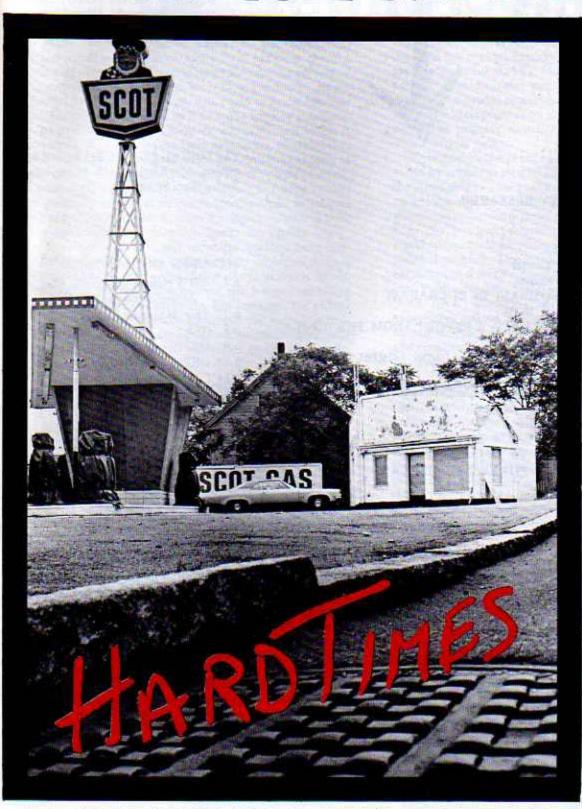
SCIENCE FOR PEOPLE



ENERGY

FOOD

HEALTH

POPULATION

VOL. VII no.1 75¢

BI-MONTHLY PUBLICATION OF SCIENTISTS AND ENGINEERS FOR SOCIAL AND POLITICAL ACTION · SESPA· JAN. 1975

inside



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- 4 ACTIONS ON XYY RESEARCH
- 5 LETTERS
- 6 NEWS NOTES
- 8 ENERGY CRISIS
 - I. Immediate Causes
 - II. Structural Causes
- 17 POPULATION: BOMBAST IN BUCHAREST
- 20 AAA\$: THEN AND NOW
- 22 HEALTH CARE POLITICS: A REPORT FROM THE A.P.H.A. CONFERENCE
- 26 HEALTH AND NUTRITION COLUMN: AGRIBUSINESS
- 27 SOYBEANS IN INDIA?
- 30 NORTHEAST REGIONAL CONFERENCE REPORT AND RESOLUTIONS
- 31 CHAPTER REPORTS
- 37 INDEX TO SCIENCE FOR THE PEOPLE VOL. V, #5 to VOL. VI, #6
- 39 LOCAL ADDRESSES FOR SESPA/SCIENCE FOR THE PEOPLE

PICTURES AND GRAPHICS

- p.1 Jeff Petchek/Somerville Media Action Project
- p.3 This Magazine
- p.5 *CPF*
- p.9 URPE
- p.13 URPE
- p.14 CPF
- p.15 LNS/CPF
- p.20 Philadelphia Evening Bulletin
- p.26 Guardian/CPF
- p.29 Her-Self/CPF

EDITORIAL PRACTICE

Each issue of Science for the People is prepared by a collective assembled from volunteers by the magazine coordinating committee. A collective carries out all editorial, production, and distribution functions for one issue. The following is a distillation of the actual practice of past collectives. Due dates: Articles received by the first week of an odd-numbered month can generally be considered for the magazine to be issued on the 15th of the next month. Form: One of the ways you can help is to submit double-spaced typewritten manuscripts with ample margins. If you can send six copies, that helps even more. One of the few founding principles of SESPA is that articles must be signed (a pseudonym is acceptable). Criteria 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. Considerably more discrimination is applied to analytical articles. These are expected to reflect the general political outlook of Science for the People. All articles are judged on the basis of length, style, subject and content. Editorial Procedure: The content of each issue is determined by unanimous consent of the collective. Where extensive rewriting of an article is required, the preference of the collective is to discuss 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 a twelve-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. Science for the People is now available in microfilm from Xerox University Microfilms, 300 North Zeeb Rd., Ann Arbor, Mich. 48106, (313) 761-4700.

about this issue

Hard Times are beginning to touch our daily lives. Food prices go up. Fuel prices go up. Inflation reduces our real earnings. Economic recession and the spectre of Depression mean that the hardships previously experienced by only some groups, will begin to reach more of us. Oil company ads tell us it's all due to poor planning. The government blames it on the Arabs. Others blame it on overpopulation or consumer greediness, or claim that the problems are inevitable. But we think that as long as our energy resources are managed for the profit of a few, rather than for the benefit of the majority, as long as food is grown for profit rather than to feed people, as long as we are at the mercy of coporate managers — we will bear the hard times and they will spend the profits.

Too often scientific and technical workers have considered what are social and economic problems from a narrow technological point of view. As in previous issues, we present articles which analyze the forces controlling critical sectors of the economy. For instance, the energy article lays out clearly and succinctly the ways in which our energy resources have been manipulated to maximize oil industry profits to the detriment of the rest of the economy.



Two shorter pieces discuss the control of food production. The first of these is the Health and Nutrition Column which emphasizes the dominant role of giant corporations in defining our food supply. The second, the Soyabean article, shows the sutble ways in which technology is exported, supposedly to increase the food supply, but in fact to open up new markets for expensive food processing technology.

In the same vein, the report on the World Population Conference in Bucharest analyzes the so-called population crisis. Those who emphasize this crisis entirely ignore the causes of rapid population increase in the Third World, the factors sustaining this increase, and the factors preventing the deceleration of this increase. The disruption of the Third World with the onset of European imperialism, beginning in the 17th century and continuing until the present century, was the basic cause of the rapid population growth. The revolution in social structure in these countries caused by imperialism can not create the material preconditions for the eventual levelling off of such population growth. Thus, population remains the primary source of productive energy in the Third World today.

We believe in the pressing need to improve the quality of life for people in all walks of life. But we are faced with the inequalities — inequalities between the lives of different groups of people. As the economic situation worsens, the divisions between those who benefit and those who bear the burden become clearer. The way scientific workers approach the relevant issues becomes a pressing political question. Two articles focus on social and political action at scientific meetings. In one case, the American Public Health Association meetings, and in the other, AAAS meetings, past and future. One describes progressive actions at the present APHA meeting. The second analyzes past SftP activities at AAAS meetings, and recommends against such actions in the future. The two articles printed on the topic generated the most discussion and disagreement within the collective, and were in fact a focus of general ideological differences. Essentially, the debate dealt with: (1) potential of public-interest science, and the question of whether SftP should support or reject the more liberal elements of the scientific community; (2) the aims of this magazine in reaching people with different ideologies, and yet in retaining a coherent political view, and (3) the distinction between those attending the Conference and those organizing it. The collective reached unity only on the fact that a clear distinction must be drawn between these two groups. The other issues were not resolved, and rather than extend the debate here, we have printed both articles in the hopes that the questions will be considered by the entire organization.



ACTIONS ON XYY RESEARCH

Genetic Engineering Group Acts to Stop XYY Study

The September issue of Science for the People carried an article describing a genetic screening project in progress at a Boston Hospital, in which newborn infants are tested for the presence of an extra Y chromosome.

The psychological and behavioral development of those with the extra Y chromosome (1 in 1000) is followed by a group of psychiatrists, to see if the children develop "antisocial" behavior. The study came to the attention of the Genetic Engineering Group (GEG) of Science for the People. We were opposed to this kind of study for numerous reasons: 1) There is little or no evidence for a causal relationship between the XYY chromosome constitution and so called antisocial behavior. 2) The intervention of the investigators is more likely to damage than to aid those in the project (the great majority of XYY males are normal individuals), because the investigator's intervention is liable to be a self-fulfilling prophecy. 3) Many parents of these children are drawn into the study by subtle deceit, not by truly informed consent. 4) Such studies represent one facet of a larger movement to attribute social unrest to intrinsic genetic factors, rather than to oppression and unjust social conditions.

In addition to bringing such studies to public view, the GEG decided to also proceed through hospital channels. Critiques were prepared and presented to the Harvard Medical School, with the request that the continuation of the study be reviewed. This led to a hearing on October 4 before a special committee on inquiry of the Medical School.

Though most of us are scientists, none of us are professionals in the precise area of the research. Thus our actions were surprising and upsetting to the Medical School Faculty, who are steeped in their own elite professionalism. In particular, the Faculty Professionals tend to view any criticism of their action as a threat to "academic freedoms" even if these actions involve harming human subjects.

We presented our critique, and also offered witnesses, such as an admitting aide at the hospital. The other side presented their defense, much of which served in fact to point up the questionable propriety of such reserch.

Up to a point, our criticism was effective. Most members of the committee recognized that truly informed consent was not being obtained. However, our criticism struck more deeply in questioning the propriety for much clinical investigation. The committee was clearly worried that if one study was stopped, the same could happen to other investigations with human subjects. The power of research precedent was also raised in the opposite context; the researchers implied that the existing screening programs (e.g. for the metabolic defect phenylketonuria — PKU) justified their chromosomal screening studies. This made the importance of preventing even this small study clearer to us, since it will obviously be used to justify larger intrusions into the lives of people.

Among the revelations that emerged during the proceedings was the fact that the research is supported by the Crime and Delinquency Division of the National Institute of Mental Health.

Aspects of our case against the study have been reported in the *New York Times* (November 15, 1974), the *Boston Globe* (November 16, 1974), and on local Boston television. Media coverage is one way of informing the public of research programs which endanger their subjects and benefit no one (except perhaps the investigators in their career pursuits).

At the time of this writing the committee is deliberating the issue and is scheduled to report out their findings about Christmas time. If the committee decides to permit the study to continue, the GEG will continue the fight and try more energetically to bring the issue to public attention via newspaper coverage, magazine articles, etc. We have recently published a more extensive analysis in *New Scientist*, Nov. 14, 1974.

The Genetic Engineering Group

LETTERS

Dear SESPA:

By publishing the article 'Science: Political and Personal' by John Stewart [Science for the People, Vol. VI, #5, Sept. 1974] we appear to be antiscientific instead of criticizing ideology which masquerades as and pollutes science and turns it to the service of those who hold power in this society.

Stewart makes his first mistake when he states that 'science is the basis of our industrial civilization'. The idea that we have an industrial civilization based on science is part of the current attempt by the scientific establishment to mystify the nature of this system and blame its injustices on 'impersonal technology'. In accepting this conception, Stewart ignores the role of the military-industrial-capitalist class in creating the industry and technology in the first place and shaping it to serve their purposes. He goes on to see science as responsible for instruments of war, when without the political actions of this class, wars would not be planned or needed, and weapons production would not be a problem. He creates a dubious and redundant expression when he talks about 'science-based technology', as if he could conceive of any other kind. Possibly, he advocates a technology based on magic?

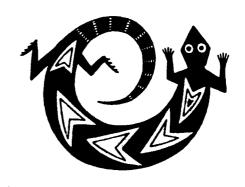
Stewart also appears to be very confused about the role of science in political systems. It has consistently been part of SESPA's analysis that science takes on the values of the political system under which it operates. From this point of view, science is clearly subordinate to the character of the social system and the relations of production under capitalism. Stewart completely reverses this relationship. His viewpoint is clearly antiscientific and, as I shall also show, reactionary in its consequences. Inside the front cover of each issue of Science for the People appears the statement "Articles . . are expected to reflect the general political outlook of Science for the People". While this statement is historically rather vague in its application, I believe it clearly excludes anti-science, and therefore the magazine should not have published Stewart's piece as an analytical article.

One of the chief areas of confusion in this article is the role of objectivity and impartiality in science. The meaning of scientific objectivity is that a fact is evaluated solely on the basis of its importance to the kind of pheno-

mena to which it is related, and the accuracy and clarity with which the fact itself is observed. The problem with establishment science (or bourgeois science, as it is often called) is that this fundamental principle is frequently observed in the breach. That is, often facts are evaluated on the basis of abstract principles that serve to justify the status quo rather than on the basis of material reality. A scientist should be impartial in that only material reality should influence his hypothesis, not political favoritism. This does not imply that he/she treat all facts alike, but that only verifiable facts be considered, regardless of the implications on the beliefs or social position of the scientist. Well, some would say, doesn't that lead to the atom bomb or air pollution? No, because if the scientific study of technology under the conditions of modern capitalism is pursued to its greatest extent, the consequences of both the unlimited production of atomic weaponry and the irresponsible destruction of the environment become quite apparent. Indeed, the atom bomb was protested by social critics and scientists almost as soon as it had been invented, and air pollution has been observed and complained about for many hundreds of years. But the form of society prevalent at this time led those in power to ignore the obvious consequences (scientifically provable) of this technology, in favor of their own interests, a clear case of how politics rules science. Likewise, if this system is scientifically studied in a political and economic sense, certain laws of evolution become evident which allow one to follow the course of social revolution, the development of capitalism into modern imperialism, and establish convincing reasons for the revolutionary overthrow of this society and the foundation of socialism. The groundwork for this theory of scientific socialism has been laid by Karl Marx, V.I. Lenin, and Mao Tse-tung. Most important of all, conclusions based on this theory are a guide to action for radical social change. Thus, Stewart's attitude would bar the path to fundamental social criticism by the only method that has ever been really effective. He would also bar the path to the social system in China which he praises in his last paragraph. I find this a most contradictory and reactionary position.

Yours in comradeship, T. Solo

(continued on p. 34)



news

Everyone! Please contribute items of interest and humor to this regular section.

GE FUEL RECOVERY PLANT 'INOPERABLE'

The General Electric Company's Midwest Fuel Recovery Plant at Morris, Illinois, is a fiasco. The installation which cost the company six years and \$64 million to build does not work and probably never will.

GE executives have told the Atomic Energy Commission that redesigning and rebuilding the chemical plant will take at least four more years and an additional \$90 to \$130 million. The only feasible answer GE has decided is a drastic redesign of the plant.

Whatever that may mean, the task will be a tremendous one. The core of the plant is a massive windowless ten story concrete box that does not readily lend itself to remodeling. GE executives are further concerned that new security and waste disposal policies contemplated by the AEC may impose additional design changes. The possibility of completely abandoning the reprocessing field has not been ruled out.

