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NO. 2

SCIENCE FOR THE PEOPLE

BI-MONTHLY PUBLICATION OF SCIENTISTS AND ENGINEERS FOR SOCIAL AND POLITICAL ACTION - SESPA MAY 1971
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EDITORIAL PRACTICE

Each issue of *Science for the People* is prepared by a collective assembled from volunteers by a committee made up of past collectives. A collective carries out all editorial, production, and distribution functions for one issue. The following is a distillation of the actual practice of past collectives. Due dates: Articles received by the first week of an odd-numbered month can generally be considered for the magazine to be issued on the 15th of the next month. Form: One of the ways you can help is to submit double-spaced typewritten manuscripts with ample margins. If you can send six copies, that helps even more. One of the few founding principles of SESPA is that articles must be signed (a pseudonym is acceptable). Criteria of acceptance: SESPA Newsletter, predecessor to *Science for the People*, was pledged to print everything submitted. It is no longer feasible to continue this policy, although the practice thus far has been to print all articles descriptive of SESPA/Science for the People activities. Considerably more discrimination is applied to analytical articles. These are expected to reflect the general political outlook of *Science for the People*. All articles are judged on the basis of length, style, subject and content. Editorial procedure: The content of each issue is determined by unanimous consent of the collective. Where extensive rewriting of an article is required, the preference of the collective is to discuss changes with the author. If this is not practical, reasons for rejection are sent to the author. An attempt is made to convey suggestions for improvement. If an article is late or excluded for lack of space or if it has non-unanimous support, it is generally passed on to the next collective. Editorial statements: Unsigned articles are statements of the editorial collective. Opportunities for participation: Volunteers for editorial collectives should be aware that each issue requires a substantial contribution of time and energy for an eight-week period. Help is always appreciated and provides an opportunity for the helper to learn and for the collective to get to know a prospective member. There are presently plans to move the magazine production to other cities. This will increase the opportunity for participation.
ABOUT THIS ISSUE

Before you settle down with this issue of *Science for the People*, we suggest you turn to page 30 and check out the “Spring Action Calendar.” We encourage you to participate in such actions since we believe that it is only through large scale action that this nation will be moved. Also, we would appreciate hearing of any other actions you know of or are planning or have participated in.

Though action is essential so also is thought to guide it, and that’s where *Science for the People* can help. In this issue, for example, you will find articles which describe and analyze how scientific workers are dealing with the problems of discrimination, political repression, and the misuse of their work for anti-social purposes. These articles attempt to dispel some of the attitudes or ideas which are part of our conditioning as scientists. You will also find articles on science for Vietnam and Cuba which discuss how some of our technical skills can be used to meet people’s needs. And as always, this issue has reports of SESPA/Science for the People activities at scientific meetings and elsewhere. Let us know what you think.

May 1971
Dear SESPA,

Last Winter in Boston I put my name on your mailing list. I want it taken off. Violence is something I cannot stomach, and your actions in Chicago are utterly immoral. The ends do not justify the means—one cannot use violent means for the purpose of bringing about an end to violence.

Harry Shipman

Mr. Shipman's name will be taken off our mailing list. But we do believe that he is either misinformed or has an inadequate understanding of violence. Those of us, who, like Mr. Shipman, cannot stomach violence are greatly pained as we see so many who believe they are pacific actually contributing to that violence by their inaction. To the extent that one functions in this society without taking action against this violence—to that extent he is complicit in the rape of Indochina, the starvation of Florida's migrant farm workers, the killing of Blacks and students, etc.

As to Mr. Shipman's description of our actions as "utterly immoral", we are unclear as to the basis for his judgement. If it is based on reading newspapers, then he exhibits a certain naivete. For there is a growing healthy awareness among Americans that the press is addicted to sensationalism even if it has to invent or distort facts to provide it. We assume Mr. Shipman did not attend the AAAS meetings; for if he had, he would have witnessed but one act of physical violence and that was against a protester [see Science for the People, vol. III, No. 1, Feb. 1971]. He would also have witnessed such other acts of violence as the exploitation of a woman's body for public relations purposes, consumption of monies that could have fed hungry children, legitimation of hired killers such as Edward Teller, and many others. These were not our doing either.

SESPA/Science for the People is not, as a matter of principle, a pacifist organization; but we all have great respect for dedicated practitioners of nonviolent direct action such as the War Resisters League, Daniel and Philip Berrigan, and others. We hope Mr. Shipman will spend the time that he is not reading Science for the People in such courageous nonviolent protests, and that he and others will show by exemplary action how to stop the violence that is America today. [Editors]

MORE LETTERS ON PAGE 29

Dear Friends,

Congratulations on your AAAS actions, which I read about in the papers, and on your December SCIENCE FOR THE PEOPLE.

I would like to get something going here, at the U. of Conn. If I got a meeting together, could you send a speaker? A report on Chicago might be a good, dramatic way of getting into basic ideas. What do you think? My husband is a bio-chemist faculty member here. I am an ex-technician.

Lorraine Roth

Sisters and brothers,

I got hold of a copy of SCIENCE FOR THE PEOPLE (Vol.2, No.2) in St. Louis recently, and have been really excited by it. Until last spring, I was going to school at Kansas University here and doing Computer Programming and research in theoretical chemistry and biochemistry. Then I got mad about being used as a skilled tool by the Man. Since last spring, I've been doing community organizing work here in Lawrence, working primarily with Newsreel and Vortex, the local underground paper. For a long while, I went thru a period of real alienation from the life I'd been leading and from the people who were still into it. I wanted to get completely into a working class life, both to help get rid of my own bourgeois thought patterns and to do organizing work. At the same time, I've wanted all along to find ways to use the skills and training I do have in science and computers in ways that could really serve the people. I've had a hard time doing that, tho, because nearly all of my training had been very theoretical. Now I've begun to understand how scientists, engineers, and technicians are being pushed into a new part of the working class in advanced capitalist society. I no longer feel so alienated from my ex-peers, but rather see them as an exploited people of which I am a part.

So you can see why I was turned on by SCIENCE FOR THE PEOPLE. I am particularly excited about the workers' groups that are being organized across the barrier of white-collar vs. blue-collar workers. Right now, I'm trying to find a job in a factory here in town, because there is a real need in Lawrence to bridge the gap between the radical-freak-student community and the townspeople as a whole. I also would like to get a SCIENCE FOR THE PEOPLE type group going with the people I used to work with. Yours in revolution,

Steve Hollis

The above two letters show one of the ways SESPA/Science for the People grows. We called Lorraine. She got a meeting together at which Jon Beckwith from Boston spoke. There is now a group in Storrs, Conn.

Steve's beautiful letter indicates that the attitudes and material conditions that led to the analysis and actions of SESPA/Science for the People are quite prevalent among scientific workers. Steve had already had a few meetings when Dick Levins of Chicago visited. There is now a group in Lawrence Kansas. [Editors]
The nightmare of genetic engineering and test-tube babies and other spectres of the misuse of science stimulated the British Society for Social Responsibility in Science (BSSRS) to call a meeting in London in late November of 1970. "The Social Impact of Modern Biology" summed up in the meeting title myriad concerns about the value of science, the misuse of science, the desirability of scientific advance, and other related social aspects of science. However the 18 speakers, renowned academicians that they were, showed little appreciation of the problems with which the symposium was designed to deal. In fact the audience of students and post-docs showed considerably more sensitivity to the issues, thus providing a sounding board for the main presentations. The meetings were open to the public, but a daily entrance fee and the technical or abstract nature of most of the talks discouraged the lay public from attending.

The meeting was opened by its main organizer, Maurice Wilkins, Fellow of the Royal Society (FRS) and Nobel Laureate (NL). Wilkins' greatest fear was not of the possible negative social impact of biology, but rather that discussions of it might lead to an increased anti-rationalism and "rock the boat of science". To try to counteract these tendencies he first lectured the press rather condescendingly to be more responsible in their reporting and not to blow things out of proportion. He also expressed the hope that the meeting would be held in a calm and rational atmosphere so that the press would not have the opportunity to distort it.

Monod and the Concept of Objective Science

The first major talk of the meeting was given by Jacques Monod, NL, foreign member of the Royal Society, member of the College de France, etc. As it turned out, while Monod's speech was anything but a radical critique, it was the most provocative of the first two days. Monod, who has recently published a philosophical treatise entitled "Le Hasard et la Necessite", tackled the problem of the lack of religious or political ethics in today's society. Since, according to Monod, the growth of scientific thought has robbed man of all his traditional beliefs, exposing everything from Buddhism to Marxism as having no logical basis, science has the responsibility to fill the vacuum. Modern societies which live on science, but reject the values of science will collapse. Monod suggested that the pursuit of knowledge is an ethical value itself; that science is based on the moral code of objectivity which should provide a basis for a new ethic.

It was very important that this viewpoint of the objectivity of scientific endeavor was brought out early in the meeting. It is a hang-up of many scientists and leads many of them, among other things, to view themselves as priests in a new society. There are at least two objections to be made to this viewpoint. First, what it ignores is that science is always done in a particular social context. A small ruling elite who control our political-economic system determine which science will be funded and how that science will be used. The direction which science takes, therefore, is not deter-
This attitude was presented late in the meeting by Bob Young of Cambridge, who delivered an analysis, based on historical examples, showing the influence of ideology on scientific research.

What Social Impact?

After the spurt of controversy over Monad's philosophical proposals there followed a series of technical talks designed to lay a foundation for understanding the implications of research in modern biology. These talks ranged from the fields of molecular genetics to immunology, agricultural botany and the cancer problem. Of the 18 talks at the meeting, 10 were in this category. These speakers for the most part either ignored the implications of research in their field or they emphasized only the beneficial aspects. Presentations in the area of molecular biology and genetics did not contain references to the use of research in those fields for developing biological weapons nor to the potential dangers of genetic manipulation in humans. More medically oriented talks did not include any discussion of what are the major health problems in the world. Many in the audience who had assumed from the title of the meeting that such questions and their political implications for scientists would be the main function of the meeting became very disheartened. Perhaps the most shocking example of this sort of talk was that of R.G. Edwards of Cambridge.

Edwards, Steptoe and coworkers received a good deal of publicity early in 1970 for their attempts to implant a human female uterus an egg fertilized in the test tube and carried through many cell divisions outside the subject. Although the first such attempt failed, the same technique has been carried out successfully with mice and most knowledgeable workers in the general field think that success in the case of humans is close at hand. Edwards stated that "our work stems from a fundamentally humanitarian view," and pointed out that the technique would have the following beneficial results: 1) curing of infertile women; 2) detection of many "genetic defects" before the fertilized egg is reimplanted in the uterus; and 3) predetermination of the sex of a child—i.e., fertilized eggs with X-X (female) chromosomes could be thrown away and only X-Y (male) ones used.

For those who are not familiar with the potential dangers of such genetic tampering, I will list some of those which Edwards completely ignored: 1) Wealthier mothers could pay surrogate mothers to go through their pregnancies, carrying their children. One can imagine a thriving business with black mammies being hired for this purpose. 2) The effects of the uncontrolled predetermination of the sex of children on a society could be disastrous. One can imagine, for example, the net result of individual decisions in a society in which boys are favored. 3) The elimination of fertilized eggs with genetic defects brings up the question of what is a genetic defect. For example, males with two Y chromosomes (XXXY) have been claimed to be "overly aggressive" and to have "criminal tendencies." There has been discussion about trying to eliminate such
"monsters" from the gene pool. But obviously, it is possible that these supposedly negative anti-social characteristics are defined as such only in the context of the corrupt societies in which we live. 4) In addition to negative screening-out possibilities with this technique, there is also the possibility for positive genetic engineering. Groups of individuals with identical genetic characteristics could be created with refinements of a combination of this and other techniques. A society might undertake to produce replicas of a particular individual with traits which are deemed to be beneficial to that society. In our own country, under present conditions, we can imagine what qualities would be considered desirable.

