INSIDE

4 Rx FOR THE PEOPLE: Preventive Genocide in Latin America
9 POGROM FOR PROGRESS: Brazil
15 AAAS: Action and Reaction
20 AAAS CRITIQUES
27 UPCOMING EVENTS
28 THE PHILADELPHIA STORY (Another Experiment on Women)
30 BOOK REVIEW: War Without End
34 CALCULUS FOR CONQUEST
40 LIGHT IN THE SEWER
42 ENGINEERING UNEMPLOYMENT: How to Lie with Statistics
44 LETTERS
47 LOCAL ADDRESSES FOR SESPA/SCIENCE FOR THE PEOPLE


EDITORIAL COLLECTIVE: Esther John, Scoop Leahy, Eric Prahl, Tom Strunk.

LETTERING: Tom Strunk

PHOTO CREDITS: The Chronicle of Higher Education donated some pictures of the AAAS to us, and they wanted us to say so.

Special thanks to AI, critic and mentor.

EDITORIAL PRACTICE

Each issue of Science for the People is prepared by a collective, assembled from volunteers by a committee made up of the collectives of the past calendar year. A collective carries out all editorial, production, and distribution functions for one issue. The following is a distillation of the actual practice of the 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 for 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. Consequently, 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 the 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. For legal purposes Science for the People has become incorporated.
ABOUT THIS ISSUE

BEST WISHES for the NEW YEAR
in the same vein as earlier,
again very very sincere
in conditions further severe,
making for all very necessary
conscious efforts not to be accessory
to the forces of rising neo-fascism
serving sometimes monopoly capitalism
and at others the social revisionism,
thus all the time this or that imperialism;
necessitating checks also on diversions to left romanticism
harmfully contributing only to pseudo-revolutionary
jingoism
or on the growing trends to mere radical liberalism
no way leading real breaks from benevolent elitism:

with Hopes for early recognition
of essential need for involvement in mass action,
even to safeguard the rapidly eroding rights
of democracy and of freedom fights,
individual and collective, against oppression and suppression,
as part of the common peoples struggles for freedom and
liberation;

Hailing the revolution for the people
carried out themselves by the common people
N.S.

In the past issues this space was used to mainly describe the articles appearing in the issue. There is, however, a more important idea which needs to be stated. It pertains not only to all issues of Science for the People but also to other magazines published by other radical friends. You and all people in struggle must look at these publications as tools to be used in organizing and waging those struggles. This appears to be obvious, but too few people act accordingly. Let's assume you read these magazines because you agree with them and find them informative. If that's true then ask yourself the following question: "To how many other people do I sell or give this magazine?" See? That's what we mean. Unfortunately, for many of us we can count this number on one hand.

If we want to see an end to the slaughter of people fighting for the right to govern themselves, an end to the racist oppression of blacks and all minorities, an end to the oppressive use to which the technology we create is put then we will have to reach many more people. We must convince many of our friends (and other people who should be our friends) of the need to change this system whether by organizing, distributing literature, discussing or by confrontation. This means exposing to everybody the ways in which this capitalist system must exploit and destroy people. The article "Preventative Genocide in Latin America", in this issue is a good example of exposing the exploitative way in which the rich of the U.S.A. are using birth control programs. It's information like this that we should take with us to show the U.S. scientists at the AAAS Mexico City meeting this summer (see page 14). And it's information like this that we should give to everybody with whom we work and socialize.

Science for the People is not like the New York Times which you read and throw away. Use Science for the People to educate and organize; sell it to others. In many respects we are competing against the lies that permeate the establishment press. The only effective way to do this is to make our ideas the property of everybody.

Science for the People magazine also affords a means of analyzing and improving actions. People draw many lessons from their struggles, be they day-to-day or larger actions. It is essential to the success of all struggles to communicate these lessons. It is in that spirit that we print such articles as "Calculus for Conquest" and "AAAS Critiques" in this issue.

The only way the magazine can grow in both circulation and quality is for people to contribute to and use Science for the People as an aid to their political development and that of others.

March 1973
We of the Editorial Collective at first had reservations over the use of the term "Genocide" in the title of this article. However, in accord with the following statement from the United Nations Convention on Genocide we feel the word is most appropriate.

ARTICLE II.
IN THE PRESENT CONVENTION, genocide means any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:

a) Killing members of the group;
b) Causing serious bodily or mental harm to members of the group;
c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
d) Imposing measures intended to prevent births within the group;
e) Forcibly transferring children of the group to another group.

ARTICLE III.
The following acts shall be punishable:

a) Genocide;
b) Conspiracy to commit genocide;
c) Direct and public incitement to commit genocide;
d) Attempt to commit genocide;
e) Complicity in genocide.

Ratified by the United States in 1950.


Today, "explosive populations" are portrayed in the United States as one of the world's most critical problems. The "population crisis" as it is commonly known, cannot be analyzed without an awareness of the background of the panic's promoters. In cooperation with corporate expansion into the Third World, government agencies are now multiplying their efforts to develop preventive genocide.

"family planning" as a weapon against the revolt of the oppressed.

Within the State Department the Nixon Administration has established a population "office" which is now responsible for coordinating efforts of embassy officers, the Agency for International Development, the Peace Corps and the U.S. Information Agency to encourage less developed countries to focus on population matters. The State Department itself attributes all manifestations of misery in the world to numbers—"For the vast majority of families in the 'less developed' countries, the possibilities of improvement of the welfare of parents and children are submerged by sheer numbers".

During the four fiscal years, the State Department's fund-giving arm, the Agency for International Development, has increased the budget for population control from $10.5 million to $17 million.

In addition to dispensing population control dollars to dozens of governments, AID pumps money into a number of "philanthropic" organizations that operate throughout the world. One of the biggest recipients is the International Planned Parenthood Federation, whose trustees include Lammot duPont Copeland of the DuPont chemical Corporation, (Copeland recently gave $2 million to Harvard University for its Population Center), Eugene Black, former chairman of Chase Manhattan Bank, and George Kennan, Cold War theoretician.

During the 1960's, the present IPPF president, Dr. Alan F. Guttmacher bluntly described his fears of Third World revolts:

Reckless population growth without parallel economic growth makes for a constant lowering of the standard of living. Such a decline, with its concomitant mounting poverty and...
hunger inevitably delivers a population to some kind of -ism, whether it be communism, fascism, or Pan-Arabism and weans them away from democracy. [1]

Similar ideas have been expressed by American presidents such as Eisenhower, who explained his own support for population control as follows:

Once, as President, I thought and said that birth control was not the business of our federal government. The facts have changed my mind. Today with former President Truman, I am honorary chairman of Planned Parenthood (IPPF) because I have come to believe that the population explosion is the world’s most critical problem.[2]

Later, Johnson would be more precise:

Let us act on the fact that less than 5 dollars invested in population control is worth a hundred dollars invested in economic growth. [3]

Leading American industrialists, such as John D. Rockefeller III constantly evoke the “diminishing resources” theme as a justification for curbing population growth:

As the gap between the developed and underdeveloped world alarmingly widens, economists point out that the U.S. with less than 6% of the world’s population, already consumes some 55% of the world’s raw materials. [4]

These same interests have been vocally represented since 1944 by the Hugh Moore Fund. Moore, a wealth manufacturer, successfully brought the population issue into NATO and later founded the Population Crisis Committee, the Campaign to Check the Population Explosion, and the World Population Emergency Fund. Today, he is chairman of the Association for Voluntary Sterilization. Moore’s colleagues on the boards of these and other agencies include figures such as Eugene Black, General William H. Draper (former Secretary of the Army, present IPPF chairman), or Will Clayton (a former under-secretary of state).

In recent years, both the American government and the “philanthropic” agencies such as IPPF, have exerted continual pressure upon Latin American nations to reduce birth rates. A celebrated case in 1969 was Bolivia, which had recently nationalized GULF Oil’s holdings. When Bolivia, with a population density of less than four persons per kilometer, refused to institute “family planning” programs, the World Bank, under American pressure threatened to withhold all development loans.

Another type of pressure has been conducted by the “Food for Peace” programs. Since 1968, five percent of all “food assistance” must be consecrated to programs for reducing population. The Foreign Assistance Act now authorizes American presidents to “consider the extent to which the recipient country is...carrying out voluntary pro-

grams in population control.”[5]

The efforts of the State Department are reinforced by such pillars of corporate “charity” as the Ford and Rockefeller foundations, which operate their own population control programs throughout the Third World. Between 1952 and 1968 the Ford Foundation had distributed $115 million, more than any other public or private agency. In 1968 alone, the Rockefeller Foundation distributed $18 million or almost twice as much as the State Department’s population control outlays.

The interconnections between agencies indicate the pitfalls of attempts to examine “family planning” within a vacuum. Just as the most powerful businessmen in the U.S. and the leadership of such agencies as AID and the CIA have developed complex strategies for keeping the world’s future population within “acceptable limits” in order to forestall the crisis that a multi-national system of exploitation will surely produce.

Robert S. McNamara, current World Bank president, and former Secretary of Defense, has been a trustee of the Ford Foundation and president of Ford Motors. On behalf of his money-grubbing class, he explained:

All activity (concerning population matters) arises out of the concern of the bank for the way in which the rapid growth of population has become a major obstacle to social and economic development in many of our member states. Family planning programs are less costly than conventional development projects and the pattern of expenditures involved is normally very different. At the same time, we are conscious of the fact that successful programs of this kind will yield very high economic returns.[6]

Today, McNamara’s statement is paralleled by American policy. “Costly development projects” have been drastically reduced in the last seven years as population allocations have multiplied. Between 1966 and 1969 AID’s population control appropriations rose from $11 million to $18 million but in education and manpower training, funds were reduced by almost $6 million. Health programs were cut by $49 million.

2. Hunger and Profits.

Imperialist strategists such as McNamara, when they expound the neo-Malthusian theory of numbers as an obstacle to economic development, conveniently omit the rape of the Third World by foreign capital. Large portions of each year’s exports are funneled out as profits on foreign investment or interest on foreign loans. In this way “developing countries” are continually deprived of funds that could be used for domestic capital expansion. In Latin America, where foreign exploitation goes back a hundred years, North American capitalists have consistently maintained staggering profit rates. During the 1950-60 period, they directly invested $3.8 billion, but were able to withdraw $11.5 billion.

Since 1960 and the initiation of the so-called “Alliance for Progress,” food production in Latin America has fallen incredibly, instead of rising. For example, in

March 1973
Argentina, where beef exports have continually risen, the Argentinian people's consumption of beef has dropped 50% in the past ten years. While the supply of animal protein increased 12% in the world as a whole, it fell 18% in Latin America. [7]

Despite the Latin American food crisis provoked by American super-exploitation, the world-wide picture sharply contradicts neo-Malthusian cries of alarm. According to the U.N., "the food problem in the near future is more likely to be surpluses than starvation." General Boerm, former Food and Agricultural director (FAO) warned that "excess supplies of cereals, butter, and dry skimmed milk reached proportions that led to serious problems in the commodity markets." Only 1/10 of the world's total land area is under cultivation according to the U.N. report.

"More dramatic still are what new techniques, food strains and fertilizers can do; one ton of nitrogen equals in production the worth of 14 arable acres. Food production has been growing one and three quarters times as fast as population since the mid-1950's." [8]

Mass starvation does not result from insufficient quantities of food, but from the inequalities of capitalist distribution. A case in point is the American colony of Puerto Rico, where investors obtain a 28 percent return on invested capital (twice as high as in the U.S.), while the average wage of a Puerto Rican industrial worker is 1/2 to 1/3 lower than the North American level. At the same time the cost of living in Puerto Rico is 25% higher. The island is agriculturally very rich, producing sugar, fish, pineapples, tomatoes, lettuce, but re-importing these same food-stuffs for local consumption at greater cost. Fourteen percent unemployment, at different periods has caused emigration to the U.S. to reach forty thousand yearly.

As early as 1936, the United States decided upon a strategy of reducing the island's potentially rebellious population. Since then, the Family Planning Association of Puerto Rico, an affiliate of IPPF has operated clinics throughout the island. By 1954, one sixth of all women of child-bearing age had been sterilized, and by 1965, one third. Paul Hatt, a U.S. expert on sterilization in Puerto Rico, described the situation:

Sterilization is so popular that local politicians dispense the necessary bed space in return for political allegiance. What explains this phenomenal popularity? Sterilization is effective and relatively easy. Another reason is that sterilization is usually performed in the hospital postpartum, thus removing some of the onus and embarrassment of a special trip and a special examination. [9]

According to the Population Council, contraceptives with dangerous side effects were tested in Puerto Rico for three years at the Humacao clinic before the facts were revealed. Joe Sumner, a midwestern tycoon and inventor, developed new devices and a new chemical himself to prevent births. He spent hundreds of thousands on "pilot" projects in Puerto Rico to learn if an operational formula could be found for other areas.

Today, Puerto Rico is used by the U.S. as an artificial showcase of capitalist development. While it is pretended that "Operation Bootstrap" (1945-1955) industrialized the island, it is also pretended that "family planning" since 1936 brought prosperity. In 1964, the Fourth Western Hemisphere Conference was held in San Juan, Puerto Rico. One of its many themes was how to win support or "tolerance" from the Catholic hierarchies. It was widely advertised that priests in El Salvador and Uruguay had publicly endorsed "family planning." Heavy emphasis was placed upon individual governments' cooperation with the family planning programs of the Organization of American States.


In order to convince Latin Americans that "family planning" agencies have the interests of the people at heart, the confidence of the masses must be won. North
American Protestant organizations had long been a willing instrument in promoting necessary trust for widespread acceptance of U.S. programs. The Church World Service with support from AID and other agencies, has initiated "family planning" programs on a worldwide scale. Its activities particularly emphasize selection of "leaders" through training conferences and seminars for public officials. Another specialty of the CWS is creation of "experimental" programs in villages and urban slums, often through Latin American universities. Guatemala has had its own national CWS program.[10]

The American Friends Service Committee (Quakers), well known in the U.S. for support of the black civil rights movement and opposition to the Indochina war, has operated population programs in conjunction with IPPF and UNESCO. In Mexico, the AFSC has sponsored international training programs for medical personnel and teachers at all educational levels. In 1971, 239 professionals were trained. In Colombia, the AFSC has been proud to claim 100 monthly IUD insertions in Barranquilla.[11]

The Mennonites and Unitarians, working in the poverty-stricken areas of Haiti, Trinidad, Guatemala, Colombia and Peru, preach "Christian consciousness and responsible parenthood" in order to make genocidal schemes more palatable.

The intertwining of church programs and more overtly imperialist programs, such as those of AID, Population Council, or the Ford and Rockefeller Foundations make it clear that in Latin America, "Protestant benefactors" have long ago made their choices with regard to "explosive populations."

4. In the Field.

Another major international agency created to mobilize private wealth and power for shaping public policies is the exclusively ruling class Population Council, which was initially established by the Rockefeller family. Today its leaders include such industrial magnates as Henry Ford II, Richard Mellon, and Stewart Mott. The Population Council serves mainly to finance research into such topics as attitudes of poor women in El Salvador toward contraception or the study of male attitudes towards fertility control by the school of Politics at University Sao Paulo in Brazil. In Trinidad, the Population Council has supported programs for clinically testing the IUD. In 1953, Ford Foundation appropriated fourteen million dollars for expansion of the Council's bio-medical laboratories used in fertility research.

The Pan American Health Organization (PAHO), organ of the World Health Organization of the U.N., helps furnish existing programs with medical knowledge and necessary materials. PAHO has assisted government programs in Trinidad and clinics in the small towns and rural villages of Costa Rica, as well as other Latin American countries. Although under U.N. auspices, PAHO is also supported by Ford, Rockefeller, Population Council and others.

One of the largest centers for training "family planning" personnel and processing data has been CELADE (the Latin American Demographic Center) in Chile. CELADE has instituted the famous KAP surveys (Knowledge, Attitude and Practice) which "demonstrate the demand for goods and services, in this case, birth control." The project was initiated at the International Population Program Center at Cornell University in New York. Interviews are conducted with questions concerning health, fear of infidelity, effects of contraception on pleasure and the effects on male authority.

CELADE has also engaged in projects in the Central Valley of Chile, demonstrating the IUD. There are smaller sub-centers of CELADE such as CESPO in Costa Rica. In Nicaragua, with a population density of less than 10 persons per square mile, CELADE has supported fertility control efforts of the social welfare offices.[12]

Hundreds of family planning clinics throughout Latin America carry the title Asociacion Pro Bienestar de la Familia—IPPF affiliates. AID not only funds these clinics, but maintains many of its own. In Jamaica there are 122, and in Honduras, with one of the lowest population densities in the Western Hemisphere, there are 60 clinics.

Another front for AID's enormous expenditures is the Pathfinder Fund, which supports IUD experimentation and helps supply almost every country in Latin America with free or low cost contraceptives. Pathfinder is known for "pilot" projects such as the series of "simplified medicine" experiments carried out in a rural area near Caracas.[13]

As shown previously, private foundations were the early backboard of "field-testing" and general propaganda in the "family planning" field. Ford Foundation has contributed generously to such projects as the study of side-effects of contraceptives in Puerto Rico (one million dollars), and to Mexico for international training in Culdoscopy, a quick and inexpensive method of sterilization.
In Colombia, the Rockefeller Foundation has put large sums into the ACFM programs (Association of Colombian Faculties of Medicine) for its population center, concentrating work at the University Del Valle, The Catholic newspaper, El Sigle, wrote in a 1965 article that 40 thousand Colombian women had been sterilized under the ACFM program. Small money payments, promises of free medical services, and free lipstick, artificial pearls were offered.[14]

In Bogota, the headquarters of the Population Reference Bureau is also supported by the Rockefellers and other business magnates. For forty years, it has been concerned with distribution of educational information, focusing on elementary textbooks, high school publications and regular bulletins. Trustees include Frank Abrams (Jersey Standard) and Lawrence Wilkinson (Continental Can). The Bureau has organized “population dialogues” for high level officials, newspaper editors, wealthy industrialists, and labor leaders.