The GE plant is one of three commercial plants for spent fuel recovery in the United States, none of which is operational at present. Nuclear Fuel Services has a 300-ton plant at West Valley, New York and a 1500-ton plant is planned by Allied Gulf Chemical Corporation at Barnwell, S.C. The NFS plant, after a long period of successful operation, has been shut down while additions are made and it is not expected to come back on line until early 1979. The Barnwell plant is not due to go into operation until 1977 and that may be delayed. The only other re-

processing capacity in the country is owned by the Atomic Energy Commission and was installed as part of the weapons program for separating out plutonium.

For the nuclear industry the main problem posed by the GE plant's failure is what to do with all the fuel it was supposed to process. Sixty tons of irradiated fuel are already waiting at the plant and a lot more will arrive before 1980, the earliest that GE could have a remodeled facility running. Also, the GE problem will change the economics of nuclear power by delaying plutonium recycling, and removing quantities of uranium from inventory.

Present storage capacity at nuclear power plants is limited and the AEC may have to pull through with a solution. The commission is looking into the possibility of providing storage space or opening its military reprocessing plants to commercial use.

--weekly ENERGY report-- Science

HOW DOES DEFENSE SPEND-ING REALLY WORK?

When the Air Force needed beds recently to install in the control rooms of the Minuteman missile silos, they did not go to a bed manufacturer and buy beds. Instead they contracted with an aerospace company to invent a bed. The total contract was for 82 beds at a cost of \$88,500 (or \$1080 per bed). When the Government Accounting Office looked into this contract, they found the contractor did not invent a bed at all but instead had purchased Army cots for \$23 apiece, and attached brackets to the cot legs so they could be fastened to the floor.

- CPF

TANZANIA REJECTS IMF "AID"

Tanzanian President Julius Nyere has rejected an offer of the U.S. dominated International Monetary Fund (IMF) to help the country confront a severe famine crisis.

The IMF was called in to advise the country on economic problems caused chiefly by the high price of manufactured goods which must be imported. The IMF offered to help Tanzania on the condition that it abandon certain of its major development goals. The Monetary Fund would "aid" the country if it gave up plans to move the seat of government from Dar es Salaam on the coast to Dodoma in the interior. The government was also directed to give up developing the "Ujamaa" agricultural cooperative villages and to concentrate on cash crops for export.

According to Tanzanian government spokesmen, moving the capital from Dar es Salaam to Dodoma is a way of combatting the country's lopsided development engendered by colonialism. Also, the "Ujamaa" villages designed to boost cooperative efforts and increase food self-reliance are at the heart of Tanzania's national economic policy.

- The Guardian

COURT DENIES PREGNANCY DISABILITY BENEFITS

States can deny disability benefits to women incapacitated by normal pregnancy, declared the Supreme Court in a six to three ruling. "There is no risk from which men are protected and women are not," Justice Potter Stewart wrote for the majority in its June 17 decision. "Likewise," under the California law in question, "there is no risk from which women are protected and men are not."

Working mothers, according to 1973 Department of Labor statistics, comprised 39% of all women in the labor force. In addition to the denial of disability benefits for pregnancy and pregnancy-related medical problems, women face mandatory pregnancy leaves without pay, often followed by loss of seniority, tenure credits, and other benefits, and even loss of the job itself.

Employers have also refused to hire women of child-bearing age, even resorting to the use of lie detector tests to determine applicants' maternity plans.

However, employers do allow disability benefits for men who are incapaci-

tated by conditions affecting only members of their own sex, such as prostate problems and circumcision, as well as hemophilia and gout, which largely affect males.

Dissenting from the majority opinion of the court, Justice Brennan stated, "A limitation is imposed upon the disabilities for which women workers may recover while men received full compensation for all disabilities suffered."

"By singling out for less favorable treatment a gender-linked disability peculiar to women, the state has created a double standard for disability compensation." Despite this double standard for men and women, Brennan noted that the "economic effects caused by pregnancy-related disabilities are functionally indistinguishable from the effects caused by any other disability."

—CPF

IMPERIALIST POWERS ENSURE U.N. MEMBERSHIP FOR SOUTH AFRICA

Thanks to a triple veto of the United States, Britain, and France, the apartheid regime of South Africa remains a member of the U.N. The October 30 veto defeated a Security Council resolution introduced by third world countries that would have expelled South Africa from the U.N.

Although there are fifteen members on the Security Council the three veto votes were more than enough to block the resolution. Any one of the five permanent Security Council members (U.S., U.S.S.R., Britain, France, and China) can override the council by casting a veto. The triple veto of October 30 was the first in U.N. history.

If ever a country explicitly warranted expulsion from the U.N., South Africa certainly fills the bill. For twenty years the apartheid regime has operated in violation of innumerable U.N. resolutions condemning its systematic racial oppression, its illegal rule of Zambia (South west Africa), its breaking of sanctions against the white settler regime in Rhodesia, among other offenses. Yet, despite clear language in the

U.N. charter calling for expulsion of persistent violators, a handful of voters was able to preserve U.N. membership for South Africa.

It was a foregone conclusion that the motion would be halted despite the overwhelming 125 to 1 General Assembly vote that referred the matter earlier to the Security Council. Although the outcome met with severe bitterness among African and other third world countries, there was also a sense of subtle victory among the delegates. In forcing a debate and a vote on the issue the delegates were able to air the question in the U.N.'s highest body and to flush the South African regime's international backers out into the open. It is explicit now that South Africa remains in the world body not by the will of the majority but by the determination of three imperialist powers.

—The Guardian

ASBESTOS HURTS WORKERS' FAMILIES

Recently it was discovered that asbestos endangers not only those who work with it but their families as well.

Asbestos causes a rare cancer of the stomach and chest lining called mesothelioma; lung cancer; and asbestosis, another lung disease. The diseases often don't strike a worker until 20 or 30 years after exposure. Many cases are developing among shipyard asbestos workers of World War II.

And now researchers have found asbestosis disease symptoms in family members of those workers. Some of these people had very small, short-term exposure to asbestos — probably from dust brought home on the workers' clothing. But of 210 people studied 40% showed lung abnormalities. Four indirectly exposed to asbestos as children recently developed mesothelioma, and two of them have already died.

These findings strengthen workers' demands to eliminate asbestos from the air in workplaces. (It has at least 3000 industrial uses.) Unions

such as the Oil, Chemical and Atomic Workers are demanding processes be redesigned so workers will not inhale any asbestos fibers, and that employers provide special clothing, showers, and changing and laundering facilities so that workers do not bring the mineral fibers home to their families. Current regulations require none of these facilities, and the present five asbestos fibers per cubic centimeter limit means that workers inhale billions of asbestos particles each work day.

The Occupational Safety and Health Administration set an asbestos limit of two fibers but then agreed to delay enforcing the regulation until the end of 1976, so that industries would not be 'inconvenienced.'

The experimental study on which OSHA based its two fiber limit has recently been revised in light of new evidence indicating that the level of asbestos to which workers are now exposed can cause cancer and lung diseases years later.

CPF/Liberation News Service, New York Times

MORE IUD WARNINGS

The Food and Drug Administration recently revealed that the Dalkon Shield intrauterine device (IUD) is no more dangerous than any other IUD. The Dalkon Shield has caused 12 deaths and 209 serious infections in women who became pregnant with the device in place. All IUD's were reported to have caused a total of 36 deaths.

An FDA panel, which held hearings on IUD's in August, reported that 16 women using the Lippes Loop, four Saf-T-Coil users, and four women using other IUD's have died from infections.

Despite its recent findings, the FDA said that IUD's are less likely to kill you — in the short run at least — than birth control pills. The IUD death rate is between one and ten deaths per million; the rate for the pill is 22 to 45 per million.

CPF/The Wall Street Journal

ENERGY CRISIS: oiling the profit making machinery

IMMEDIATE CAUSES

Is There a Shortage of Oil and Oil Products?

When the energy crisis hit with full force last fall and winter it took the form of an absolute shortage of oil and oil products. Gas became very scarce. There were rumors about not enough heating oil to last the winter. And hundreds of factories cut back on production and laid workers off. A lot of people felt at the time that there wasn't any real shortage at all — that the whole thing was made up by the oil companies. So it's important to ask, was there a real shortage? And the answer seems to be yes, and no. Yes, there was a real shortage of oil products at the consumer level. But no, there is no immediate shortage of oil reserves and other sources of energy.

A case study was done for the National Science Foundation looking only at proven reserves — that is, reserves which are presently known to exist and which can be recovered by methods that are economically and technically feasible — and assuming no change in technology, no imports, and steady growth in the economy, this study found that natural gas will last us until anywhere from 1989 to 2000. Petroleum will last until 1988 to 2011, and coal will last far, far beyond 2050. ("Future Energy Demand and Its Effect on the Environment", NSF, September, 1972) And this is the most pessimistic view!

The most optimisite view is based on calculations of "potential reserves" — that is, proven reserves plus those that would be available with new technology. The figures here are:

Kind of fuel	Years of supply left if used at present rates
petroleum	58 years
natural gas	52 years
coal	3,094 years
shale oil	32 years
nuclear fuel	100 years

In any case, whether you take the optimistic or the pessimistic point of view, the case is clear. The raw materials that are the souces of energy are there. We possess them. So there is no absolute shortage of energy.

But there was a shortage of oil products. In fact, there still is shortage — it's just not being experienced as a shortage because higher prices have cut large numbers of people out of the market. The fact that the shortage of oil products was real is clear from the following figures. Well drilling for gas and oil, in the U.S. during the first quarter of 1973, was just barely over the 1969 level. Secondly, extraction of these products in the first period of 1973 was less than the 1971 level of extraction. And in October and November of 1972, east coast refining operations were running at only 82% of capacity on the average. By December of that year it had only risen to 89.7%. Full usage is considered to be 94% of capacity. (Staff Economic Study, Federal Reserve Bulletin,

December, 1973). It's clear then that domestic production of oil products was not keeping up with rising demand. In fact, in some phases of operations it was even declining. Why was this happening?

What does the Oil Industry Say is behind the Energy Crisis?

From the first few weeks when the energy crisis began to make itself felt, the oil industry started a tremendous advertising campaign to put out its "line" on the crisis. The industry's position was that it had been warning the American public for months that this was coming on, but we refused to listen. The industry named several factors as key reasons for the crisis. First they talked about rising demand and "consumer greediness". Then there were decreased oil depletion allowances, laws freezing the level of prices, a whole series of environmental protection laws forbidding off-shore drilling, and a concerted campaign to hold back the Alaska pipeline. And they also talked a lot about their rate of profit. Let's take a look at some of these reasons.

First of all, consumer greediness. This is slightly ironic, at best. For years, the oil industry has been urging people to buy more and more gas and oil products, working with the auto industry to encourage larger and more wasteful cars, and luring people into gas stations with gimmicks like contests and free glasses. Now all of a sudden we're demanding too much!

This "explanation" hardly even deserves a reply. You don't have to go far to find documented evidence against it. The Federal Reserve Bulletin of December, 1973 states "data do not support the view that there has been a significant acceleration in recent years in the final (non-industrial) use of energy. The BTU (energy measurement) energy end-product measure has grown at a fairly steady 4.0% annual rate over the past two decades." But then where have these large increases in demand come from? The Bulletin gives the answer—industrial production. A decline in the growth of the supply of natural gas has also added to the demand for petroleum as an alternate energy source.

The oil industry also talked a lot about "bad government policies" by which they meant the reduction in the oil depletion allowance made in 1969, and the freeze put on oil prices as part of the general wage-price controls beginning on August 15, 1971. They also blamed a whole series of environmental protection laws that had prevented them from extensive use of off-shore drilling, as well as the success of the ecology movement in delaying developments like the Alaskan pipeline, etc.

But what the industry has been talking about most is their rate of profit. As Exxon put it in one of their ads: "Are our profits high? Yes. High enough? No!" The ad went on to explain that if the industry is to attract the funds that are critical to maintaining the necessary level of investment that will allow the industry to continue to meet the demand for energy, they must be able to earn what they call "a fair return on investment" — and they have not been able to do this. The oil companies claim

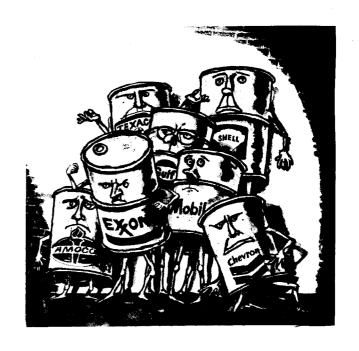
that they have been in a profit slump since 1968, and that in order to overcome the current shortage they must make multibillion dollar investments. This money can only come from one of two sources: profits (which have been declining) or outside sources. But in order to attract outside investment they must have a rate of profit that is sufficiently high to attract outside investors. (More on this later).

What's the Real Reason for the Energy Crisis?

The immediate causes of the U.S. energy crisis were a reduction in domestic production, a reduction in refinery capacity, and a cutback in imports. But what's behind all this is the deterioration in the profit structure of the industry.

Figures on the rate of profit in the oil industry are often very confusing and do not give a clear picture of what's actually going on. Part of the problem is that all available figures come from the oil industry itself. As far as we can tell from the figures available, the rate of profit in the oil industry was at best just at or slightly below the average among the Fortune 500 (the largest 500 corporations in the U.S.). There is also substantial evidence that the rate of profit was actually below the average rate of return for manufacturing as a whole (something that the oil industry itself claims is the case).

Forbes, a high-class business magazine, presents the following picture: between 1960-1968 the rate of return on net worth (total assets minus total liabilities = owner's equity) increased from 9.0% to a high of 13.1%. During this same period, the average rate of return on net worth for all industry in the U.S. increased from 9.1% to 10.4%. However, beginning with 1969 a reversal of the trend set in. Due to oversupply from the Middle East and Africa resulting in price cutting in the European market, the



rate of return in the oil industry declined until it had reached a low of 8.9% in 1972. But the average rate of return for all industry was about 12.5% in 1972. The picture, then is one of a decline in the rate of return for the oil industry not just internally but also in relation to other industries.

Another interpretation of the deterioration of the position of the oil industry has to do with the structure of long-term debt to invested capital.