The point is not that these potentials in genetic manipulation are inherently evil. In a society where science is used to benefit the people rather than a ruling elite such techniques could be of great importance. However, even in a just society great care must be taken in foreseeing all possible consequences of such fundamental tampering with human characteristics.

Many of the ramifications of the Edwards-Steptoe technique are far enough off in the future so that we need not become hysterical. However, the fears of some of the immediate implications of this work have led even Dr. James Watson, whom we would not have expected to "rock the boat" to say "...we might have expected that many biologists, particularly those whose work impinges on this possibility, would seriously ponder its implications and begin a dialogue which would educate the world's citizens." Right on! Science for the People!

Although the questioning of Edwards by the audience was limited, some of the negative possibilities were brought up. When asked about the moral and social implications of his work, Edwards consistently replied that these problems were simply a matter of a private decision between doctor and patient! These extraordinary statements were barely challenged by the audience. Considering the title of the meeting and the probability that of all the speakers Edwards' work had the most likelihood of social implications in the not too distant future, it was amazing to me that he was let by so easily. (One of the other speakers, when questioned in private about this session, said, "Well, we had to be polite.") We will see in a moment for whom the moral indignation was reserved.

James Watson also delivered a talk at the meeting on approaches to the cancer problem. Although not explicit, he gave the impression that the cancer problem was the major health problem confronting the world today and once it was solved, the major goal of biological research would have been achieved. There was no discussion of the fact that the overwhelming majority of the world's population do not reach the age where cancer is the major problem and that many more people suffer from other diseases such as parasites, etc. Despite this omission, Watson's talk was entertainingly forthright, as usual, and included such surprising statements as "I don't think we (as scientists) have an inherent right to society's money."

The Villain of the Piece

Finally, in the middle of the last day, came an event many people seem to have been waiting for—the appearance of a villain in the person of A.J. Hale, Director of Research of G.D. Searle and Co. and an apologist for the drug industry. THE MAN FROM INDUSTRY: Hale gave a detailed description of the systems of checks and balances, advisory councils, and government control which insures that every drug produced will be of the highest quality and effectiveness. Those instances where ineffective or even harmful drugs slip by onto the market are always the products of small fly-by-night firms. He even argued that too much government control was stifling some of the benefits to society which the drug companies had to offer. The audience came alive at the end of Hale's talk and besieged him with sharp questions and statements of their moral revulsion at his performance. The "politeness" shown to previous speakers was discarded as the whipping-boy of the meeting had been found. Of course the attacks on the drug industry were all valid, but it seemed extraordinary to me that previous academic speakers who had been just as smooth in ignoring their responsibility to the people, were not subject to the same attacks.

The reaction to Hale and the lack of criticism in general of the academic speakers holds some important lessons for us. Hale presented a picture of an ideally functioning benevolent drug industry. Many of the other speakers talked of the progress is basic research and the benefits for mankind that await us. We all know how in fact the drug industry is run to exploit people, often at the expense of their health as well as their pocketbooks. We should also realize that much of our supposedly pure academic basic research is used directly by corporations and government for the exploitation and oppression of people. Researchers working in universities are just as much tools of the system as those working for government and industry. The Fellow of the Royal Society who talks about the wonderful benefits of genetic manipulations is just as irresponsible as the drug industry man.

And yet, the moral rectitude exhibited by many at this meeting reflected a conviction on the part of academic scientists that they are free from all complicity in a system which many of them recognize as being bad. This attitude and the general elitism of academic scientists also affects radicals in academia. It keeps them from allying with industrial scientists who also experience misuse of their science but who also experience the generally oppressive conditions of a worker at the workplace. There is also elitism in the relationship of the scientist to the engineer, the engineer to the technician, and the technician to the production worker. Thus all forms of elitism keep us from building a broad movement—one of our most important tasks.

After a barrage of angry questions from the floor following Hale's speech, some of the above were finally brought out. The reaction to these attacks on the academic speakers was sharp and bitter. The chairman of the session, Dr. Max Perutz, NL, FRS, expressed astonishment that anyone could find something wrong with
the fine presentations of his academic colleagues or could possibly compare them with that of Hale. Another one of the speakers complained that the comparison was “quite unfair.” However, it was clear that the audience responded to the critique and proceeded to discuss more clearly the involvement of all of us.

The last three speakers preceding Bronowski’s talk, myself, Bob Young and Hilary Rose (new chairwoman of BSSRS), brought a more critical tone to the meeting with attacks on the elitist concepts expressed during the meeting and some more radical analysis of the way in which science is done and taught. The audience response to these speakers indicated that the majority of the people there were far more in sympathy with the radical critique than with the attitudes of the majority of the speakers.

Two sessions devoted entirely to open discussion were held, one at the end of the meeting. These meetings were well-attended and quite lively. Among the questions pursued were the following: 1) Is science really neutral? 2) Is it possible, recognizing the harmful potential of scientific research in its present context, for scientists as a group to control the applications or to prevent current research. Here, many of the established scientists expressed their support for a scientific elite taking greater responsibility for the control of science. 3) What is the value of science?

Summary

The meeting, in one sense, was a tremendous disappointment in that so little of the speakers’ time was devoted to the social impact of modern biology. However, the meeting as a whole was encouraging to the many who had not had the chance to consider it in much depth.

Why was this meeting called? The conveners were aware of the growing criticism of the role of science in society. The organization of the meeting seemed designed to channel this concern into a “responsible” liberal critique. However, since a liberal critique cannot stand up to this sort of public exposure and debate, the meeting, in fact, served to expose the bankruptcy of this critique to many who had not had the chance to consider it in much depth.

J.B.

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EXPLICIT OPERATIONAL PROGRAM (272)

Betty Zisk of Boston University* points out that having mastered an appropriate list of “buzz words” an apprentice author could achieve acclaim by his peers (and the public). This is useful information in these days of unemployment. DOD contractor employees (and others) might wish to change their field. Being experts in projecting buzz words due to years of writing successful government proposals and reports, they should only need a new set of such words to change fields. If political science interests you (i.e., there are grants available), the following excerpt from Betty’s article should help.

Magic Words for Political Scientists

Rules: Choose any 3-digit number. (A table of random numbers may be utilized if needed.) Find the corresponding acceptable professional phrase by locating the relevant number in each column. You now need only a few verbs, gerunds, and disclaimers, and your article is complete. Example: 123 = latent empirical parameters.

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Note: Scholars in potential riot areas may wish to substitute the following for one of the above:

9-a relevant 9-a black 9-a confrontation

The hypothesized dynamic orientation (857) of this tentative systematic typology (904) is obvious. Our purpose is to help the fledgling author to play a valid functional role (909) which takes into account all latent isomorphic variables (118). In addition, one explicit operational assumption (276) is the lack of a contradiction between this value-neutral empirical program (722) and a quasi-policy-oriented conceptualization (683).

H.F.

Known to outsiders as the home of Anheuser-Busch brewing company and the St. Louis Cardinals (owned by August Busch), St. Louis was once one of the most prosperous and bustling cities in the country. Deriving its wealth largely from railroads and the Mississippi harbor, it became internationally famous when the World’s Fair and the Olympics were held there in 1904. But the growth of Chicago as the midwest’s rail center left St. Louis to decline and decay. Nevertheless industry grew in St. Louis. It became second-largest in auto-assembly operations and boasted several shoe factories and the extensive hog and cattle feed facilities of Ralston-Purina. Eventually it became the home of McDonnell Aircraft, Emerson Electric and Monsanto chemical company, three prominent members of the military-industrial complex.

During the 1960’s St. Louis had a kind of industrial renascence. It entered a new phase of prosperity, spurred by stepped-up military spending and symbolized by extensive construction of upper-income, high-rise housing in the downtown area and the building of the 630 ft. Gateway Arch on the waterfront. However, the economic optimism was short-lived. Layoffs in response to defense cutbacks have become commonplace.

It’s a tough break when you’ve been riding along fully employed, wages rising (never as fast as prices, though), buying a house, children growing and planning to go to college and suddenly the apparent prosperity comes to a halt. Scared, angry, confused, maybe wondering what you’ve done wrong, you find yourself confronted by a whole new set of problems you haven’t even thought of before. There are new experiences too—like applying for welfare after your unemployment checks and savings run out. Even looking for a job may be something you’ve forgotten how to do—after all it’s been a long time since you’ve had to do that.

People react differently under such conditions of stress. Some even break up under the strain; but some get stronger in the face of adversity. When one St. Louis woman got the word from her husband that he was laid off, she moved into action. She got coverage in November in the St. Louis Post-Dispatch for her idea of JOBSEEKERS, an organization to get jobs and jobseekers together. Some faculty and students at Washington University, seeing the article and knowing McDonnell full well from its four trustees of the university and its role as weapons producer, offered their help. Shared anti-war attitudes and shared enemies helped to begin what is now developing into a real coalition of workers and students.

These are blue-collar workers as are most of the 220,000 persons laid off last year in the aerospace industry and they are union members.1) But their union, local 837 of the IAMAW (International Association of Machinists & Aerospace Workers), which they refer to as a “company

1 At the St. Louis MAC plant at least 3,500 union members were laid off in 1970. The number of non-union, that is, white collar workers laid off is estimated at over 500. At least 10,000 union job positions were lost during the years 1967-70—a decrease in the work force of about one third.
union", had not done any more than ensure that the layoffs are accomplished in an orderly fashion according to seniority. In fact, recent organizing among the unemployed in direct response to layoffs is being done in spite of the unions or among traditionally non-union workers.2)

JOBSEEKERS did well to get unemployed workers together, but its original concept was soon found to be inadequate: the jobs just weren't available. The best they could do was to compete against each other for the handful of low-wage jobs available. Rejecting this competitive approach as no solution they turned to the collective task of finding out how to make more jobs. Why is there unemployment and what are the conditions that generate jobs?

Drawing from their own experiences, discussions with students and others they began to put it all together. They knew that they weren't at fault. After all they want to work; many had worked for MAC for 15-18 years. Clearly they are part of a more general recession and equally clearly the recession, the Indochina war, the arms race, high taxes, the high price of everyday living are all the same general problem. They asked us (from Washington U.) to give an explanation.

We pointed out that the government billions spent on waste and war spur production that produces no goods for people. When the government cuts down on this spending, MAC and similar companies have no alternative market; they don't make anything at any price that people are ready and willing to pay for. So since in this economic system companies only produce for profit not for people's needs, they cut back on production. That means less work, layoffs. If MAC kept paying workers their wages and produced and sold less, it would have fewer profits. MAC's return of 21% on investment for 1970 is a good rate of profit, a good incentive to investment and MAC's stockholders are much more important to management than the workers whose hard work has built MAC and its stockholders' fortunes.3)

Workers at the first two mass meetings of JOBSEEKERS did not like the idea that they and their families had to suffer to maintain or increase McDonnell's profit rate. They overwhelmingly approved a set of demands we suggested around which to organize other unemployed, and those still employed but threatened with layoffs. 1) Everyone has a right to work. 2) Everyone has a right to enough money to provide for his family. 3) To implement the above demands, companies must accept lower profit levels by taking on more workers who will work shorter weeks without reductions in pay.4) 4) To implement the above demands, the Board of Directors of military contractors must have significant public (because much of the capital comes from the government) and worker (because their efforts create profit) representation. 5) The federal government should not create jobs by increasing taxes of working people but should re-allocate what it already collects to socially useful projects that will use our skills for constructive rather than destructive ends.