5. Conclusion

From the level of propaganda aimed at lower class women to the highest government discussions of population, the alleged connection between poverty and population is continually stressed. Demographic explanations of poverty have provided the giant capitalists with a smokescreen to mask their own role in creating misery.

U.S. imperialism is now manipulating the essential right of every woman to birth control so as to carry out preventive genocide against the women of the Third World.

Revolutionary Cuba regards birth control as a matter of individual choice. Fidel Castro explains that with socialist economic development, Cuba could support a considerably larger population:

The Cuban Revolution is not blindly against birth control. The size of the family is the individual decision of the husband and wife as part of their human rights. It is the duty of the State to furnish them with the adequate means for having as many or as few children as they want. The Revolution is not scared by population increases and is not worried by a temporary drop in the birth rate.

. . . There are some countries that pretend that birth control is the solution, but the only ones who are saying this are the capitalists, the exploiters, because no one who understands what humanity can achieve through science and technology sets out to impose limits upon the number that can exist on the earth. This would be especially out of place in a country like ours where there is enough land to take care of a much greater number of people.[15]

B.M.

(A case study follows.)

FOOTNOTES


CENTER FOR CUBAN STUDIES

An increasing number of North Americans have become interested in the Cuban Revolution. The purpose of this Center is to make available a comprehensive collection of documents and study materials about revolutionary Cuba. Important Cuba collections now exist in the Library of Congress and in a few regional academic libraries but there is none in the New York City area, despite the fact that it has the largest Spanish-speaking community in the U.S.

The Center will sponsor films, lectures, seminars, and discussions and will have meeting space available for groups with similar interests. Also offered are classes in Cuban and Latin American History and society, Spanish language classes, a speaker’s bureau and information for persons intending to visit Cuba.

By becoming a member ($15 regular, $25 supporting and $50 sustaining) you will receive the bulletin of news and information from Latin America, regular information on new items received for the reading room, current research, monthly seminars, classes, discussions, speakers and film showings.

The Center is being organized and staffed by Sandra Levinson, Joan McTigue and Roberta Salper.
A Case Study in Population Control

In the late twentieth century, the precepts of Reverend Thomas Malthus are being revived, even though nineteenth century capitalists have found them inconvenient and backward. Whereas scientists such as Darwin had demolished the "scientific" basis of Malthus' predictions and socialist thinkers such as Karl Marx had devastatingly disproved his predictions, Malthusian fears of imminent doom and destruction caused by a "population explosion" have now been reawakened—owing to an energetic publicity campaign by the American power elite.

Although Malthus advocated "moral restraint" instead of contraception or other means of reducing population, his present day heirs insist upon the use of any "scientific means" for lowering the birth rate. Believing that "nature" no longer controlled population rates, Malthus had deeply feared widespread scarcity and a degeneration of morality. For him, overpopulation, instead of the rise of industrial capitalism, was responsible for the evils that he attributed to the society of his day.

In referring to his own erroneous laws of geometric population growth, Malthus felt that the upper and middle classes, with the knowledge of these laws firmly in mind, would be able to alter the conditions of the poor "prudently", but efficiently.

Undoubtedly, one of the most valuable of these effects would be the power that would result to the higher and middle classes of society, of gradually improving their governments, without the apprehension of these revolutionary excesses, the fear of which, at present threatens to deprive Europe even of the degree of liberty which she had before experienced to be practical, and the salutary effects of which she had long enjoyed.[1] ("Let them eat cake" was apparently Malthus' slogan, too.)

Nevertheless, he partially agreed with the capitalists of his day who contended that industry needed a reserve army of labor. "Prudential habits with regard to marriages, carried to a considerable extent among the laboring class of a country depending mainly upon manufacturers and commerce, might injure it."[2]

Capitalism requires a "reserve labor force" so that production can be stepped up or reduced according to business cycles. Unemployment is not a burden upon capitalism, but an essential part of it. The greater the number available to do a job, the lower the wage level need be, and the higher the profit rate.
Today, in Latin America as in many under-developed regions, although the middle class is prospering and consumption is rising, the majority of men and women have less food now than they did in 1945. According to Andre Gunder Frank, a “metropolis-satellite” relationship dominates Latin America and other regions of the Third World, causing this lessening of food intake by the poor majority. For example, the very rich sugar and coffee-producing regions of northeastern Brazil are “national satellites” of Rio de Janeiro and Sao Paulo, which in turn are satellites of the United States. Most of the capital pumped into the “metropoles” of Latin America by the imperialist powers is re-exported in even greater quantities as profit. In fact, inflation created by the unbridled spending and hoarding of both the middle and upper classes forces the poor majority deeper into poverty.

Each car Brazil puts on the road prevents 50 people from having transportation by bus. A refrigerator closes the possibility of a community freezer. A hundred lives are sacrificed for the sake of one dollar spent on doctors and hospitals for the wealthy instead of programs for safe drinking water. Huge amounts of foreign invested capital are used to mass-produce goods that are worthless to the majority. In the language of Marx, verdinglichung or reification, is the changing of one’s real needs into the demand of mass manufactured products. If one is thirsty, he must have a Coke.

Very basically, the underdeveloped world furnishes foreign capitalism with new consumer markets, super-cheap labor, and precious raw materials. The bulk of goods produced in the Third World (agricultural, extractive, and mass-produced) are exported to advanced capitalist countries, creating deeper dependency. “It serves the interests of the metropoles which take advantage of the global, national, and local structure to promote their development and the enrichment of their ruling classes.”

Gunder Frank believes that foreign-dominated industrial development cannot possibly lift countries such as Brazil out of the cycle of satellite development. Although many Latin American capitalists believe that archaic institutions, such as the latifundia or estate system, have imprisoned their economies in underdevelopment, Gunder Frank disproves this hypothesis by demonstrating that the most recent industrial development, especially of Argentina, Brazil, Mexico, and Chile, took place between 1914 and 1945, the period of the two world wars and the worldwide depression—precisely the period when the “metropoles” of these Latin American countries, the United States, was weakest.

The super-exploited regions of Northeastern Brazil were once direct satellites of Portugal and later Britain. The acute “boom or bust” nature of the Northeast’s single product economy, which has varied from silver, to sugar, to gold, to rubber, has traditionally depended on the demands of foreign investors.

Presently, the Brazilian Northeast is viewed by many economists as one of the richest, most strategically valuable regions in Latin America, despite the fact that it is one of the poorest with a yearly income of 60 dollars per capita for 60 percent of the population. The Governor of Pernambuco has attributed the Northeast’s economic problems to the “high salary of peasants”, but in Brazil as a whole, income distribution is fantastically unequal. The top 10 percent of the population is receiving 42 percent of personal income, while the other 90 percent must make ends meet with only 58 percent. Furthermore, Uruguayan journalist Eduardo Galeano reports that by 1968, “foreign capital controlled 40% of Brazil’s capital market, 62% of its foreign trade, 82% of the maritime transport, 100% of tire production, 80% of the pharmaceutical industry, 50% of machine production, and 62% of auto factories.”

Incentives for foreign investments in the super-impoverished Northeast are even greater than in the South. Investors receive 50% income tax deductions, and 300% of loans with equity. According to the Brazilian government, foreign industry in the Northeast would reduce the economic disparity with the center-south without “upsetting” the land-owning structure of the region. Nearly 300 new industries have been set up varying from the production of Ford Pinto engines to Willy trucks and oil drilling equipment. Such industries destroy the environment, exploit the Northeast’s labor, and produce nothing for the region’s inhabitants. Moreover, they buy up huge tracts of land and dispossess the peasants.

Population planning and redistribution become major considerations in developing “scientific” plans for exploiting the region on a more grandiose scale. Surplus unemployment, mass migration, and political unrest are seen as obstacles to progress by Brazil’s oligarchy and the industrialists who support it. However, the present dictatorship is reluctant to endorse national population programs which may offend its archly conservative Catholic supporters. The government maintains that massive development plans such as the Transamazon highway require huge amounts of cheap labor. According to General Emilio Medici, Brazil’s dictator, 8,000 miles of road will “transform the great Brazilian wilderness into one of the most densely populated areas of the country, linking cities, towns, the vast plantations, and ranches now being opened up there, and the hydroelectric and metal plants of the Tocantins, Topajas, and Jari Rivers.” According to Affonso Henrique, correspondent for the magazine Americas, drought and starvation in the Northeast brought Garrastazu Medici to the realization that “something must be done to aid the 30 million crowded together”. At this point, he allegedly resolved to
build the Transamazon highway linking the Northeast with the rest of Brazil “to carry the landless population of the Northeast to the unpopulated lands of the Amazon” (the largest reservoir in the world). One billion dollars was invested in the project of land redistribution and promotion (Proterra). The plan calls for 10 million peasants to be assigned to plots along the highways and to work on its construction. The U.S. Agency for International Development (AID) has given substantially to this project, foreign companies are particularly interested in the precious deposits of iron, aluminum (bauxite), tin, and gold which have been found in the middle of the Amazon jungle. US Steel Corporation, with the major iron ore concession, is predicting 8 million tons of steel to be extracted yearly.[8] The promise of rapid transportation and more accessible markets have been warmly greeted by hungry investors such as U.S. millionaire Daniel K. Ludwig, who owns 6 thousand square miles of land in Amazonia.

The Transamazon highway is not only an instrument for internal colonization, but an attempt to unite Brazil with other countries in South America. “All this is directed towards a logistic placement of Brazil’s sub-imperialist aggressive army . . . and so imperialism, bordering almost all South American countries, will be magnificently linked with Peru. Brazil is a kind of strategic tentacle in the southern part of our continent.”

As early as 1960, latifundistas (estate owners) had accumulated 91% of the farmland. Rich, fertile estates often lie idle as the latifundista speculates on land prices. Brazilian sociologist Carlos di Medina affirmed that estate owners make their greatest profits from their laborers. In 1973, at least 65% of Brazil’s rural poor will be living at subsistence level or below. This is not surprising when we look at regions such as Ceara, where sharecroppers earned an average yearly cash balance of $2.50 after basic necessities were deducted.[9] Present wages in Brazil have represented a loss of 63.4% purchasing power since 1964. The rubber gatherers (seringueriros) in Rio Branco, who have now been thrown off the plantations because of the decline of the Brazilian rubber market, are forced to pay enormous prices for necessities. For example, a pound of powdered milk costs $1.25 and a pair of shoes is $5.00.[10]

Food consumption patterns are a barometer of near-starvation conditions. In Rio Grande do Norte, meals are eaten only once or twice a day. During harvests, the diet is limited to brown sugar and meal in the morning, beans and meal in the evening, and occasionally sun-dried meat. In Paraiba, doctors reported that 80% of the population is undernourished. Forty-three percent of Brazilian children’s deaths result from malnutrition. According to the Brazilian Health Ministry figures, about ½ of the population is tubercular. To further ensure high mortality, public expenditures on health declined 30% between 1967-71. In Maranhao, there is one doctor for every 20,600 people.[11]

The latifundia system itself ensures a permanent “wage-slave” role for most peasants. Land plots allotted to peasants are very small, and the soil is either eroded or exhausted. No financial or technical assistance is given for improvements. If peasants obtain small loans or seed from employers, this can be deducted from wages at exorbitant rates of interest. Moreover, peasants cannot grow what they please or keep livestock except a few chickens or a hog. Plantings are limited to subsistence crops with little or no market value. It is customary for the campesinos (peasants) to be forced to purchase necessary foodstuffs at higher prices on the market or in stores operated by estate owners. In many cases, the laborers repurchase the same food that they had previously sold to the landlord at a much lower price.

Under such conditions in the Northeast, together with increasing unemployment, large numbers have been forced to abandon their homes. Over the past 10 years, approximately 18% of the population has migrated to cities in the South.[12] Their motivation has not been hope for a better life, but starvation. Vast concern over the “swollen cities”, or cidades inchadas, and the ensuing turmoil is being expressed throughout Brazil by the implementation of brutal and repressive measures against the discontented.

The long-standing impoverishment of the Northeast has always generated revolts. As early as the 1820’s, organized peasant revolts took place against the Portuguese. In the early 1960’s, the emergence of Peasant Leagues and Unions on the sugar plantations, under the inspiration of Francisco Juliao and Manuel Da Conceicao, became an important ingredient for prompting investors to sanction the overthrow of President Goulart, who was on the verge of implementing widespread nationalization measures, as well as making land reforms.

Indian populations have fared even worse according
Northeast Brazil, the rich get richer and the poor get children." Daly takes his facts and figures from 10 economists of the Bank of the Northeast (now administered by First National Bank of Boston). He uses every available argument to place the burden of misery upon the individual peasant and sharecropper, particularly, the woman, by insisting that family limitation is a prerequisite to improved living conditions. Common population control arguments are totally divorced from socio-economic considerations: (1) Death rates have been lowered; therefore the numbers of people will increase at unnatural rates. (2) Elevation of the standard of living through development projects are nullified by sheer numbers of people. (3) Overcrowding and deteriorating conditions breed violence; or as Lyndon Johnson viewed foreign aid to Latin America:

The ultimate triumphs of foreign aid are victories of prevention. They are shots that did not sound, the blood that did not spill, the treasure that did not have to be spent to stamp out spreading flames of violence. These are victories not of war— but over wars that did not start.[13]

One can easily utilize the same empirical methods for refuting population control arguments: (1) Less than 1/10 of the world's surface is inhabited. (2) Food production has outpaced human reproduction 1 1/2 times since the mid-50's. (3) Population growth rates automatically decline with the rise of living standards, as has been evidenced most rapidly in the past decade by countries having planned economies, i.e. Cuba, China, and the Soviet Union. Population control arguments should clearly be comprehended for what they are: attempts to smokescreen the actual sources of misery and poverty while the pillaging of the world continues. Many anthropologists have clearly demonstrated that countries with a very low nutritional level, where millions "normally" starve are also areas where birth rates are highest. The results of malnutrition, far from cutting down the birth rate, increase it.[14] The peasant often sees a large family as a source of labor that can permit subsistence. The oppressed cannot accept the propaganda of a family planning which emphasizes individual economic gain through low fertility. They have no illusions about gain, as their daily energies are spent on survival.

Resistance to population control programs has been the answer of the poor Latin American, particularly, the rural poor (e.g. Northeast). These hungry persons have been transformed by imperialist ideology into a collective enemy! Scientists who recognize that massive birth control is a dubious venture in areas such as Brazil's Northeast, have written seriously on the necessity to accept death control as an alternative to costly health programs which only "prolong misery". In the book Challenge to Man's Future Harrison Brown writes, "In the absence of restraint, abortion, sterilization, coitus interruption, or artificial fertility control, the resultant high birth rate would have to be matched at equilibrium by an equally high death rate. A major contribution to the high death rate would be infanticide, as has been the situation in cultures of the past."[15]
William Vogt in *Road to Survival* sees the Health doctor as the culprit: . . . "through medical care and improved sanitation, they are responsible for more millions living more years in increasing misery. In many parts of the world, doctors apply their intelligence to one aspect of man's survival, and deny their moral right to apply it to the problem as a whole." [16] President of the world wide Population Council and former Director of the Bureau of Applied Social Research at Columbia University, Bernard Berelson, proposes to go beyond family planning and establish the following "involuntary fertility controls".

1. Mass use of 'fertility control agents' by governments to regulate births at acceptable level: the 'fertility control agent' designed to lower fertility in the society by 3 percent to 75 percent less than the present birth rate, as needed; substance now (1968) unknown but believed to be available for field testing after 5 to 15 years of research work; to be included in water supply in urban areas and by 'other methods' elsewhere [Ketchel]; 'addition of temporary sterilants to water supplies or staple food' [Erlich].

2. 'Marketable licenses to have children,' given to women and perhaps men in 'whatever number would ensure a reproduction rate of one' . . . [Boulding].

3. Temporary sterilization of all girls via time-capsule contraceptives, and again after each delivery with reversibility allowed only upon government approval . . . [17].

Other suggestions of Berelson include very specific Foreign Aid strings attached to population control measures, withdrawal of maternity benefits, child or family allowances, limitations on governmentally provided medical treatment, housing, scholarships, loans and many other equally insidious plans. [18]

Latin Americans and other Third World peoples daily experience the harsh brutalities from discrimination and super-exploitation—all in the name of peace and progress. Additional measures manipulating their personal lives will come as no surprise. The oppressed throughout the world realize that their social context excludes them from real possibilities to decide for themselves when to and when not to have children, just as they realize that the legal provisions for social, educational and political equality are but a mockery. Only these people through their on-going heroic struggles will determine their own future on their own terms.

B. M.

**FOOTNOTES**

[2] Ibid.
[6] Ibid.

*"It's more practical to divide the profits among 2,000 generals than among 10 million Brazilians."* Rius in Siempre, Mexico City

March 1973
LOS NUEVOS CONQUISTADORES — AAAS TO MEET IN MEXICO!