The Financial Crisis of the Oil Industry

Chase Manhattan Bank's Financial Analysis of a Group of Petroleum Companies 1972, (30 companies including all the large international firms), reported that interest charges had increased 98% during the period 1968-1972. In particular the key ratio of Long-term Debt (bonds) to Invested Capital (Shareholder's equity which includes capital stock and retained earnings plus long-term debt) has been rising rapidly. For Exxon this ratio has gone from 9.2% to 17.6% during the 1963-1972 period. Standard Oil of California registered an increase from 12.5% to 16.5% from 1968 to 1972, Mobil went from 15.5% to 17.5%, and Royal Dutch/Shell from 13.9% to 23.3%. Although some firms showed stability in this ratio and a few registered declines, the long-run trend has been upward.

What does this mean? First, from the oil industry point-of-view, reliance on self-generated profits for expansion was no longer possible. Profits, though remaining high during this period did not keep pace with rising equipment costs — a new 200,000 barrel per day refinery costs about 800 million dollars, four times its 1960 price. Increasingly these companies found themselves competing in the finance capital markets along with other industries. High and rising interest rates on long-term debt require fixed payments reducing profits and are a potential source of disturbance to the corporation when the obligation is due. Second, since the oil companies must compete for finance capital, they face the possibility of not obtaining the desired amount at an acceptable rate of interest making their expansion plans subject to the market rather than under their own control. Since it is expansion that is one of the main goals of the corporation, the oil monopoly began to feel threatened. It is from this position that we hear the chief executives of these firms plead that business is not profitable enough to ensure 'needed' investment funds. This 'crisis of control' over their own 'corporate destiny' is now being resolved in favor of the oil monopoly by enormous increases in the price of crude oil and refined products in the United States. The companies, with the help of the Nixon administration and their bought friends in Congress are forcing consumers to finance their independence from banks and other major lenders. We are told that this is necessary as oil is a risky business - yet, advances in exploration techniques mean that there are considerably lower costs in finding new oil than

before on a major scale. The present crisis revolves around the financial structure of the oil companies and is not a true crisis of petroleum supply.

Why Has the Rate of Profit in the Oil Industry Fallen?

There are four basic reasons.

- 1. The majority of existing oil fields in the U.S. have reached the point where it is very costly to extract the oil with the existing technology.
- 2. The competition afforded by independent oil producers and distributors had made significant inroads into the profits of the giant companies, and had resulted in many gasoline price wars in the late '60's.
- 3. The ecology movement had hampered the oil industry in its attempt to secure off-shore drilling rights and the passage of the Alaskan pipeline. More significantly, it posed a serious long-term threat to the oil industry and its freedom of movement in developing new techniques and new sources of energy.
- 4. Finally, the rising trend of nationalization throughout the world, as reflected in the organization of oil producing nations into OPEC (Organization of Petroleum Exporting Countries), posed a serious threat to the U.S. oil industry. OPEC was formed in 1960 but did not really begin to make itself the spokesperson for the Arab countries until the late '60's when the defeat of the United States in Vietnam was certain combined with victories of national liberation struggles in this country and around the world changed the balance of power and made possible a number of moves on the part of Third World countries that had not been possible before. OPEC began to demand greater control over their own natural resources and they were successful. In 1970, when Occidental Oil Co. entered Libya on a new profit sharing basis more favorable to the Arab nations, a new era in the Middle East began. All new agreements would reflect the new ownership shares, and the holdings of all U.S. oil companies were threatened. It was this change in the political balance of power, and with it the increase in economic and political risk that helped precipitate the energy crisis.

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STRUCTURAL CAUSES

The United States, with 6% of the world's population, accounts for 30% of the world's energy consumption. Those corporations involved directly in the production of various forms of energy in the U.S. (oil companies, utilities, etc.) involve a large and growing fraction of the goods and services produced. Decisions made by these energy industries and by the government in order to maximize corporate profits have as their consequences substantial social costs (hidden costs borne by our whole society) which constitute an indirect subsidy of these industries. In the case of energy usage, examples are:

- The switch from steel to aluminum cans
- The conversion to an automobile-based lifestyle
- The promotion of electric heating for homes.

In the development of new power sources, the necessity of a rapid return on investment has led to choices which don't make sense for our society as a whole, such as:

- The emphasis on nuclear fission with its crash program to develop a fast breeder reactor.
- The lack of investment in major research and development programs for solar or fusion reactors.
- The deliberate suppression of the development of coal gasification.
- The attempts to raise profits by building larger and larger power plants.

These obscure decisions and hidden subsidies have solimited and shaped the options of consumers that responsibility for the current energy-wasteful orientation of our economy may be laid squarely at the doorstep of the energy companies and their partners, the so-called regulatory agencies. In the current energy crisis, attempts to blame the public for their wasteful ways have served as a smokescreen, distracting attention from the virtual stranglehold the energy industry has gained on our entire economy. The tendency to base technological decisions on profit-oriented criteria, without an accounting of the true social costs involved, is an inevitable characteristic of corporate capitalism, a system which cannot meet people's needs, but can serve only an elite ruling class.

I MISUSE OF ENERGY

Aluminum Cans

In recent years there has been a vigorous marketing effort by the aluminum companies to promote aluminum in place of steel for canning. This campaign would not have succeeded if the price of an aluminum can had not been competitive with that of a steel can. Since part of this competitiveness was due to improvements in manufacturing aluminum cans, one might believe that the market was realigning the economy to take

advantage of the new technology. But in fact, the competitive price of the aluminum can is due to other factors. In particular, electric utilities have established rate structures that charge large users such as aluminum companies about one-third as much per kilowatt-hour as residential users.[1] Since aluminum is refined by an electrolytic process, electricity represents a substantial portion of the production costs. And this rate structure exists in spite of the fact that the growth of large industrial users has been the major strain on generating capacity.[2] Thus, cheap power for industry has been subsidized by residential consumers, who have simultaneously been blamed for excessive consumption and brownouts.

This is bad enough, but since the energy content of the fuel that must be burned to make an aluminum can is 2.07 kilowatt-hours, as opposed to 1.0 kilowatt-hours for a steel can, one can see that the overall energy efficiency of the economy has been lowered by this trend.[3] Furthermore, aluminum does not rust, so if it is discharged into the environment it does not return to a natural form. Also, its non-magnetic character makes it harder to separate from other refuse for recycling. These two features are an added price society has to pay which is not accounted for in the marketplace.

Transportation

The trend in recent years has been towards energy intensive forms of transportation (planes, trucks and cars) and away from the energy efficient forms (trains and to a lesser extent, buses). This trend has been encouraged by vested interests and paid for by the public.

As recently as 1972, \$5 billion of the \$8.8 billion federal transportation budget was spent on highways. Between 1944 and 1961 the federal transportation budget was devoted entirely to highways. These spending patterns were strongly encouraged by the automotive, rubber and petroleum industries.[4] After all, it is much more effective to tell people to see the U.S.A. in their Chevrolets if there is an interstate network of highways to do it on. But the consequences of massive road and highway development are much more pervasive and lasting than pleasure travel. It has encouraged a spreading out of the economy away from the urban centers into the suburban landscape. It has led to a whole way of life which includes shopping centers, drive-in fried chicken, drive-in movies, drive-in banking, and commuting to work. In this new life style the auto is no longer an option, but a necessity. The public has become a captive market for cars and gasoline. It is hard to imagine that the corporate managers of the auto and oil industries did not forsee this to some extent and in fact count on it.

There is even evidence that the auto industry has moved to disable mass transit. A report recently presented to the Senate Anti-trust Subcommittee claimed that General Motors was responsible for the changeover of many urban mass transit systems from

electrified trolleys to diesel buses. That in itself is a lowering of energy efficiency, but the report goes on to say that no improvements in bus design were made after the mass transit systems had been captured. As a result these systems decayed and in many cases collapsed, so that GM could sell more cars. The report asserted that a similar process has occurred in the railroad industry where some companies have suffered losses since changing from electric to diesel trains.[5]

In this example we see that the market, rather than leading to the most efficient allocation of resources to meet the needs of society, is actually used as a tool of corporate managers to maximize profit. And in so doing, they have led us to patterns of consumption that use energy very inefficiently.

The All Electric Home

Until very recently, there was a vigorous marketing effort to encourage the use of electric heat in homes. The pitch was that electric heat is clean, convenient, and less expensive to install and maintain than other forms of heating. The real rationale, which was explicitly stated in a 1967 Consolidated Edison report, was that since peak power usage occurs during the summer, something must be done to increase off-season usage and thereby increase profits with a minimum of capital investment.[6] While this policy increases the efficiency with which the utilities' capital is used, a look at the overall heating efficiency gives a different picture. Fuel burned in the average furnace provides home heating at between 70% and 80% efficiency. The combined efficiency of generation and transmission of electricity is about 31%. Even though this electricity is utilised at close to 100% when it reaches the home, twice as much fuel must be burned to produce the electricity required to give the same amount of heat. It might be argued that electric heating allows the environmental impact of power generation to be removed from urban centers, but this does not eliminate the greater impact implied by the decreased energy efficiency, and in the case of Consolidated Edison of New York, with many generating plants within city limits, this argument is clearly false. Electric heating is good for the utilities but bad for those who breathe. Fortunately, the utilities have discontinued their promotional efforts in this direction, but it required a crisis to force this change.

II PRODUCTION OF ENERGY

Fission Power

In the area of energy production there are further examples of how the current system of cost accounting and profit reckoning ignores costs that must be borne by the society as a whole. This again results in technological choices which maximize profits for vested interests but which are manifestly socially undesirable.

The most glaring example of this is the enormous commitment of the U.S. to the development and use of

nuclear fission energy. Of the \$999 million 1974 federal budget for energy R & D (research and development), \$530 million is for nuclear fission.[7] If these figures were the outgrowth of a rational energy policy, they would indicate that nuclear fission is the most desirable way to meet future U.S. energy needs. In fact, the long list of health and safety issues surrounding nuclear technology clearly indicate that this conclusion is in direct opposition to the facts.

During the operation of a nuclear reactor, highly radioactive wastes are produced in its fuel rods. Eventually the accumulation of these wastes would stop the reactor from operating, so the fuel rods must be periodically removed and transported to a reprocessing plant, where the wastes are separated from the remaining usable fuel. Accidents during transportation of these fuel rods could expose the public to high levels of radioactivity and could leave areas uninhabitable for thousands of years. Furthermore, the wastes extracted from the fuel rods during reprocessing must be disposed of in such a way that their escape into the environment is prevented for the thousands of years during which they remain "hot". The problem of wastes is particularly serious because many reactor-produced radioactive substances are biologically active, unlike the most abundant naturally occurring radioisotopes. Even if dispersed, these biologically active wastes can be concentrated by various organisms along the food chain until they appear in large concentrations in our food. Once ingested, they become part of our tissue, leading to long term internal exposure.

Although a nuclear explosion is extremely unlikely during a major accident in a conventional fission power plant, the high temperatures and pressures and the exotic chemistry of the fuel elements and cooling systems makes the possibility of a chemical explosion a significant risk. Aside from the danger of bodily injury to nearby personnel, this creates another avenue for radioactive pollutants to escape into the environment. The effect of the release of radioactive pollutants, either through accidents or through the small amounts released in normal reactor operation, is cumulative. The decay of the pollutants is so slow that each new release increases the background radiation count.

Commercial power reactors have not lived up to design specifications. A recent survey conducted by the Knight newspapers[8] showed that, of the 38 nuclear power plants which had received operating licenses, 9 were shut down because of accidents, AEC orders or safety-related problems. At least 6 more were running below capacity for similar reasons. Only 5 plants were actually operating at full capacity. Solutions to the various problems of fission power, if they exist at all, will be expensive, leading to sharply increasing costs for power.

The above considerations make it hard to see how large scale commercial fission power technology can be introduced without serious harm to the public. We are pursuing a policy that has a social cost far in excess of the social benefits.

Breeder Reactors

This situation is even worse in the case of "breeder" reactors. The importance of this device may be judged from the \$530 million 1974 research and development budget for fission energy, of which \$357 million is for a single item, the liquid metal fast breeder reactor. What is it? Only about 1% of naturally occurring uranium is usable as fuel in existing power reactors because its major componant, the isotope uranium 238, is not fissionable. However, inside a reactor, this isotope can be changed by neutron bombardment into a new fissionable material, plutonium, thereby producing new fuel. A reactor which produces more fuel than it uses up, by virtue of this process, is called a breeder reactor. In order to breed plutonium economically, one needs a reactor with a very high intensity of neutrons, and hence one that operates at high temperatures. This very high temperature, together with the fact that neutron bombardment itself causes damage to materials, makes the possibility

of accidents with a breeder reactor even higher than with ordinary power reactors. Indeed, it has recently been announced that two Russian prototype liquid metal fast breeder reactors have suffered major delays, one due to a "serious mishap".[9] Breeder reactors will contain enough highly fissionable uranium 235 and plutonium to manufacture hundreds of atomic bombs. In the event of a major accident with the melt-down of some or all of the fuel rods, a critical mass of fissionable material could accumulate. Thus, a real nuclear explosion becomes a possibility with breeders.

A further problem with breeders is that plutonium, the fuel produced, is one of the most toxic materials known. Less than one-millionth of a gram injected into animals has produced cancer.[10] Yet a safer breeding method, not involving plutonium, but rather turning naturally occurring thorium into fissionable uranium 233, has received almost no R and D support. The reason? Preliminary design calculations show that it would take



January, 1975

much longer to double the amount of fissionable material, and hence be less profitable.

Even the argument given for developing the breeder is suspect. It is claimed that without breeding, known supplies of cheap uranium fuel (less than \$10 per pound of uranium oxide) will be exhausted in twenty years. But even at \$50 per pound for uranium oxide, the cost of electricity is increased by less than ¼ of a per cent kilowatt-hour. At that price there are ample fuel reserves already known for at least 50 years, by which time other, safer sources of energy could exist, if sufficient R and D funding were made available.

Why are we becoming so dependent on fission power? Fission technology was developed by the government at public expense, primarily for military purposes during and shortly after World War II. It was believed that only a relatively small additional investment would make nuclear fission technology available for civilian use. Even this extra investment was largely paid for by the taxpayer, partly through military expenditures, such as the development of power plants for nuclear submarines, and partly because of the need for the Atomic Energy Commission to maintain and legitimize its own growth and budget allocations. Operating expenses are also subsidized by taxpayers, since the AEC sells the utilities enriched fuel at a fraction of the cost of producing it. With the nuclear fission option, the taxpayer has made the utilities an offer they simply couldn't refuse.