Leaflets based on the demands were given out at plant gates but there has not yet been any substantial response. Unemployed workers with families have to handle immediate problems in addition to organizing political action. They've got to survive. For some this has meant turning to welfare. But the Welfare Department treats them as if they were lazy and shiftless. They learned a

3 MAC, in its expectation of continuing demand, had begun a program of investment in more productive machinery - automation. With the new machine tools productivity per machinist has gone up 2000% - another way to boost profits. Consequently Sanford McDonnell, president of the company, anticipates that even with the F-15 contract, MAC's direct production workforce will decline by at least two thousand in this decade.

4 Presently, rather than accept the start - up and managerial costs, MAC takes care of peak requirements by working portions of the still - employed work force to 55 hour weeks. The workers don't like the long hours even though they get time and a half pay.

Please subscribe
great deal from that experience. These white blue-collar workers, in a city that has had its share of the use of blacks by employers as strike breakers, could not have been convinced as well by any article or talk that being on welfare does not necessarily mean that a person does not want to work. They also began to see the basis for common cause with the predominantly black Welfare Rights Organization.

To understand more about the Welfare Department, JOBSEEKERS invited a member of a radical social-workers' group. She told them that one of the real functions of Welfare Departments is to prevent organized opposition to the system by humiliating recipients and getting them to accept an individualistic interpretation of their misery. The welfare department that gives out crumbs and humiliates people, and the corporation board that denies people the opportunity to work are part of the same system—a system in which the wheels are turned by profit and inhuman behavior is the product. In short, welfare departments are not there to take care of unfortunate people's needs, but to prevent them from fighting for their real needs.

Encouraged by the radical social worker's confirmation of what their own experience was telling them and by her advice that they not accept the welfare department's definition of the situation but try to get all they need, they are planning group visits to the welfare department. It is a lot easier to avoid being intimidated when there is the solidarity of a group. Hopefully they can increase solidarity by enlisting the Welfare Coalition in a joint struggle.

Survival requires mutual support in other ways too. At present we have not yet succeeded in generating much enthusiasm about food cooperatives, cooperative day-care centers and a skill bank to exchange needed services. Our blue-collar friends (like ourselves) have been raised on the myth that you are a better person if you can go it alone. But we hope to overcome these attitudes of competitive individualism. Some initial small successes are likely to demonstrate the value of cooperative help projects.

As members of JOBSEEKERS learn more about the benefits of collective action, they are becoming more interested in alliances with other groups. They hope to recruit scientists and engineers as well as more blue-collar workers. They have been warm to us from the beginning (we were invited to join the steering committee) and they will probably join us at Washington Univ. against our common enemies. Most exciting is the interest shown by some unions. Teamsters, Auto Workers (UAW), Clothing Workers (ACWA) and Electrical Workers (IUE) sent representatives. The first result of these visits is an offer of help from the Teamsters to get our story out. The St. Louis Post-Dispatch restricts its reporting to attention-getting fragments and does not tell readers or callers our address, so the Teamsters have offered to print JOBSEEKER material in the Missouri Teamster and provide all the copies needed for distribution. Now in the planning stage is a big kickoff meeting at the union hall of a labor/student alliance.

How successful will JOBSEEKERS be in organizing workers around its demands? Presently, most workers expect to be back to work soon. Some are also fearful that they will be blacklisted if they get involved in militant action. But economic crisis, the hallmark of the American system, is near upon us, and history shows that fearful and frustrated people with an inadequate understanding of the systemic causes of their misfortunes are prey for the demagogue with fascist-like solutions.

Organizations like JOBSEEKERS are needed to immunize workers of all strata against racist and superpatriotic solutions by pointing out the systemic nature of the problems and the need for the construction of a society that replaces the profit motive by the motive to serve people's needs. So we cannot judge JOBSEEKERS' success by the rate at which it acquires new members, but by how well it gets its message out. If organizations like JOBSEEKERS are there when the historic conditions arise, then we will bury this system in the muck of its own crisis.

N. M. & J. S.

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May 1971
Only a few blocks uptown from *Orgy of Love, Three Terror Thrillers, and Debut of a Monster*, the N.Y. Hilton was hosting the winter meeting of the American Physical Society (APS). I wondered how the APS could ever compete with the orgasmic sensationalism of Times Square. How could it draw the pimps, freaks, bums, junkies, and other human derelicts of the 42nd Street circuit? Of course it really didn't matter, but it gave me something to think about as I poked around the APS meeting overhearing saucy tidbits of equation here and there or bumping into bumper stickers reading "Physics is Good for You" (Oh, really?).

It was the first scientific meeting I'd been to in over a year. Unfortunately, being a physicist didn't help me know what to expect. I figured the APS should be no stranger to political activity—after all, it was the birthplace of SESPA two years ago. But physics is in a bad way these days with jobs impossible to find and research grants getting harder to come by. Chances were that the physicists would be so deeply involved in their own problems that they wouldn't want to be bothered.

And sure enough, they didn't want to be bothered. If they were post-docs, assistant professors, or industrial scientists who were looking for jobs, they didn't want to be bothered about why jobs are so scarce, or about how thousands of other workers are now unemployed, or about what implications technological obsolescence might have for them in the long run. No sir. And if they were tenured faculty members or well established scientists, they didn't want to be bothered about how their work was contributing to weapons development and the war in Southeast Asia, or about how their skills were being used to legitimate and rationalize an oppressive social order, or about how racial and sexual discrimination were hallmarks of science, or about what they might do to protect fellow scientists who are being arrested and harrassed on account.
of their political beliefs. Absolutely not. And if, alas, they were graduate students, then they couldn't be bothered because they weren't even at the meeting (the cost was prohibitive unless someone paid your way).

Well bother or no bother, we activists (for want of a better description) were going to the meeting anyway. The challenge was exciting. Could the insularity of the APS be broken down? Could scientists be encouraged to see their work in a broader social and political context? Could they begin to understand that the barriers they had constructed between them and the rest of the world were only in their own minds? Maybe, maybe not. But if nothing else, they would learn that the walls of the N.Y. Hilton could not shield them from political issues.

Charlie’s* room, where SESPA people were supposed to gather Sunday evening to plan activities, turned out to be too small—a good sign. In fact up to 30 or 40 people finally met in a larger, soon smoke-filled room. The different groups there suggested actions they thought would be appropriate: New York was planning harrassment of Los Alamos and Livermore scientists, Chicago was interested in anti-war activities, Berkeley was pushing resolutions and the SESPA pledge, the Arden House group (graduate students) was concerned about Ph.D. overproduction, and Boston was concentrating on a challenge to Edwin Land, guest speaker at the large ceremonial session. Quite naturally, the first question to come up was that of tactics. The APS had planned several sessions on “Physics and Society” complete with star-studded casts—sort of like what was going on at Times Square. Should these sessions be disrupted?

I wonder if anyone could make sense out of the discussion which followed. The motion was made that there be “no AAAS-type disruptions.” That might have sounded wonderful, but no one knew what it meant. Only a few had been to the Chicago AAAS meeting and the rest, with naïve faith in the press, were reacting solely to newspaper accounts. In 1971 no less! Anyway the Chicago people explained that actions at the AAAS meetings were not designed to bring sessions to a halt, but rather to change the nature and structure of the sessions. The idea was to provide a format in which people could share their common experience and collectively analyze problems meaningful to them, as compared to passively ingesting the sterile bullshit fed them by select panelists. But then the question comes up: isn’t taking over a meeting, even to make it more democratic, an undemocratic act? Actually the more democratic act? The APS has the right to keep meetings off campus and thus control every aspect of the meeting. How can this undemocratic and arbitrary exercise of power be challenged? Some of us felt that the best way to expose and undermine this power is to deny its legitimacy, while at the same time trying to provide a format for meaningful discussion at the scheduled sessions.

Such arguments had some sway. But people just couldn’t seem to overcome their hang-ups about disruption, as though there was something sacred about sessions blessed by the APS. It’s interesting that those most vocal in denying our right to violate the sanctity of these sessions were the same people who intone moral rectitude to the sinners in the weapons stalls. Be that as it may, the discussion of tactics was inconclusive, and so nothing definite was planned for Monday, the first day of the meeting.

As a consequence, nothing much happened that day, and when an impasse again developed at the SESPA meeting that night, it was decided that those people interested in an action at the ceremonial session on Tuesday should go ahead with their plans but not use the name of SESPA. So the Polaroid action was planned. The issue we would raise was how scientists’ skills are being utilized to develop the technology of oppression—as exemplified by Polaroid’s development and sale of the ID-2 Instant Identification system presently used to maintain South Africa’s apartheid regime.

How can I even begin to capture the drama of that action? Imagine yourself at the meeting: from the time you register on Monday morning it’s evident that something besides pollution is in the wind. For a day and a half a four page pamphlet [see following pages for a reproduction of this pamphlet] is being handed out which describes the Polaroid ID-2 system, how it’s being used, and how the Polaroid Revolutionary Workers Movement (PRWM) is fighting against Polaroid’s South African policies. You wonder what that has to do with the APS. By Tuesday morning it all becomes clear. A leaflet explains that the APS has implicitly endorsed Polaroid’s policies by inviting Edwin Land, its president, to be the featured speaker of the ceremonial session that afternoon. The leaflet announces that the microphone will be taken before Land is scheduled to speak in order to raise the issues discussed in the pamphlet. Land will not be prevented from speaking. Tension mounts as the afternoon session approaches. How many people intend to occupy the stage? Will police be used to block the takeover?

It turns out there are no police. In fact the ceremonial session is approaching acute boredom as the regular speakers drone on and on. Then as the chairman finally begins to introduce Land, there is a stir in the audience and 40 to 50 people move up onto the stage to take the mike. No resistance. Ira Rubenzahl explains the importance of the apartheid issue and then turns the mike over to Ken Williams of the PRWM. A black man (who has no degree in science) is addressing the APS! He describes how scientists as well as other workers are endangering not only themselves but the whole world by producing the tools which are used (and will be used) to control and manipulate us all. Suddenly the mike goes off! Shouts from the

* Charlie Schwartz of Berkeley SESPA [ed.]
There were very few graduate students around to lend a hand, but the occupants of the stage, irate at the microphone shut-off, remain on stage in protest just long enough to arouse the hostility of the audience. (Get the blame off!)

And then, his passage safe at last, Edwin Land approaches the podium. Hands trembling and lips quivering, he begins to speak—no, nothing comes out. The President, Chairman of the Board, and Director of Research of Polaroid—Mr. Polaroid—cannot answer. He begins again, and again nothing. Then a few halting words—incoherent attacks upon the PRWM and revolutionaries. More stammering. At long last, his composure finally regained, Land begins his talk on color vision and the audience once more can relax into scientific oblivion.

I find it difficult to assess the overall effect of the action. Aside from a few hecklers in the audience, the reaction to the microphone takeover was not one of great hostility, though it is doubtful that the tactic won many over to our side. Most seemed to listen with interest. The great success was that for the first time at a scientific meeting, radical scientists, working closely with other movement groups, broke down the barriers of a scientific meeting to bring an important issue before scientists in a forceful way. For members of this country's ruling elite, like Land, the action signified that they can no longer find a haven in the confines of a scientific meeting. Many physicists, upset by our tactics, expressed a desire, rather, to be convinced by good manners and the force of rational argument. My impression is that most of them would never have considered the issue at all had it not been brought up in this way. Many of them, for example, had read full page Polaroid advertisements, believing every word, while neglecting to consider the arguments in the pamphlet distributed by SESPA/Science for the People.