Some time ago the AAAS announced plans for a June 1973 “Inter-American” meeting in Mexico City. The theme of the meeting, “Science and Man in the Americas” (aside from being sexist), is an attempt to disguise the fact that science is an important instrument of capitalist expansion and cultural imperialism in Latin America.

The purposes of the AAAS meeting are explained and documented in a 32-page pamphlet, Por Que, which analyzes the role of U.S. science and technology in Latin America and then places the AAAS meeting within that context. A Spanish translation of the pamphlet is being prepared and will be available soon.

The Mexico City meeting of the AAAS offers a great opportunity for radicals of many countries to cooperate in challenging U.S. domination of science, and to begin to liberate science for the people of all countries. In order to develop a strategy of opposition for the Mexico meeting it is necessary to have the fullest participation, in all stages of planning, of comrades in Latin America, particularly in Mexico.

Contacts have already been made in many countries; however, it is desirable to establish communication among as many people as possible. If you have friends in Latin America or know Latin American students in the U.S. who might be interested, please contact us immediately at one of the addresses below (we’ll at least send them copies of Por Que). Although preliminary work and discussion has been done by the Boston, Chicago and Minneapolis groups, other groups and individuals are encouraged to discussed the event and contribute ideas for strategies and actions.

Science for the People
1103 E. 57th St.
Chicago, Ill. 60637
(312) 753-2732

Science for Vietnam
1507 University Ave. S.E.
Minneapolis, Minn. 55414
(612) 376-7449

Available from the Boston, Chicago, and Minneapolis groups at 50 cents per copy.
The American Association for the Advancement of Science (AAAS) is one of the largest organizations of scientists in the country. Its weekly magazine Science has some 150,000 subscribers. For the past four years Science for the People has held actions at the annual AAAS meetings.

The fundamental aim of all our actions this past December was to point out to the general AAAS membership the involvement of establishment science with the oppressive, racist policies of the U.S. government. We were careful to distinguish between the unwitting complicity of scientific workers like ourselves who make up the vast majority of the AAAS, and the deliberate participation of the few who make up the scientific power structure. Since the emphasis of this year's meetings was social "science" and behavior control, it didn't require much stretch of the imagination to see the political content of the research presented.

This year's Science for the People actions fell into three major categories:

1. Individual interaction with hundreds of AAAS members via literature distribution and informal discussion (this, incidentally, is a simple but highly effective approach. Through private conversation many of the scientists expressed not only interest in our aims, but substantial agreement on the fundamental issues involved.)
2. Attendance at selected AAAS sessions to raise incisive questions about political implications and to encourage the rest of the audience to do the same.
3. Organization of an anti-war rally.

Turning the Tables

On Tuesday, December 26, 1972, 25 Science for the People persons set up a literature table in the registration area of the Sheraton-Park Hotel and were promptly ordered to remove it by a AAAS official. This was their first action in accordance with this year's hard-line policy against Science for the People. In the previous three years, space had been provided for us. When we refused to remove the table, three other AAAS officials repeated the order during the course of the morning. One official even suggested our moving outside—into the rain. Later we were offered space in an obscure area, two floors below. Again, we refused, whereupon Richard Scribner, AAAS meeting manager, informed us that we would be evicted by the police if we didn't leave. However, we gathered so much support from AAAS members who were passing through the registration area that the officials chose not to move against us that day. They did leave behind a prowling team of hotel detectives and D.C. police to keep an eye on us.

The table was set up the next morning and immediately the harassment began anew. At 1:30 p.m., while a large crowd was watching the NARMIC slide show on the automated air war (which had been set up next to the Science for the People literature table by the Committee for Social Responsibility in Engineering), hotel detectives moved in and pulled the plug, leaving startled AAAS members viewing a blank screen. Immediately, AAAS official Howard Greyber stepped forward with several D.C. Special Operations police and proclaimed: "I respectively ask you to withdraw in an orderly manner." A very heated debate
then followed before an ever-increasing audience. It soon became clear to the AAAS officials that they were gaining nothing by this approach and so the signal was given and the police moved on the table.

The people standing in front of the table were pushed aside but resisted. A tug-of-war ensued. Several of these people were grabbed by the police but then were pulled away by the others. A general melee developed. Many of the police were brutal during the arrests. People were knocked to the floor and eyeglasses were smashed. In particular, one policeman was seen pummeling a person with one hand while choking him with the other. Then he smashed this same person with a walkie-talkie while tossing him into the wagon. In all, five Science for the People people were arrested inside the hotel and three others outside as they continued to fight the police.

Because of our strong stand, the literature table remained in place and was staffed until well into the afternoon, when a dozen riot-equipped D.C. police arrived and deployed themselves for action. At this point the Science for the People group in the area elected to take down the table and return to the hotel to prepare for that night’s activities.

People in the AAAS were outraged at the strong-arm tactics of the officials. Even a subsequent article in *Science* points out the absurdity of the AAAS’s decisions.

Pressured by AAAS members’ opinions, by the hotel management, and even by the D.C. police (who had more important concerns), meeting editor Scribner was forced to set aside space for Science for the People just below the registration area in the hotel. This, then, formed our home base for the literature table and for the NARMIC Slide Show. We talked with hundreds of people and sold much literature.

People showed special interest in a beautifully desig-
Conceptions and Alleviations of Aggression and Violence

This session, in contrast, did not exactly welcome Science for the People's ideas. About 15 of us attended this meeting, which was chaired by Jerome Singer of Yale and starred Amitai Etzioni (Professor of Sociology at Columbia University) with his speech on "Public Policy and Curbing Violence". The meeting dragged through the first three speakers and the questioning was spirited during and after the prepared remarks. Then Etzioni tried to tell the audience that the way to curb violence was to crack down on the deviant elements in society. We of course rejected this outright, and started a barrage against these ideas. His proposal for a two-way closed circuit cable TV spy system was attacked by the audience as a highly repressive tool which ignores the conditions that produce violence. The questioning and responses were hot and heavy. During one question Etzioni said "If you don't like those two-way cable systems (TV, telephones, etc.) you can always unplug them!". This remarkable statement drew a cry of anguish and disgust from the audience and the questioning grew even more intense. In the end Etzioni was discredited and the political acumen of the audience and speakers was substantially aroused.

Racist "Science" on the Run

On the fourth day of the convention Daniel P. Moynihan (assistant to the President on Urban Affairs and Executive Secretary on the Council on Urban Affairs, 1969-71, recently appointed Ambassador to India) and James Coleman (AAAS section vice-president and author of the Coleman Report) were scheduled to speak on "Public Policy and Social Science". We decided to liberate this session so that these pseudo-scientists who engineer and disseminate reports and policies may be challenged. We printed up a leaflet describing what Moynihan and Coleman had done, we encouraged people to attend the session, and we even suggested questions that Moynihan and Coleman could be asked. An excerpt from the leaflet reads as follows:

...At the request of the government Moynihan wrote a report (1965) which declared that the poverty in the Black ghetto is due to weakness in the family structure which produces psychological damage to Black children. The main weakness is supposed to be a tendency toward fatherless homes and matri-focal families. But previous careful studies of fatherless families and children did NOT reveal any significant peculiarities of childrearing practices or any significant increase in mental illness or disorientation. Nevertheless, President Johnson quoted the report shortly after it appeared. It became a "scientific" justification for cutbacks in already meager services. More recently, Moynihan has been endorsing theories of genetic racial inferiority as well.

James Coleman, an AAAS section Vice-President, is the author of the well-known Coleman Report, which claims that improved funding of Black schools would not improve educational achievement. [Ed. note: This implies genetic inferiority of Blacks.] He reached this amazing conclusion by refusing to compare the educational budgets of rich and poor communities, on the grounds that to do so would "contaminate" the class and race variables. His report, widely hailed by the press as the definitive work on education, has become the standard excuse to justify reduced school spending. Coleman's "report" has thus contributed to the further deterioration of schools and to the increased unemployment of teachers.

When we arrived at the meeting room, we found it sealed off. Apparently, the AAAS feared that Science for the People might get in beforehand and rearrange the seating as we did at the Bundy session last year (see Science for the People, Vol. IV, no. 2, March 1972, p. 6). The crowd began to gather and soon there were 300 or so people milling around outside the room. Several members of Science for the People used this time to explain our position and to hand out leaflets. Meanwhile the crowd became so large that a room divider had to be taken down so that everyone could fit into the hall.

Moynihan, who was supposed to chair the session apparently decided to avoid our questioning—he didn't show up at all. The substitute chair was Amitai Etzioni (who had by this time called Science for the People "Marxist-Leninist fascists") After a short period of shouting, steamroller chairing and a sham vote, Etzioni's proposal prevailed: Coleman and his two discussants would present their views and then the audience could ask questions. This structure of course assumes that what the speakers choose to say is more valuable than what the audience wants to know. Coleman spoke his piece. Out came all sorts of notions on how researchers ought to tailor their work so that it can better serve the government's needs. He said that "disciplinary" research was to have "no social or humanitarian values" and was to be treated as "pure" or "neutral". By contrast, he blatantly stated that "policy" or applied research was supposed to be designed to achieve the ends of the policy maker who paid for it. He saw the researchers as workers, busily gathering up factual information—then "the interested people of the world of action" should put the pieces together and figure out the overall result of the research. In our opinion, Coleman's proposal for streamlining the policy research apparatus attempts to develop the worst features of that system: to make it an even more effective instrument of oppression for those who hold power.

The questions that were asked were very pertinent and pinpointed many of the faults in Coleman's research. In addition to Science for the People questions, many other people, including a school psychologist cited errors in Coleman's methods of getting data for the report. As the questioning became more intense, many of the people who had come to hear Coleman and Moynihan began to understand why we thought a confrontation was in order. One man
who was about 50 years old said that he now realized that our objective was not just to break down sessions (as the AAAS would have others believe) but to rebuild them. As a result of our actions at this session, many middle-of-the-road AAAS members began to see what we were about.

Peace Research at the AAAS

A real down of these meeting was a session on "Radical Perspectives in Peace Research", in which we were asked to participate. For any of us who doubted that format affects content, this session was a vivid demonstration. Here was the one session from which we had expected a good deal, but what we witnessed seemed to be a parody of all the regular sessions we had criticized. One after the other, well-intentioned but long-winded speakers stood at the microphone delivering monologues on abstruse approaches to "radical" research. The audience sat dutifully; some waited their turn to ask the brief question there might be time for, others dozed off, and gradually, one by one, they began to wander out, looking discouraged. No doubt there were many who felt guilty about being bored—blaming "very important" stuff—and concluding that they just aren't cut out to be radicals. The proceedings finally came to life with laughter and applause when the Science for the People speaker prefaced his remarks with a promise: "I'm going to speak for four minutes." Afterwards a number of people sought us out and we had some rewarding political discussions. The experience was a sad reminder that good ideas cannot be communicated effectively within the existing framework of AAAS sessions and rather than participating politely in them we will have to continue our attempts to change them.

Fighting Sexism through the AAAS Bureaucracy

Among the more promising sessions at this year's meetings were some of those dealing with issues of women and science. These sessions tended to be chaired by women and to feature women speakers. However, they were still limited to establishment representatives—professional scientists and administrators. Many speakers presented strong cases for ending the male domination of the sciences and against the myths concerning women's "abilities" to be logical and "scientific".

At one session a male professor of child development put forth the outrageous thesis that women grow up to be better at rote learning than at analytical reasoning, the latter being a "male" characteristic. According to him, little girls acquire rote learning when they copy the behavior of their mothers, whereas little boys learn more abstract reasoning from their male role models, giving them practice in analytical reasoning. This gem of circular reasoning (a male characteristic?) was given its final twist when the professor reminded us that there may well be a biological reason for this phenomenon, although he could not as yet provide data on this subject. This staggering performance had a gratifying aftermath. The audience and the panelists joined together in totally trouncing the speaker, his pseudo science, and the sexism that created it.

Women at the AAAS seem in many instances to be more politically aware than the men, undoubtedly due to the intense discrimination they have suffered. A few Science for the People women attended an informal women's caucus set up by some AAAS members. Many of the AAAS women there were embittered by the autocratic treatment they had been dealt by the AAAS bureaucracy. An ad hoc women's committee of the AAAS formed out of last year's caucus had been obstructed at every step by the Board of Directors (made up of 12 men, one woman). As we understand it, this committee has now been arbitrarily disbanded and has been replaced by another bureaucratic arrangement which allows the women even less access to the AAAS power structure.

The women at the caucus were anxious to hear about our troubles over the literature table and readily agreed to include as one of their four resolutions to the AAAS Council a statement defending our right to distribute literature. The statement, however, was worded in cautious and non-committal language.

We hope that next year more of us from Science for the People will attend women's sessions and work to directly confront the AAAS's sexist nature. We feel that the women of the AAAS have especially strong reasons to ally with us to fight sexism in science.

Bombing Nixon's Bombing

A substantial portion of Science for the People's efforts at the AAAS meeting went into organizing an anti-war rally, partly in response to the most recent bombing...
raids on northern Vietnam. While we were planning our rally, we learned that a group of well-known scientists had issued a statement, primarily protesting the bombing of civilian targets, and were also planning a rally. We learned too that some members of that group were relying on us to distribute their statement and publicize their rally. After some discussion, our group decided to issue an anti-war statement of our own, one which would not contradict the other statement, but would go considerably beyond it in presenting a brief political analysis of the origins of the war. We also agreed that we would be glad to join with the other group in building a common rally. Sad to say, strong intimations arrived from their famous (but absent) members via long distance telephone that this willingness to join forces was not shared. One notable scientist referred to Science for the People as “the kiss of death”. Thus, there appeared to be queasiness at the thought of working with a group which builds a movement based on mass support, and which, moreover, has on occasion been impolite. Nevertheless, we continued to talk with the members of that group who were present and we were soon pleased to reach agreement on a joint rally and press conference. In spite of the initial hesitation and wariness, considerable mutual respect and trust developed.

In the meantime, other members of our group were working to publicize the rally to everyone at the meetings. Thousands of copies of our anti-war statement were printed and distributed; hundreds of posters were put up; and on the morning of the rally “flying squads” of Science for the People people visited all the sessions, announcing the rally and urging everyone to join us (for a description of “flying squads” see March 1972 Science for the People). Several members of the AAAS chose to do so.

The rally was held on December 28 in a park near the conference hotels, and featured seven speakers, including three from Science for the People. Each Science for the People speaker emphasized one aspect of the war as an illustration of the use of science against the people—the electronic battlefield, the use of counterinsurgency tactics, and the racist ideology inherent in the U.S. government’s Far East and domestic policies. It was pointed out that these very same scientific techniques which have been developed to suppress people’s struggle for liberation in Indochina are now being applied to similar ends in cities across the United States. Both the rally and the press conference were televised.

As a final encouraging note to these efforts, a fairly strong antiwar resolution was passed by the AAAS council. The statement deplored the use of the resources of modern science for the war and concluded “the Council of the AAAS urges an immediate cessation of hostilities and an immediate withdrawal of all U.S. armed forces from Vietnam, Laos and Cambodia.” Until recently the Council claimed to hold itself aloof from political involvement and had managed only to express “concern” over the war. The AAAS’s higher echelon has finally been forced to admit that the worlds of science and politics are not separate.

Evenings at the Shoreham

Each evening we held a meeting to review the events of the day and to plan the actions for the remainder of the week. Our meetings grew as more people came to learn about us.

On Wednesday night we had a very large meeting. We discussed our strategy regarding the literature table, and many new people voiced their opinions. After lively discussion, we took a vote: should we continue to make a stand for our right to the table, or should we give up in the face of the AAAS offensive? The vote was 100% for a strong stand.

Sometimes meetings dragged on and on. We would discuss tactics for an action for quite a while and no group consensus could be reached. We’d try voting but the issues were often too complex to sort out. Sometimes we abandoned an action because we couldn’t get it together.

The AAAS meetings are so important that we should give them more extensive advance preparation, without sacrificing our flexibility on the scene.

Conclusion

Encompassing a variety of political orientations within our group, we built a firm solidarity over the five-day period by uniting in action.

It is important to remind ourselves of the great value of actions such as these. The awareness we try to encourage is a long time coming. Yet even in one week, Science for the People had a real effect on many people.

The hope should be that each act, each heightening of consciousness, each organized protest, will have the effect of water dripping on stone, inevitably wearing the stone away. Each drop seems ineffective because its result on the stone is invisible; isolated drops will not have the effect of steady and ceaseless ones; no single drop will smash that stone. But in time, the water continues and the stone is no more.

—Tom Hayden
Below is my accounting on only a couple of points.

I am assuming that we think SESPA activities at large meetings such as the AAAS, ACS, APS, NSTA, etc., are valuable and that we should continue to make our presence felt. For me, involvement with SESPA at the AAAS meetings (I haven’t been to others) has come to serve two purposes: (1) It gives me a chance to exchange ideas and experiences with other SESPA people—i.e., to learn a lot and to make or renew friendships; (2) It also provides a chance to raise issues in the “established” science context that must be faced by all scientific workers if we are to ever make science a beneficial force. The problem is that it is difficult to do both of these things in the course of four short, action-packed days and nights. In the past, we have used those four days both to build a temporary organization that could carry out certain actions, and to plan and carry out the battle simultaneously. I have come to feel that some more effective organization, to direct the SESPA actions at the AAAS meeting, should be built prior to the start of the actual convention. This past year something along this line was tried, with a planning session Thanksgiving weekend. But the group assembled in Washington proceeded as if such a planning session had never existed. I’m not sure what the reasons for this were, but I feel we lost a lot of valuable time, and may, as a result, have been less effective than we might have.