The Non-development of Other Energy Options

In contrast to the large R and D funding for nuclear fission, other energy options have been starved for funds. In the 1974 R and D budget, nuclear fusion is earmarked for an apparently large \$101 million and solar energy for \$13.8 million. But both figures represent major increases over the 1973 budget and part of the fusion budget is actually for R and D on military applications of high powered lasers.[7] Both fusion and solar energy have essentially unlimited sources of fuel. Both are inherently much safer than fission — the problem with fusion is getting it to work, not keeping it under control. Thus in the event of an accident, a fusion reactor would simply shut down — uncontrolled explosions could not occur. Furthermore, fusion produces only a few radioactive byproducts, neutrons and tritium, which should be relatively easy to control. Solar energy is completely free of chemical and radioactive pollutants. Thus, both of these alternatives are preferable to fission since they do not impose unreasonable burdens on our society as a whole.

Why haven't these options been pursued more vigorously? First, because of the existence of the AEC, a large fission power industry and a more certain technology, the time scale for large-scale fission power, including breeders, was judged to be shorter, i.e., corporate profits would appear much sooner. Second, both fusion and solar power would involve extremely high initial capital oulays but would have low



maintenance costs. This means that capital investment would have to be amortized over periods considered to be too long by private enterprise. Third, development of "clean" fusion or solar power would render obsolete "dirty" but profitable fossil and nuclear plants in which major capital investments have already been made. Fourth and last, fusion and solar power use fuels (water and the sun) which are readily available and can't be put under corporate control. This poses a serious threat to those corporations (notably the oil companies) which control the reserves and facilities for processing both fossil fuels and uranium. Thus, in spite of the major risks and consequent social costs inherent in fission power, the short term profits possible are so large that research in fusion and solar power has, relatively, been almost completely ignored, in spite of their much greater long term potential.

Another energy option that has existed for some time is coal gasification. Coal reserves in the U.S. are sufficient for the next several hundred years. However, coal is much less convenient to use than other fossil fuels and usually contains more pollutants than other fossil fuels. Both of these problems can be dealt with if the coal is turned into a gas before being consumed. A fairly efficient process for doing this was developed in Germany in the 1930's. The professed reason that it has not been used widely is that 1000 cubic feet of coal gas costs about \$1.50, compared to about \$.50 for natural gas. While this is probably true at the current state of the art, one must ask whether R and D in this area could have improved the situation. Not only has research in this area not been pursued, until recently it has been deliberately inhibited. Standard Oil of New Jersey (Exxon), together with I.G. Farben, the originator of the process, formed International Hydrogenation Patents, Inc., which was charged with discouraging interest in gasification, and if that proved impossible with acquiring the rights to new developments in the field to prevent their deployment.[11]

Larger and Larger Power Plants

As a final example of the competition between private profit incentives and social desireability, we examine the tendency for the electric utilities to build larger and larger generating facilities. The rationality of this is to take advantage of "economies of scale". In practice, this has not completely worked out. To quote a leading utility executive, "... the operating efficiency of the new large units which are being constructed today has not come up to design expectations. Some of this arises from moving forward and extrapolating older, more established technologies, but a substantial portion arises from the fact that poorer quality equipment, deficient in many cases in both design and execution, is being delivered to our job sites." [12]

The utilities have difficulty maximizing their profits because the equipment manufacturers are maximizing theirs. The total effect is increased social costs to the public. A single large turbine may account for more than 10% of a utilities' generating capacity. If it fails, a major brown-out or black-out becomes a serious possibility. Also, these larger plants lead to a much more concentrated environmental impact. This is especially serious because pollution control devices either do not work up to their design standards or do not exist. But since the electric power companies do not pay for environmental disruption or public inconvenience, they determine their investment policies purely in terms of "economies of scale".

III. WHAT CAN WE EXPECT IN THE FUTURE?

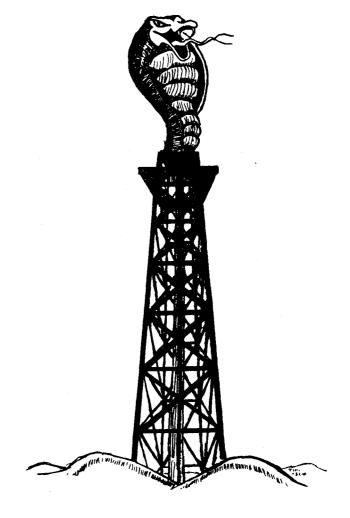
Over the past few years, the oil companies have deliberately produced shortages of gasoline and heating oil by capping existing wells, by cutting down on domestic exploration, and by not constructing new refineries. The objectives of this artificially induced scarcity were:

- 1) Increased immediate profits with existing equipment and investment levels.
- 2) Guarantees of subsidies for developing new technologies and plants, such as for oil shale and coal gasification.
- 3) Removal of environmental restrictions on their operations.

This oil company strategy has been completely successful, with the aid of 100% backing from the Nixon administration. The public has been manipulated into accepting hardships and increased costs both by an appeal to their patriotism ("let's all pull together for the good of the country") and by accusing them of being profligate energy spenders, even though the "American way of life" has been, to a large extent, designed and imposed on the public by the corporate decision makers. By increasing prices to the public, the oil companies have reduced demand and alleviated the immediate problem of gas line-ups. Nevertheless, it is clear that over the longer term, energy problems will remain.

For the next four or five years, shortages in petroleum products will persist and probably get worse, because of a 3 million barrel per day shortage of domestic refining capacity (the lead time for refinery construction is 3-5 years). Minor savings will occur as the public is coerced by rising costs into using smaller automobiles and into under-heating their homes, but these will be far outweighed by increased use of oil for electric power generation and petrochemical production. The utilities will exert strong pressures to be allowed to shift back to using coal rather than oil or natural gas. If successful, this campaign will lead to substantial social costs through increased air pollution, the effects of strip mining, and the dangers of explosion and black lung disease in deep coal mining.

Increasing fuel costs are making alternative fuel sources, such as shale oil and coal gasification, more attractive. However, because of the major efforts required in R and D and for the construction of plants, neither of these seems a serious prospect before 1980. Again there are serious social costs involved. For shale oil, one must dispose of the processed rock —over 1.5 tons per barrel of oil produced. Coal gasification uses huge quantities of steam, leading to potential water shortages.



January, 1975

Over the past five decades, the efficiency of producing and transmitting electricity has grown by a factor of six, from 5% to a current industry-wide average of about 31%. This improvement has been an important factor in allowing the utilities to meet ever-growing demands for electricity. Although further improvements in efficiency will occur as plants are modernized (the best current plants have efficiencies of 40%) and through the eventual introduction of combined cycle systems using high temperature gas turbines, it is clear that they could not account for more than a 50% improvement by the end of the century. Important as these improvements may be, they cannot, by themselves, have a significant effect upon our power shortages. Substantial new plant construction will be required.

It would appear that the supply of energy (and other essential resources) will only meet demand through continually increasing prices, at least until the end of the century. In the long run, there are only two feasible sources of large-scale power with minimal environmental effects — solar power and nuclear fusion. Although the technology exists today to use the sun for the partial heating of homes (at costs comparable with other methods, with today's inflated fuel prices), large scale electricity generation using either the sun or fusion seems a long way off. The time scale for introducing either of these forms of "clean" energy could, in all probability, bereduced drastically by large scale R and D programs. That these programs have not been introduced reflects a conscious decision to develop those forms of energy which would lead to quick profits, with little consideration for their long term social costs.

No doubt the corporate elite will try to adust to a situation of chronic energy shortages. Energy will be allocated preferentially to high profit areas in the industrial sector of the economy. Shortages will be experienced primarily by the working public. They will be expected to conserve and to pay skyrocketing prices. The high cost of energy will contribute, directly and indirectly, to continued inflation, which will affect mainly the lower and middle classes. Because of the shortages, the public will be blackmailed into greatly increased use of nuclear power and coal without their environmental problems having been solved. This blackmail will be possible because much of the added cost, being social, is less noticeable than increased prices.

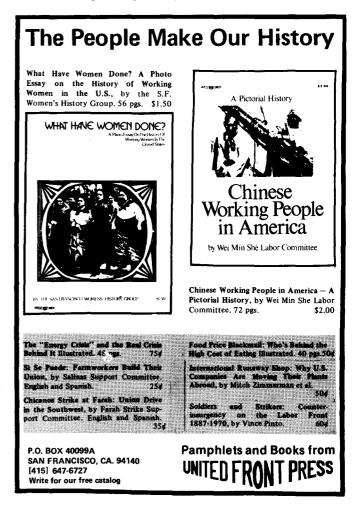
Although many of our economic ills will doubtless be blamed on the energy crisis, in reality, a much more fundamental process is occurring. Shortages, such as the current "food crisis", are occurring in all sorts of goods. These shortages bear little relationship to limited resources, but rather reflect the unwillingness of capitalists to make productive investments when their rate of profit can be much higher in military production and by speculation in land, currencies, gold and commodities (thereby driving up prices). To accomodate the enormous burden of debt that is produced, investment follows those paths that promise the largest and fastest return, rather than incurring more debt in

order to expand real production. This stagnation is an integral part of present day capitalism, a system which cannot meet people's real needs, but can only serve to further concentrate wealth and power in the hands of an elite ruling class.

N.Y. SESPA

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BOMBAST IN BUCHAREST

REPORT ON THE WORLD POPULATION CONFERENCE

The planned climax for the United Nations' World Population Year was the World Population Conference held in Bucharest, Rumania, in late August. Official, exclusive delegations composed of high level policy-makers attended from most countries. In addition several thousand others attended the prior International Youth Population Conference and the Population Tribune, a forum for non-governmental organizations, both in Bucharest. Global population control, after decades of a "softening up" process carefully planned by private movers such as the Rockefeller and Ford Foundations, was at long last judged ready to 'surface' and be granted full state honors. However the debut was seriously marred by frequent outbreaks of clear thinking and militant assertion as some national delegations, unofficial delegates and many other interested people and organizations sought to counter the din of too many neo-Malthusian voices. Because most of the mass media shared the nervous optimism of the Conference planners, it was difficult to tell, from a distance, that the Conference outcome actually marked a distinct shift in attitude away from population control, and was undoubtedly a victory for the Third World in the struggle against imperialism. At the same time the Conference did not come to grips with the real issues or if it did, discussed them in outmoded categories. There was much talk of the need for urgent solutions but little of what was proposed or agreed was in any sense adequate or realistic in relation to the needs of the majority of the peoples of the world.

Conference Background: The Population Establishment

A major target of the Population Establishment (see box) has been international endorsement of population control, and involvement of intergovernmental institutions (United Nations, World Health Organization, World Bank, etc.) in promoting population activities in the Third World. UN involvement in population control is important because of the supposed neutrality of the UN. Its endorsement gives scientific and political legitimation to population control, but in addition the UN can

operate where the bilateral programs of the U.S. or other Western government and private agencies may be viewed with suspicion. In 1966 the General Assembly adopted a resolution mandating UN assistance to "population action programs" and in 1967 a special fund, the United Nations Fund for Population Activities (UNFPA) was established within the UN to assist population programs.

Despite these developments, Western hopes of obtaining international support for a global population policy were weakened as evidence grew that family planning programs were not achieving the results expected and predicted for them. National family planning programs had been the key element in Western population control strategy, the "quick technological fix" that would solve the problem. Progress had been achieved in some areas, e.g. Taiwan, Singapore, Hong Kong and South Korea. However, in the large predominantly rural populations of the rest of Asia, Africa, and Latin America, family planning programs had made virtually no impact on birth

POPULATION ESTABLISHMENT

"Population Establishment" is our shorthand term for a complex of foundations (Rockefeller Fund, Ford Foundation), private organizations (Population Council, International Planned Parenthood Federation), governmental agencies (U.S. Agency for International Development, Swedish International Development Authority) and international bodies (U.N. Fund for Population Activities.) These groups spent over \$200 million on population control activities in 1972. The term also includes writers, demographers and scientists such as Paul Ehrlich, Kingsley Davis and Bernard Berelson. These organizations and individuals have some differences of opinion and approach, but have generally promoted "neo-Malthusian" ideas and pushed programs to implement these ideas. A description of these groups is found in "Rx for the People: Preventive Genocide in Latin America.' SftP. March 1973.

rates. Worse still for the Population Establishment, a growing school of thought among "bourgeois" social scientists was beginning to accept what Marxists had always argued: namely that birth rates would only decline as part of a generalized economic and social transformation. This explained why in China birth rates were declining rapidly while in India, for example, they remained high. This "developmentalist" approach, as it came to be known, was backed by studies from prestigious liberal institutions like the Overseas Development council and the Population Council. These showed that in countries where the benefits of development were shared more evenly in terms of income distribution, land ownership, access to education and so on, birth rates had declined. The problem for the population controllers was how to "operationalize" these findings. The developmentalist approach — land reform, improving the status of women, income redistribution, better social services in rural areas - seemed to be in direct contradiction with the pattern of imperial control and dependent capitalist development. The response of the Population Establishment to this new challenge was to concede the importance of economic and social factors but to carry on as before, arguing that each question should be dealt with separately, with separate strategies and plans for each sector.

Youth Conference for Openers

Planned as a youth adjunct to the World Population Conference, the International Youth Population Conference was organized through eight respectable international youth organizations (with UN or other recognized affiliations), appropriately balanced east-west. In most cases the delegates reflected the prevailing opinion of their governments. This conference brought together over 200 young people (under 30) from more than 80 countries, immediately preceding the main governmental conference, and was the first indication that attempts to consolidate popular opinion in support of population control would fail.

Participants from Africa and Latin America immediately organized themselves into caucuses and worked out common positions. Together with youth from Eastern Europe, and a few from Western countries, they pressed for and obtained strong condemnation of imperialism as the root cause of the problems of the Third World. The participants from Asia and the U.S. (who tended to come from upper class backgrounds) who had expected to play a major role were surprised to discover that they were isolated in seeing population as a "technical issue". Despite a strong counterattack on the last day by Asian participants and strenuous attempts by the World Assembly of Youth and the International Planned Parenthood Federation (IPPF) to enforce voting discipline on those participants whose fares they had paid, the Conference endorsed a strong anti-Malthusian line.