The main shortcoming of the action was that it did not build interest is further actions; the number of people attending the nightly SESPA meetings remained just about constant (30 people) throughout the meeting. That kind of attendance represented a failure on the part of the radicals to stimulate interest and mobilize support. I confess I'm somewhat at a loss to explain this failure. We were up against sizeable odds—as I already pointed out, people really didn't want to be bothered. There were very few graduate students around to lend moral or manpower support to the actions. In the past, local groups had provided a great deal of support, but N.Y. SESPA had succeeded in mobilizing essentially no one except a half dozen or so. The younger scientists who did come to the meeting were absorbed in their own employment or funding problems. They correctly attacked the APS and the physics establishment on a number of grounds, but failed to recognize how the systemic roots of these problems rule out solutions from within the scientific community alone. Nevertheless the existence of just such disaffection should have been the nucleus upon which radicals could build. We were unable to take advantage of this opportunity.

Certainly local organizing left something to be desired. Virtually no provisions had been made for producing leaflets or other materials, a situation which proved to be a great handicap in organizing and publicizing actions. Thus John Froines' (Chicago Conspiracy?) appearance Wednesday night went almost unnoticed, while an action that same afternoon was missed by many who would have been sympathetic. The action, directed at the session on graduate education, consisted of calling a meeting of graduate students an hour before the official session was to begin, and then treating the regular session as a disruption. Needless to say, Fred Seitz and the cronies on his panel were a bit surprised to find themselves out of control. They were forced to put two graduate students on the panel who then proceeded to lambaste the whole bunch of them.

It was heartening to see people who had earlier expressed reservations about the so-called disruptive tactics participating in the Polaroid and graduate-education actions. Some progress had been made. Perhaps it's too early though to judge the overall effect of the SESPA activities. The authority of the APS leadership had been successfully challenged and the sanctity of the meeting had been destroyed. To have neglected the Polaroid issue would in my opinion have been a terrible failure. While feeling a certain frustration over the difficulty of organizing, I found working with some of the people from Chicago, Berkeley and New York very rewarding. I made some friends, no doubt some enemies, and some new contacts. No sooner will these words be printed, than we will find ourselves at the APS once again, this time in Washington. More physicists will be feeling the squeeze. The spring anti-war offensive will be under way. Seize the time!

A.W.
It's like opening a present.

Polaroid Corporation* invented and manufactures instant color identification systems. The present production model known as the ID-2 system takes two color photographs of a person or document in 30 seconds and issues a plastic identification card. Since 1966, when Polaroid introduced the ID-2 system before an international police convention in Hanover, Germany, the company has worked to install its ID-2 system in South Africa. The Polaroid ID-2 system is now being used to produce the 15 million passports that every Black South African must carry at all times or else face imprisonment.

Since October 1970, a group of people working at Polaroid and calling themselves the Polaroid Revolutionary Workers Movement (FRWM) has been attempting to stop Polaroid from providing the South African Government with the ID-2 system. Polaroid has responded to the FRWM demands by claiming it will not sell the South African government the ID-2 system. However, this is just a ruse since the company continues to provide its distributor in South Africa, the Frank and Hirsch Co., with its products including the ID-2 system, which in turn are sold to the South African government. In order to force Polaroid to withdraw from South Africa, the FRWM has called for a world-wide boycott of all Polaroid products.

Polaroid is one of the large corporations which dominate the American economy. Polaroid's American sales in 1969 were 453 million dollars and the sales from foreign subsidiaries amounted to over 70 million dollars. Profits were 65 million dollars from the parent company and eight and a half million dollars from foreign subsidiaries.

The Chairman of the Board, President, and director of research of Mr. Edwin Land, Fortune magazine estimates his personal fortune as over half a billion dollars. Mr. Land founded Polaroid in 1937. Since 1938 Polaroid has engaged in a lucrative trade with South Africa. Besides the Polaroid Land instant camera, Mr. Land's other scientific achievements include plastic optical lenses for devices for seeing at night, an infinity optical ring sight for bazookas, and the development of the U-2 spy camera.

Polaroid employs over 10,000 workers in America, but there are no unions in Polaroil. Polaroid workers earn from two to four and a half dollars per hour. The Office of Economic Opportunity reported in 1970 that black workers in Polaroid received from 18 to 25% less than white workers.

But the recent character of these large scale testing programs should not obscure the fact that these techniques will be used everywhere. The Canadian government has already initiated negotiations with Polaroid for its ID-2 system under the "citizen certification plan" after the police caught a man with a photo on the French separatisms. The system is presently undergoing tests in the Montreal suburb of Longueil. In the United States legislation like the Defense Facilities and Industrial Securiy Act* shows that the use of ID-2 on a massive scale may be just around the corner. If you carry a driver's license from one of the five states using the ID-2 system, your picture is already on file with the state government. Polaroid's ID-3 will take four pictures: one for you, one for your state police, one for the FBI, and one for the national computer data bank.

What the ID-2 system illustrates for scientists is the pernicious way in which science is misused. You don't have to work at Los Alamos or Fort Dix to find your scientific skills beted for anti-social ends. Even by working at an innocent looking camera company you are being used as a tool for the maintenance of a repressive social system. In fact, it doesn't matter whether as a scientist you are working for Krypton, or Dow, or the AEC, or MIT, or Harvard, you will be contributing to the power and longevity of the American ruling elite.

There is no easy way out. It is the nature of the present social and economic order that technology is not used to meet people's needs, but rather to manipulate those needs for the benefit of the few. The scientist who has not learned how to understand the nature of their work, the people who are directly threatened by it, already begins to fight back. The scientist as well as the production worker, is used to create the instruments of oppression. As scientists we must recognize that we are also victims of that oppression. The Polaroid workers struggle is our struggle.

BOYCOTT POLAROID

SCIENCE FOR THE PEOPLE

* The Defense Facilities and Industrial Securities Act of 1970 would require security clearance for workers in "any plant, factory, industry, public utility, mine, laboratory, educational institution, research organization, railroad, airport, pier, waterfront installation, canal, dam, bridge, highway, vessel, aircraft, vehicle and pipeline."

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May 1971
Since the American Physical Society (APS) meeting a number of developments have occurred in the campaign to force Polaroid Corporation to withdraw from South Africa. On February 9, 1971 Polaroid responded to the boycott called by the Polaroid Revolutionary Workers Movement (PWRM) by sending a memo to all its employees stating that, "Any public support of, or any public advocacy of, a boycott of Polaroid products by Polaroid employees has been, is, and will continue to be 'misconduct detrimental to the interests of the company' and any Polaroid employee so engaged has been, and is, subject to severe disciplinary action, including discharge." Hence the company argued that the exercise of an employee's constitutional right of free speech in advocating change in company policy was punishable by dismissal.

The next day Polaroid made good its threat by suspending without pay Caroline Hunter and Clyde Walton, two young Black Polaroid employees whom the company identified as leaders of the PRWM. Caroline worked for Polaroid as a chemist and Clyde worked in the sales department. In the letter of suspension the company stated that, "public advocacy of a boycott . . . is inconsistent with your responsibilities as an employee of the company . . . We will no longer tolerate a situation in which you . . . strive to hinder or counteract the effectiveness of [the company's] operations."

There was no mention of the issue of Polaroid's involvement in South Africa in either the memo or the letters of suspension. What is the meaning of Polaroid's phrase, "the effectiveness of its operations?" Does it refer to Polaroid's ability to test and perfect the ID-2 identification system on the Black people of South Africa?

Finally, on February 24, 1971 Caroline and Clyde were fired. Because there are no unions in Polaroid (an attempt to organize a union was squashed by management last summer) Caroline and Clyde had no recourse except to appeal to the officers of the corporation. However a number of people, including Boston SESPA, who understood the significance of a political firing, organized a picket and rally for the next day in front of the Polaroid Corporation Headquarters in Tech Square, Cambridge. The demonstration was attended by over 100 people with an equal number of onlookers.

Formation of the National Movement against Apartheid (NMAA), a broad-based group to support the Polaroid boycott, was announced at the rally. It immediately took action by leading a group of 40 people to the nearby MIT Coop, a campus store, and demanding that the MIT Coop respect the Polaroid boycott and remove Polaroid products from its shelves until the company withdraws from South Africa. The demonstrators chanted "off the shelf!" Learning that the directors of the Harvard Cooperative Society of which the MIT Coop is a part were meeting that afternoon, the NMAA marched from MIT to Harvard Square stopping in camera stores along the way and asking them not to sell Polaroid products. Two representatives from the NMAA and one from the Polaroid Workers told the Board of Directors of the Harvard Cooperative Society what Polaroid was doing in South Africa and that the Coop should honor the boycott. The Board of Directors, after appointing a special committee to study the problem, responded by refusing to honor the boycott on the grounds that Polaroid was taking positive steps to end apartheid. Ha! Polaroid continues to sell its products (including ID-2) to South Africa and continues to recognize the legitimacy of the apartheid laws by attempting to increase the salaries of Blacks within the constraints of South African labor laws [see previous page]. The corporation also provides scholarships for Blacks; but they have no choice but to attend government operated schools where they are instructed in servitude. Because of the Coop's decision, the NMAA began a picket of the MIT Coop, asking people not to shop at the store until the Coop removes Polaroid products. If this action does not bring results, a picket of the Harvard Square branch of the store is planned.

The struggle against Polaroid has taken other forms. On March 11, Edwin Land was scheduled to talk at Harvard's Physics Colloquium on "The Retinex Theory Of Color Vision", the same lecture he delivered at the APS convention in New York. Over 60 people attending a prelecture meeting decided to question Land about Polaroid's involvement in South Africa before the start of his lecture. However, as the beginning of the colloquium approached, and with all the lecture equipment in place, Land's talk was suddenly cancelled. So the lecture room was liberated, and an impromptu teach-in on South Africa, apartheid, and Polaroid's policies was held instead.
The myth of progressive capitalism and Polaroid's liberal image have undergone severe strain. The company has refused to break with American corporate enterprise and withdraw from South Africa. Instead, the company has responded to the political issues raised by its employees by firing those employees, and by threatening those others who would dare to continue to exert pressure on management. Furthermore, careful scrutiny reveals that Polaroid's much-publicized "equal opportunity employment" has proven to be a hoax. Although Polaroid employs 1,000 blacks (10% of its work force), only 80 of them are in white collar positions. According to the Washington Post, Jan. 17, 1971, "The company's own confidential studies show that blacks are being paid 22% less than whites doing the same job. Blacks are finding promotions slow. And the company admits to having a quota on the number of blacks hired." For example, according to the same article, "a black engineer (departed) was earning $350 a month less than a white man working next to him on a job with less responsibility."

Thus Polaroid's stance in South Africa is consistent with its practices in America.

Boycott Polaroid products in your workplace!

I.R.

REPRESSION HITS THE LIBERAL Front

A note from Washington University in Saint Louis tells of the case of David Colfax. Judged according to the only standard that matters, his practice, David has been a tireless worker in the building of radical action and consciousness. In 1967, he initiated the campaign to have the American Sociological Association take a stand against the Vietnam war and was also an organizer of the Sociology Liberation Movement and the Union of Radical Sociologists.

In St. Louis since 1969, he has played an active role in establishing a radical research and action group of health, education and welfare workers and in establishing and editing a radical newspaper. There he also worked with welfare-rights groups and was active at Washington University in the strike following the Kent State murders and the Cambodian invasion and in the successful anti-ROTC campaign.

That David should be the object of repression by reactionary administrators with the support of political conservatives is no surprise. For many it should also not be a surprise that the denial of tenure and the giving of a terminal contract can be traced to the weak recommendation of liberals in the senior faculty. Intimidated by administrative talk of shutting down the department, they acted in defense of all that is dear to them—their own privileged positions. The note from Washington University describes the events as follows:

Immediately following a review of his credentials and an interview in which his relations with the Black Panther Party were examined, Colfax was informed that the senior faculty had voted 5-4 to grant him tenure.

