any agency of the federal government or from any firm in contractual relationship with the federal government which requires any studies or efforts substantially related to the war. Examples include: any of the above related to the war, collection of data on village organization or political support in Southeast Asia, land reform for AID, logistical support studies.

Because of the difficulty in interpreting and applying such rules it is *imperative* that the system of review and monitoring include a constant exchange between the review body and the community at large. Regular publication of policy and contracts is one approach. It is quite conceivable that such a body might fall rapidly out of touch with the community it is supposed to represent. There must thus be the provision of mechanisms whereby not only the members of the review body could call the general direction or specific projects into question, but also that any member of the community can bring his views before the review body as a whole and before the community. It is unthinkable that views remain static and that what is acceptable today will be acceptable tomorrow and for this reason the possibility of change must be institutionalized.

One of the reasons why the University is going through a crisis today is that large parts of the community no longer support research that was once quite acceptable and that the only "legal" line of action open to them is through the Board of Trustees—less-than-candid Trustees who cling to the outdated view of University government as a hierarchical, top down, authoritarian structure and who refuse to recognize the need for community decision-making on vital University issues.

It seems clear to us that given the concerns of many of the Stanford community there should be no SRI research in the three areas outlined above and that community control over Institute policy and activities be established so that the Institute can function in a manner more harmonious with an evolving University.

There are two further problems related to selecting the best guidance for SRI research which have been ignored in the preceding discussion.

1) The first is the question of adequate representation in the review body. Aside from the question of whether any group can be represented by one or a few of its number there is the harder question of whether or not the right groups will be represented at all. For example, what of the monitoring of socio-economic or political research on urban areas—should not city dwellers as a class of those most affected by the research have some say in what kinds of work will be done? In particular, with respect to the biggest urban problem: that of slums, poverty and racial ghettos—should not the poor white and black slum and ghetto dweller have some part in reviewing the types of research done by an organization such as SRI, rather than just leaving the choice to corporations or city governments who will pay for what they want? How can one hope to insure that research is not performed which is detrimental to the urban poor? How can they be represented? Do "informed intellectuals" have the right to speak for them? Or should members of their number be sought out?

Another, more difficult example is that of SRI international research affecting peoples in other countries. In the past SRI has been guided by the "foreign policy of the United States government." This has meant that SRI has unquestioningly assumed that the best interests of the Vietnamese people are represented by the Saigon government since it is an ally of the U.S. and is thus an adequate judge of the value of contracts affecting those people. Is this an acceptable method of determining the social desirability of their research? We think not.

Even when SRI has sought counsel from non-governmental foreign nationals about the desirability of their work from the local viewpoint they have turned to corporate leaders, "key business executives," as the most authoritative representatives of the interests of the local population. Is this a satisfactory choice? Why not peasants rather than industrialists? As much as SRI claims to be politically neutral and objective in its non-military research, we hope that our arguments make strikingly clear that here too it consistently makes political choices and that its entire world view is politically oriented by its close identification with "free enterprise."

It is obviously a complex and difficult problem to find a method of representation which best represents the interests of a majority of the people of an area to be studied. Yet it is also just as obvious that such an effort must be made and that the present method be rejected as unacceptable.

2) The second problem relates the question of control to the dynamics of a productive research organization. In theory a not-for-profit research institute can allow its personnel to generate exploratory research because it is not heavily tied down to the constraints and values of the marketplace. Thus one can, by picking professional personnel with capabilities in certain areas expect to expand imaginatively in those areas with little guidance or control. In fact, SRI has not used its potential to sponsor exploratory research to the best advantage. Rather SRI has followed a policy of rapid growth and hence has not freed enough funds for much in-house sponsored research. Furthermore, SRI has very much "followed the market" in this effort to expand (witness the evolution described in part II). Finally while the SRI management has encouraged expansion into new areas "where the money is," such as the Naval Warfare Research Center in response to the availability of funds from the Defense Department, or the Agricultural Research Center in Pasadena backed by California agri-business, it has not encouraged self-directed exploratory expansion into areas such as urban problems or natural resource preservation until very recently.

But not only should a not-for-profit organization realize its potential of self-directed research, but to do so it needs to allow considerable freedom to the individual researcher in order for him to contribute most creatively within the context of a research team.

Without freedom from undue "bring the money in" pressure researchers can't be creative or critical. Without freedom from financial pressure, project managers may take on contracts that are undesirable,

unethical or beyond capability. Without freedom to question ideological assumptions, the research product may be morally objectionable or turned to nefarious uses. SRI policies often seem to be directly detrimental to the functioning of such freedom and, while unusual, cases of coercion and pressure being applied on low-ranking personnel to get them to work on projects for which they have no interest have been brought to our attention.