Forum for Non-Governmental Organizations

The "Population Tribune" was a meeting concurrent

with the main Population Conference supposedly intended to provide a forum for the expression of divergent views and to facilitate "fruitful exchange". In fact it did neither of these things. The sessions took the form of lectures or panels, sometimes with three or four speakers followed by questions. This format precluded the possibility of discussion. At the same time the majority of the speakers represented institutions active in various aspects of population control. Apart from a handful of Third World radicals, the "divergent views" represented differing approaches within the population establishment.

The main attraction of the Tribune was a speech by John D. Rockefeller III actually acknowledging the failure of family planning and endorsing the "developmentalist" approach and the need for a reduction in consumption in the developed countries. Rockefeller is the founder and probably the single most active supporter of population control. He is Chairman of the Board of Trustees of the Population Council, the influential private organization created and maintained in part by the Rockefeller family largesse. Rockefeller's Tribune speech is a significant indication that the developmentalist argument had sufficiently widespread impact to force at least rhetorical concessions from the people most responsible for development not happening.

The World Population Conference

When the Conference convened, the militancy of the Third World countries was immediately apparent. On the first day the head of the Chinese delegation delivered a blistering attack on the super-powers for their plundering of the poor countries and arguing that pessimistic fears over population were groundless. Many other Third World delegations, including countries with anti-natalist policies like India, Egypt and Jamaica, also pointed to the hypocrisy of the West in monopolizing the bulk of the world's resources while claiming that the Third World is overpopulated.

Both Pro-natalist governments in both the developed countries and the Third World, and the socialist developing countries were allied. China, Algeria, Tanzania and Cuba contested the very idea that population could be considered a problem and argued that population could not be dealt with in isolation from questions of colonialism, imperialist exploitation and world resource use. This produced accusations of ideological posturing by western delegations and media. But as the Conference progressed it became clear that the majority of Third World governments agreed on the need to spell out the changes required in international economic relations. Several western proponents of population control, notably Canada, the Netherlands and Sweden broke from the hard line taken by US delegates. Despite this the head of the US delegation, Casper Weinberger (longtime Nixon cohort, former Budget boss, and currently in charge of reducing the health, education and welfare of the American people as the Secretary of HEW) persisted in claiming the conference was going according to plan.

The World Population Plan of Action: Before and After

The main item on the agenda of the Conference was the proposed World Population Plan of Action (WPPA). The first draft prepared by the UN had encountered considerable opposition for its heavy emphasis on population control. To achieve consensus references to the diversity of demographic conditions and government attitudes, and stating that population policies should be an "integral part of economic and social development" were included. Yet, behind the facade of progressive sounding phrases the final draft remained essentially directed toward the limitation of births in the Third World. A reference to reduction in resource consumption by the developed countries was dropped at the insistence of the US.

To the dismay of the UN and the supporters of the plan over 200 amendments were submitted in the first two days of the Conference. The main thrust of these amendments was the elimination of the Malthusian elements of the Plan, in particular the call for a global policy of reducing births. Throughout the Plan sections were added or amended clearly reflecting the view that the solution to problems of poverty and underdevelopment in the Third World could be solved by fundamental changes in international economic relations, specifically the implementation of the declaration on a "New International Economic Order" adopted at the special session of the UN General Assembly this year. References to specific targets for fertility were deleted. Instead governments were "invited" to consider setting targets to be achieved by 1985.

The right of couples to information and services to enable them to have the number of children they desire was upheld, irrespective of government policy. At the same time family planning as a way of altering or influencing population trends was rejected in favor of economic and social measures such as land reform, income redistribution and improving the status of women. Strong lobbying by women's groups lead to a series of amendments which recognized the equality of women and spelled out the need for specific measures to achieve this. A key addition recommended that "the economic contribution of women in households and farming should be recognized in national economies."

Other significant changes included reference to the need for national independence and liberation as a precondition for true development. The sections dealing with urbanization, international migration and rural development were considerably strengthened in a positive direction.

Understandably the Population Establishment has attempted to play down the importance of the changes and has singled out the few clauses that still reflect their positions. Nevertheless the opponents of the Western approach were clearly in the majority. The intent of the changes is without question a repudiation of attempts to make population the culprit for poverty and underdevelopment and a backlash against the way in which

imperialist countries have sought to promote birth control in the rest of the world.

A Non-Malthusian Coalition

A very significant development in Bucharest was the coming together of a number of radical critics and opponents of western-capitalist ideology and programs on population from all parts of the world. The coalition organized regular discussions throughout the conference, coordinated questioning in key sessions, pressed for the inclusion of non-Malthusian speakers on panels and held two Press conferences. We also set up a literature table which served as a focal point for the coalition. The immediate impact of these activities was limited. This was partly due to the controlled environment and partly because many of us had not met before and so were unable in the time available to resolve political differences and operate as an effective force. Nonetheless we made many useful contacts and agreed to form an international network to exchange information and research and coordinate political action. (see box.)

EMERGING POPULATION ALTERNATIVES — EMPA

EMPA is an information-study-action group on population and birth control from a non-Malthusian, radical perspective. It is in the process of building a network of international contacts interested in these questions.

EMPA: c/o 343 E. 9th St. New York, N.Y. 10003

Conclusion

The new consensus that emerged from the conference is a major and unexpected setback for the Population Establishment. Both they and the UN thought that objections would be taken care of. The change of position by Rockefeller made little difference since the conference had already questioned the very existence of a population problem as it had been defined hitherto.

Although gratifying in some respects, the Conference once again demonstrated the absurdity of existing international structures. The majority of the delegates were part of an international elite whose lives and thinking are totally divorced from the aspirations and experiences of the people they claim to serve. The Population Establishment had planned to use the Conference to thoroughly legitimize population control. By helping to defeat this goal and by working for real development alternatives, progressive people and groups can make a significant contribution.

Michael Carder, Bob Park

At the time of his attendance at the World Population Conference, Bucharest, in August, 1974, Michael Carder was employed by the UN Fund for Population Activities as a demographer. Bob Park is a member of the Boston SftP chapter and also interested in population. Boston, December 1969. "Activists disrupt science meeting..." In newspapers throughout the country it was reported that wild radicals under the slogan "Science for the People" had laid waste to the annual meeting of the American Association for the Advancement of Science (AAAS).

Of course the press gave a pretty distorted account, but the activities organized in opposition to the AAAS meeting, including picketing, leafleting, petitioning, film showings, outright disruptions — a virtual onslaught of political fervor — struck like a lightning bolt at the bastions of establishment science. Not only was the direct participation of scientists in the suppression of the Vietnamese liberation struggle being attacked, but for the first time since the 1930's, an assault was being mounted also on the systematic way in which science was being used to bolster U.S. imperialism and the capitalist system as a whole.

The AAAS was caught off guard. Science for the People activists demanded that the Association take stands against the Indochina war, the brutal murder of Black Panthers in Chicago, the discrimination in science against women and Third World peoples. Sessions which featured apologists for the U.S. government or the *status quo* were barraged with leaflets and questions that exposed and criticized their political stance. So vociferous and forceful were the Science for the People activists at that meeting that the presence of the beloved U.S. astronauts went all but unnoticed.

That was five years ago. But those five short years have witnessed dramatic changes in the level and kind of political struggle taking place in the U.S. The Vietnamese victory, and the more general breakdown of U.S. worldwide political hegemony, have ushered in new outbreaks of political activity here at home; Native Americans, Chicanos, prisoners, and women have taken up the struggle, and, as the economic crisis intensifies, workers are fighting to build and strengthen their unions. The contradictions of capitalism - unprecedented wealth and power amidst pervasive poverty and powerlessness, stagnating production amidst unmet needs, systematic waste amidst material deprivation, advanced technical intelligence amidst widespread popular ignorance, . . . (the list is endless) — these contradictions are becoming ever more apparent and are forcing the system closer to the breaking point.

One of the most striking contradictions (and one of utmost importance for SftP) is that our society supports a vast scientific and technical apparatus while at the sametime scientific and technical work is becoming increasingly divorced from the needs of the masses of people:

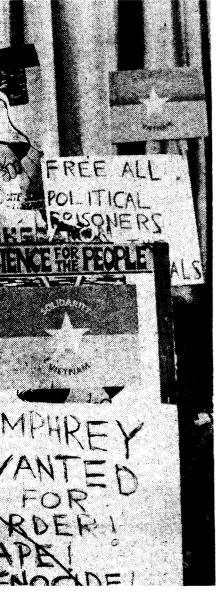
— While people are struggling for liberation, science is mobilized to maintain their subjugation. From overt counterinsurgency weaponry to the most subtle behavior control technology (see SftP, vol. VI, no. 3, May 1974), from the battle-field to the streets to the prisons to the schools, science is being marshaled by the ruling class to maintain its political control.

AAAS: tl



- While people are dying from pollution, industrial hazards, U.S. bombs and bullets, slum conditions, and inadequate preventive medicine, millions of dollars are being spent in developing artificial organs, dangerous drugs, sophisticated medical machinery, and new strains of (potentially lethal) viruses.
- While people go hungry throughout the world because they are too poor to buy the food that exists or because their land has been turned over to cash crops which they cannot eat, science is called on to develop "miracle" seeds

en & now



that require miracle fertilizers and miracle pesticides, miracle irrigation schemes and miracle agricultural machinery. By the same "miracle," this Green Revolution has served to intensify capitalist control of agricultural production, but not to feed the poor.*

In instance after instance, scientific and technical work in the U.S. is becoming more divorced from the pressing realities and necessities of people's lives. At best it diverts social resources into wasteful and unproductive activity. At worst it creates the knowledge and technique for the further oppression and exploitation of millions of

people. Such is the nature of science in the age of monopoly capitalism. History shows that nothing short of a total transformation of society will put an end to this unprecedented misdirection of human resources.

This is where the AAAS comes in. Its role historically has been to strengthen science within the present system, to maintain the status quo (see "A History of the AAAS," SftP, Vol. II, no. 4, Dec. 1971). During the present period, when the contradictions outlined above have come into sharp focus, the role of the AAAS has become increasingly reactionary. Its foremost function is ideological — to maintain the myth that science is a purely progressive force, one above politics. By obfuscating the political relations of science, by clouding over the class interests served by science, it seeks to minimize in both scientists' minds, and in the society at large, the gross contradictions of capitalism. Just take as the simplest example the theme of the January 1975 annual meeting - "The Quality of Life." If anything stands out in the world and needs to be addressed it is rather "The Inequality of Life," and, in particular, how science contributes to it.

What this means is that the whole establishment of science and technology finds itself in an increasingly precarious position. Any progressive revolution will institute fundamental changes in the nature and extent of scientific and technical work. Much of this work will be eliminated altogether. Of course the managers of the scientific workforce (big professors, research directors, government administrators, etc.) hope to defend their present positions, and thus have a direct interest in maintaining the system as it is. Yet there are, in addition, several million people, from Ph.D. scientists, to computer programers, to laboratory bottle washers, to engineers, to school teachers, to health workers, who are also tied into the present scientific and technical establishment. Their livelihoods, as well as the few privileges they have in terms of salaries, status and work conditions, depend on the continued growth, or at least the maintenance, of the existing scientific and technical apparatus. This workforce is dependent for its existence on the continuance of the capitalist system and the capitalist class which it serves. In this sense, the scientific and technical workforce constitutes one of the more conservative sectors of U.S. society.

During the last couple years, as the ideological position of the AAAS has become more untenable and as the liberal support of the anti-war movement has retreated from view, the AAAS has taken a harder line against those who challenge establishment ideas and

^{*} A Ford Foundation team of U.S. experts recently returning from China admitted that there was adequate agricultural production in China to feed the population, but advised that China should centralize its agricultural research in the manner of U.S. science. What they failed to understand was that starvation is not a technical problem, but a political one — one that the Chinese revolution solved without the use of capital intensive green revolution technology. For further information see *China: Science Walks on Two Legs*, a SftP report, Avon, 1974.

practice. While arguing for "freedom of speech," the AAAS has sought to relegate Science for the People to the remote corners of its meetings — arresting 8 people at the Washington meeting of December, 1972 for setting up literature tables, nearly having five others deported in June, 1973, in Mexico City, and harassing Science for the People for simply attempting to leaflet at the San Francisco meeting in March, 1974.

The ability of the AAAS to get away with such repressive and undemocratic measures has been largely due to the fact that SftP has not put a great deal of effort into organizing AAAS actions in the last two years. The lack of interest in organizing around the AAAS is not only a reflection of a more widespread shift from confrontation tactics, but a recognition of the fact that the AAAS meeting no longer draws people who might support SftP politics. The meeting rooms, conferences and cocktail parties are populated with bureaucrats, administrators, careerists, and the more established scientific elite — all of whom have an interest in maintaining their present and future positions of privilege. They aren't about to rock the boat.

Things are not going to change by appealing to those who have already been bought off by the system. Why,

then, should we expend energy on the scientific managerial elite who come to the AAAS meeting to devise new strategems like the "congressional fellowship program" for coopting young scientists into government service? Why expend energy on the careerists who come to the AAAS meeting hoping to hop on the next research bandwagon out of Washington? Why expend energy on the reformists whose "public interest science," by excluding any notion of democracy or popular political power, preserves for them their elite, privileged positions? The AAAS meeting warrants only a minimal organizing effort.

Instead, SftP should attempt to reach those who recognize in their own alienation and frustrations the oppresiveness and irrationality of science and technology under capitalism. We must work to formulate a political practice and program which responds to the anti-human nature of science in this society by engaging in the struggle for socialism. But this must be done honestly, without denying that, in the short run, socialism certainly means the dismantling of science as we know it. In the long run, however, it will draw on more scientific energy and creativity than the world has seen to date.

Al Weinrub

HEALTH CARE POLITICS: APHA conference report

From October 20-24, the American Public Health Association (APHA) held its 102nd annual meeting in New Orleans. The theme was a more progressive one than ever previously adopted as a convention topic: "The Health of Non-White and Poor Americans". The more than 8,500 participants represented a cross-section of American health professionals, from doctors and nurses to social workers to community health organizers. There are enough interesting parallels with the AAAS to make lessons drawn from organizational experiences there relevant to the functioning of Science for the People at the AAAS Convention in January.