I am not enamoured of tight, highly centralized organizations. But it is obvious that we could have used something tighter at the recent meetings. Since we did not know each other, and had never worked together before, and since we tried to proceed ultra-democratically, we rarely got through with our doctrinal discussions and disputed until midnight. That is really too late to start planning in any serious way, detailed actions for the next day (such as what sessions to attend, what issues to raise in those sessions, etc.). We could have attended more sessions, raised better points, and engaged more rank-and-file AAAS members to attend our evening SESPA meetings if we had had more semblance of organization and direction.

Few outsiders (outside of SESPA), and in fact few loyal SESPA members, wanted to sit through three and four hour meetings. Thus, I’d suggest something like the following: A planning session, open to all who want to come should be held Thanksgiving weekend, or some other time prior to the AAAS convention (with a new AAAS convention time appropriate advance dates will have to be selected). That group will constitute a central planning committee for the AAAS meetings. The planning committee will have responsibility for (a) making advance plans, including earmarking sessions that definitely ought to be attended, thus giving people time to do some homework and prepare themselves, and setting some general policies; and (b) running the actual activities at the AAAS meeting. The latter would involve someone from the committee chairing each evening meeting and presenting an agenda, as well as directing daily activities outside the evening planning meetings (including making sure the literature table was staffed, etc.). The Central planning committee could have other members added to it from among those attending the AAAS meeting, if that seemed desirable. Those SESPA members or others who wanted to work with SESPA could have input into decisions at the evening meetings, but overall policy issues should form a less central part of the discussions held during the AAAS. Those evening meetings should deal first and foremost with organizing activities for ensuing days and discussing situations which come up at the spur of the moment (such as whether to support a rally, etc.) The major policy would have been drawn up at the prior planning sessions and should not be argued out every night. All this requires that individual SESPA members (and others who join us) accept a little bit of discipline—but I think we can communicate our ideas more effectively, and make our presence more generally felt if we have first organized ourselves a little bit. I’m afraid we might have turned off some potential SESPA workers by our endless and meandering meetings.

Of the actual tactics we tried, two seemed to me particularly successful. One was attendance at various sessions where SESPA people raised issues which otherwise might not have been raised from the audience. I heard some good reports about general audience reaction to this tactic. The other was preparing short leaflets, distributed before a particular session, giving some facts about the person or per-
sons speaking, or about the topic to be discussed. Both of these activities are good examples of what I think our main function at such meetings to be: education to a new point of view. As long as we choose the arena of a scientific meeting, that is the most positive thing we can do. There are lots of ways to educate, and sometimes restructuring a meeting, or actually disrupting it, can serve that purpose as well or better than the more "restrained and academic" approach. But we should never forget that once we begin turning off the average AAAS member in the audience, we have started to defeat our purpose in being there. Thus, I think our restraint, our willingness to be non-arrogant, at the past meetings helped win us more general support. It became clear, however, to many of us who attended one or another session to raise points and provoke discussion, that we should have been better prepared. The average AAAS member at those meetings will respond much more favorably to facts than to simply generalized viewpoints, or especially rhetoric. Again, the need to plan ahead is especially important for us to serve our most effective educational role.

Hope this gives some food for thought.

In peace and struggle—
Gar Allen
St. Louis Stfp

NEWFOUNDLAND

SESPA people don't seem to be very into organizing scientists around their own oppression. It should be obvious that people are more dedicated to the struggle if they are fighting for themselves rather than doing somebody else a favor, out of compassion for those "poor blacks" or "poor Vietnamese". This means dealing with such questions as working conditions and job security for scientists, which might seem like a wishy-washy liberal issue, but which, nevertheless, is an immediate concern to many of the scientific workers present at the meeting. It also means pointing out the power relations that exist in science, namely that there is a small closed clique of self-annointed elite who themselves do no scientific work (research) but nevertheless seem to be in complete control of the institutions of science (the AAAS, APS, NAS, High Energy Advisory Committee to the AEC, etc.) These people are not only the ones primarily responsible for screwing their colleagues by throwing them out of work, but also have the closest ties to the government and are most willing to cooperate with the DoD, AEC, CIA, etc.

B.Y.

CORNELL

SESPA has conscientiously avoided both organization and program in its structure. This is fine if its aim is to be merely a clearing house and information center for "radical" science activities. As such it does not even have the political structure of a united front organization. It cannot endorse national programs like "Sign the October 26 Agreements Now!" or even "Stop Jason!". It cannot join coalitions. It cannot call a press conference. Etc. A clearinghouse is a movement resource but not a political force. Many SESPA members want SESPA to be more than a clearinghouse and this results in certain contradictions. Even the idea of going to a AAAS convention for "radical agitation" and "organizing" contradicts the idea of a clearinghouse. A clearinghouse (usually) doesn't get arrested handing out literature. Neither does it organize meetings for "radical actions" or call demonstrations. When it does so, it is not really acting as a clearinghouse.

To some extent there is a "hidden program" in SESPA as far as U.S. imperialism, racism, and the role of the scientific establishment are concerned but it is so well hidden that even the "hard core" SESPA members who originated it don't know where it begins and ends. In the weeks before the AAAS convention in Washington, there was little discussion, let alone collective agreement, as to the purpose and objectives of SESPA's attendance at the AAAS convention. At the SESPA meetings during the convention objections or endorsements of specific tactics came from a dozen different (and sometimes contradictory) reasons rather than out of a political context. An example is the meeting where we decided whether or not to enter a AAAS presidential address and read a brief statement. The action could have had tremendous significance. But the discussion, postponed to a few hours before the address, contained a jumble of tactical and political considerations,
It means is that planning is impossible. The tolerance of structurelessness is repressive. It prevents unity and collective feelings of a group from being struggled out and expressed. It further precludes channels of responsibility, individual and collective. An example is the lack of clear responsibility for deleting a paper written by the Chicago chapter from the SESPA booklet for the AAAS convention.

SESPA’s organization is very confusing to outsiders. This combined with general ineptness (e.g. putting May, 1973 on December’s issue) and the “counter-culture” image of SESPA were at least as responsible (probably more) for turning people off at the AAAS convention than the fact that our politics was “too radical.”

These are more than tactical considerations. People’s hesitancy to join SESPA is in some sense rational. Some are reluctant to join forces with a group that does not have explicit politics and organization and in some cases does not take itself seriously. Of course people who see themselves as “activists” may join in the hope of changing things. But if SESPA is to be more than a clearing-house it must be a political organization. It can’t be an activist club in between.

Uncertainties of program and organization led to two important kinds of problems during the AAAS convention that were also somewhat evident before the convention and now too: communications to the public (press, etc.) and relations with other organizations. Press relations, for example, were handled by people with little previous SESPA experience. Relations with other organizations were basically not handled at all. Because of this our relations with Medical Aid to Indochina and to the Wald-Feiffer-Westing group were at best confused. Even our internal communications (such as with our New York and Chicago chapters) were very strained. Also many contacts with other groups were not made which could have been.

Our “purism,” especially in the absence of a clear political program, tended to isolate us at the AAAS convention. It was wrong and elitist not to respond directly to the arrests of our members at the AAAS convention. In some ways the actions of the AAAS, decided at the level of the Board of Directors sharpened some of the very contradictions we had come to expose. Only a week before the chairman of that board had written an editorial in Science magazine committing the AAAS to the “free exchange of ideas.” Many who knew about the arrests were interested and sympathetic. Many more left the conference never knowing that it had happened. We took a purist outlook, thinking that it would dilute our politics if we talked about repression. In the same way we refused to deal with the AAAS, thinking that it would pollute us if we made demands upon it. Don’t we make demands upon the U. S. government! At times we also took a purist attitude toward the press, shying away from setting up some kind of consistent relations or contact with them.

These attitudes did nothing to make our politics more radical or progressive. They only served to isolate us.

Frank Rosenthal
Milton Taam
MADISON

Considering the geographical separations we all suffer from, the preparation for the meetings was well done. We received information in Madison good and early and were sorry that none of us could attend the Thanksgiving planning session, the results of which were sent to us by mail. The booklets made especially for the conference hit their mark; for example, the “AAAS in Mexico” pamphlet had conference editor Walter Berl shaking in his shoes and urging us to show restraint. I hope SESP members haven’t taken part in these preparations, and in the convention itself, will make the sacrifice next time. It is the only sort of action which we take as a national group, and the experience helps to unify us all as well as showing us who and where our friends are.

At the conference we faced decisions which we were not quite ready to make with political certainty: how to restructure the sessions and why; whether to put resolutions before the AAAS board; how to work with Pfeiffer, Westing & Co., and so on. In discussions with AAAS members we could not always bring home the connection between the subject matter of our booklets and the political role of the AAAS as an institution. The “interlocking dictatorships” approach and its derivative of “guilt by association” are good analytical methods, but can be too general for tactical use in the enemy’s back yard. For our own sake we might discuss among ourselves the specific political differences between SESP and the various professional societies. After all, SESP was founded four years ago on the realization that the American Physical Society, a microcosm of the AAAS, was an improper institution to work through. Getting this strategy straight can help guide our oppositional efforts in the future, and help educate those, such as the press, who still don’t understand why we refuse to become part of the standard AAAS format.

The question of political control remained unclear. If our goal was complete control over a few sessions, then of course we now have much reason for self-reproach. But the duel over ultimate control was a myth from the start—behind each session chairperson were the hotel security guards, Scribner, and eventually the metropolitan police under AAAS direction. Any control we might have seized would have been under some degree of AAAS benevolence and restraint. The political control problem should be faced by all SESPAs groups in their home cities, where they have the time and numbers to challenge oppressive institutions fundamentally. At the AAAS conference about 50 of us came together briefly and with relatively little acquaintance to oppose a large, well-organized association. In such a situation we must use the powers we actually have—to convey our politics, to expose the political realities behind the conference, and to win supporters over to our struggle. If we can protect our right to do this without joining up with the AAAS management, that is a political victory. We succeed each time we restructure a session well enough to get our point across to those attending. The AAAS management is afraid of our ideas, and they will provide the confrontations by their repressive acts. In Washington we were physically brutalized by the city police and constantly harassed for merely handing out leaflets. AAAS press officials like Thelma Heattwole purposely tried to shut us off from the press, and five boxes of our literature were “mysteriously” stolen. Such facts should be placed before all the people as evidence of real political oppression. At national events like the AAAS conference our power lies in our ideas and in our spirit, not just in our numbers or brute strength.

At best the establishment U.S. press sees us as sensational news; in Washington they ignored the political issues we represented, waited around for a police bust, and then portrayed us as violent disruptors. Ultimately we must rely on our ability to reach others through discussion and circulation of our literature. But a more consistent press policy will help nonetheless. In addition to one well prepared press conference we should have two or three people in charge of press contacts throughout any convention. They could arrange informal, in-depth interviews and be ready to respond to emergency situations like the bust. This might have saved us from the embarrassment of having issued two different press releases simultaneously and still having failed to meet press deadlines with our side of the arrest story.

Our “anti-leadership” organizational difficulties are great—we risk all the dangers described by Joreen in “The Tyranny of Structurelessness”. In Washington we were smart to plan more discussion on this matter, and I hope an “organizational” conference will take place in some form.

Above all, I hope we keep the spirit of cooperation and patience which brought us through that week of pressure and little sleep.

for Madison SESP,
Doug Hanson

March 1973
BALTIMORE
Great Atlantic Radio Conspiracy

Some people were clearly dissatisfied with the activities of Science for the People at the 1972 annual meeting of the American Association for the Advancement of Science. At one of the radical caucuses, it was decided that we should submit the grounds for our dissatisfaction for distribution to the membership.

To provide an effective radical presence at the meetings of scientific and professional societies, I think that the following conditions will have to be met. They were generally absent from the AAAS meetings.

1. There should be a central, public, easily accessible room where radical scientists can regularly meet.
2. At formal meetings, radicals should not be embarrassed at having meetings that start and end at a designated time. Further, it is not elitist to withhold the right to participate from passersby or the curious who just wandered into the meeting room. Nor is it elitist (at an annual national meeting) to insist that chairpersons be capable, and speakers be relevant and concise (Local chapters and organizations should be the place for training.)
3. There should be some formal meetings where people from different cities could exchange information on what they are doing—their current programs, ideas, problems, actions, doubts, etc.
4. There should be workshops for radical scientists and for outreach to liberal or alienated professionals.
5. There should be some registration procedure for radicals in attendance as well as some systematic efforts at collecting the names and addresses of the interested or the curious. Without this, there can be no formal follow-up.
6. Some persons should serve as press officers; a simple press packet should be prepared; and when unusual events are planned, or occur, press contact should be arranged to help reporters understand what took place.
7. Persons attending regular sessions in order to provide a radical critique must do their homework. A tightly-reasoned, well-written, coherent paper presented by an articulate and poised speaker is not going to shatter simply because a group of radical antagonists give spontaneous expression to their outrage. While to those of us who share a radical consciousness, the anti-human implications of a given paper may be obvious, most persons in the audience will either be unaware of those implications or they will share the values of the speaker. I think the purpose of a radical presence is to make those implications explicit, to present a critique, and perhaps an alternative. I think that this takes considerable preparation.
8. Formal attempts at evaluating the outcome of a radical presence at scientific meetings should be made. What did "straight" people think of it? How did radical participants evaluate their own effectiveness? Did anyone learn anything?

In such a setting, disruption h who use the meeting to bring it acts that deny others the oppo engage in dissent. As an associ can to prevent this kind of inter provide the scientific and technica full and free discussion of some problems is one of the most impo for the advancement of science.
no place. We welcome participants as into confrontation; we condemn anity to present their views or to n, we shall take whatever steps we rence. We believe that the effort to community with the opportunity for iety's most pressing and difficult nt things we can do and is essential

Now all of these conditions may require more people power, time, money, or other resources than are available at any given time. At the least, there should be a literature table and a large, central, easily accessible place to hang out.

Any assemblage of radicals these days can be quite confusing without a program. I had the impression that some meetings were dominated by persons who had very little investment in the development of a science for the people or for the organization, Science for the People. I think that this is potentially disastrous. I myself participated as a radical scientists, but not as a member of StfP.

As one of the organizers of the Union of Radical Sociologists, I think we failed in part because we could never decide how to organize ourselves at sociology conventions and, in part, because we had too many people involved who were uninterested in radical sociology and/or in building a permanent organization of radical sociologists.

As a sociologist, I think I can demonstrate that the constituency of the left is larger than ever before. At the same time we are organizationally weaker. Unless we develop viable organizational forms, we shall lose that constituency. I think that a national organization of radical scientists operating out of autonomous local groups will be difficult to maintain. But it needs to survive, because it is an important strategy for revolutionary organizing in this country.

Howard J. Ehrlich
Research Group One
2743 Maryland Ave.
Baltimore, Md. 21218

NORTHSIDE CHICAGO

We were disappointed in our failure, as a chapter, to carry through with the AAAS projects which we had planned before the conference began. This caused us to re-evaluate the "collective" nature of our work. We decided that despite the apparent consensus of our planning sessions a lack of hard planning diffused the sense of individual responsibility, so that each of us did little while each expected the group to pull us together. This was our own problem, and we have since worked to overcome it by clearly spelling out individual responsibilities within our group projects. In particular, "the one who knows most" about a particular project will not be allowed to dominate the project, because this encourages passivity in the rest of us and makes projects become, de facto, the work of individuals rather than of the group.

Not being as cohesive a unit as we might have been, we were drawn into the excitement of the convention as individuals--and receiving no "institutional" support or encouragement for the activities we had planned from SESPA as a whole, we failed to accomplish any of the important positive goals which we and SESPA had set for ourselves at the Thanksgiving planning session.
In particular, access to the means of production among the chapters;
(3) a fairer sharing of the financial cost of maintaining the organization.

The overall structure would have three components:

(1) autonomous local chapters;
(2) membership at large;
(3) a national office with a paid staff to carry out administrative work (channeling correspondence, arranging production of Science for the People, and so on), but not policy decisions.

II. Chapters

A group wishing to be considered a local chapter must provide:

(1) a list of x SESPA members (x must be greater than, or equal to 3), including one willing to be the local chapter contact;
(2) a statement of the focus of the group; this would include some statement of projects and general orientation;
(3) some contribution from each chapter toward the costs of Science for the People production, administrative costs and so on. Specifically, this means that a clearer statement of costs should be circulated to the membership. Such a better understanding of and support for the costs of the organization would assure more continuity in funding and less dependence on the salaries and grants of individuals;
(4) promotion of the magazine in its area by distributing it at schools, libraries, local professional society meetings;
(5) ability to function as an editorial collective when its turn comes up;
(6) filing of at least one annual chapter report.

III. Members-at-large are defined as persons who are not able to affiliate with a chapter. They pay a suggested $10/year (less for students, unemployed, underemployed, etc.), which also entitles them to a subscription to the magazine.

All members, whether members-at-large or members affiliated with a chapter, are eligible to be delegates at regional meetings, which can be called by a chapter by a notice in Science for the People. The regional meetings will deal with coordination, policy statements, election of delegates to national meetings, etc. National meetings might be called to plan for AAAS meetings, to decide on policies of support for or cooperation with another movement group, and so on. All meetings, at all levels, should be open to all members.