Several days later, however, on the pretext that several of the people who had voted against him had not had an opportunity to review his work or had not read his outside letters of support, another meeting and vote was scheduled, the argument being that this would provide a chance for a stronger vote in his favor.

But already administrative reactions to the original vote had been made known: Colfax, active in the student strike and in the community, was not to be granted tenure. And thereupon two of his original supporters, concerned with "departmental autonomy" in the face of administrative opposition, acted accordingly: this time they abstained, as did another who had been formerly opposed to Colfax. This time the vote was three favorable, three opposed, and three abstentions.

Both votes were forwarded to the university personnel committee, the "official position" of the department chairman, a David Carpenter, being that the second—illegal—vote was merely "informational". And in mid-February Colfax received a copy of a letter from the Dean to Carpenter stating that, "The (Personnel) Committee has advised me, and I share their opinion, that the departmental recommendation was not sufficiently strong to warrant recommendation of his tenure. It must be my conclusion therefore, that his appointment for the academic year 1971-72 will be a terminal one."

We stand behind our brother scientist, David Colfax, and congratulate him on being acknowledged by the enemy as an effective fighter. The weapons used against him, denial of tenure and non-renewal of contract, are becoming the standard tools of academic repression. So although we recognize the setback we also appreciate the lesson as to how untrustworthy and unprincipled liberals are and how easily they can be intimidated. David's case will be a victory in the long run if we all learn that lesson.

Letters protesting the handling and outcome of this matter should be sent to the campus newspaper, Student Life, with copies to the Dean of the Faculty of Arts and Sciences and the President of the Sociology Graduate Student Union, Washington University, St. Louis, Mo. 63130.

H.F.

May 1971
There is no law prohibiting the detection and removal of phone taps, regardless of their so-called legality. "The vast majority of phone taps are planted without court approval anyhow," according to the Counter-Spy Committee, a group of electronic technicians and lawyers in Washington, D.C. who provide free detection and removal service to people and groups being tapped but unable to pay for professional detection services.

The committee has a display of devices recently uncovered in and near the homes and offices of several Washington area government employees, students and political activists. The counterspies found one elaborate device plugged into regular phone company equipment near the home of a woman school teacher who had participated in a few marches. The device was a near duplicate of the equipment which should have been there, except that it also served as a powerful radio transmitter.

The Counter-Spy Committee is looking in other major cities for people with some knowledge of electronics who would like to be trained and given equipment to detect taps by the D.C. committee. The D.C. committee will send fully equipped teams of technicians to remove devices when local sleuths discover them. Money is urgently needed for travel expenses and equipment upkeep.

Contributors, volunteers and persons wanting further information should write to: The Counter-Spy Committee 1402 New York Ave., Washington, D.C. 20005. LNS

When the Boston campus of the University of Massachusetts opened in the Fall of 1965, its initial physics faculty was made up of two men and two women, and one of the men was married to one of the women. At the start of her fourth year the wife (of the couple) got notice that "University policy quite clearly prohibits the contemporaneous appointment, within the same department, of close relatives", and that her appointment would not be renewed after the end of the year, contrary to the physics department's recommendation.

The author of this manifestly logically compelling reason for severing a woman from the faculty after four years was the Chancellor, the chief administrator on the Boston campus. It was the last day of his three years in office, and this was his parting shot at two faculty members who had endeared themselves to him by their open criticisms of administrative failures and malpractices, a whole series of which led to his early resignation and departure from the campus in the Fall of 1968.

This firing is an unusual one because it is not only clearly unrelated to professional qualifications or to professional performance—there aren't even any allegations of shortcomings. The sole reason advanced by the Chancellor was the marital relationship, and a supposed desire by him to obey trustee-established policy on employment of relatives, a desire so intense that he was prepared to apply his "strict obedience" ex post facto to the woman faculty member whom the Trustees, in full knowledge of her dual appointment with her husband, had approved.

The Chancellor's ability to fire the wife rested in turn on the discriminatory nature of her initial appointment. It is quite common in colleges and universities that, as a group, women faculty have less job security than men, not of course "in principle", but in actual practice. For this reason, and others that will be elaborated on, the administrative practice in this case is related to the problems of
discrimination confronting women faculty everywhere.

Freda Salzman and her husband George were recruited in the Spring of 1965 as the two senior faculty in Physics for the Boston campus, she as an Associate Professor 3/4-time and he as a tenured Professor—luckily for him. There was also one Assistant Professor and one Visiting Assistant Professor, the latter living in Boston for only one year, who then returned to her home institution. Freda and George each came with a dozen years of post-doctoral experience, she having received her degree several months before he received his.

The offer made to them reflected a general reluctance on the part of the President, the top administrator under the Trustees, to have couples within departments, but a willingness to accept a limited number of such appointments in cases where particularly qualified couples were involved. Still, he wished to avoid, whenever possible, tenured couples within departments*, the rationale presumably being that if the family relationship proved detrimental to the welfare of a department, it would be easier to rectify the situation if the couple were not tenured. The problem with this wish of the President was that it conflicted with another of his wishes, namely to make believe that the university adhered to the guideline of the AAUP (American Association of University Professors) on tenure, which says simply that no full-time faculty member can be kept untenured for more than seven years.

The administration "solved" that problem by an arrangement, which is still used, in which one member of the couple (invariably the wife) is appointed to a part-time position. That way the President avoids a tenured couple within a department, the couple can look forward to long-

1 Occasionally tenured faculty members got married, and there wasn't much the president could do about that. In his words "both are permitted to continue in the positions they occupied prior to marriage", showing clearly that he thought it was a privilege he gave them, not their right.

2 Subsequently, written agreement on the nature of the understanding between ourselves and the administrator who recruited us was obtained, but he has also indicated his belief that the university is not "legally" bound to adhere to it, and that it is his understanding that any non-tenured faculty member can be fired without any reason being given.

The Salzmans, when recruited, were told that there were a number of such husband-wife teams at the University, that the part-time position for the wife was the normal way in which they made such appointments, and that the arrangement had proved entirely satisfactory for all concerned. While they fully expected the first few years at a new campus to be hectic and frustrating, they did not anticipate the intense internal struggles or the numerous firings that were to occur, and they accepted the offer, at the same time declining an offer of dual tenure from a large urban campus of a major midwestern state university in order to remain in the lively physics environment of the Boston area, and to take part in building the Boston campus of the University of Massachusetts.

Needless to say, we (for it is I, the husband who is writing this) were inexcusably naive in believing the administrators would behave decently, and that an understanding between those who hired us and ourselves, even though not initially committed to paper, would be honored by succeeding administrators. Instead, once the Boston campus administrators decided that we were "troublesome" and that they would have "smoother administrative sailing" without us, they hesitated not at all to breach the initial under-
standing and to try to drive us both out. Their major blow was to deprive Freda of her position, but other forms of harassment were also employed.

The struggle to retain Freda on the faculty began in the summer of 1967, when the Chancellor's intentions first became apparent through a memorandum stating "his interpretation of Trustee policy on close relatives" and signalling his intention to "tighten up" enforcement. In the Spring of 1968 the physics department, forewarned of the administration's changing position, took pains to prepare a particularly strong recommendation for her reappointment for the 1969-1970 year, and solicited letters of reference from a number of prominent physicists, among them several Nobel laureates, to support its recommendation. This recommendation was rejected in the letter stating, "University policy quite clearly prohibits...", referred to in the opening paragraph.

Clearly the truth content of the Chancellor's "reason" for rejection is the same as that of Ronald Reagan's assertion that the California Board of Regents rejected renewal of Angela Davis' appointment because she was a poor teacher. At the University of Massachusetts, university policy is established by the actions of the Board of Trustees, and, in the matter of employment of relatives, these actions are such as to allow latitude to administrators. In fact, this year there is a couple holding "contemporaneous appointment[s], within the same department" on the Boston campus, additional evidence of the falsity of the alleged prohibition, and also evidence of the readiness of the administration to apply the supposed rule for selective punishment.

As already noted, the first Chancellor wrote his non-reappointment letter on his last day in office. Following his departure, the office remained vacant for one month, and then, in October 1968, his successor appeared on the scene. The physics department repeatedly asked him to reverse the previous Chancellor's action. But he, like his predecessor, apparently believes that any criticism of administrative actions is harmful to the University, and for almost two and a half years he has adamantly refused to reverse what he terms a "legitimate discretionary judgment" of his predecessor.

In December of 1970 the Tenure and Grievance Committee for the Boston campus, a committee of tenured faculty elected by the Faculty Senate, to which the case had been taken by the physics department and by Freda and me, issued its findings—unequivocally supporting the plaintiffs and recommending Freda's reappointment as soon as possible. The Chancellor rejected that too, and in early March the faculty voted its support for the Tenure and Grievance Committee and for the Department of Physics in a strongly worded resolution. At this time (early March) the three-end-a-half-year-old struggle is still in progress.

While the kind of discriminatory hiring practice under which Freda was appointed is clearly bad for women faculty so employed, it is also harmful to the climate of intellectual independence at the university because it establishes a category of (female) faculty who are denied the possibility of attaining the formal job security that tenure offers. The discharge of untenured faculty for reasons unrelated to their professional performance is an obvious technique for intimidating all untenured faculty. In general, the ratio of untenured to tenured appointments is much larger for women than for men. Those women who are employed in part-time appointments, or in other "special" categories which deny them their full faculty rights, are often also exploited through their "non-eligibility" for retirement benefits, sabbatical leaves of absence, and other "fringe benefits". As a result, they quite often "tend to their teaching" and remain largely silent in the struggles that occur within their institutions for fear that entry into the controversies may cost them their jobs. The results of such discriminatory hiring practices are clearly harmful, and not only to the women faculty, for self-criticism is crucial to colleges and universities, and faculty who are afraid to engage in it serve the institution as little more than hired teachers.

In institutions with a large proportion of untenured faculty the exercise of academic freedom can be quite effectively stifled by even a few examples of firings by arbitrary administrative actions. Such actions should thus be of concern not only to women faculty, but to all faculty, and to all students. The vitality of the intellectual life of the institution is itself at stake.

For women students there is a special concern. If they are to flourish to the full extent of their individual potentialities, then they must not be prevented by a male chauvinist society from encountering women who are complete persons. They must come into contact with women who have decided on difficult careers—such as physics—and who have been successful—as a matter of course, not as anomalies. One of the most effective means for keeping people suppressed is by robbing them of their aspirations, and one of the ways of achieving this is by denying them examples of people like themselves who have succeeded.

For example, a young woman who harbors a desire to become a classical composer may very well doubt the possibility if the only examples of famous classical composers she can think of are all men, and if she has never even encountered a woman composer. Likewise a young woman who would like to become a physicist may be able to think only of Marie Curie as an example, clearly an anomaly in the world of physics greats, and if she is denied the opportunity to encounter ordinary real women who have become good physicists, she may easily give up the dream as being beyond reach. Obviously, successful examples in all fields of endeavor are not less important for women than for blacks, Puerto Ricans, or any of the other suppressed groups within our society.

In fact, Freda's decision to become a physicist was in no small part influenced by her first-hand exposure to a real live woman physicist. Here in brief is the story. Freda Friedman was born in Brooklyn just in time to enjoy her early childhood during the great depression. She attended elementary and high school in Brooklyn, then got a job and attended Brooklyn College at night.
for a half year. After spending the next year away, working and saving, she returned to Brooklyn and enrolled as a full-time day student at Brooklyn College, tutoring, babysitting, and working summers, eager to continue her formal studies. Mathematics and physics particularly intrigued her. At college she met another similarly intrigued student, me, and changed her last name to mine, a practice that clearly reflects the male supremacist nature of most contemporary societies.