The APHA is a large, amorphous body with tendencies reflective of more progressive forces in health care than the AMA. Historically, the APHA was based in the mili-

tary medical personnel, state health personnel, and federal personnel who weren't military. Its conventions, in recent years, have been the gathering point for the progressive forces within the American health care establishment. It is a large body with no official lobbying mechanism. However, with a 1.2 million dollar annual budget (18% from the Agency for International Development), it has been able to mount conventions that are significant enough to attract presidential aspirants, secretaries of (not too much) Health, Education, and Welfare, and so forth. Its leadership carries weight within the various advisory mechanisms for health policy at the state and federal level. By contrast the AMA, a much smaller body, is much more influential. Firstly, the AMA represents a more homogenous class grouping, chiefly physicians in

private practice. Because of this homogeneity, it can represent the distinct economic interest of this very privileged minority. The APHA, on the other hand, represents all aspects of the health profession, from the lay practical nurse to the physician in public health, and even many private phsyicians. Secondly, the AMA has set up a "separate" body, AMPAC, which funnels huge sums of money into legislative lobbying, the election of candidates, and public propagandizing against "socialized medicine". The huge sums of money that it raises by stiff dues assessment make AMPAC a powerful political force. Only the AFL-CIO (as a single entity) outspent AMPAC in the 1974 elections, and then, not by much. Even though most of their candidates lost, the amount of money and the coherent economic interest AMPAC represents will make it a powerful (a negative) force for defense of private fee for service medicine in the coming years.

A second grouping within the APHA organization is historically more recent, and actually reflects the political movements of the late sixties. There are Black, Latino. Puerto Rican. Asian. and women's caucuses. These hold official meetings that are announced in the APHA program, elect officers, and establish communication networks for the year. They make sure that certain sorts of papers are presented in various sessions, and organize "soapbox" sessions on themes they feel are being neglected. In fact, the theme of this year's convention was established by demonstrative action from the Black Caucus confronting the official APHA governing council. These forms are not present in the AAAS . . . probably because science is a much more racist institution in this country than the health profession (and if that isn't an indictment). The caucuses had to demand and win their official position within the APHA structure (it was not a gift of an enlightened bureaucracy). SftP might consider winning such a role within the AAAS, if we can learn to use that position effectively, rather than being co-opted into being a sort of "loyal opposition".

The major sessions of the APHA convention were the plenaries. The opening plenary was addressed by Dolores Huerta of the Farmworkers Union, Sargent Shriver (who called on the APHA to replace the AMA as the voice of American medicine), and Jesse Jackson (could you imagine AAAS opening with a similar gathering?) Almost 8,000 people were in attendance for this talk, in which Shriver struggled mightily to compete in militancy with the other two speakers. It was a strong note to open on, but without immediate sessions to follow up on the themes raised by the speakers, much of the impact was lost. Another major plenary was held on "women and health", in which Dr. Helen Rodriguez-Trias gave a speech emphasizing the problems of Puerto-Rican women and therefore strongly linked the problems of racism, chauvinism, and male supremacy within the health profession. Again, immediate follow-up sessions would have strengthened the impact of such a talk (attended by more than 2,500 people), but it was not to

Another large scale session was held on the question of national health insurance. It is in examining this meeting that we can see a good model for linking plenary session turn-ons with concrete action and organization. The speakers were Malcolm Todd of the AMA, speaking in behalf of the AMA's proposed Medicredit plan; Peter Fox from HEW speaking on behalf of the administration's C.H.I.P. (comprehensive health insurance plan) program; Max Fine speaking on behalf of National Health Security (formerly known as the Kennedy-Griffith's Health Insurance plan); and Ronald Dellums speaking on behalf of legislation he is proposing to introduce to Congress next year creating a national health service and abolishing fee for service medicine. The almost 2,000 participants responded in interesting fashion to the speakers. The AMA spokesperson attempted to say the right things in terms of what was needed, but then proposed the AMA remedies which, if not fascistic, are certainly irrelevant to meeting the health needs of the American people today. He was booed mildly. The administration spokesman was worse than the AMA man. He offered nothing, and in fact proposed cuts in al-

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ready inadequate services. The response was gratifying. He was almost shouted down and many paper airplanes were seen flying through the room. Max Fine spoke for the general aims of the Health Security Bill (a bill which Kennedy merely sponsored . . . it was drafted by trade union people and progressive medical faculty people). As many people know, Kennedy withdrew his sponsorship from this bill to co-sponsor a bill with representative Wilbur (swim in the lagoon) Mills. This bill was merely a rationalizer of the administration's bill which the major insurance companies would surely love (since they wrote it). However, the trade unions refused to support Kennedy (though academics such as Adam Yarmolinsky did), and many congressional people continued to keep the Health Security Bill on the fire. Fine's presentation earned a mild applause, especially when he polemicized against the regressive features of the AMA and administration plans. Dellums, however, ignited the audience. He outlined what was necessary for a decent, people-controlled, totally inclusive, non-profit-making health care system. He contrasted his program against the weaknesses of all the other plans. He then declared he was going to introduce legislation that would cover the key points for creating a national health care system, and called on the APHA to help him win such a measure. He concluded by pointing out, in dramatic fashion, that every member of Congress already enjoys the total benefits of health care his "radical" bill would provide. The response was electric. More than 3/4 of the room stood and cheered wildly (i.e., more than 1200 health professionals whose privileged position is, to some extent, threatened by such proposals . . . but whose ability to deliver health care for the people would be immeasureably enhanced).

Immediately after Dellums' talk, there was a work meeting, where those who had drawn up a draft legislative piece summarized their work briefly, and then solicited volunteers (more than 200 people volunteered at this meeting for work on one or more sections). Also, Dellums met with the representatives of all the caucuses, and, in a hard business like way emphasized how this legislative piece would change the whole character of the health care debate in the U.S. Congress, how it would raise issues untouched by all proposed legislation (occupational health, environmental health, special health needs of nationally oppressed peoples, financing of health care, and the possibility of nationalizing drug and hospital equipment companies), and therefore turn the debate from a constant right-wing gavotte from Health Security to Medicredit, to a debate in which Health Security is a moderate position. The caucuses were receptive, and have become active in the campaign around preparing the Dellums bill (those interested in working on the bill can contact Mike Duberstein in the office of Ronald Dellums, U.S. House of Representatives, Washington, D.C.). It is in directing a plenary toward creating a movement around a specific issue, that we can see how the format of such gatherings as APHA or AAAS might best be used.



Another significant activity at the APHA convention was the organization of a Cuba-Chile information project. This activity was organized by the U.S. Cuba-Health Exchange (U.S. CHE), based in New York. The organization paid for a booth (\$400), and staffed it with members of the organization who were attending the convention. The booth had a large display, gave away thousands of pieces of literature, and generally outdrew most of the corporate and federal agency booths. Two sessions were organized by these people, one on Chile, at which two refuge Chilean doctors spoke, contrasting health care in Chile under Allende, with health care now. The second session was a report back from a medical delegation to Cuba. Both sessions were well-attended, and the presence of some hostile people plus many unfamiliar faces indicated that good new agitation was accomplished by the sessions.

Through much of the meeting, sessions of the Executive Council were going on. These voted on resolutions which had been previously drafted on a variety of topics. Like the AAAS, APHA is hide-bound by deadline rules on submitting resolutions. However, there was some sympathy to suspending the rules to introduce a resolution on, for example, behaviour modification. This sympathy stemmed from a strong threat from the Black Caucus, as well as many concerned individuals that action ought to be taken on this theme. (Unfortunately I do not know what transpired around the resolution once it reached the floor). Again, the most effective action for radicals to win through to such positions is to be tightly connected to an organized form, such as a caucus, and act, within the council, as a spokesperson for such a caucus.

Nevertheless, our caucusing within the AAAS may be said to have motivations similar to those involved in organizing a caucus within the APHA. That is, the conventions are exceptionally large gatherings at which one can, within the framework of opportunities unwittingly (or consciously) provided by pseudo-liberal leaderships, raise issues more pointedly and to a higher level, organize more communication and co-operation between progressive forces, and confront those who do wield actual advisory power to the government with the bankruptcy of their position, and push them a little further toward either some genuinely progressive position or a genuine break with the power structure. Furthermore, both the APHA, and the AAAS have adopted "progressive" themes in this year, and, for APHA, the next. Leaning to work within the framework of such themes would seem to be an important step for us.

There are several organizational features of APHA which are worth examining. Basically, APHA is officially organized into 24 "sections". These range from community health planning, to environment, to health administration, to laboratory, to maternal and child health, to medical care (the largest section), to occupational health, to new professionals (a special caucus representing Black and Latino health workers), to school health, to statistics. The sections each set up a program

of sessions for the convention, at which papers are given in the topic area. They also have one to three business meetings and some sort of social affair which raises the funds for the coming year. Some of the sections are very progressive, such as the new professionals or occupational health. These sections frequently have non-health people speaking to their working sessions (e.g., Tony Mazzochi of the Oil, Chemical and Atomic Workers Union was an invited speaker in an occupational health session on Environment, Politics, and Health). Some of the sections have elected people with whom Science for the People has a working relationship. The next convention, scheduled for Chicago in November, 1975, has, as its theme 'Work and Health'. This topic will be heavily influenced, in all sessions, by the Occupational Health section, which is influenced strongly by people who have written for SftP in several issues. Already people are considering what sort of sessions could be suggested to other sections, and what can be organized within their own section to emphasize a pro-people approach within this theme. It should not be presumed that there is not some sort of struggle within each section, or between sections. I attended a session on "What Every Public Health Official Should Know About Nuclear Power," sponsored by the radiological health, epidemology, and occupational health sections, which was mainly an apology and defense for using nuclear power plants (since other things are proven to be more dangerous). What is important is that progressive people can strongly influence the agenda of the working sessions by organizing to give good papers.

Prognosis:

APHA in many ways is similar to AAAS. However, it has one great advance. It has significant, organized participation from third world people. The racism of the training structure of American science has thus far prevented such caucuses from appearing at AAAS. We should be interested in attacking such racism, and winning commitment from AAAS to do more than promote Equal Opportunity. As in all education today, the fight against racism is the central touchstone around which we will successfully advance — or fall into fascism. In addition to this fight, we must also struggle against sexism (again, a disease more serious in science than in the general level of health professionals represented by APHA), and elitism. We should consider bringing nonscientific people, especially trade unionists and third world people into the AAAS convention to set down their agendas of needs. The theme of the convention makes this legitimate. It is not up to a scientific elite to define what makes the quality of life . . . it is up to us, as radical scientists and people interested in science to bring together a coalition of masses of people to demand of science and scientist a true Science for the People.

In sum, I am not recommending legislative action, or any other single panacea for our role in AAAS or APHA. Legislation, especially legislation that radicals write and

organize around is valuable, but only valuable in being part of creating a mass movement. Similarly, it would be important for us to strengthen the role of SftP as a caucus at APHA, but not with the aim of "taking over" the leadership of the organization (an illusion at best, but a misdirected aim that could prevent us from addressing how to build a radical science movement, at worse). Rather, a caucus would act to mobilize progressives, bring them together and give them direction toward concrete programs and activities. As a grouping an effective caucus can educate and agitate for a true Science for the People, and expose what is not at all Science for the People. Similarly, we can educate about imperialism, and how it uses and misdirects science, by relating it to people's work. We might consider uniting people around progressive legislation of specific relevance to science. For instance, there is a debate about how scientists should "advise" the government, now that the Nixon negativism is being replaced by the Ford-Rockefeller co-option view. What should be our stance in this debate? Can we concretize our view from agitation to legislation? These are questions for collective explora-

Allen Silverstone



health and nutrition

AGRIBUSINESS

This year I have been growing vegetables in my backyard, and when I can, baking my own bread. While a sense of back-to-the-earth may be a part of my motivations, my vegetable garden is also, in a way, my personal protest against capitalism. I have come to realize that foods are corporate products, not grown to feed us, but grown and processed to maximize profits. Not to say that I eat politically, but foods in the supermarket are the way they are today largely because of choices made by monopolies and conglomerates.

Food production and processing has become concentrated in the hands of a few large corporations. For example, three firms make 1/4 to 1/3 of the profits in the meat industry.[1] Nine canning and freezing companies (out of 1200) make 55% of the profits in vegetable processing. There are fewer farms — 2.7 million in 1969 compared 6.8 million in 1935 — and small family farms are vanishing, to be replaced by large-scale farms. Many farms contract directly for their entire crops with large processors like Del Monte. Beef cattle are raised more and more (75% currently) in massive food factories called feed lots. Food monopolies are growing (Kraftco and Borden in dairy products, for example). Many nonfood industries, such as Tenneco, Kaiser, and ITT, sensing that food is where the money is, are investing their huge financial resources in food.[2]

Large supermarkets and chain stores dominate the marketplace. The four largest firms control 40% of retail food sales in 175 of the 205 largest metropolitan areas.[1] With this power, competition is out. Supermarkets no longer need to cut food prices in order to increase sales; they create demand through advertising. We are constantly bombarded with new products. Whoever had to be told to buy cheddar cheese the way we are told to buy individually packaged frozen pudding? The supermarkets provide so much variety that many now carry 8000 separate items.[1]

While a lot could be said about the effects of agribusiness policies on food prices, my problem is what agribusi-

ness has done to the food itself. Foods in the supermarket are often adulterated or diluted. Meats contain hormones and antibiotics. Cheese products with only a small percentage of actual cheese in them are often sold a higher prices per ounce than regular cheese.[3] Dairy substitutes use a lengthy list of cheap synthetics instead of expensive milk. Juice drinks with water and sugar as their main ingredients boast about their vitamin C enrichment. The so-called enrichment of foods (as in breakfast cereals and packaged baked goods) replaces only a small fraction of what was destroyed in the processing. Compare a pound of fresh potatoes with a pound of potato chips, filled with oil, preservatives, and additives, and elaborately packaged. Not only must we pay more for the processed potatoes, but we lose something in terms of nutritional value. In the processing of instant mashed potatoes, 40-95% of the vitamin C is destroyed.[1] If these foods are not a danger to us, they certainly do not facilitate good health.

The worst insult in the supermarket, I think, is the fresh produce. New varieties have been bred for longer shelf life, durability in lengthy transport, bulk, and eye-catching qualities such as color. Supermarket tomatoes and oranges bear little resemblance to the homegrown varieties — nutrition and taste have been sacrificed for profit.

(continued on p. 29)



"As you perhaps know, some of our policies have been questioned of late."

SOYABEANS IN INDIA?