Northside Chicago
CALL TO IEEE ACTION!

Committee for Social Responsibility in Engineering
475 Riverside Drive
New York, N.Y. 10027

We are planning an action at the IEEE (Institute of Electrical and Electronics Engineers) Annual Convention held in New York City, March 26-29, 1973, at the Coliseum (59th Street, Columbus Circle). Anyone interested in helping is asked to contact us at the above address.

INTERNATIONAL GENETICS CONGRESS

A group of us in the Chicago area are beginning to plan for activities at the International Genetics Congress to be held in Berkeley from August 20 to August 29 in 1973. We feel that it is especially important that SESPA have an active presence there because among topics geneticists are working on are the following:

1. The racism of Shockley, Herrnstein, and Jensen masquerading as the study of the genetics of intelligence.
2. The possibility of altering human genetic architecture.
3. Green revolutionaries spreading and selling new crop varieties and in the process forcing commercialization of agriculture and offering false hopes of improved living conditions.

Preliminary programs for the congress indicate that its organizers are pretending genetics and geneticists are either always beneficial to society or irrelevant to anything but the "advance of knowledge". We must force the congress to confront the real implications and potential destructiveness of genetics research. Although it is called an international congress, in the past it has been dominated by and is the mouthpiece of western technologically advanced countries. We are interested in making the congress truly international. We hope to agitate for invitations and visas for scientists from revolutionary socialist countries and scientists who do not represent the ruling elite from Third World countries. We invite everyone interested in planning and participating in activities at the genetics congress to get in contact with us at the address below. We will serve as a clearing house for information until a more formal, representative group can be formed.

David C. Culver
Department of Biological Sciences
Northwestern University
Evanston, Ill. 60201

NATIONAL SCIENCE TEACHERS’ ASSOCIATION

Science for the People is organizing activities at the National Science Teachers’ Association (NSTA) annual convention, to be held in Detroit from March 30 to April 3, 1973. Our actions at NSTA have been designed to challenge the structures and social and political implications of science teaching and to offer alternative sources and materials. We are already preparing workshops on the teaching of ecology, energy, and other specific issues. We particularly need help from the Detroit area and the midwest. If you are interested write to:

SESPA/Science Teaching Group
9 Walden Street
Jamaica Plain, Mass. 02130

MIDWEST CONFERENCE FOR A RELEVANT SOCIAL SCIENCE

February 23-25, 1973
Midland Hotel
172 W. Adams
Chicago, Illinois

We are planning an interdisciplinary meeting as a step towards enhancing radical scholarship. The purpose of the Conference is to consider alternate approaches to fundamental social issues. A wide range of disciplines and experiences will hopefully be drawn upon. The concern will be both with making available research and expertise to those working to improve the quality of life. We would like to know what suggestions you have. So far, we are working on the following panels: The Women’s Movement; Academic repression; Community Research; Latin America: Revolution in the 70’s; the Underground Press; the role of students in social change; Rise and fall of Democracy in Greece. We hope to cover many more areas.

Please send abstracts of work you’re undertaking and would be willing to present to the Conference. If you will act as a discussant or workshop discussion leader, please notify us:

[ ] I plan to attend the Conference.
[ ] Please keep me informed of plans for the Conference.
[ ] I will need day care.
[ ] I will need hotel accommodations.
[ ] I will need free housing.

Send all correspondence about the Conference to the coordinator:

William A. Pelz
1237 W. North Shore Avenue
Chicago, Illinois 60626
On the weekend of May 13, 1972, twenty women travelled by bus from Chicago to Philadelphia, to receive abortions in an out-patient clinic. The women were scheduled to get abortions at Chicago clinics which had just been shut down by the Chicago police. The Philadelphia Women’s Health Collective became involved when the Women’s Center was contacted to arrange emergency overnight housing.

The weekend proved to have physically dangerous consequences for the women from Chicago. It was an exhausting and frightening experience for those of us in the Health Group. It raised serious questions about the safety of the abortion technique used and the people who engineered the weekend (most particularly Harvey Karman). But, beyond this, it forced us to confront issues such as our lack of control over experimentation on women, lack of access to reliable information on abortion, and our vulnerability to exploitation by both the “hip” and straight medical establishments as a result. We have written this report in order to share the information we gathered during and since this weekend and our analysis of some of the issues involved.

A History of the Weekend and the “Super-Coil” Technique

The arrangements for this weekend were made by Merle Goldberg, a woman from NYC who had been involved in the abortion movement for several years. Harvey Karman, who claims to be a PhD psychologist and inventor of the flexible cannula*, was flown in from Los Angeles to teach a technique of performing abortions in the second trimester of pregnancy to two doctors at the clinic in Philadelphia, Baron Gosnell and Benjamin Graber. Neither of the doctors had ever used the technique before and it is unclear whether either had even performed second trimester abortions. The cast of characters this weekend also included a crew from Channel 13, the NET station in NYC, who were supposedly to make a film about the experiences of the women as they went through their abortions.

The Health Group was contacted to arrange housing for the women (at that time up to 40 were expected) less than a day before they were to arrive in Philadelphia. None of us had ever heard of the “super-coil” technique. We attempted to get reliable information on its safety as a procedure and came up with completely contradictory results. Although we were being asked to participate in the activities of the weekend, none of the questions we raised to any of the people involved in arranging the weekend were satisfactorily answered. We eventually decided to locate one place to house all the women because we were told that the abortions would be performed with or without our cooperation or opposition. We felt that the women would be medically safer in one location than scattered in private homes around the city without immediate access to medical attention.

The twenty women, not the expected forty, did not arrive until late in the evening and the procedures were begun immediately. One woman was not pregnant. Four women were in the first trimester; they received vacuum aspirator abortions, using the “Karman cannula.” These women experienced no complications. The remaining fifteen women were in the second trimester of pregnancy and received “super-coil” abortions.

The “super-coil” abortion involves insertion of a number of plastic coils into the uterus, packing the vagina, waiting for a period of 16 to 24 hours, and removing the coils, after which a spontaneous abortion supposedly occurs. The uterus is then evacuated by vacuum aspiration using a Karman cannula.

*A cannula is a small piece of tubing inserted into the cervix through which a fetus is sucked by a vacuum aspirator. It used to be that cannulas were inflexible because vacuum aspirator abortions used to entail dilation of the cervix; now it is common that the cervix is not dilated and flexible cannulas are used.
The "super-coil" is said to be less traumatic than the saline method. Its proponents, Harvey Karman and Merle Goldberg, claim that it has a low or almost non-existent morbidity rate, is simple, quick and relatively painless. Karman is quoted in an early summer issue of the J.A. Free Press (obviously after the Philadelphia experience) as saying, "We have never had to put anyone in the hospital, there have never been any complications, and the procedures are all painless".

Of the fifteen women aborted by the "super-coil" in May, nine had complications; making the morbidity rate 6.6% higher than that of any other second trimester abortion method which is currently used. These complications included one perforation of the uterus, which eventually led to a hysterectomy performed at Presbyterian Hospital in Philadelphia; two women with retained tissue, necessitating repeated uterine aspirations; one woman with peritonitis (a serious inflammation of the wall of the abdomen) requiring exploratory surgery (a "laparotomy"); seven women with fevers of 100.4 or greater; and a number of women discovered to be anemic after the procedure. These statistics hardly seem to support Karman's claims.

A number of women who were being aborted found the procedure to be very painful. Evacuation of the uterus did not occur spontaneously, and often the fetal material had to be pulled out with ring forceps. The simplicity and quickness of this method is clearly very questionable. And regardless of quickness or simplicity, the high morbidity rate seems to indicate that this method—the super-coil—is decidedly inferior to any other presently used method of second trimester abortion.

The complications which resulted from the technique were not the only indication of the questionable nature of the activities which occurred that weekend. Although blood was drawn when women arrived, the lab work (to detect anemia and blood type, including Rh factor) was not done until after the women left Philadelphia. Also those of us who participated in the weekend were not given accurate information concerning the NET film. The Philadelphia women's objections to the filming were completely ignored. Despite the claim by Karman and Goldberg that the purpose of the film was to demonstrate the plight of women attempting to obtain abortions, its major focus was on Karman and his techniques. None of the complications resulting from the procedures were even mentioned. The source of the arrangements for the filming has still not been explained.

During the weekend the women in the Health Group felt an almost overwhelming sense of powerlessness to effectively intervene or change anything that was happening. We feel that we learned at first hand the acute need for a network of information on abortion procedures and those who perform them. Only such a network accessible to women all over the country can alert women to the possibilities of exploitation and medical mis-practice in the abortion business. The women from Chicago were mostly young, poor, and black (many of them on welfare) and we feel that the exploitation and medical experimentation to which they were subjected was linked to this fact. Women must gain the power to control and, if necessary, to prevent such "experiments." We can do this only if we are well-organized and informed.

**Harvey Karman and His Friends: Who Are They?**

Harvey Karman and Merle Goldberg are well known to a large number of women involved in abortion throughout the country (and probably the world.) Karman was sent to Bangia Desh by Malcolm Potts of International Planned Parenthood, to perform super-coil abortions on many of the women who were raped by the Pakistan soldiers. This expedition has helped to develop his image as a culture hero even in a women's magazine such as Ms. We will probably never know the morbidity/mortality rates for our third world sisters in Bangia Desh.

Several years ago, Karman and Goldberg were connected to Women's Medical Center in New York City. According to women we spoke to who worked in the clinic, both Karman and Goldberg were involved in what were considered, at the least, questionable medical practices. According to our sources there was little record-keeping and little or no follow-up for the women who received abortions. Karman also seemed to believe that women experience no real pain during abortions and rarely if ever gave women any type of anaesthesia.

According to three women who worked in the clinic, the Board of Directors of Women's Medical Center eventually closed the clinic at least in part because of what they learned of Karman's and Goldberg's activities. It has since been reorganized and re-opened with Karman and Goldberg completely out of the picture.

Karman left New York after his association with the clinic ended and has since been active on the West Coast. Various women's groups in California (particularly Self-Help Clinic One of the Feminist Women's Health Center in Los Angeles) have had experience with Karman. Their experience indicates that Karman is more concerned with undermining women's control of their health care and propagating his own technology and reputation than with meeting the health needs of women. In the October/November issue of The Monthly Extract, the newsletter published in conjunction with the Los Angeles Self-Help Clinic, Karman was denounced: "When a man seeks publicity at the expense of women; when a man experiments with techniques on hopeless victims in Bangia Desh; on very young women from the Black community; when a man runs a paid ad denigrating the efforts of dedicated feminists, THAT MAN IS NOT A FEMINIST."

**Recent Abortion Experimentation**

On the West Coast, Karman has recently been performing an experimental early abortion procedure called endometrial aspiration (it is also known as menstrual extraction, although this term applies to a procedure which

---

is not being developed primarily as an abortion technique. Endometrial aspiration is being actively pushed on the East Coast by Merle Goldberg for the National Women's Health Coalition. The National Women's Health Coalition in conjunction with the Population Council is conducting a study of endometrial aspiration.

The procedure involves the insertion of a 4 mm. cannula through the cervix into the uterus. With the application of suction, the lining of the uterus (the endometrium) is extracted. The procedure can be performed on a woman whose period is up to 10-14 days late. Because of the small size of the cannula necessary at such an early date, dilation is not required and anesthesia does not always have to be used. Presently, this abortion procedure is being performed on many women who do not have a means of positively confirming pregnancy.

The need for new abortion and contraceptive techniques is urgent. But because reproduction control has always been directed at women, women have been the experimental animals used to test out new techniques. Abuse has been rampant. The best known example is the pill, but any new method of birth control or abortion technology is susceptible to the same chain of events, unless women intervene. When experimentation is done—on women—we must attempt to understand and control it.

To begin to achieve an understanding of the experimentation into endometrial aspiration, two sets of questions must be asked, one political and one medical.

**Politically:**
1. Do researchers have accountability? This means that the researchers must be in regular contact with a consistent group of women, including feminists with health skills, who review their progress and can control decisions about their experimentation.
2. Financial arrangements—who is pocketing profits? Are massive amounts of money accumulating in the hands of researchers, backers, or marketers, or are funds being channeled back into the women's health movement for further research, clinics, education, etc.?
3. Are women given complete information about the experimental nature of the method, including all possible risks? If they are depending upon the technique as an abortion procedure, are they given complete information concerning the confirmation of pregnancy?

**Medically:**
1. Is there dependable record keeping and follow up? Side effects, rate of failure, long-term effects both positive and negative?
2. What is the rate of retained tissue? Of infection?
3. What is the effect on the body of repeated endometrial aspirations?
4. How many women using endometrial aspiration are pregnant? How many late in menstruation? For how many is a late or missed period a sign warning of potential medical problems and not pregnancy?

Menstrual extraction is a woman-developed technique; it was invented by women in the L.A. Self-Help Clinic who have been using it on themselves for over a year and a half. It was conceived of and is being used as a means of giving women control of various aspects of their reproductive system. It is of concern to women not only as an abortion technique. However, as an early abortion procedure, known as endometrial aspiration, it is rapidly becoming a male-controlled research experiment. It is being seized by people who have no commitment to the women's movement or to women in general, but who are committed only to increasing their own power, reputations, and bank accounts. These people must be stopped and the technology returned to women's control.

**What is to be Done?**

Recent developments with endometrial aspiration and the Philadelphia women's experience with the super-coil abortions make it clear that for women to begin to assert control over experimentation being done on women, two immediate steps must be taken:

1. We must continue to develop a network of information accessible to women all over the country. We must investigate and share our information concerning abortion and birth control techniques. This network is crucial not only to our ability to react responsibly and quickly in crisis situations such as Karman's experiment in Philadelphia, but also to our development of long term strategies for gaining control over medical practices in our local situations.
2. We must develop informed sets of medical standards to guide us in evaluating experimentation performed on women. We must be able to de-
termine when and how women are being exploited as experimental guinea pigs by both the 'hip' and the 'straight' medical professions.

One of Karman's most successful methods for manipulating radical women and others involved in health has been to employ our own rhetoric about the rigidity and professionalism of the medical establishment. Karman is not a medical doctor. This, in itself, is not something to hold against him. Trained, competent para-medics can play a crucial role in our struggle to demystify and change the medical system in this country. However, we leave ourselves wide open to becoming a part of what exploits women (i.e., second-rate medical care in this case) if we just dismiss medical standards and practices because they are a part of organized medicine as it exists now.

Para-medics like Harvey Karman may be able to confuse and rip us off more easily than doctors. Not everyone who works outside of the medical system is working for our best interests. We must have our own standards which we have developed out of our own research and experience, which we have discussed and criticized, on which we can rely. In the name of feminism we should not be risking women's lives!

No matter where or what we are doing in terms of abortion and women's health we have got to have the control; the only way we can get it is to take it. This report was written in an effort to share some of our conclusions and information as a step towards educating ourselves to seize that control.

Philadelphia Women's Health Collective and friends
Taylor told a Congressional committee in 1963:

*Here we have a going laboratory where we see subversive insurgency, the Ho Chi Minh doctrine, being applied in all its forms. This has been a challenge not just for the armed services, but for several of the agencies of Government, as many of them are involved in one way or another in South Vietnam. On the military side, however, we have recognized the importance of the area as a laboratory. We have sent teams out there looking at the equipment requirements for this kind of guerrilla warfare. We have rotated senior officers through there, spending several weeks just to talk to people and get the feel of the operation, so even though not regularly assigned to Vietnam, they are carrying their experience back to their own organizations.*

The rest of Part I details the working out of the new counter-insurgency strategy—first in the Pentagon and then in the universities and research institutes. Scientists, students and scholars will be especially interested in Chapters 3 and 4, which show the importance of their work to counter-insurgency and exactly how their research passes into the hands of the military. For example:

*The Department of Defense can easily obtain most of the information it requires on minority groups from the literature of scholarly anthropological research. The Cultural Information Analysis Center (CINFAC) of the Center for Research in Social Systems maintains an up-to-date computerized index to all anthropological studies produced in the United States, including PhD dissertations, conference papers, and field reports. Studies of military significance are duplicated and distributed by the Defense Documentation Center. Most of the time, the authors of these studies are totally unaware that their research is being used to plan military operations.*

Part II deals with the technological war, the contemporary face of warfare. The chapters are so dense with information that smooth reading slows and bumps along, as in a reference book. Early in this section Klare states:

*By directly supervising the activities of the Pentagon's own in-house laboratories, and by controlling the assignment of defense research contracts to universities, think tanks, and private industry, the Director (of Defense Research and Engineering) effectively sets policy for the nation's scientific and technical community.*

The Pentagon's laboratories are profiled, one after another. One of the major parts of counter-insurgency strategy is a rapid deployment capability—to be able to move an American force of just the proper size, up to an army, anywhere American interests are threatened. This is in large part the story of the C5-A, a nearly-miraculous airplane which can carry tanks, heavy artillery, helicopters, hundreds of soldiers, and which saved the Lockheed Aircraft Corporation from bankruptcy by its price tag (which included a $2 billion cost overrun). The third chapter in this section gives a long account of the development of the electronic battlefield, detailed descriptions of its components, and a notion of the automated warfare that is its future direction. (see "Toys Against the People or Remote Warfare," *Science for the People*, January, 1973.)