Both Freda and I were strongly influenced by Melba Phillips, who was then on the physics faculty of Brooklyn College, and was acclaimed by the self-recognized authorities—the physics majors—as one of the most outstanding physicists there. A student of Oppenheimer’s who even had a process named after her—the Oppenheimer-Phillips process—a woman, a thoroughly cosmopolitan and generous person, a fine but utterly unpolished teacher whose lectures were in her head (and which she occasionally had trouble arranging in an orderly fashion as they came out), she was devoid of pomp, though not, it seems to me, of a gentle form of gamesmanship. Sometimes she would copy the details of generating functions for Laguerre and other polynomials needed for her day’s lecture from her New York Times, where she had scratched them during her morning subway ride from Greenwich Village to Brooklyn College. She was in fact a model for a woman who wanted to be a real person, and who liked physics.

Melba Phillips was also a radical person.* For example, once in her class in mathematical physics, she even waking minute calculating atomic wave functions. Becoming a physicist didn’t imply that one had to become a drudge. One could still be aware of life, and could pursue a broad range of interests. Of course one did have to learn how to calculate those functions.

Anyway, Melba steered us out to the University of Illinois for graduate studies, where she correctly assured us there were two very fine physicists—and nice guys—Sidney Dancoff and Arnold Nordsieck—from whom there was a lot to learn. So we packed our one-room attic apartment into twenty-eight cardboard cartons, and got on a Trailways bus—with the cartons—it was the cheapest way to move—for Urbana, Illinois. Urbana, Illinois is as Urbana as Paris, Illinois is Paris. But that was O.K. There were no distractions—only the sound of corn growing in early June.

At Illinois we found a large and congenial physics department of men, presided over by stern father-figure Dancoff and Arnold Nordsieck—from whom there was a lot to learn. So we packed our one-room attic apartment into twenty-eight cardboard cartons, and got on a Trailways bus—with the cartons—it was the cheapest way to move—for Urbana, Illinois. Urbana, Illinois is as Urbana as Paris, Illinois is Paris. But that was O.K. There were no distractions—only the sound of corn growing in early June.

At Illinois we found a large and congenial physics department of men, presided over by stern father-figure F. Wheeler Loomis. The departmental practice was generally, though not strictly, one of supporting men graduate students in preference to women graduate students, on the basis of the demonstrable fact that most of the women got married and did not complete their degrees, and were thus a poor investment, statistically, compared to the men graduate students. I had a teaching assistantship the first year, and Freda had me. We arrived a few weeks before the beginning of the Fall (1949) semester, and got right to work studying for the Pre-preliminary (yes, that’s right) examination in optics, to be offered in another month-and-a-half or two. So it began.

Actually there was some instruction by a woman physicist at Illinois. Occasionally, when Maurice Goldhaber couldn’t get to one of his lectures in nuclear physics, his wife Gertrude would conduct the class in his place. And she did a fine job, although I believe it is true that she did not, as Maurice did, know from memory every single isotope of every element and the spin and parity and energy and lifetimes and half widths and decay modes and probabilities for every excited state of every isotope. Neither did any of the other physics faculty. But it was their good fortune that they were not married to Maurice, and therefore they were, unlike Gertrude, eligible to be on the faculty. We were told that the anti-relative practice at the University of Illinois was a carry-over from the depression.

We also once heard a colloquium in Urbana by Maria Goeppert Mayer on nuclear shell structure—before she got the Nobel Prize for that work. At that time, her husband Joseph was a Chemistry Professor at the University of Chicago, and so of course—you guessed it! Subsequently the Goldhabers went from Illinois to the Atlantic (Brookhaven) and the Mayers from Illinois to the Pacific (La Jolla). So there were a few female physicists with whom we made at least slight contact at graduate school.

Oh, yes. At Brooklyn College there was also a young and very good solid state theorist, Esther Conwell. She advised Freda, quite sensibly it must be admitted in retrospect, not to marry a physicist.

Discrimination against women will not be done away with overnight because it is an integral part of the means by which society exploits the non-dominant classes within the population. It would be useful to document the extent of various discriminatory practices in different colleges and universities. If you are at an institution of “higher” education, you can start by getting the breakdown into male and female of the following categories: full-time tenured faculty; full-time untenured faculty; part-time faculty (usually all untenured). Of course the ranks, teaching responsibilities, and salaries of the people in these categories are also important data to know.

When the Boston campus of the University of Massachusetts opened in the Fall of 1965, its initial physics faculty was made up of two men and two women. Four years later the faculty consisted of thirteen men. This Spring Freda Salzman is teaching a course in relativity theory, which she offered to give, and which the physics department then invited her to give. The students get no credit. She gets no credit. Soon, with continued support from colleagues, students, and friends, she will probably succeed in regaining the position from which she was unjustly severed. But she is only one of the many academic women who are getting short shrift from academia as it is now organized and run.

May 1971

G.S.

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3 In the early 1950s, during the McCarthy era, she was subpoenaed for questioning by the McCarran Committee and, as a result of her refusal to cooperate with the committee, was dismissed from Brooklyn College, much to its misfortune. She is now on the faculty of the University of Chicago.
INSURGENT PRESS GROWS AMONG SCIENTISTS AND ENGINEERS

The following are a few of the publications we have received that are indicative of the growing social awareness among scientists and engineers and the failure of the professional societies and journals to provide a forum for the expression of technical workers' concerns about the social and political aspects of their work.

TASC Newsletter
Box 952, Palo Alto, California 94302
TASC (Technology and Society Committee) was formed by persons concerned about the uses and misuses of technology. In addition to weekly luncheon discussions, TASC sponsors symposia, workshops, films, and retraining and employment programs all focusing on redirecting the activities of science and engineering towards more humane goals. (membership and subscription $10, subscription alone $4)

MAG Newsletter
Alan McConnell (temporary editor), Dept. of Math., Univ. of Ill. (Chicago), Chicago, Illinois 60680
MAG is a group of mathematicians who are working to make the American Mathematical Society (AMS), and the mathematical community in general, a little more responsible, a little more in touch with the real world. The Newsletter reports activities at mathematical meetings and discusses various strategies of action.

We received the following article from Berkeley SESPA just as we were closing out this issue of the magazine. Though we think the author's discussion requires some clarification in parts, for example in the discussion of tactics and in the analysis of McMillan's position, we are printing the report as is in the interest of keeping our readers up to date on local SESPA activities.

Students and staff at the University of California's Lawrence Radiation Lab at Berkeley continue to press for the right to hold organized meetings at noon hour in the Lab auditorium. This seemingly innocuous demand has resulted in a seventeen-month controversy involving Director of the Laboratory, Dr. Edwin McMillan, Chancellor of the Berkeley Campus, Roger Heyns, President of the University, Charles Hitch, and quite possibly, some of Ronald Reagan's Board of Regents. While the cast of characters is filled with Nobel Laureates McMillan, Chamberlain, Alvarez, and Calvin, the impetus for action has most recently been due to graduate students and post-docs, who on March 4 (of course!) held a noon-hour meeting outside after being denied use of the auditorium.

The meeting was held less than one month after the Academic Freedom Committee of the Berkeley Campus found that the Lab rules violated the academic freedom of the 500 students and faculty of the Lab. The Committee's report was supported by the Berkeley Faculty and by the Chancellor, but has had no effect on Lab policy. McMillan, without mentioning the conclusions of the report, has asserted that he is independent of the Chancellor and takes orders only from the President of the University. By such maneuvering McMillan has managed to forestall action for some time, but it seems unlikely that this tactic can survive a determined effort by Lab personnel to win their rights.

Last summer, Charlie Schwartz, a SESPA founder, was suspended by McMillan for holding noon-hour meetings. It is widely believed that if similar action were taken against graduate students the pressure against McMillan would become overwhelming. On the other hand, McMillan feels he cannot let these meetings...
continue without responding, lest his rules become meaningless. Schwartz's many controversial actions made him vulnerable to McMillan. Such vulnerability seems absent in those now pressing the issue. Lab personnel are becoming increasingly irritated by McMillan's actions, and a few senior scientists have threatened to leave the Lab if the rules are not changed.

Any battle, which lasts as long as this one has, provides an excellent opportunity to judge the value of certain tactical approaches. The tactics have been moderate by any standard. As a result, many liberals, such as Owen Chamberlain and Arthur Rosenfeld, remain firmly committed to the cause. Occasional support has even been provided by Luis Alvarez, Nobel Laureate, past president of the APS, and a somewhat conservative member of the Establishment. These moderate tactics, however, are certainly the cause of the great duration of the controversy. Attempts to use University and Lab rules to gain a satisfactory settlement have failed completely. Indeed, it has become clear that there really are no rules when it comes to the conduct of people like the Director of the Laboratory. This fact has dictated the tactics which have been employed recently: maintaining constant pressure on McMillan from within. This pressure cannot be made to disappear by a redefinition of the rules, but can be stopped only by firing or suspending employees.

It is worth analyzing McMillan's position, for while he may be an inept administrator, he is by no means a reactionary, a supporter of the War or of Ronald Reagan. Indeed, there is much which is tragic about his situation. He is frightened that liberalization of the rules would result in raucous noon-time rallies, presumably led by Huey Newton and Tom Hayden. Even in the absence of such demonstrations, he fears that noon meetings would introduce controversy into the Lab (whose sister Lab designs thermonuclear weapons). Lab administrators have repeatedly stressed that it is all right for scientists to worry about nasty questions like the War, but it seems to them improper that the workers at the Lab should consider these problems while at work. This elitist view is the key to the Lab Administration's thinking: there is a hierarchy in the Lab of which they occupy the top and the students the bottom. They believe that they can decide for the rest whether freedom of assembly is useful or not and they have decided that, at least at the Lab, it is not. The most extreme aspect of this position is McMillan's contention that he and his administrator friends know that the proposed noon-time meetings will not convince anyone of anything, so why have them. This line is not going to be bought by anyone.

The prospect is for more illegal meetings. A request has already been made for use of the auditorium for March 18 and March 25 to discuss upcoming elections in Berkeley. Denial of these requests may result in legal action against the Lab.

B. C.

May 1971

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In 1969 major industrial polluters spent one billion dollars to advertise their efforts at pollution control—ten times more than all U.S. companies spent for air pollution control devices in the same period.

( *The Sciences*, 1, no. 1, Jan. 1971, New York Academy of Sciences )

The U.S. has only 1.5 doctors per 1000 population, seventh highest in the world.


In 1943 in the cities there was one doctor for every 500 persons. Today there is one for every 20,000 persons. That means the emergency rooms of public hospitals are handling all sorts of health problems that used to be taken care of by the family doctor.

( Dr. Joseph English, former Peace Corps psychiatrist, quoted in the *Boston Globe*, February 1971 )

Only 6% of all employed chemists in the U.S. are women. These women earned a salary approximately 70% of the salary of similar male chemists.


Each mile of the proposed Alaskan pipeline will contain 500,000 barrels of oil travelling at 7 mph. Only 12 shut-off valves are planned along the 789 mile route (65 mi. apart) so a break could produce an oil spill amounting to the equivalent of more than 120 Santa Barbara spills.


While the recipient of the greatest number of dollars per capita in American foreign aid, Laos, between 1966 and 1967, suffered the highest per capita casualty rate in the world and endured the heaviest per square mile bombing in history.