Science and scientists have been described as instruments of development. Indeed they are. But they can also be used as instruments of underdevelopment and of neocolonial exploitation. The problems of increasing the production of food in underdeveloped countries have been laid in the lap of Science and Technology. But without appropriate social reforms, Science is powerless and barren, and even dangerous. This is amply born out in the promotion of the production and processing of the soyabean in India. This technology has been subtly and patiently promoted by foreign foundations and experts, and by the agricultural universities backed by them.

Work of several years has recently been brought to fruition with the decision to set up a "most modern" soyabean plant at Hyderbad, for which the most sophisticated machinery is to be imported. This large plant, the first of its kind in the country, would produce food products for protein fortification of children and expectant mothers. UNICEF has shown keen interest in the project and decided to give some free machinery to the plant. As I will show, the U.S. is also keenly interested in the project.

A few facts will make clear the reasons behind the interest and involvement of U.S. imperialists in the project. Soyabean is today the leading cash crop in the U.S. and the primary legume and oil seed in the world. The U.S. is also the world's leading producer of soyabean accounting for 75% of the world's output. Soyabean is also the number one product among U.S. agricultural exports. As a matter of fact, soya oil has been the major component of all PL-480 food grants to countries around the world. In the wake of the explosive concern for protein malnutrition all over the world, technologies for making various protein formulations with soyabean have been standardized in the U.S. Within the U.S. soyabean processing is a substantial business. It is the major source of vegetable fats, and the extracted meal with its high protein content is used with corn for making animal feed. In addition, soya protein has been formulated into an impressive array of new luxury products, such as textured protein, vegetable meat, protein drinks, and biscuits.

Promotion of the Soyabean

The promotion of the soyabean in India, not natively grown in any significant amount, must be seen in the above context. The principle arguments advanced in its promotion have been that it can be grown in India with profit, that its yield is high (higher than say that of peanuts), and that because of its high protein content it could go a long way toward solving the protein problem. It could also solve the oil famine in the country. The table below compares the soyabean to the commonly used pulses and peanut in protein and oil content.

	Oil	Protein
Food	[per cent]	[per cent]
Soyabean	20	40
Peanut (seeds)	40	25
Various pulses	1-2	20-24

Experimentation on growing soyabean was started by various USA-tied unversities and lately by the All-India Coordinated Research Project. Some post harvest processing and utilization studies were initiated in some centers. On the surface the soyabean project has everything to recommend it.

Soyabean vs. Peanut

The case for soyabean in India has to be seen primarily in the context of the peanut, which is the major oil seed in the country, and also a relatively rich source of protein. In a way, it is the Indian counterpart of the soyabean. The pulses are also very important from the standpoint of protein.

The yield of soyabean in the U.S.A. is undoubtedly more than that of the peanut in India, but this is of little consequence since practically all crop yields are lower in India. The current yield of soyabean in India is also higher than that of the peanut. But this again is of no significance because considerable research has gone into improving the yield of the soyabean, all of which is being applied in India. Comparable work has either not been done for the peanut or is not being applied due to various socio-economic reasons.

The peanut can also stand comparison with the soyabean as a source of oil. The peanut yields more oil per acre than does the soyabean in all areas of the world. Moreover peanut oil has versatility of use (cooking oil, salad oil, refined oil, and vanaspati*) while soyabean oil, because of its flavor properties, is unacceptable as unrefined oil and is used mainly for vanaspati manufacture.

There is no doubt that soyabean has a higher protein content than does the peanut. But because of its cooking properties soyabeans cannot be consumed after cooking, nor does its common mode of use — as a fermented product — fit into the Indian dietary pattern. To be used then, soyabean has to be technologically processed into various products and formulations.

Thus any soyabean program in India must have as its aim the use of soyabean as a technological raw material for the manufacture of vanaspati as well as processed protein foods. This is a crucial point. It implies (a) technological ties with developed countries, and (b) drawing the production process away from the common people. But before considering this aspect further, let us have a brief look at the problem of solving protein malnutrition through soyabean technology.

Solving Protein Malnutrition

Protein malnutrition and its solution are certainly grave problems and any program of soyabean processing for this purpose should be commendable. However, many practical questions arise. First, if protein malnutrition is perceived as such an important problem, why do we export various protein rich oilcakes to protein excess countries, to be wastefully converted into animal protein for luxury consumption there. Second, why have our agricultural universities and planners not done something about the most important Indian protein foods, the pulses, the production of which has been falling in recent years? Is it because they are consumed directly, and do not provide an opportunity for starting a fancy processing industry? Third, for whom are the proposed protein foods to be made? The 60-70% of the population who are in desparate need of protein do not have the purchasing power to buy any food, not to speak of special protein rich formulations. And those that do have the money are not in need, nutritionally, of such food. Would not the protein be diverted for formulating fancy products like textured protein, vegetarian meat, protein rich biscuits, and chocolates — for which a market exists or can easily be created?

Possible Impact of Soyabean

There is real danger that soyabean may supplant rather than supplement the peanut, the production of which is already well below plan targets, and even pulses. Agricultural experts claim that soyabean will be grown in areas where the peanut is not cultivated because of soil conditions and hence will not replace the peanut.

*A hydrogenated vegetable oil used as a butter substitute in India.

Unfortunately, what will or will not be grown, and where, depends little on scientists and experts, and much more on socio-economic factors. With soyabeans being used as the raw material for processed foods, which may be exported, soyabean has all the potential for becoming a superior cash crop. When that happens, all other factors will be subordinated, and soyabean is bound to replace the peanut, and perhaps even the pulses.

The end result of promotion of soyabean with its technological processing in plants such as the one set up in Faridibad, will thus be disastrous under the present socio-economic circumstances. First, by competing with and displacing the peanut and arrogating to itself all research and physical inputs, the availability of oil in the country will decrease rather than increase. And the soyabean oil will go mostly to feed the vanaspati industry for the small affluent section. Second, with respect to fighting protein malnutrition, it will make little contribution, as shown above, and the protein will largely go again to the luxury sector, and perhaps partly for export. As a matter of fact, if soyabean does replace the peanut and the pulses even partly, as it is most likely to do, the availability of protein to the poor people will decrease, not increase. Third, under the present socio-economic conditions soyabean processing would of course also involve import of technology and machinery, as is indeed going to happen in the Faridabad case.

Was it not then precisely (a) to push this technology into India and to keep us tied to their soyabean technologies, as well as others to be imported in due course, and (b) to further promote the luxury sector in the country, that soyabean has been patiently promoted in India all these years?

All this is not to say that soyabean has no place in the country. That it can be grown in certain parts of the country with profit, there is no doubt. That under appropriate socio-economic conditions, and as a supplement to peanut and pulses, its production can be beneficial, is also obvious. But two prerequisites to this are:

- Indigenous research for its utilization by fully indigenous techniques and indigenous equipment, and
- An effective socio-political climate to ensure its utilization for the good of the common people rather than for a luxury sector or 'export'.





The Scientist's Role

The tragedy is that the takeover of agriculture and agricultural science by industrial interests has been achieved with the full support of Indian scientists themselves. And why not? Is not science neutral? Are not scientists required and even admonished to see only the 'scientific' aspects? Are they not supposed to concern themselves only with the frontiers of knowledge and 'quality' of research? If it so happens that the talk of protein malnutrition in general, and that of soyabean in particular, is in the air, if soyabean research and publications thereon are respectable, if it gets recognition and maybe promotion, if it gets easy grants and equipment from munificent foundations, if it also gets foreign fellowships and easy seminars and perhaps foreign meetings - then, why, of course they must work on soyabean.

Those scientists who see science and its application only as an instrument for development, and close their eyes to its use as an instrument of exploitation and imperialist enslavement, are either naive or do not want to see the truth.

K.R. Bhattacharya

PEOPLE'S POWER

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(continued from p. 26)

What are the solutions? A return to small family farms and "Mom-and-Pop" groceries is unrealistic. Del Monte and Borden are here to stay. Even the small health food stores with their stock of alternative foods often charge exhorbitant prices and some have been known to sell more "organic" foods than have been grown.[4]

Regulatory agencies (USDA, FDA, and FTC) instead of protecting the consumer, are tools of the very industries they supposedly regulate. Their policy-making positions are staffed by people recruited from agribusiness. Food corporations have active lobbying forces in Congress and make large investments in political campaigns. Consumers, on the other hand, are an interest group without power.

Today, the consumer movement asks in vain for changes from businesses it has no control over. Boycotts have limited strength and may even be counterproductive. For instance, meat producers responded to a boycott by cutting back production and discarding animals without putting them on the market. Coops and collectives, encouraging signs of group action, are still small scale and affect the general market little.

Apologists for the food industries say it is impossible to have the old-fashioned unprocessed additive-free foods in a system of mass distribution for large city populations far from any farm acreage. Indeed, they say, we actually have more variety and better food than we used to.[5] We cannot accept this.

Until there is a change in the economic system, it will be difficult for the consumer to control the production and distribution of food. Decisions will never be made to optimize food quality but only profits. What is to be done? The government must be stopped from creating figure-head consumer councils. Coops, collectives, and even neighborhood gardens, should be enlarged to include more and more people. More important is broad education and even advertising so people will learn what it is they are eating and why. But these are only temporary measures. The struggle against agribusiness can only succeed through group action and eventual mass movement.

Sue Taffler

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chapter reports

NORTHEAST REGIONAL CONFERENCE

Approximately 60 people attended the second Northeast Regional Conference held November 16-17 in Voluntown, Connecticut at a farm run by the Community for Nonviolent Action. All chapters in the region were well represented, and representatives from Cincinnati were also in attendance. Planning for the conference was done by the Northeast Regional Committee. In preparation for this conference a group in Boston [the Unity Caucus] wrote a document which includes analytical notes, draft principles of unity, draft guidelines for practice, and a draft proposal. This document was distributed prior to the conference and was to form the basis for discussing principles of unity. Also included in this mailing was a proposal to restructure the way in which the magazine is produced. A second discussion bulletin was sent out prior to the conference [unfortunately too late for everyone to receive it], which included responses by groups to the unity caucus's document. Copies of these documents and others were redistributed to attendees at the conference.

People started arriving Friday evening, which was set aside as a time for people to meet and get to know each other. At the initial plenary session on Saturday morning the magazine coordinating committee's proposal to restructure the way in which the magazine is produced was discussed. Some strong disagreements with the proposal were raised during this discussion and it was decided to have a workshop in the afternoon to discuss them. Following the plenary session and after lunch, workshops were held that dealt with the magazine proposal; convention activities; sexism, racism and elitism; occupational health; science for Vietnam; workplace organizing; science teaching; professionalism; and the energy crisis. An evening plenary session heard reports and proposals from workshops. The Magazine Coordinating Committee's proposal with amendments was passed by a substantial margin [see resolution #1] and a resolution calling on us to support two farm worker organizations. [See resolution #7.] Any frustration engendered at the plenary was worked off at the party which immediately followed it.

The Sunday morning plenary was titled "Whom should we bring together, about what, and why?" It was envisioned that during this plenary we would begin discussing the Unity Caucus' document. This discussion did not take place, but was replaced by a general discussion of principles of unity. Out of this discussion a set of questions was developed which people were urged to use as a discussion guide. These questions were formalized by a small group during lunch and passed during the afternoon plenary. [See resolution #2.] The afternoon plenary was titled "What role can the Regional Conference play in uniting SftP nationally?" A number of resolutions were passed during this session: formation of a national organizing committee and an internal discussion bulletin; making the magazine serve a national organization; a statement on procedures for developing principles of unity. [See resolutions #3, 4, 5, 6.]

REGIONAL CONFERENCE RESOLUTIONS

Resolution No. 1: Magazine Reorganization

Editing, production, and distribution of the magazine should be broken down into three separate tasks. These tasks would be the responsibility of three different committees which would be accountable to the membership through general meetings in Boston, and N.E. regional meetings when they exist, as well as to all other chapters through the mail. Members of any committee will be subject to confirmation and recall by their respective chapters, and openings will be announced to the membership at large.

(1) Editorial committee: 6-10 members of the organization who will commit themselves to at least six months work; maximum one year. They would rotate so that after each issue is finished one or two members would leave the committee and replacements would be found. This group would be responsible for soliciting, editing, and selecting material for each magazine; they would also do the rough design. It would be possible for some members of this committee to be from chapters outside Boston and to participate by mail and telephone. A maximum of two members of this committee could be new people. Most new people would be expected to have some experience with one of the other magazine groups. This committee would not be responsible for an issue of the magazine until May.

(2) Production Committee: 4-6 members of the organization who will commit themselves to at least six months work. This group would be in charge of the actual production of the magazine: proofreading, layout, paste-up. They would build up a graphics file, make contact with photographers, artists, etc. This work could introduce new people to the organization. This committee would not be responsible for an issue of the magazine until March, but could help with the production of the January

(3) Distribution committee: 4-6 members of the organization, who will commit themselves to at least six months work. This group would mail the magazine: work to increase distribution locally and nationally. This includes making contacts in other organizations — for example, psychologists, to send them the behavior and modification issue, or groups of prisoners, hospital workers, etc. Work in this area has begun already and needs to be expanded.

While united in theory that every stage of the production process is integral to the making of the magazine, we recognize that in practice the division of labor within that production process could tend to resolve into an elitist hierarchy of mental and manual work. There is a two-part practical way to handle this problem:

(1) Everyone involved in making the magazine should acquire experience in more than just one of the three functions.

(2) All magazine workers should participate in criticism of each issue and talk to each other about (a) what's going on in the work process, (b) how it is affecting the people working, and (c) whether our practice matches our political theory.

The Magazine Coordinating Committee will be reconstituted. It will consist of two rotating members from each of the three committees and the magazine coordinator. The Magazine Coordinating Committee would have ultimate control over the production and distribution of the magazine, would choose new members for the committees when they are needed; would be accountable, as are all three groups, to a general meeting of the membership. The magazine coordinator would be responsible for answering letters of inquiry about the magazine, soliciting material for the editorial committee, keeping production materials in order, and any other duties relegated to her/him by the new Magazine Coordinating Committee or the organization.