The chapters in the last section of *War Without End* discuss mercenary armies and police, which are an integral part of counter-insurgency. These forces are made up of Third World soldiers whose officers are trained in the U.S. and whose equipment and arms are all American. They make their bread by ensuring that the local elites that command them stay in power to maintain a favorable climate for American investment and trade. Klare looks in detail at Project Agile, whose specialized R&D (research and development) has aided client regimes in Asia. He also discusses police training programs and the role of the military in Latin America. The final chapter discusses the U.S. involvement in Southeast Asia and the various mercenary armies used there, including the Secret Army in Laos. The mercenary forces are extremely important in counter-insurgency strategy, because they form the first line of defense for American interests abroad. Only when they fail must the electronic battlefield and rapidly deployed American forces be brought into play.

Two strong and diametrically opposed social forces create the conditions for perpetual warfare.

*Only through revolution can the people of the Third World begin the process of development and acquire some measure of self-dignity; only through counterrevolution can the American business elite preserve its wealth and power. For the United States, the only possible outcome of this global conflict is participation in a long series of limited conflicts, police actions, and stability operations—the War Without End.*

In the preface Gabriel Kolko criticizes the scientists and scholars whose value-free bent and narrow specialization have made it convenient for them not to question the limits of American power or the future direction of our society. Klare transcends these limits, combining accurate research and clear writing with a radical perspective. N.A.
APPEAL

from the African liberation movements for Angola, Mozambique, and Guinea.

The Portuguese are using defoliants against crops in the liberated areas. It isn't known where the defoliants are made and who supplies them to the Portuguese. It has been said that one of the substances used is "CONVOLUTOX" but the composition of this substance is unknown. The World Federation of Scientific Workers has set up a commission to investigate the use of the defoliants and other genocidal weapons (coordinator: Steven Rose, Open University, England). Any work group in the U.S. with information on the defoliants or who want to help collect information on the role of science in the war should contact

Science for Vietnam
c/o Val Woodward
2235 Hillside
St. Paul, Minn. 55108

Science for Viet Nam

"This booklet was prepared in summer 1972, largely from past Science for Viet Nam Newsletters, as an introduction for people who want to know more about SFVN, as an aid to those who are starting new groups, and as an encouragement and review of a year's work for those who have been working in SFVN over the months."
Available from SCIENCE FOR VIET NAM, the Chicago Collective, 1103 East 57th Street, Room 47, Chicago, Illinois 60637.

Science Teaching: Towards an Alternative

A general critique of science teaching which was distributed at the April meeting of the National Science Teachers Association. Fifteen cents ($0.15) per copy (or less for large orders.) Available from SESPA, 9 Walden St., Jamaica Plain, Mass.

WHO RULES MASSACHUSETTS WOMEN

...a study of where the women are—and are not—in Massachusetts state government; published by the Women's Research Center of Boston, August 1972.

Who Rules Massachusetts Women documents for the first time the number of women and men in the top policy-making positions in each branch of state government, analyzes the effects on women, and recommends strategies for change. The text is accompanied by clearly drawn tables and charts.

Among the findings: overwhelming male domination where it matters (sic): 97% of the judges are men; 93% of top positions in the executive held by men; 98% of the legislators are men. Among the effects: discriminatory laws, policies, and judgments against women; over-protection; and not so-benign neglect. Among the recommendations: more feminists in public office; increased feminist political activity in and out of government.

Single copies are $1.00 each plus 15¢ postage. Bulk rates: 2-9 copies, $1.00 each plus 25¢ postage; 10-25 copies, $95 each plus 60¢ postage; 26-50 copies, $90 each plus $1.15 postage. Checks should be sent and made payable to:

Women's Research Center of Boston
CSPP
123 Mt. Auburn Street
Cambridge, Mass 02138

War Resisters League

Last night I had the strangest Dream we saved our money and got a grant from the WRL and we bought a reconditioned B-29 from Tricky Dicks used car lot and on August Sixth we flew over Hiroshima at 35,000 feet and we dropped Harry Truman

D.B.
CALCULUS for CONQUEST

SESPA Vs. ARMY MATH RESEARCH CENTER

For the past several months the Madison Collective of Science for the People has been directly involved in the struggle against the Army Mathematics Research Center (AMRC) located on the University of Wisconsin Campus. We are not the first to oppose this military funded and directed institution. Since 1967 it has been the focus of many anti-war activities. For most readers, the AMRC evokes a memory of the August, 1970 bombing and the death of one physics postdoctoral student. The history of the AMRC and the struggles waged against it are relevant to Science for the People, for at issue here is the manner in which we are to deal with a blatant misuse of scientific talents and information. In this report we would like to raise this issue and describe the actions which we have taken against AMRC.

We in Science for the People came to oppose AMRC by a rather indirect route. None of us had been involved in the early investigative work that uncovered its true purposes, and though we had for years participated in campus protests, we tended to remain outside the circle of involvement. Instead, we concentrated on reaching other scientists who, like us, were dissatisfied over the misuses of their research—the Indochina War more than any other single event bringing us together. In seeking alternative modes of research, we embarked upon the Science for Vietnam Project, the nationwide cooperative effort to supply scientific information to North Vietnamese scientists based on their own requests. Equally important, the program aims at reorganizing scientists into collectives that can sense the needs of people and act on them. While the year we spent on this activity was most productive, especially in the development of a working collective, our overall success was limited. We had not expanded in membership, we had not engaged the interest or enthusiasm of many other scientists, and we had not come to deal with our basic political purposes. It was at this juncture in our development, early last summer, that we learned of a forthcoming symposium on Population Dynamics arranged and funded by the Army Mathematics Research Center. We saw this as a clear example of how the military, through the AMRC, begins to penetrate the basic science and subvert them toward military needs. In order to understand this perception, one must have a clear picture of the history of AMRC and what its functions are.

AMRC

The AMRC is a research institute composed of a director, nine permanent staff members, 37 visiting researchers, and eight computer programmers and secretaries. Although it is located on the University of Wisconsin campus, it is not an academic department. Rather, it derives academic legitimacy from its nine staff members, who have joint professorial appointments in other departments such as mathematics, statistics, computer science and industrial engineering. The researchers include graduate students, junior UW faculty employed part-time, and visiting scientists from other universities and military installations. The director, J. Barkley Rosser, is appointed subject to the approval of the Army Mathematics Steering Committee, for whom he works. Rosser, whom we shall meet again in this story, achieved mathematical eminence through his direction of theoretical ballistics at Allegheny Ballistics Lab, direction of the Focus Project of the Institute for Defense Analysis (IDA), and assistance in the founding of IDA Centers at Cornell and Princeton.

The 1.3 million dollars the Army spends annually on the AMRC represents about 43% of the total Army mathematics funding in universities across the country. For this sum the AMRC is, in their own words, under a written contract to "conduct mathematics research which has relevance to problems that exist or are inherent to military problems, which has emphasis upon long-range investigation, and which is directed toward the discovery of tech-
niques that may have application to the Army's needs."
As well, the AMRC is to "cooperate with Army activities in their recruitment of scientific personnel."

The location of AMRC on a major university campus is no accident. The military needs basic mathematics for ballistics, for computerization (pattern recognition for computer bombing, weather modification programs), for airlift routing, personnel deployment schedules, and so forth. However, the Army lacks a staff of mathematicians capable of keeping pace with these and future needs. While industry does carry out some basic research, most is performed at universities where numerous disciplines and facilities are concentrated and where highly skilled, relatively low-paid investigators are available. The AMRC is one way the Army gets the job done.

The staff members of the AMRC all have security clearances and accomplish their tasks by either working on campus or by traveling to military installations. In addition, the AMRC offers Research Residencies which allow Army scientists extended periods at the AMRC working in areas of interest to the home military installation. Trips by the AMRC staff to such places as Watervliet Arsenal, Picatinny Arsenal, Aberdeen Proving Grounds, Fort Detrick and Edgewood Arsenal are commonplace.

Protest in Madison

With the militant university protests during the past several years, it was inevitable that the AMRC would become a hot issue. Large protests on the UW campus first took place in October of 1967 against Dow recruiters over Dow's manufacture of napalm. For awhile the AMRC was ignored because concrete information about its functions was scarce. This picture was altered when university people like David Siff and James Rowen uncovered, through public documents, the exact role of the AMRC. The AMRC was now exposed, and by 1969 the cry "TO AMRC" was heard at the mass rallies. In the fall of 1969, the Wisconsin Student Association held public hearings on the AMRC until Director J. Barkely Rosser cancelled further participation of his staff. Rosser also refused to divulge the AMRC's 1967 annual report, but after strong criticism was voiced he did release it, with certain sections linking the AMRC to Project Michigan and the electronic battlefield censored.[1] By the spring of 1970, University in-house criticism of AMRC was silenced—the University fired its most active anti-war critics and thus effectively reduced the few antagonistic faculty to sheep.

But the anti-war movement continued to grow as leftist groups in Madison organized a United Front. Action continued into 1970 with large mass rallies, demonstrations against GE recruiters, and more frequently, militant incidents of trashings and firebombing. The University ignored repeated demands that ROTC and AMRC be removed from campus and with the invasion of Cambodia the protest was intensified even further.

A watershed occurred at 3:00 a.m. on August 24, 1970. The AMRC installation in the physics building was bombed and a physics researcher was killed. The effects were devastating. Large overt protests dissipated. Action against AMRC came to a halt. The University capitalized on the bombing by accusing the entire anti-war movement of encouraging such acts; it labeled the bombers as madmen, and completely absolved itself of any responsibility. One of the four men accused of the bombing, Karl Armstrong, now awaits the outcome of appeals on extradition hearings in Toronto, Canada.[2]

The Low Profile

The response of the AMRC to the years of scrutiny and criticism afford a glimpse of the basic nature of this institution. The AMRC has always strived for a low profile, anonymous cohabitation with its university handmaids. It has avoided mention of any military connection. In fact, the AMRC's contract with the University states that "press releases, presentations at scientific meetings, and papers should not disclose financial details, possible military application, or the overall Army program in the particular field involved." The annual reports are laboriously sanitized and censored, as was the 1967 report in the manner described above. Trips to military installations are omitted, and it is only through travel vouchers that the true story comes out. Some of the papers are rewritten to conceal their real purpose. Director Rosser's paper on "The Probability of Survival of a Subterranean Target under Intensive Attack" had figures which were so close to the actual military situation under study that it had to be rewritten with new computations "suitable to the survival of ant hills at which rocks are being thrown." Following the bombing in August, 1970, the "Army" was dropped from its title and the "Mathematics Research Center" was moved to the top floor of the Wisconsin Alumni Research Foundation building overlooking scenic Lake Mendota.[3] In 1971, the (A)MRC sought "neutral" funding from the National Science Foundation under the assumption that it would continue to do the same work as before. NSF turned down the application for lack of funds.

Until the bombing, most of the left groups fought to "get AMRC off campus" where its access to university equipment and personnel would be hampered. In this way, it was hoped that the Army would be hurt. The weak point in the approach was that many faculty and students supported the demand in order to purify their university, not really to hinder the Army. At the core of such support was the belief that the basic research done on the campus was "neutral", that is, it developed in the absence of any political context and without any effect on the direction of political trends in the future. Such a belief in the neutrality of science is still very common and we met it head-on in our demonstrations against the (A)MRC symposia.

Our Demonstrations

Twice yearly the (A)MRC sponsors symposia which, in the words of its Director, are of "much value" to the military. The aim of the (A)MRC symposia is not to deal with urgent military questions, but rather to assess the current status of knowledge in particular fields and to make
contact with the talented scientists. There are no generals in uniform, no pep-talks, no arm-twisting to consult on military matters; in fact, signs of military interest are distinctly absent. The invitations are issued with the revised title "Mathematics Research Center" inconspicuously placed below and to one side of the large bold letters:

UNIVERSITY OF WISCONSIN

The old soft sell. Who are the promising scientists? Who shows an inclination to think along lines useful to the military? "Say, I wonder if you would help me for a moment with a problem I have been having with a project at Redstone?" Or "That sounds like interesting research. You know, the Army is interested in a variation on that model. I think they are awarding funds for such work."

This year's June and September symposia were entitled "Population Dynamics" and "Mathematical Programming". The Population Dynamics symposium dealt with demography, the description and quantitation of trends and determining factors in the behavior of populations. The Mathematical Programming symposium considered topics on large scale linear programming, network theory, and game theory. About 100 to 150 people attended each of these meetings, traveling from university, industrial, governmental and military centers.

We in Science for the People decided to oppose these symposia. The Army was counting on the ignorance and passivity of the participants to help them remain anonymous. We had to make the (AMR)C act as an institution with set aims and methods. We had to make the (AMR)C the focus rather than us or our tactics. In order to offset the Army's design, we had to inform the participants at the conferences of the Army's purpose and encourage them to take some form of action. Prior to the conferences we dashed off letters to the invited speakers; during the conferences we picketed outside the meeting hall, distributed leaflets stating the reasons for our protest, held counter-conferences to discuss what we felt to be the critical issues, and spoke with anyone who would listen.

The University Administration and the (AMR)C responded to our protests in ways we had seen before. At first, the (AMR)C denied that any military purpose lay behind the Symposia. The day before the June conference was scheduled to begin, J. Barkely Rosser told local radio station WTSO that he was surprised to hear of the forthcoming protests, for, in his words, the Symposium was not funded by the Army but by the National Science Foundation. However, at the opening session two days later, Rosser changed his stand. He admitted that the conference did indeed have Army backing and that the subject matter had been endorsed by the Army in the spring of 1971. Fearful of large-scale protests, the University called out scores of riot-equipped police to handle the 200 peaceful demonstrators that peacefully assembled to greet participants as they arrived at the site of the Symposium. Frightened of having any political issues introduced into the Symposium program, the (AMR)C refused to allow UW students into the conference hall. They were permitted to watch the proceedings on closed circuit television. The reason for this action was an alleged "tip" that disruptions were intended. However, the head of the University Protection and Security, Ralph Hanson, later admitted that he knew of no such tip.

The Seminar Participants Respond

At first the participants were confused by our presence. This was supposed to have been just another "neutral" symposium. What did these long-haired people want with their posters: SMASH ARMY MATH....?....SCIENCE FOR THE PEOPLE, NOT THE ARMY....?....YOUR EQUATIONS ARE KILLING ASIANS....? Many of the participants had not been aware of the Army's backing at the time they agreed to come. Once aware of the Army's interest and sponsorship they retreated into a series of rationalizations.

There was the scientist who denied his work had any military applications either now or in the distant future. "I know my work has no military application; I am just ripping off the Army so that I can do my research." Even the Symposium Co-chairman, T.C. Hu, a specialist on network theory, laughed at our assertion that his work had military usefulness. He stopped laughing when a rapid librarial search uncovered seven recent Air Force Project Rand studies on sophisticated network interdiction models for "optimal" bombing of the Ho Chi Minh trail.

We also encountered the scientist who dissociates himself from the consequences of his work. "But surely anyone can use this research, not just the Army!" George Dantzig, one of the early developers of linear programming knows his work is useful for the military, yet as he indi-
cated in talks with us, he does not want to concern himself with that aspect of his research. This dissociation came out in other forms. Some insisted that they represented no one but themselves. “As a citizen I feel we should respond to social needs, but as a scientist, I know my main task is to perform my work.” Still another variation was a feeling of helplessness. “The Army will just get someone else to do this work. I am just a cog in the wheel. If I voiced my objections, I would be fired.” When we had exhausted all the possible arguments for why these scientists should oppose military penetration of their work, they invariably responded with, “You are speaking to the wrong people. The military is controlled by the congress, and if you want to get something done, you must take your protest to that agency.” It is interesting to note that the demographers, who tended to believe their work had no military applications, would be willing to take a moral position, whereas the mathematicians, who knew their work had military importance, refused to view their work in any moralistic way.

We also encountered the sexist who upon seeing women in our group demanded to know, “Why aren’t you girls working in your labs or doing something to improve yourselves?” There were humorous responses as well. Steven Robinson, one of the assistant directors of the (A)MRC was forever brandishing his 35mm camera at us, while Louis Rall, the other assistant director, darted frantically about screaming, “Don’t you think we need a strong defense?” Rall’s finest moment came on the night of the June welcoming party. He turned crimson red at the sight of photographers snapping pictures of his wife as she attacked one of our picket signs. Cold warriors became furious and hurled insults. They felt proud to attend an Army conference, and so, they said, should anyone who cherishes freedom.

Some honestly tried to deal with the issues we were raising. Prior to the first conference we published the fact that Norman Ryder, an eminent mathematical demographer and former UW professor, had informed us of his refusal to attend because he knew about AMRC. Stuart Dreyfus, an invited speaker from Berkeley, denounced Army sponsorship in his opening remarks and stated that he would refuse all similar invitations in the future. At the September sessions Joe Engels, a former Navy researcher now at the University of Illinois, granted an interview to the city press in which he expressed misgivings about military complicity and disillusionment over the meager social benefits of military research. These responses were pretty good; they signify some hope for the further radicalization and politicization of the scientific community.

Nevertheless, most participants had that lean and hungry look and were eager to gather credits in their march along an unmarred career. They probably understood what their acceptance of Army sponsorship signified; but these were ambitious men and their own security and professional positions were most important. There was no time or energy for political diversion. The effect our demonstrations had on this mentality is not clear to us.