Such freedom, of course, in no way inhibits the setting of overall research policy and the determination of the criteria under which research will be accepted or rejected.

There is another area of concern over the present relationship between SRI and the University: a financial one. SRI has an annual discretionary cash flow estimated somewhere between \$1.5 million and \$4 million. As owner of SRI, Stanford could appropriate these funds for use elsewhere. However, considering that the University to date has refused even to allow SRI to engage in endowment fund raising for fear of conflict with the University's fund raising efforts, and considering that the lack of free endowment has been one of the principal reasons why SRI has not been able to expand self-directed exploratory research, it would be hard to justify such expropriation if the expansion of such types of research is desired.

A View of the Future

Central to the forgoing discussion is our feeling that closer ties between the University and SRI can be of considerable advantage to the University. Closer ties can also be seen as beneficial to SRI, if one refuses to visualize the SRI of the future as a market-following and profit-seeking, "not-for-profit" institution.

If we accept the types of controls suggested on some SRI research and the idea of University guidance to overall institute policy, we feel that we can look forward to the institute becoming less and less dependent on the market, on private enterprise and on defense contracts, and more and more responsive to the desires of the University community to move in the direction of more exploratory applied research on critical social and economic problems. One could expect less study of helping corporations expand abroad and more study of economic development. One could expect less work for the timber industries and agri-business and more work on natural resource preservation and environmental studies. One could expect less work for those corporations which have proved incapable or undesirous of solving the urban problems of unemployment and housing and more research on programs to eliminate poverty and misery through new approaches, such as governmental decentralization and cooperative enterprise.

There can be little doubt that if through new administrative connection and cooperative efforts, University departments became more influential in the formulating and execution of SRI research programs, new directions would result. Such cooperation would not only provide greater resources and research opportunities for University faculty but also give the staff of SRI the possibility of being more closely associated with the University. As stated much earlier there is no suggestion being made either that SRI personnel be assimilated into the University, or that faculty drop their teaching functions. Rather, new and closer ties such as those mentioned provide the opportunity for members of each institution to benefit from the skills and knowledge of members of the other. One might expect joint appointments to increase and one would certainly expect the educational and professional opportunities for students, faculty, and research workers to expand considerably.

Thus far we have only addressed ourselves to the questions of the need for some kind of University community control over SRI and to three probable areas of immediate concern. We have tried to define a structure, however, which institutionalizes the means of change and feel compelled to suggest that in the future there may be other, broader areas of concern to the University community which may strike more to the heart of the institute than the limited concerns expressed until now. For example, the question has already been raised in the community-at-large whether applications of technology for military and industrial clients, of restricted access and having no educational function should be part of a University's activities in any way, even if they now benefit a small part of the University. It is the very real probability of changing concerns and shifts in emphasis which have led us to suggest the structural changes that we have. For us, it is within the framework of a climate of continually evolving criticism and active community participation in decision-making, that the future of the University must lie.

The time is rapidly passing where students are content to leave the direction of their lives to others, where faculty close their eyes to the real social and economic roles of the University and where captains of industry are allowed to define those roles and to guide the course and development of the University.

A new direction is being demanded of the University. Its present role is under study and new roles are being defined and sought. If a mechanism is created which allows, indeed encourages, criticism and change of SRI's policies and programs, that institute, in an altered form, can be a valuable asset to a University seeking a new, creative role in society.

APPENDIX

A Short History of Community Conflict over SRI

The Stanford-SRI Study Committee and this report—as well as the student occupation of the Applied Electronics Laboratory and the trustee's moratorium on new CBW contracts at SRI—are results of some years of research, education, and agitation by students on the left at Stanford.

Concern about SRI's war work began in 1965 with the discovery by members of the Stanford Committee for Peace in Vietnam of two CBW contracts being performed by the Institute. The contracts were revealed in the newsletter of the Graduate Coordinating Committee, a political group first organized in late 1964 and the grandfather of the Stanford left.

More detailed studies of Stanford/SRI's war research were published in the spring of 1967 in *Resistance*, the journal of Stanford's short-lived, student-run experimental college, The Experiment. These articles were the first to argue that the university—and particularly SRI—was in fact deeply involved in the policy and performance of the Southeast Asian War, and the point brought hot debate, particularly after Experiment members covered the campus with posters of the trustees which read "We Accuse."

As a part of a nationwide Spring Mobilization against the War, about 150 students from Stanford and the local high schools marched on SRI's Menlo Park facilities on April 14, 1967.