PEOPLES SCIENCE PROJECTS FOR VIETNAM

Science for the People activists in Chicago and the racial faculty in the Division of Biological Sciences at the University of Chicago have begun a long-range effort to provide technical assistance to the people of Vietnam. A variety of projects are underway at this time, all of which were requested of scientific workers in the United States by their counterparts in the Democratic Republic of Vietnam, the Provisional Revolutionary Government of South Vietnam, and at the University of Hanoi. This direct scientific collaboration in problems of development and reconstruction will provide material aid for the Vietnamese and will reaffirm that the people of our two countries are not at war and that they wish to cooperate in working for the common goals of defeating U. S. imperialism and using science for the betterment of life, for liberation, and not for oppression.

The Biology for Vietnam program began when Dick Levins, UC professor of biology, returned from a visit to Hanoi this January. He travelled to North Vietnam as the American delegate on a trip sponsored by the World Federation of Scientific Workers. There he met with many Vietnamese scientists and discussed the ways in which scientific workers in the United States could directly aid in solving the problems confronting their Vietnamese colleagues. After returning to Chicago, Levins, Dick Lewontin, also a UC professor in biology, and Claudia Carr, a UC graduate student in geography, began organizing the Biology for Vietnam projects.

The Work To Be Done

The most immediately pressing scientific problem in Vietnam at the present time is a medical one. For many years the U. S. Military has been dropping antipersonnel bombs on Vietnam. The most common form of this weaponry is the metal fragmentation device which strikes the ground, explodes, and sends hundreds or thousands of small, irregularly shaped metal splinters travelling at high velocity in all directions. These fragments, because of their small size, are absolutely ineffective in destroying buildings and weapons installations. They are, of course, very effective in destroying and injuring human beings. The widespread deployment of these bombs against civilian populations confirms that the U. S. Military strategy behind their use is one of terrorizing the people of Vietnam into submission.

The campaign of terror was stepped up appreciably two years ago when the U. S. Air Force switched its antipersonnel bombs from metal fragmentation devices to plastic fragmentation devices. Once the plastic fragments become embedded in the flesh, they cannot be detected with conventional X-ray techniques, and they cannot be localized surgically because of the irregular trajectories they follow after penetrating the skin. Obviously terror is easier to induce if the possibility for removing these fragments is minimal or nonexistent, and if thousands of people survive with permanently implanted plastic fragments that cause chronic pain and organ dysfunction.

It is a testimony to the resourcefulness of the Vietnamese that the plight of these victims is the only significant military medical problem they have yet been unable to solve. They have asked people in the United States to develop the bioengineering techniques necessary to localize plastic fragments in human flesh and the surgical techniques necessary to remove them. One of the projects of the Biology for Vietnam program is to coordinate the various medical and engineering expertise that might be available around the country to help develop these techniques.

Another project requested by the Vietnamese entails researching the ecology of reforestation. With their characteristic concern for the future, the Vietnamese want to begin now to deal with the problems they will have to face after the war is over regarding the massive destruction of botanical life in their country. U. S. saturation bombing and defoliation have left tremendous areas of Vietnam deforested and pock-marked by bombcraters. The reclamation of this ground will be one of their major post-war economic problems. U. S. ecologists and soil scientists can help.

A related project has to do with the development of seed varieties resistant to herbicide contamination in the soil. With so much of their land poisoned by U. S. defoliating agents, agronomists must develop procedures for cleansing the soil or must try to bypass the contaminants by developing new crop strains. The former solution is possible, but it might require many years or decades to be effective since it involves the introduction of microorganisms into the soil and the eventual metabolization of the contaminants. Consequently, Vietnamese agronomists are becoming more interested in exploring the latter solution and believe that their colleagues in the U. S. can be of some assistance to them.

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There are also projects being undertaken which require little or no technical expertise in biology. A great deal of bibliographic research on crop diseases is necessary for Vietnam because of the inability of researchers in that country to obtain access to Western professional journals. People in this country will collate the available research on a specific problem, such as the diseases of rice, and send a detailed report of their findings to Vietnam. There is also work to be done on collecting books and reprints of journal articles for use in basic science courses in Vietnamese universities. Rather than shipping such materials in a random fashion, the Vietnamese have requested that they be organized around specific courses or content areas and sent in such preassembled packages.

Some specific projects have been underway since early February and are already nearing completion. These include the following work which is being performed by groups and individuals around the country: an investigation of the possibility of using ants for pest control; a study of the ecology of medicinal plants; research on the synthesis and use of olfactory insect sex attractants as a method of collecting and destroying agricultural pests; a collection of different varieties of agriculturally important plants for use by the Vietnamese in their breeding studies; and a collection of anecdotal information that might be relevant to large-scale agriculture, like the fact that marigolds planted at certain intervals are effective in repelling nematodes.

Wherever possible this work is being done openly to indicate that whatever Nixon & Co. in Washington are up to, scientific workers are not at war with the Vietnamese people. Where individuals cannot act openly, they are passing information and relevant hints along clandestinely.

Organizing the Solutions

People have already begun work on many of the projects outlined above and will undertake the remainder in the coming weeks. However, participation in none of the projects should be seen as limited to the Chicago area. Only the mobilization of a nation-wide effort on each of these projects can provide us with some measure of confidence that they will successfully be completed. At this time of widespread opposition to the Indochina War, there is a very real possibility that scientific workers, varying in political outlook from left liberal to revolutionary, can all be integrated into a common scientific and political program. The apparatus for coordinating such a nation-wide effort has been set up in Chicago through the offices of Dick Levins and Dick Lewontin, Dept. of Biology, and Claudia Carr, Dept. of Geography, University of Chicago, Chicago 60637. Anyone interested in cooperating should contact one of them in order to avoid duplicating the work of someone else and in order to find out what the current priorities are.

There are a variety of organizational forms appropriate for work on these projects. Levins and Lewontin themselves are teaching a joint course to biology graduate students, the purpose of which is to solve some of the problems suggested by these projects. Groups independent of the university are forming in order to take on specific problems. Others have indicated a willingness to coordinate the efforts of scientific workers that will be working on the same project but in different cities, such as the technical people required for the plastic pellet work.

Groups should be encouraged to form on specific university campuses, within professional associations, and in different regions, which can relate to and communicate directly with their equivalents in North Vietnam. Contacts can be established for such groupings, through the people in Chicago, with Vietnamese institutions like the Polytechnique School, the University of Hanoi, the College of Agriculture, the Society for the Propagation of Science and Technology, the Physics Institute of Vietnam, and Institute of Epidemiology and Hygiene, the Medical College, and others.

It is important to emphasize very strongly that people are needed for these projects whether or not they possess any technical expertise in the biological sciences. Much of the work requires only basic literacy skills, such as the bibliographic research, the collecting and packaging of books and articles for Vietnamese university courses, the collecting and dispersal of

AID TO CUBAN MATHEMATICIANS

The Cubans can use scientific books of all sorts, which can be sent to:

Nestor Garcia
International Relations
University of Havana
Havana, Cuba

Or to avoid possible trouble with the mails, to:

Chandler Davis
Dept. of Mathematics
University of Toronto
Toronto 81, Canada

Also: Europeans are supplying dozens of teachers. Especially needed are people to teach secondary school math (in Spanish) for periods of at least six months. One of the coordinators of this effort is:

Didier Castelle
15 rue IaKanal
Paris 15, France
information from and to individuals working on the same project in different locations, and the recruitment of more and more people into the various projects. For example a group of people, predominantly from the social sciences, in the Chicago area have taken on the responsibility of publicizing the Biology for Vietnam program with the twin objectives of recruiting more people into the program and building anti-war consciousness and the anti-war movement in the United States.

The Political Impact

The most compelling reason for carrying out the Biology for Vietnam program is unquestionably to provide real material aid for the Vietnamese. However, a secondary reason, of significant importance, is the positive political effect the program can have within the American scientific community and the American population generally. Scientific workers with even vaguely anti-war politics are increasingly realizing that their work is either contributing to the power of a war-making society or is irrelevant to curtailing that society's war-making policies. A feeling that their professional lives and their political objectives are becoming irreconcilable is driving many scientific workers toward either an abandonment of their work or of their politics or both. A program like Biology for Vietnam could demonstrate to such people that there are many individuals besides themselves who are faced with this dilemma (the first prerequisite for overcoming alienation), and that something can be done to integrate their scientific skills with a movement for meaningful political change. The power of the program as an organizing tool is not limited to the recruitment of new workers into the movement. Many of us, already committed to the idea of Science for the People, and the analysis that flows from it, have a great deal to learn about the concrete expression of that idea and the development of the nonelitist, interdisciplinary, politically-oriented scientific practice that it demands.

Furthermore, the Biology for Vietnam program, if it can be publicized effectively, has the potential to contribute more than materially to the anti-war movement in the United States. The movement has recently been stressing the necessity for people in this country to dissociate themselves from the war effort in active and visible ways. The current campaign in support of the People's Peace Treaty is an expression of this policy. If an important sector of the population, like scientific workers, begins to act this way, it can serve as a workers, model for workers in other areas, and at the same time help build a viable, functioning movement even more capable of increasing its influence and power. Enforcing our dissociation from the Indochina War by direct, public collaboration with the countries that the U.S. government defines as "enemy", further isolates that government, and the ruling class behind it, from the people in whose name it claims to govern, and further undermines it legitimacy.

AID TO NORTH VIETNAMESE MATHEMATICIANS

The Vietnamese need modern text books. They can use several copies, because their duplicating facilities are few. English is OK (study of the language is now much more widespread there). It is possible to get the books to Hanoi, via diplomatic channels. They can also use cash contributions in Western currency, for purchase of books and travel expenses for scientific visitors; they will publish an accounting of their disposition of funds contributed. Both books and checks may be sent to:

Delegation Generale de la RDVN
2 rue Le Verrier
Paris 6, France
Attn: M. Tran Tri

Contributions from North America may be sent for forwarding to:

Chandler Davis
Dept. of Mathematics
University of Toronto
Toronto 181, Canada

Physics for Vietnam

Dick Levins returned from North Vietnam with a few requests that pertain also to the physical sciences. A program to carry out these requests is currently being formulated in Chicago. Specifically, the Vietnamese are interested in obtaining information on integrated circuits and on computer technology, including actual computer programs. They would ultimately like to pair the computer at the University of Hanoi with a computer here in the States. They are also in need of specific items of equipment, like a mass spectrometer, and spare parts for equipment they already have. A detailed and lengthy list of these items has been obtained from a group in London that has been working on their procurement. It is hoped that surplus items can be located in physics departments and laboratories in this country. It might also be possible for people teaching physics in universities to assign the construction of one of the needed pieces of equipment as a class project with the announced intention of forwarding it when completed to the people of Vietnam. Anyone interested in helping to develop the Physics for Vietnam program should contact Bob Ivano or Larry Lambert of the Department of Physics at the University of Chicago, Chicago 60637.

B.Z.
H E L P  F O R  S C I E N C E  E D U C A T I O N  I N  C U B A  A N D  V I E T N E M

Scientific and technological resources of the United States should not be used to help colonize and repress people in less developed countries, but to help them improve their own economic, political and cultural position. That would be "Science for the People." While the chances of official U.S. policy being changed to conform with this notion are slight as long as the U.S. government continues to be controlled by the dominant power interests, people can do something to implement such an approach. Two countries where scientific aid for the people is urgently needed are Vietnam and Cuba, where U.S. science and technology continue to be used to devastate and oppress.

In Vietnam, U.S. military strategy is designed to destroy the will of the people to resist occupation by the Saigon-Washington government. Part of this strategy is to disrupt Vietnamese society and culture by any means necessary; for example, by bombing Vietnamese villages with incendiary and antipersonnel devices such as steel needles and pellets, or by relocating a large part of the rural population in the South away from their ancestral lands. "Vietnamization" will not improve matters, since the U.S. government recently admitted that "preventive" bombing of the North will continue and intensify during the "Vietnamization" period.