Our Mistakes

Our most serious shortcoming was the lack of a clear and assertive political position. We had developed a sharp analysis of how the military penetrates basic science, but we did not adequately expose the real politics behind scientific programs organized along capitalist lines to support imperialist power. Perhaps we were unaccustomed to dealing with the raw politics, or perhaps this meant a degree of seriousness which we were not quite ready to adopt. As a result, we seldom surpassed a simply moralizing position vis a vis the inverted priorities within science. Our manner tended to be mild and rational—we came across as reasonable scientists with opinions differing from the mainstream but worthy of consideration. We could easily be placed in a liberal packet as another point of view. The ramifications of this in practice were unfortunate. For example, at the September conference a mass rally had been planned, with our cooperation, by another campus group. But when it occurred we became uneasy. Here were screaming, angry militants marching up to the convention, flags and banners unfurled, waging excellent guerilla theater; we paced quietly back and forth in front of the hall. In spite of our timidity, we did see that our alliance was political and with those out on the street, rather than intellectual and with scientists at an Army conference. But another
distinction had already been made both by the participants and the press: the rational, level-headed scientists and the crazies on the march. In this separation we encountered the special problem of potential self-isolation which we all face. An American scientific education has taught us to feel different and apart from others, usually due to some form of "expertise". Although we have always fought against such elitism, the seeds of this same attitude were ironically within our own actions and hesitations at the demonstration. This is a guarantee of powerlessness; to overcome it we must gain a solidarity and mutual understanding with non-scientific political groups and not just share and dissipate our alienation with other scientists.

We made a similar error when some participants approached us with the question: "We agree with what you say, but what can we do in our own home towns?" We responded anemically that they should expose, a la Ellsberg, the misuses of science, or else organize in groups. But there already is a group, Science for the People, with the beginnings of a politic and a force. Our response showed that we did not yet perceive ourselves to be integral to that national movement.

A People's Mathematics

In our demonstrations at the June symposium we came to realize that negatively arousing latent frustrations and angers would not be enough. We needed a positive program that would suggest ways to reconstruct the corrupt social context of science. By the second conference our collective had been studying together an article by Andre Gorz and his book, Strategy for Labor. We decided to see what it would mean to apply his ideas to our struggle against AMRC. According to him, to seek "non-reformist reform" means demanding a reform which is required by human needs, but which cannot be met without a change in present institutional structures. It shows why capitalism is not capable of meeting these particular and basic needs. In applying this to our own situation, we dropped the moralistic, ivory tower demand for "AMRC off campus" and called instead for its political re-functioning to solve human rather than military problems. AMRC should become PMRC—a People’s Math Research Center—a center which demystifies mathematics so that the people can use it to meet their needs. A PMRC would be run by its workers, together with the people of our area, and all research and financial records would be open so that the public could judge its work. We should now demand, for example, the construction of mathematical models to help devise an adequate urban transportation system, or of models which serve to measure and control the impact of the tourism industry on Wisconsin’s ecology.[4]

Although we raised the demand for a PMRC in September, it did not come across with force. We spent most of our energy refuting those researchers who wanted to deny the military importance of their own scientific fields, and thus there was little opportunity to pursue the concept of a People’s Math. We are now engaged in developing these ideas to a more mature point.

In Conclusion

At the conclusion of the two conferences we were left exhilarated. We had upset the AMRC and the Army, perhaps even hurt them. Our collective action had shown that an alternative to passivity and indifference exists for scientists. From it we had gained a renewed sense of strength. New channels opened up as other radicals who had supported us in our action sought us afterward for information and help in their struggle, with Karl Armstrong, against the university-government war machine. And finally, we will remember the gentle faces of our friends from the Chicago Collective of Science for Vietnam who traveled to Madison to be with us on the picket lines.

The growth which we have undergone will ultimately be measured by our future actions. We have spoken in this article of the need for a coherent political philosophy without having detailed what this should entail. Our own thoughts on this, as a group, are not as yet well formed, and we must engage in further work and study. A better political framework is needed not only for our own collective, but for all Science for the People collectives. Science for the People makes no sense as simply a moralistic movement to reach other frustrated researchers; it must reach out into the broader social movements and there find its political significance. We hope that others will respond to this need, and we invite criticism and suggestions on what we have done.

In struggle and friendship

Madison—Science for the People

FOOTNOTES

[1] Under Project Michigan the University of Michigan developed the sophisticated infrared photography techniques which reportedly aided Bolivian troops trained by American special forces to track down Che Guevara. The Army called on AMRC to assist the project at some point between June, 1966, and Guevara’s death in October of 1969. The title, “Assistance to Project Michigan,” appears in the table of contents of the report, but the entire eight-page section covering specific assistance and advice is censored. By a Board of Regents mandate even top university officials can be denied access to such AMRC material.

[2] The University has played down the political significance since then, because extradition from Canada is possible only if the suspect (Armstrong) is accused of a non-political act. Hence the university now refers to the bombing as an act of ‘criminal malcontent.’

[3] The Wisconsin Alumni Research Foundation (WARF) is a tax-free foundation founded in 1925 as an unofficial arm of the University by some alumni who were interested in exploiting several patents which the late professor Harry Steenbock had secured in the process of Vitamin D irradiation. Since then it has expanded into fertilizers, anti-coagulants (the rat poison Warferin), cheese manufacture, and ownership of the Wisconsin Dells, a resort area northwest of Madison. WARF’s trustees invest profits in Smith Barney and Co., a major New York financial house. Their assets were listed at $50 million in 1961, but have been unavail-
able since then because non-stock foundations are not required to show financial figures of this sort. WARF donations to the University have been almost entirely in the natural sciences—92%.

Who controls WARF? This is not easily answered, but four of its trustees hold directorships in the First Wisconsin Bankholders Corp., the state's largest banking system. Another trustee, H.I. Romnes, is Chairman of A.T. & T. Romnes is also a director of Cities Service, U.S. Steel, Colgate Palmolive, Goodyear Tire and Rubber, and Mutual Life Insurance Co. of New York. General Mills has also been represented on the WARF directorship. Past Air Force Comptroller, General E.W. Rawlings, is now president of General Mills.

[4.] Tourism is Wisconsin's second largest industry and is considered the key to the 'development' of the northern part of the state. As footnote no. 3 mentions, the Wisconsin Alumni Research Foundation already has its hands on the most developed (i.e. commercialized) tourist region—Wisconsin Dells. (You pay to get in. It's closed in the winter.)

Science Against The People

By Berkeley SESPA

The story of Jason—the elite group of academic scientists who, as technical consultants to the Pentagon, have developed the latest weapon against Peoples' Liberation struggles: "Automated Warfare."

What some of America's leading scientists have said about SESPA's research into the workings of Jason:

"SESPA has compiled a miserable record, especially in New York, in its disregard for both truth and for minimal standards of human decency ... You have no monopoly on outrage about the war in Vietnam, and history shows us what happens to a movement when it provides a haven for thugs." Prof. Harold Lewis, Chairman of Jason, University of California, Santa Barbara.

"This report contains several misrepresentations and/or quotations out of context. More significantly, it violates the conditions under which I agreed to meet with SESPA, which were that I would listen and you people would talk." Prof. Kenneth Watson, University of California, Berkeley.

"Relatively few sentences in the statement (summarizing the interview with SESPA) are free of some substantial error or misrepresentation. You do not have my permission to publish such a misrepresentation. In addition to ethical issues, a publication of this type would raise serious questions of damage to academic freedom and of libel." Prof. Charles Townes, University of California, Berkeley.

Available from SESPA, P.O. Box 4161, Berkeley, California, 94704. $1.00 for single copies, $0.65 each in groups of 10 or more.

Billions for Band-Aids

An analysis of the U.S. health care system and of proposals for its reform edited by Elizabeth Harding, Tom Bodenheimer, and Steve Cummings.

"We hope that it will at least be useful to groups that are organizing in local health struggles aimed at changing our health system."

Available from Bay Area Chapter, Medical Committee for Human Rights, P.O. Box 7677, San Francisco, Calif., 94119. Single copies: $2.00 plus $0.25 postage. Bulk Orders (10 or more): $1.50 ($1.75 for institutions) plus $0.25 postage per copy. Payment must accompany all orders. Checks payable to "Billions for Band-aids."
BATTLE MEMORIAL INSTITUTE
505 King Ave., Columbus, Ohio

Battelle is eightyith in the "Index of 500 Largest Military Prime Contractors for Research, Development, Test, and Evaluation Work (Fiscal Year 1967)." * In that year, Battelle Memorial Institute received $6,804,000 in "net value of military prime contract awards."

The following information is from Viet Report, January 1968.

Includes: Remote Area Conflict Information Center; Defense Metals Information Center; Radiation Effects Center; Battelle-Defender Information Analysis Center.

Primary focus: Research, Development, Test and Evaluation work in physical and life sciences, engineering and weapons technology. Includes Department of Defense Centers for Research and Development information on: counterrinsurgency operations and equipment; aerospace metals; the effects of nuclear radiation on military equipment and personnel; and ballistic missile defense.

Current projects of special interest (sponsoring agencies in parentheses): Chemical and Biological Warfare agent research (Army Chemical Center); research on biological effects of nuclear explosions (Defense Atomic Support Agency); study of water resources in the Middle East for Project AGILE (Advanced Research Projects Agency, Department of Defense); long-term projections of supply and demand for agricultural products in Central America (Department of Agriculture); research on industrialization in Western Africa (Agency for International Development).

* Report, Office of the Secretary of Defense, Directorate for Statistical Services, December 28, 1967

January 10, 1973

Professor Freeman J. Dyson
Institute for Advanced Study
Princeton, New Jersey 08540

Dear Professor Dyson:

In a recent letter you and Professor Bott asked me to help the Battelle Rencontres Committee improve future Rencontres by comments on past ones, and discuss concrete ways in which participation in the past has influenced my work.

As far as I am concerned—and, I believe, many other concerned scientists as well—the best thing you and any other planners and/or participants involved with the Jason project, IDA, DCPG, or ARPA, etc., could do is:

(1) cease all your services for the Pentagon;
(2) repudiate the U.S. militaristic policies and corruptions of science in that service;
(3) reveal whatever inside information you have about the military, as Ellsberg did.

To you the connection between these requests and the sense of your letter may seem tenuous; allow me to elaborate on how these requests have direct relevance to my own research and how the issues they raise inhibited the productivity that should have come out of my past participation with the Battelle Rencontres.

I attended the Rencontres on Group Representations and Quantum Mechanics at Battelle Seattle in the summer of 1969. I arrived the day that men were landing on the moon; the T.V. was on, and there was lively debate on the topic of the scientific significance of the expedition. I found this conversation much more revealing than the usual "I'm a high energy man; what's your field?" type of chit-chat. The tone was set for the possibility of interesting exchanges on all levels.

Under the tutelage of Professor Bargmann, these possibilities materialized. I was especially pleased with how some of the physicists really tried to teach this pure mathematician greenhorn what quantum mechanics was all about. Several concrete possibilities for collaboration occurred, including the relevance of factor representations of type II of the symmetry group of the Hamiltonian in a certain problem in solid state physics, and the possibility of a relativistic treatment of the tie-in of Brownian motion with quantum mechanics a la Edward Nelson. The enthusiasm inspired in me was tremendous.

The Battelle Institute took very good care of us and

COLD AND ALONE...
used their resources quite well to encourage this exciting interaction.

I made personal friends with a number of participants, including one young physicist who worked for IDA. I didn't know much about IDA at the time, but I had a vague malaise about his involvement with it and, therefore, mine with him. I felt like confronting him and saying, "What's a nice guy like you doing consulting for an outfit like that?" but I felt it was "out of place," "inappropriate in a scientific context," and besides, in my weakness, I didn't want to offend anyone.

Then another young physicist at the Rencontres invited me to join him in putting my name on a memorandum he was circulating on the military contracts awarded the Battelle Memorial Institute; I enclose a copy of what we sent out. He and I had been bothered by the contradiction between, on the one hand, our feelings about the war in Vietnam, the technological development that made it possible, the compliancy of institutes like Battelle in that development, and, on the other, how the Institute was coddling us, making this interaction possible, etc. Although I did none of the research on the memorandum, I cosigned in a gesture of solidarity, because I had committed myself to confronting the American people with the war at every available opportunity.

The official reaction to the memorandum was one of benign neglect. However, it did stir up some discussion on the issues that we felt needed discussing. Many of the participants told us they couldn't see the point of the act; after all, it had no call to action and was purely informative. Also, to them it smacked of biting the hand that feeds you. I believe these criticisms were well taken, but more about that later. I was more disturbed by the friends who pulled me kindly aside and warned me of the impudence of our act. One older mathematician told me that we would throw the country into fascism if people like me continued to actively protest the war as we had. The young physicist who worked for IDA informed me that he too was against the war, but the way we had gone about bringing it up was "inappropriate here." He didn't seem to want to join in helping us plan more appropriate ways. The unkindest cut of all came from another young physicist with whom I had become fast friends—he was a closet radical of sorts—who cautioned me that I could hurt my career by stunts like this, and if I weren't careful, I may never be invited to a conference like this again. After all, I was just getting started . . . "Then why the hell didn't you or someone else who's more established raise these issues?" I asked him heatedly. He informed me that he did raise these issues in private conversations with individuals and he let his feelings be known, but he thought that institutional attack was unwise and ineffective. I felt he had let me down a little, but all these criticisms made me wonder.

I still had cordial relations with the rest of the participants, and we talked some more good science. Nonetheless, I felt the contradictions even more keenly, and it inhibited active collaboration. For example, how was I to work with the solid state physicist (who was employed by Battelle) on the group representational aspects of his problem, when neither he nor I had any control over the results of our research? All the usual rationalizations presented themselves: first, the work was totally theoretical and probably had no practical application at all, much less a nefarious one; second, the work wasn't that important, and we'd be lucky if twenty people in the world read our paper; third, if a joint paper came out of this, my! how my career would be advanced, and maybe I'd get invited again to neat institutes like this and maybe the Institute (for Advanced Study in Princeton) and get government grants and get to travel and wouldn't my department be proud of me . . .

I felt like I was falling into the same sewer that Oppenheimer fell into (if I seem to be flattering myself by the comparison, I can only recall that others have rationalized their compliance by self-effacement): that of going to neat protected institutes; of the ecstasy of doing pure science; and, then, with the cocky self-assurance only the bright and successful have, of deciding now I'll use my talents to straighten out the country—set the military and government straight by getting in Jason (after all, I'm brighter and more humane, aren't I?)—and solve the world's problems behind closed doors with the rich and the powerful. And be—Where the Action is.

Why is it a sewer? Because you're making decisions that affect other people's lives without being accountable to them. There is no mechanism whereby they can influence you. You are insulated from the fruits of your creations; the Vietnamese people—nay, even the American people—have no avenue of approach save confrontational protest. You may think that you can get some influence for good in these ways, but you're kidding yourself. You're a hired man to the ruling class; they'll pick your brains and listen to your advice when it serves their interests and ignore you when it doesn't. You may consider yourself humane, liberal, and personally decent, but you are being used for evil purposes, and at present no one can stop this but you.

Professor Dyson, in the preceding paragraph I used the second person in a general sense, but you are welcome to interpret it as being addressed to you personally.
Thus, I cannot do science at institutes like Battelle, in view of its involvement with the power structure of this country, as well as the involvement of some of the participants, until we can freely confront these issues. Do not misunderstand me; I am not saying that I cannot do science with people unless they think the way I do about everything. The realities transcend our personal opinions about the war in Vietnam, U.S. policy, socialism, vivisection, etc. The point is that you make decisions, advise on policy, and direct technology in ways that affect people (killing the Vietnamese presumably affects them) and no one can confront you except me and others like me. People who do things like that must be held accountable by somebody, and until you are willing to be held accountable and disengage yourself from your masters, I can't do science with you or anyone like you.

I hope that your perspective is not so distorted that you cannot see that these issues are more important than the question of incorporating E-invariance into the Haag-Kastler axioms.

I read your AMS Bulletin article on "Missed Opportunities," by the way, and found it extremely stimulating and challenging. I feel that one way to pick up on the missed opportunities is to have interactions between mathematicians and physicists like those I saw at Battelle. I want badly to do that sort of science. But for me it is impossible until these incredibly urgent matters get resolved.

Professor Dyson, I rambled at such length for a number of reasons. The primary one was to respond to your inquiry sincerely and inform you how participation at Battelle has influenced my work, and how it can be more beneficial to me. And what I am asking of you in points (1), (2), and (3) is not outside your power. If you have already taken steps like these privately, please do so publicly, so others will know of your example; anyway it is more than your own conscience to which you are accountable. It is the people of the world.

I guess another reason I rambled so was to take the opportunity to spill out things stewing inside me for a long time.

Finally, as you must be aware, until you hold yourself accountable, you are going to be subject to confrontation by groups like SESPA and the French scientists at College de France that confronted Gell-Mann. Until you do, I personally will confront you at the first opportunity. I hope these ramblings help you understand where we are coming from. And, as far as I am concerned, the confrontation is not to punish or to castigate, but to force you to be accountable and urge you to join us in building a science for the people, responsible to them, and not to the forces of profit, privilege and war.

Sincerely yours,
Robert D. Ogden
ENGINEERING UNEMPLOYMENT
OR HOW TO LIE WITH STATISTICS

The rate of unemployment among engineers concerns engineers themselves, the engineering colleges, industry and the government. If the rate is low and a passing affair, then no action is needed: the situation will correct itself in a short time. If the rate is high and persists over a period of years, then organized remedial action becomes necessary. Lacking such action, numbers of engineers may be forced into selling real-estate, gasoline and hamburgers. Engineering colleges may have to shut down departments or cut staff in the face of declining enrollment. The government may have to end unrestricted entry of foreign engineers into the United States. Over a longer period, industry and the country may be faced with a shrinking engineer labor pool and a concomitant declining national technical capability.