In late January, 1968, SRI was revealed to be doing extensive counterinsurgency research in Thailand by the *Peninsula Observer*, a newspaper edited by recent alumni of Stanford and The Experiment. The *Observer* later revealed SRI's counterinsurgency research in Peru and Honduras, too.

Most of the campus, of course, was introduced to SRI counterinsurgency and CBW by *Through the Looking Glass*, SDS's fall quarter "radical guide to Stanford," which was essentially the outcome of a summertime research group of students and townspeople meeting as a class of the Midpeninsula Free University.

Demands Tacked on Door

On October 8, soon after the quarter began, SDS tacked its demands to the trustee's door, calling for an end to "all military and economic projects and operations with Southeast Asia." On October 9, SRI President Charles Anderson rejected the demands, explaining that government sponsored research "is in the public interest."

On October 10, SDS made an October 14 deadline for its demands, and Acting President Glaser announced the formation of the Stanford-SRI Study Committee. The 14th came and went; so did SDS to SRI.

The SRI committee first met on November 14, but by December campus opinion—informed by the *Daily*, SDS, and the *Resistance*—was at least one factor in bringing Student Body President Denis Hayes to request of SRI directors that they not commit the Institute to "any further long-term research" in CBW or research "in support of the American military effort in S.E. Asia." SRI President Anderson refused him December 12. A similar proposal that, during the committee's deliberations, SRI not enter into nor renew contracts for the S.E. Asian War, CBW, or counterinsurgency, was brought up by Committee member Barton Bernstein and discussed for a month. But it never made it to the vote, after Anderson told the committee SRI expected to take on no new major contracts.

When the January 28 *San Jose Mercury* revealed that SRI had just accepted a "top secret \$1.8 million contract to help Thailand improve government operations and fight Communist guerrillas," SDS celebrated SRI veracity by running up the flag of the National Liberation Front. It had previously called for the resignation of three trustees from war industry, demanded that military electronics research be discontinued in the University and SRI, and reiterated its other demands.

On January 14 some 50 students had carried their demands personally to an on-campus trustee meeting, only to be met with adjournment and later tried for "disruption," found guilty, and fined. Most, refusing to pay the fines, were barred from registering.

On January 29, a hundred students occupied the Applied Electronics Laboratory briefly and then moved on to an SRI annex in the Industrial Park, where they were barred from entering.

At an AAUP sponsored forum on SRI in February, an SRI employee announced that he had been "coerced" into contract work to which he objected.

And on March 11, in a student-trustee forum first called by the January 14 defendants but finally sponsored by the University Advisory Committee, some 1400 members of the university community heard Trustee William Hewlett again maintain that having SRI perform services "for the United States of America" is not a political decision. They also heard the five trustees unanimously refuse to lobby with their colleagues for an open meeting at which they would discuss the SRI committee report and recommendations. When the trustees asked the audience whose request it was for such a meeting, they were met by a roar "OURS!"

Coalition Demands

Subsequent to the March 11 meeting the "SRI-Coalition" was formed by community members concerned with the future of the SRI-Stanford relationship. On April 3, the Coalition together with a dozen other community groups including SDS and the UCM called a town meeting to discuss the growing conflict between community concern and trustee intransigence.

Out of that meeting of some 800 people came the following demands:

1) We demand that the trustees discontinue all plans for severance of SRI from the University (with or without a restrictive convenance), and that instead SRI be brought under tighter control by the University, and that guidelines be established for socially acceptable research to be directly applied to SRI and the rest of the Stanford Community.

2) We demand that all research in the following areas be stopped as of April 9 and that no new contracts in these areas be accepted:

1) All classified research at Stanford and SRI,

2) All research classified and not, at Stanford and SRI in the following areas:

a. Chemical and biological warfare (CBW),

b. Counterinsurgency at home and abroad,

c. All research in support of the war against the peoples of Vietnam, Laos, Thailand;

3) We demand a special meeting of the Stanford Trustees during the week of April 21, that this be an open meeting in which anyone from the Stanford-Palo Alto community may participate in the discussion and observe the discussion.

The decision of the Trustees to not react to most of the demands, moving only to put a moratorium on *new* CBW contracts and to promise closed hearings with "selected" witnesses, led to a new community meeting April 9. There, after several hours of discussion, the people voted to sit in at the Applied Electronics Laboratory in order to halt the war research ignored by the trustees.

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Our statement is dedicated to the courageous students and faculty who, deeply concerned with Stanford's involvement in Southeast Asia, occupied the Stanford Electronics Laboratories in order to put a stop to a significant part of that involvement.

We wish to thank the innumerable people who have contributed research and articles on the operations of the SRI-Stanford complex. The on-going work done by David Ransom and the people of the Peninsula Observer, and last summer's Free University research seminar provided much of the background data for this report.

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