This calculated disruption of civilian life, unprecedented in its severity, has not damaged the morale of the Vietnamese people, but it has hurt them in other ways. The Vietnamese value highly their intellectual tradition and system of education - aspects of their society that are practically unknown in the U.S., where most people think of the Vietnamese as tenacious but simple-minded peasants. American scientists, recent visitors with their Vietnamese colleagues, point out that U.S. bombing of the North has forced the Polytechnic University in Hanoi to decentralize and has destroyed much of the Central Scientific Library.

The Vietnamese people see scientific and technical education as extremely important. In the short run, they need it for industrial manufacturing and medical techniques to save the lives of their people. In the long run, they need it to rebuild their country and improve their living conditions.

In Cuba, U.S. policy is aimed at nothing less than starving the people into accepting the kind of government that the U.S. government believes is best for them. Not content with eliminating Cuba from the sugar quota and instituting a trade embargo that prohibits U.S. firms from exporting to Cuba, the U.S. government tries to enforce a vicious secondary boycott of European and other Western firms that sell to Cuba. Thus not only industrial articles but also food and medical supplies are very scarce, and rationing is severe.

Thirteen years ago the Revolution took power in a country that had been for half a century little more than a colony of the U.S., with its economy completely integrated into that of the mother country and almost totally dependent on one crop, sugar. Since then, despite U.S. opposition and obstruction, the Cuban people have been working to achieve stability, economic independence and control over their own political destiny.

Numerous visitors over the past few years report that the Cubans are aware of the importance of education to this endeavor, particularly in science and technology. However, the disarray of the educational system engendered by Cuba's former colonial status has been aggravated by the departure since the revolution of the vast majority of the elite university professorial class. Thus progress in this critical area will be slow and help is needed.

In the United States "Science for the People" is not yet a reality. The corporate and military establishment controls much of scientific work, both in industrial research and development and in the universities where it is protected by "academic freedom." But American scientists can use science to help the Vietnamese and Cuban people in a significant and constructive way. These people urgently need advanced medical, scientific and technical journals and textbooks to further their educational endeavors. In addition, the Cuban people welcome American university professors, particularly in the biological and health sciences, who wish to teach for a few weeks or months in Cuban universities.

A political collective in Cambridge, Massachusetts has already collected and shipped over 3,000 pounds of books and journals to North Vietnam and Cuba, and other groups are also active. For the past two summers American professors have taught at the University of Havana, and further courses are planned for the coming summer. If you are interested in such projects, please write for more information to SESPA Science for Vietnam and Cuba, P.O. Box 59, Arlington Heights, Mass.

Red Crate Collective

Science for the People
I am very interested in what you are doing. Please send me literature about the ideas and purpose that move you. I am a biochemist, Chilean, and about to go back to Chile and dedicated to the idea of doing science to complement and develop human welfare. Too much of science, seems to me, like a deaf man who is answering questions nobody has asked him.

Chile confronts two enormous problems in scientific research. One is that the country is paying royalties, patents and what not for discoveries made in foreign countries, which are later patented for industrial exploitation. Two, those scientists that do go back to Chile try to compete and emulate the big universities of this country leading to wasteful and frustrating competition. Problem one would need the cooperation of scientists in the world to declare science nobody's property and to establish effective mechanisms of wide availability. Problem two, needs the ingenuity and the social conscience of scientists to do research in topics and fields that are folkloric to the particular country. At the present moment I am in the latter quest and thirsty for dialogue.

My address is: RR 12, Box 225 Edgewood Hills, Bloomington, Indiana, 47401.

Cordially,
Christian Orrego

Dear Friends,

Saw your address in the Liberated Guardian.
Enclosed is a check for $2 to help pay for any info about yourselves and People's Science in general. I'm a senior at the School of Engineering Science at FSU [Florida State University] and am a radical ..... PM will come out with an issue on "People's Science" in a few months.

Build a movement in the South!

B. Broedel, ed. PM
308 S. Macomb
Tallahassee, Fla.
32301

Bob sent us two issues of the newsletter, PM. It's good! Those of you in his area ought to get in touch with him. We cannot overemphasize the importance of building a movement in the South. [Editors]

May 1971
SPRING ACTION CALENDAR

April 19-23: Protests in Washington by 5000 veterans of the Vietnam war, sponsored by the Vietnam Veterans Against the War. Relatives of war dead and relatives of prisoners of war are invited to join in a march and ceremonies at Arlington National Cemetery. Other activities include a war crimes tribunal on the Capitol steps, a 24-hour vigil and a ceremonial returning of medals.


April 24: Mammoth assembly near the White House and march on the Capitol to focus on the demand for immediate withdrawal. A parallel action on the west coast will be held in San Francisco. Sponsored by National Peace Action Coalition (NPAC), Peoples Coalition for Peace and Justice (PCPJ), and entire anti-war movement. PCPJ will also present demands for a $5500 minimum income for a family of four and the freeing of all political prisoners.


April 26-30: Mass lobbying of all government institutions related to militarism and social welfare, along with nonviolent direct action organized by PCPJ.

May 1: May Day march through New York's working class sections. 11:30 AM at 110th & Broadway, organized by Progressive Labor Party.

May 1: Youth festival in Washington and mass rally to present the Peoples Peace Treaty to the government called by the Ann Arbor Student and Youth Conference. Local and regional support actions.

May 2: Mass inspirational rally to prepare for intensified mass civil disobedience, called by the PCPJ.

May 3-4: Intensified civil disobedience and disruption in Washington.

May 5: National moratorium in all cities and campuses, called by NPAC, PCPJ, and SMC, commemorating the Cambodian invasion and the slaying of the Kent and Jackson State students.

** May 14: Science for Vietnam—scientific conferences to work on technical problems faced by the Vietnamese [see announcement on this page].

May 16: Solidarity Day with the GI movement, with actions in support of protests by GIs on Armed Forces Day at military bases around the country.

** May 18-20: Actions at Spring Joint Computer Conference, Convention Hall, Atlantic City, N.J. Contact: Paul (212) 675-8490. Organized by Computer People for Peace, cosponsored by SESPA/Science for the People and others. 30,000 attendance expected [see announcement on this page].

** June 13-17: Actions at American Nuclear Society in Boston. Contact: Al (617) 495-2497.

** SESPA/Science for the People activities

MAY 14 – A DAY OF ACTIVITIES ON SCIENCE FOR VIETNAM

ORGANIZE ACTIONS IN YOUR CITY, WHERE YOU WORK, AT SCHOOL

[See “Peoples Science Projects for Vietnam” p.25 and “Help for Science Education in Cuba and Vietnam” p.28]

Here is the tentative agenda for the University of Chicago Program:


Workshops—Problems of reconstruction, Medical Problems, Scientific Development, Exposes of Local War and Counterinsurgency Research, Counterinsurgency Gadgetry.

Militant Action—Demonstration at a local war research center.

Fun—Party, Dance, Fund Raising.

For further information contact: Larry Lambert, Box 89, Ryerson Lab., 1100 E. 58th St., Chicago 60637, or Len Radinsky, Anatomy Dept., University of Chicago, Chicago 60637.

JOIN WITH COMPUTER PEOPLE FOR PEACE AND SESPA/SCIENCE FOR THE PEOPLE

In a mass, multi-based series of actions, meetings, and demonstrations at the Spring Joint Computer Conference (SJCC), Convention Hall, Atlantic City May 18-20

SJCC is an annual trade show technical conference public relations gimmick sales event which brings together representatives of major corporations (IBM, GE, Honeywell, RCA, Litton, AT&T, etc.), high level military and government officials, and the technocratic elite that serves their interests.

AMONG THE ISSUES: Use of computer-based information systems as a means of social control, corporate racism such as IBM in South Africa, misuse of computers vs constructive potential, role of automation in rising level of unemployment.

For further information contact: Paul Millstein (212) 675-8490

Science for the People
LOCAL ADDRESSES FOR SESPA/SCIENCE FOR THE PEOPLE

BERKELEY  Box 4161, Berkeley, Calif. 94704
BOSTON  Box 59, Arlington Heights, Mass. 02175
BOULDER  c/o Jane Bunin, Sunshine Canyon Road, Salina Star Rte, Boulder, Colo. 80302
CHICAGO  Box 89, Ryerson Laboratory, 1100 E. 58th St. Chicago, Ill. 60637
CLEVELAND  c/o David Nichols, Interdisciplinary Studies in Social Science, CWRU, Cleveland Ohio 44106
DETROIT  c/o William J. Steffy, 1279 West Forest, Detroit, Michigan 48201
ITHACA  c/o Al Ferrari @ The Glad Day Press, 308 Stewart Ave, Ithaca, N.Y. 14850
LAWRENCE  c/o Steve Hollis, 1406 Tennessee St., Lawrence, Kansas 66044
LOS ANGELES  L.A. SESPA Box 368 Canoga Park, California 91306
MADISON  c/o Bob March, Dept. of Physics, Univ. of Wisconsin, Madison, Wisc. 53706
NEW YORK  c/o David Kotelchuck, 49 W. 96th St. Apt 53, New York, N.Y.
NORTHFIELD  c/o Mike Casper, Dept. of Physics, Carleton College, Northfield, Minn. 55057
OSSINING  c/o Ed Walker, Spring Valley Road, Ossining, New York 10562
PHILADELPHIA  c/o Peter Sterling, Dept. of Anatomy, Univ. of Penn., Philadelphia, Pa. 19104
ST. LOUIS  c/o Jeffrey Schevitz, Dept. of Sociology, Washington Univ., St. Louis, Mo. 63130
STONY BROOK  c/o Theodore Goldfarb, Dept. of Chem. SUNY, Stony Brook, New York 11790
STORRS  c/o Lorraine Roth 5 Meadowood Rd. Storrs, Conn.
WASH D.C.  c/o Mike Marchetti, 4004 N. Fifth St. Arlington Virginia 22203
WORCESTER  c/o Jim Blaut, Graduate School of Geography, Clark Univ., Worcester Massachusetts 01610

SUBSCRIPTIONS TO SCIENCE FOR THE PEOPLE AND MEMBERSHIP IN SESPA

SESPA is defined by its activities. People who participate in the (mostly local) activities consider themselves members. Of course, there are people who through a variety of circumstances are not in a position to be active but would like to maintain contact. They also consider themselves members.

The magazine keeps us all in touch. It encourages people who may be isolated, presents examples of activities that are useful to local groups, brings issues and information to the attention of the readers, presents analytical articles and offers a forum for discussion. Hence it is a vital activity of SESPA. It is also the only regular national activity.

We need to know who the members are in order to continue to send SCIENCE FOR THE PEOPLE to them. Please supply the following information:

I am a member (check here if subscriber only. [ ])

1. Name: ________________________________________________
Address: _______________________________________________
Telephone: _____________________________________________
Occupation: _______________________________________________
(if student or unemployed please indicate)

2. Local SESPA chapter or other group in which I'm active:

3. I am enclosing money according to the following scheme: (a) regular membership—$10, (b) indigent membership—less than $10, (c) affluent or sacrifice membership—more than $10, (d) completely impoverished—nothing, (e) I have paid already.

4. I will sell ___ magazines. This can be done on consignment to bookstores and newsstands, to your colleagues, at meetings. (If you want to give some away free because you are organizing and can't pay for them, let us know)

5. I am attaching a list of names and addresses of people who I believe would be interested in the magazine. Please send them complimentary copies.

If you are working, do you work in industry [ ], government [ ], university [ ], other _______

Please add any comments on the magazine or SESPA or your own circumstances. We welcome criticism, advice, and would like to get to know you.

SEND CHECKS TO: SESPA BOX 59 ARLINGTON HEIGHTS MASS. 02175

May 1971