Compiling unemployment figures for engineers appears to be a straightforward job: after all, most engineers work for sizable private companies or large government entities. In the first group, available social-security and income tax records for engineers over the past few years should clearly show the employment trends. For the second group, figures should be easily available from the government agencies concerned.

Yet the Nixon administration has not chosen to take the direct approach to engineer unemployment statistics. Instead, the government's National Science Foundation awarded the Engineers' Joint Council a $65,000 contract to conduct an unemployment survey [1]. The Council then polled 20% of a claimed "500,000 individual members of 23 major engineering societies" (e.g. American Society of Civil Engineers, American Society of Mechanical Engineers, etc.) With some 1.25 million comprising the U.S. engineer labor force, the claimed sample is 8%.

EJC came up with an engineer unemployment rate of 2.9%, considerably less than the purported national civilian unemployment rate of 5.9%.

Are the NSF-EJC engineer unemployment figures valid?

The evidence suggests that the actual engineer unemployment is at least double the stated 2.9% figure. Also, it is probable that the Nixon administration deliberately chose the EJC survey method of gathering the statistics rather than the direct use of social-security and income tax data in order to justify its do-nothing policy, one which forced many engineers to lose their homes, break up their families, and destroy their self-respect.

Probably as good an example as any of the Nixon administration's fraudulent statistics comes from the Bureau of Labor Statistics "Monthly Labor Review" of October 1972 p. 16 in a piece entitled "Characteristics of Jobless Engineers". Based on the EJC survey, the article tabulates the following figures:

<table>
<thead>
<tr>
<th>Year</th>
<th>Employed Engineers (a)</th>
<th>Unemployed Engineers (b)</th>
<th>Unemployment Rate(b/a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>1,161,000</td>
<td>8000</td>
<td>0.7%</td>
</tr>
<tr>
<td>1968</td>
<td>1,193,000</td>
<td>8000</td>
<td>0.7%</td>
</tr>
<tr>
<td>1969</td>
<td>1,220,000</td>
<td>10,000</td>
<td>0.8%</td>
</tr>
<tr>
<td>1970</td>
<td>1,183,000</td>
<td>27,000</td>
<td>2.2%</td>
</tr>
<tr>
<td>1971</td>
<td>1,163,000</td>
<td>24,000</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Suppose we add the figures for employed to those for unemployed engineers, (a) plus (b), to approximate the total engineer labor force. This gives the following results:

<table>
<thead>
<tr>
<th>Year</th>
<th>Labor Force</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>1,169,000</td>
</tr>
<tr>
<td>1968</td>
<td>1,201,000</td>
</tr>
<tr>
<td>1969</td>
<td>1,230,000</td>
</tr>
<tr>
<td>1970</td>
<td>1,210,000</td>
</tr>
<tr>
<td>1971</td>
<td>1,197,000</td>
</tr>
</tbody>
</table>

According to these figures, the engineer labor force peaked at about 1,230,000 in 1969 and dropped to 1,197,000 in 1971. Did the engineer force actually decline by 33,000 between 1969 and 1971? Did these people die or retire in the face of continuing accretions from U.S. colleges and imports from abroad? Actually, the engineer labor force had to increase. The 33,000 vanished engineers—and more—were reported as salesmen or handymen or small merchants, thereby making the unemployment figures look better and justifying inaction.

The Engineers' Joint Council has been disseminating false employment statistics for many years. Its Engineering Manpower Commission was crying about an engineer shortage one year after massive lay-offs struck the field. The reason for its orientation was stated bluntly by Professor Harold Belkin of New Mexico State University (Chemical Engineering Progress, July 1972, p. 40):

"...I must say that I had quite a few smiles flicker across my face...One of them was about the engineers' Joint Council. This happened so long ago that people tend to forget that it was organized by top corporate management people like vice presidents of engineering companies such as GE, Dupont, etc. to ensure that there would be an adequate supply of engineers for the future..."

In fact, they wanted an over-supply to help drive engineers' wages down.

Although blessed by the U.S. Bureau of Labor Statistics, the fraudulent nature of EJC's figures derives directly from its method of sampling: EJC polled 100,000 engineering society members. But engineering society membership is heavily concentrated among company, govern-

March 1973
ment, and university officials. Most working engineers stay out because they see their dues money being used against their own interests.

U.S. engineers are faced with serious problems: inadequate unemployment insurance payments, sharp discrimination after age 40, non-transferable pensions, lack of industry and government training programs. The Nixon administration's fraudulent statistics, compiled with the cynical connivance of the management-owned Engineers' Joint Council, are intended to avoid coming to grips with these problems.

J.G.

Sisters and Brothers,

The brothers here in prison have gained a great deal of knowledge from your fine publication. Over the past several months we have passed the magazine around to all those [interested] and get a good deal of feedback. I am leaving soon and hoped that you could transfer the publication to a friend of mine who will remain. This would keep the magazine inside the prison community. We appreciate your dedication and feel your strength. All power back to the people.

Lance Hill 36662-115
Box 1000
Seagoville, Texas 75159

Dear Friends;

I have read with great interest, an article by J. Beckwith in the Ann. N.Y. Acad. Sci., on the relations between science and the society in which it operates. I would like to know if SESPA has any groups in the Southern California area, particularly around Laguna Beach.

I, personally, am a research biochemist, employed in the University of California at Irvine. While I would like to think that my research activities are solely for the betterment of life, I am fully aware that such a notion is naive, at best. Unfortunately, very few others seem to be similarly concerned. In general, I find that the prevailing attitude among my colleagues is that only war research is bad, all else is beautiful. Little consideration is given to the destructive possibilities of even the most esoteric research, should it be used by the wrong people, or controlled improperly.

Those that are aware of the destructive potential of scientific research are involved in the humanities and tend to label science an evil endeavor, by definition.

I am concerned that as more bombs are dropped, and more harmful chemicals are sprayed onto or packaged into the food we eat, a polarization between groups that should be fighting for the same goal will intensify. The article by Dr. Beckwith, seemed to me, to bring together the various forces which influence the direction that any research will take, be it in the field of the natural sciences, education, or the social sciences. If there are more people, with whom an exchange of ideas is possible, I would be interested.

Sincerely yours,

Dr. Jean Danner
Dear SESP/SfP

I like where your politics are at. I take a heavy Marxist approach which is extremely close to your position. My background is heavily influenced by science training but I don't consider myself a "scientist" or "engineer." In high school I went the traditional science/math route because that was what college-bound students did. I came to University of Texas as an engineering student. In my freshman year, I got freaked out by engineering and went shopping. I settled in political science/computer science. I'm currently moving into political economy. This leads me to the conclusion that I don't really think I want to be a member of SESP (although I am a member of CPP) but I would like to receive SfP. I would like to think of myself as a SESP associate or sympathizer. I really like the things you are doing and support your positions. The article on Occupational Health and Safety in the last issue of SfP really made me think about the proper relationship between the working class (blue collar workers) and college students. Also liked the reprint of "The Tyranny of Structurelessness."

If there is any way I can help from Austin let me know. I'll be glad to do what I can although I'm going to be spending my time organizing a CPP chapter. If anyone comes thru Austin, they should drop in at my house to crash or visit.

In the struggle for peace and freedom,
Wayne Clark
3406 Barton Rd.
Austin, Texas 78722

Thanks for your supportive letter, Wayne. You are very welcome to be a member, even if you are not an official "scientist"—we have psychology students, city planners, secretaries, political science majors, etc. who are members and just as important as beneficiaries of present uses of science and technology.

Dear Friends:

Enclosed you will find a copy of a letter attached to a part of an article that I had reprinted from your November 1972 issue. It has been distributed to about 100 of my colleagues across the world.

Perhaps I should have received your permission first before copying this material and I hope you will accept my apology for not having done so. Frankly, the issue at stake seemed so important to me that I gave no thought to the legality of what I did nor to the principle of prior rights. I clearly had no intent to plagiarize. Besides, I do hope that it will serve to advertise Science for the People to a number of scientists who might not have heard of the publication.

Keep up the good fight! Peace!
Sincerely,
J. A. Gross
Department of Life Sciences
Indiana State University
Terre Haute, Indiana 47809

How could we disagree? Do you have another 100 or so colleagues? Professor Gross sent copies of the material on Jason. There is an announcement in this issue on a booklet put out by Berkeley SESP dealing with Jason in detail. See page 39.

Dear Brothers and Sisters,

I read an article on Science for the People in Liberation (March '72), and would like to learn more about what you do by subscribing to your magazine.

I am a former radioastronomer from England, now working for the CSIRO on the problem of statistical-dynamical modelling of the general circulation of the atmosphere. This is a rather new field and there is still hardly anyone else working in it. Conventional general-circulation models use enormous amounts of computing time to predict a cli-
atic state, because they have to follow the lifehistories of innumerable individual cyclones and anticyclones in detail and then compute statistics from the results. The idea of SD modelling is to cut out this inefficiency and to try to estimate the statistics which describe the climate directly, treating the effects of the cyclones etc. statistically. If this can be made to work, numerical simulation of large-scale climate will no longer be restricted to a few rich, government institutions but will be within the means of small, university groups. Also, the range of problems which can be tackled would be considerably increased. One of the main aims is some sort of seasonal forecasting.

This work, being basic research, does not fit any of the categories of “People's Science” defined in the article, although if it leads eventually to seasonal forecasts these will no doubt be freely available to all, like ordinary weather forecasts. I see no reason to stop it because some psychopath in the U.S. might find a military application. Some of your forms of People's Science sound a little impractical as ways of earning a living, and yet scientific research as a spare-time occupation isn't very practical either in my present circumstances. I would like to be allowed to work shorter hours, with a corresponding cut in salary, so that I had some energy to devote to establishing some radical “alternative” institution, not necessarily of a scientific nature.

I feel isolated, having acquired radical consciousness of how deeply society has oppressed me only this year and entirely through reading, while my personal colleagues still enthusiastically accept the Australian way of life. I look forward to learning from your magazine what you are doing.

Peace,
Martin Willson

Some comradely criticism—we'd like to point out that the weather is already among the arsenal of weapons used by the U.S. against Third World peoples. See the July 1972 issue of Science for the People. If you see no reason to stop your research, whom do you suggest should take the responsibility when your contributions are turned against humanity? Some of the initiative for finding an alternative to your present work must be yours.

The following letter was originally written and sent to the Yale Alumni Magazine, but the author saw fit to send us a copy of it.

Editor
Yale Alumni Magazine

Sir:

D. Allen Bromley’s recent description of the Wright Nuclear Laboratory as a mysterious and forbidding building, a Mayan temple, in fact the reverent tone of the whole article represents, in my view, to one-sided a perspective to be adequately informative for the readers of the Yale Alumni Magazine. Unrealistic idealization of science is surely inappropriate in an era in which the results of science are taken over and used not for the benefit of man but predominantly for warfare, for the manipulation and control of people and for self-centered private gain.

This otherwise admirable article does not mention the nature of the contract the laboratory has with the A.E.C. or whether the proceeds of the research in this laboratory have been or could be used for military purposes. There is ample evidence that the atomic energy plants so hurriedly being constructed across this country are extremely dangerous, despite bland assurances to the contrary. The disastrous pollution of this earth and its oceans we are all discovering so late derives largely from irresponsible abuse of research in chemistry and physics since World War II. Dr. Bromley’s article does not mention whether those ten graduate students who moved on so gloriously to “good positions” in universities, industry and national laboratories are even aware of the impact of their productivity, much less whether they took the trouble to investigate this factor while at Yale.

The expensive tools that capture the imagination of scientists are funded largely by us taxpayers. For that reason alone, if not for the sake of real scientific objectivity, consideration of the social consequences of research should be an obligatory part of any scientist's attitude. We are on too dangerous a course in this world now for any responsible person to do otherwise.

It is time that great institutions like Yale take their social responsibility by de glamorizing science and by requiring serious social criticism and analysis in their science curricula. For further elaboration of this point of view I can commend T. Roszak’s Where the Wasteland Ends, 1972, reviewed in Science, December 1, 1972; the magazine published by SESPA, 9 Walden St., Jamaica Plain, Mass.; and the Reports of the Hastings Institute of Society, Ethics, and Life Science.

Sincerely,
Samuel P. Hunt, M.D.

BLACK BART The Outlaw Mag

“I've labored long and hard for bread,
for honor and for riches,
But on my corns too long you've tread,
You fine-haired sons of bitches!”

Black Bart, 1877.

A magazine dedicated to “the enrichment of life through a process of freedom . . . personal revolution.”

Available from Black Bart Brigade, P.O. Box 48, Canyon, California, 94516. “Recommended donation is $5 as a six month vote of confidence, $10 if you are a fat cat or an institution, $25 if you want to be a beautiful benefactor.”

Science for the People
<table>
<thead>
<tr>
<th>State</th>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>City</th>
</tr>
</thead>
<tbody>
<tr>
<td>CALIFORNIA</td>
<td>c/o Box 4161</td>
<td>Berkeley, California 94704</td>
<td>617-427-0642</td>
<td>Jamaica Plain, MA 02130</td>
</tr>
<tr>
<td></td>
<td>c/o Al Huerer</td>
<td>Box 368</td>
<td>213-347-992</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c/o Ken Ziedman</td>
<td>Scientific Workers for Social Action</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Box 1263</td>
<td>213-535-0475</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c/o Art Larsen</td>
<td>San Diego, CA 92107</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>?/o Claudia Carr</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>U. Cal. at Santa Cruz</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Santa Cruz, CA 95060</td>
<td>408-429-0111</td>
<td></td>
</tr>
<tr>
<td>COLORADO</td>
<td>c/o Dick McCray</td>
<td>Boulder, Colorado 80302</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>303-447-1069</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONNECTICUT</td>
<td>c/o Neen Klein</td>
<td>Hank's Hill Road</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storrs, Connecticut 06286</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISTRICT OF</td>
<td>c/o David Westman</td>
<td>1715 Lauer Pl., N.W.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLUMBIA</td>
<td></td>
<td>Washington, D.C. 20009</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>202-387-2911</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLORIDA</td>
<td>c/o GRC</td>
<td>Box 12654, University Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gainesville, Florida 32601</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HAWAII</td>
<td>c/o Mark Valencia</td>
<td>Department of Oceanography</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>University of Hawaii</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Honolulu, Hawaii 96822</td>
<td>808-944-8833</td>
<td></td>
</tr>
<tr>
<td>ILLINOIS</td>
<td></td>
<td>Science for Vietnam, Chicago</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Collective 1103 E. 57th Street, Room 47</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chicago, Illinois 60637</td>
<td>312-753-2722</td>
<td></td>
</tr>
<tr>
<td></td>
<td>c/o Bob Ogden</td>
<td>Dept. of Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>DePaul University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2233 N. Seminary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chicago, Illinois 60614</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c/o David Culver</td>
<td>Dept. of Bio. Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Northwestern University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evanston, Illinois 60201</td>
<td>312-492-3741</td>
<td></td>
</tr>
<tr>
<td>MASSACHUSETTS</td>
<td>c/o Bob Tinker</td>
<td>83 Woodside</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Amherst, Massachusetts 01002</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MICHIGAN</td>
<td>c/o John Vandermeer</td>
<td>2315 Packwood</td>
<td>313-971-1165</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ann Arbor, Michigan 48104</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MISSOURI</td>
<td>c/o Gar Allen</td>
<td>Department of Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Washington University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Saint Louis, MO 63130</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>314-863-0100 (Wash. Univ.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEW JERSEY</td>
<td>c/o George Pailand</td>
<td>Grad. School of Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rutgers University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>New Brunswick, NJ 08903</td>
<td>201-247-1766</td>
<td>(Rutgers)</td>
</tr>
<tr>
<td>NEW MEXICO</td>
<td>c/o Fred Czag</td>
<td>Geology Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>University of New Mexico</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Albuquerque, NM 87106</td>
<td>505-277-4204</td>
<td></td>
</tr>
<tr>
<td>NEW YORK</td>
<td>c/o Philip Kraft</td>
<td>1805 Riverview Drive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Endicott, NY 13760</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WISCONSIN</td>
<td>c/o TAA</td>
<td>YMCA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>306 North Brooks St.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Madison, Wisconsin 53175</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOREIGN ADDRESSES</td>
<td>c/o Peter Mason</td>
<td>School of Math and Physics</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Macquarie University</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>North Ryde</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>New South Wales 2113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENGLAND</td>
<td>c/o Gerry McSherry</td>
<td>Flat 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 St. Michael's Place</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brighton, BN 1, 3 FT</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sussex, England</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRELAND</td>
<td>c/o H. N. Dobbs</td>
<td>8 Allenbury Grove</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dublin 4, Ire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WEST GERMANY</td>
<td>c/o Claus Orle</td>
<td>Max Planck Institut</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D 813 Starnberg</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Riemenschmidt</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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:
2. Address:
3. Telephone:
4. Occupation:
   (if student or unemployed please indicate)

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

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.

6. I would be willing to provide technical assistance to community, movement, or Third World groups in the area(s):

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, 9 WALDEN ST., JAMAICA PLAIN, MASS. 02130