In recognition of the need to make SftP magazine more representative of the national membership in SESPA/SftP, the Magazine Coordinating Committee will make a renewed and vigorous effort to involve other chapters in the production of the magazine by forming one-issue collectives. These collectives will be encouraged to engage in the full task of producing the magazine with the exception of the actual printing which will continue to be done in Boston for reasons of economy. A goal for the immediate future should be the production of at least

two issues per year outside Boston. To facilitate this task, chapters should be involved in a dialogue concerning their criticisms of the magazine in relation to their responsibilities to the magazine. In order to accommodate the problems inherent in production of the magazine by a chapter with no prior experience, a lead time of at least six months for these issues will be the general rule. It is understood that the magazine coo. dinator and the coordinating committee will provide aid and continuity by working as closely as possible with the one-issue collectives.

To further aid in the task of developing a dialogue within SESPA/SftP and to solicit input to SftP magazine each region should be urged to select a regional coordinator. The task of this coordinator would be to stimulate and facilitate communication. Specific tasks might include:

- (a) obtaining commitments from chapters to produce issues of the magazine;
- (b) promoting regional meetings to discuss and criticize each issue of the magazine;
- (c) coordinating the production and distribution of an internal document on political issues facing the organization.

Guidelines for future directions of the magazine as approved in April '74 by a Boston general meeting will remain in effect.

Therefore, be it resolved that the Northeast regional conference mandates the magazine coordinating committee to restructure the production and distribution of the magazine as proposed and ammended, and that these changes are subject to revision when a national organization develops.

Resolution No. 2: Important Questions to Be Resolved or Delineated Prior to the Drafting of a Principles of Unity for SftP.

- 1. HISTORY AND DESCRIPTION OF THE ORGANIZATION. Assessment of past activities. Whom do we currently relate to? Who are we?
- 2. WHAT, IF ANY, SHOULD OUR MAIN STRATEGY BE? Should we be an anti-imperialist, anti-capitalist, or socialist organization, or something else, and what do we mean by these terms? What are our attitudes toward electoral politics, counter-culture, violence? How should the possibility of a major depression affect the entire programmatic thrust of SftP?
- 3. ROLE OF THE WORKING CLASS AND OUR RE-LATION TO IT. Should we develop a class analysis and what would its role be in our work? How do we define "working class" and where do we place the various elements of our constituency? What is the principle of working class leadership, and what does it mean, if anything, for SftP?
- 4. NEUTRALITY OF SCIENCE. Pure science? Applied science? Under socialism? What is the science of struggle?
- 5. CHARACTER OF THE ORGANIZATION WE SEEK. Structure and membership. What does it mean to be a member? Mass organization or "cadre" organization? What are democratic procedures?

6. STYLE OF WORK. Do good styles of work flow out of political analysis? Dealing with personal differences. Guidelines for struggle and practice.

- 7. THE FUNCTIONS OF A PRINCIPLES OF UNITY. Are they to be used widely to explain ourselves to potential members, allies, and others, or more as an internal document? What do Principles of Unity mean for organizational activities and individuals?
- 8. WHAT ARE OUR PROGRAMMATIC OBJECTIVES? Activities directed at our immediate constituency. More broadly directed activities.
- 9. ALLIANCES AND COALITIONS. On what basis do we participate in coalitions, and how do we act within them?

Resolution No. 3: National Organization

The Northeast Regional Committee shall establish an interim national organizing committee with as much national representation as possible to arrange a national convention within one year. The committee should have its first meeting no later than Feb. 1, 1975.

Resolution No. 4: Internal Discussion Bulletin

The Northeast Regional Committee shall establish a committee to put out an Internal Discussion Bulletin that would provide communication among the membership, facilitate developing programs and provide for political education and struggle. The first issue should report the entire proceedings of the Northeast Regional Conference, including all documents presented, to everyone on the Science for the People mailing list. The bulletin committee should ultimately be under the direction of the National Organizing Committee and should be set up outside Boston. Financial support should be solicited for its continuation. Subsequent copies should be sent to those who give positive indication of continued interest. It should be distributed no less frequently than every two months.

Resolution No. 5: Science for People Magazine and a National Organization

The Magazine Coordinating Committee should prepare proposals for discussion prior to the national convention on how the magazine, *Science for the People*, should serve a national organization.

Resolution No. 6: Procedures for Developing Principles of Unity

- SESPA/Science for the People in the Northeast Region resolves to develop a statement of principles of unity within but not limited to the following procedure:
- (1) Each chapter and working project group is asked to prepare draft suggestions for principles of unity which make explicit the historical developments, current practice, and projected direction of that chapter or group and that sum up the theory learned from this history and practice.
- (2) These documents will form the basis for Internal Discussion Bulletins.

- (3) Regional conferences can then be organized to prepare draft principles from the various draft suggestions.
- (4) These drafts will be circulated among the chapters and project groups through an Internal Bulletin for criticism and further changes.
- (5) A national conference will be convened to finalize a national draft proposal of principles of unity.
- (6) The process of revising, criticising, and further developing these principles will continue at the project group, chapter, and conference level.

Resolution No. 7: In Support of A.T.A. and E.F.W.A.

Science for the People recognizes the importance of actively supporting the struggles of migrant agricultural workers in the Northeast United States, particularly in the organizing efforts of the Agriculture Workers Association (A.T.A.) and the Eastern Farmworkers Association (E.F.W.A.). These organizations are organizing all workers in the fields — in the shade tobacco fields in New England and the vegetable fields on Long Island.

In particular, A.T.A. is mobilizing around the forced migration of Puerto Ricans from the island which results from United States colonial control of Puerto Rico. We affirm that not only do all agricultural workers deserve a union that fairly represents them, but also that the exploitation which results in forced migration will end only with the complete independence of Puerto Rico.*

It must be understood also that E.F.W.A. members include poor black and white migrant laborers, as well as Puerto Ricans, who base their struggle on their desire to fight for adequate housing, health care and a living salary.

Both A.T.A. and E.F.W.A. recognize that all agricultural workers have the right to organize and form their own union.

We further recognize that our support must be shown in concrete ways, and that this support will help broaden the class and national base of Science for the People. It is essential that each chapter take up the agricultural worker question and the question of the independence of Puerto Rico - and that chapters go beyond merely discussing them. Among the things chapters can do are; make contacts with A.T.A. and E.F.W.A. support committees in our local areas to see what kinds of support they need (if one doesn't exist within a chapter's local area, then we will help in establishing a support committee with others in the community); chapters shall inform themselves of the background (history, politics and economics) behind the two questions (for this information contact the A.T.A. and E.F.W.A. support committees, the Puerto Rican Solidarity Day Committee, P.O. Box 125, Boston, MA and the Committee for Puerto Rico Decolonialization, Box 1240, Peter Stuyvesant Station, New York, NY 10009); relating educational work (such as showing the A.T.A. film or sponsoring guest speakers); magazine and pamphlet writing, and general discussion inside and outside Science for the People around the two questions; and financial assistance, especially when organizing drives are at a peak and when the workers are on strike.

[For more information see boxes on page 32.]

NOTES FROM THE THE OUTER CAPE

We went to the Northeast Regional Conference to discuss principles for unifying and expanding the base of SESPA/Science for the People. We came away with a lot of questions unanswered, but with at least one concrete advance. The three of us who travelled from the tip of Cape Cod constituted ourselves a formal chapter. We began by discussing our previous experience in SftP through the Boston Chapter and through project groups centered in Boston, and we tried to define our roles in the organization and the organization's role in building a

revolutionary movement, focusing on our desire to integrate our work with our political practice. Much of our initial discussion centered on our experience at the Northeast Regional and our reactions to the proposals offered by the "Unity Caucus."

A regional conference can be a unique opportunity to meet with people from other chapters and to resume or begin ongoing dialogues on theory and on work projects, but much of this potential was not realized this year. The

(continued on page 33)

What is EFWA?

The Eastern Farmworkers Association is a membership organization representing over 3000 agricultural workers in New York State. It includes migrant and seasonal farmworkers, working in the fields, potato packing sheds and nurseries of Long Island as well as the grape fields and apple orchards of western New York. Dedicated to serving no other interest save that of the farmworkers themselves, the Association acts as a vehicle for its members to attack the root causes of poverty and injustice. Farmworkers in New York earn an average of \$1600 a year and, due to the practice of "down time" (paying workers only while the machinery runs), migrants often make \$10-25 a week during the winter in the potato graders. The first strike by agricultural workers in New York State began in December, 1972 when two camps of migrant workers walked out of a potato packing shed in Riverhead with EFWA support. The exploitation of farmworkers extends beyond wages to inadequate health care, hazardous working conditions, police brutality, arbitrary exclusion from any relief benefits. Unemployed farmworkers provide cheap, unskilled labor to small, piecework factory operations marked by low wages and frequent layoffs. The Association is prepared to advance the interests of farmworkers and all poor people in each of these arenas.

EFWA operates a strong benefits program for its members, including a free health care facility in Riverhead. All organizers and professionals are unpaid, and the Association depends on the community for financial support and donations of materials and skills. Support groups in high schools, colleges and churches collect food, clothing and money for farmworkers. We are expanding our benefits to meet the needs created by the recession and the accompanying cutbacks of government services and charitable contributions. We cannot cut back — we either organize or starve.

The Eastern Farmworkers Association is in solidarity with ATA, UFW and all other farmworker organizations. As veterans of the farmworkers' struggle, we are realistic about the difficulties we face, yet convinced that we can win. Wherever we can offer assistance to groups of farmworkers and other unorganized workers, we are committed by our members to give as much support as we can.

E.F.W.A.

EFWA 58 Beaver Dam Road Bellport, N.Y. 11713 (516) 286-8004 EFWA 184 Clinton Street Binghamton, N.Y. 13905 (607) 724-9320

What is ATA?

The ATA (Agricultural Workers Association) will be fighting for labor legislation covering agricultural workers in the next months. If the main battle is won in Massachusetts it will spell the end to exclusion of agricultural workers from labor relations laws and allow union recognition elections to be held. ATA was organized August 5, 1973 in Hartford, Connecticut, by more than 100 farm workers. Today it has more than two thousand members. It is a multinational union based mainly in the Northeast, where there is a large number of migrants from Puerto Rico. It is the plight of these migrants in particular that has been the driving force behind ATA. The industrialization of Puerto Rico by United States corporations has ruined agriculture there, forcing thousands of farm workers out of work. With an unemployment rate of over 30% the Puerto Rican government benefits from the migration to the mainland (as residents of "a free associated state" Puerto Ricans have free access to the mainland, despite the fact that they have no representation in government or control over economic affairs). As part of the "unemployment export" policy, Puerto Rican law grants only the Puerto Rican government the power to bargain with growers on the mainland. As support in the fields (primarily in the shade tobacco regions of Massachusetts and Connecticut) and in the cities (mainly in the Puerto Rican communities) has grown for ATA, the Commonwealth government has recognized that unionization is inevitable. They are now negotiating with the Teamsters and Amalgamated Meat Cutters. ATA's support for independence for Puerto Rico collides head on with the "America-first" positions of these unions. Because labor relations acts exclude agricultural workers, growers can legally refuse to hold an election or recognize the union regardless of how many workers support it or how many have signed union cards. If the Massachusetts campaign is successful elections may be possible in the camps next summer.

David Palmer

Support Committee to ATA C/O St. Stephen's Church 413 Shawmut Avenue Boston, Mass. 02118 (617) 442-7190 or (617) 247-4171

Support Committee to ATA 175 Ninth Avenue New York, N.Y. 10011 (212) 741-5920 or (212) 673-4522

(continued from page 31)

late dissemination of comprehensive proposals by the Unity Caucus for restructuring SftP and at least a half dozen last minute responses to these proposals created tensions before and during the conference which have yet to be resolved. The process of arriving at concensus on principles and on program was short-circuited by this presentation, and the result was that many of us tended to lump together all proposals (of which there were many) connected with this group and to react increasingly with suspicion and distrust to anything they were identified with.

What began as a conference on unity was more than a confederation of caucuses. With the spectre of political infighting and factionalism hanging over us, the delegates muddled through work-shops and plenaries waiting for the BIG confrontation that never happened. At few times during the conference did we as a group allow the conflicts which so informed all of our discussions to surface and when they did, we quickly buried them. We as a chapter feel extremely uneasy about this and propose that all the participants of the conference seriously analyze what went on there and why. How did it happen that one group and its proposals so dominated our attention and why weren't similar proposals forthcoming from the other chapters and project groups prior to the conference?

Our first meetings following the conference have addressed themselves to these questions, to expanding our chapter, and to implementing the decision of the Regional to develop unity guidelines at the chapter and project group level over the next year(s). We think that the future of SESPA/SftP depends not only on what principles and what program we eventually adopt, but on how thoroughly the process of articulating these principles and this program involve the broadest base of the organization. We suggest, therefore, that this process begin immediately and that a person be designated in each chapter and group to be responsible for coordinating an analysis of past and present practice in that chapter or group with suggestions for theoretical principles which are summed up from this experience. Early drafts of these analyses should begin circulating through internal bulletins by February, with draft suggestions for national principles and for a national program following through the Spring.

Throughout the conference the question of the class base of our organization and of our ongoing organizing efforts kept coming up obliquely and rhetorically without being faced directly. We believe this is a question fundamental to our definition of principles and program, so we propose that all chapters and project groups begin to develop a concrete class analysis of themselves and their group. We find classical Marxist definitions of class to be inadequate to this task, so we suggest that all such designations be re-examined and defined according to their usage, and that we ground them firmly in terms of our own lives and our work. If class struggle is to be a basic

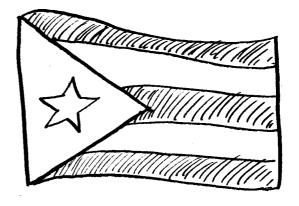
tool of our movement, then we must know what we mean by it and how we can use it. If our own "oppression" is to be a starting point for our political analysis, then we must be quite clear on how, in fact, we perceive ourselves to be "oppressed." A class analysis is a starting point of such an understanding. An ongoing dialogue within the organization is the means by which we can sharpen such an understanding into a useful and effective tool. We look forward to sharing the fruits of this dialogue over the coming years.

The Outer Cape Chapter

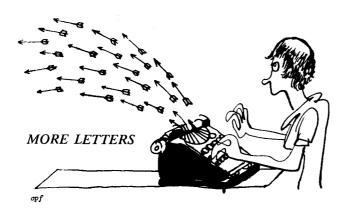
SPEECH

The following speech was made by Jim Moore of Boston Science for the People at a concert co-sponsored by SftP and the Puerto Rican Student Federation held at M.I.T. on October 15, 1974:

On behalf of the Puerto Rican Student Federation and Science for the People, I welcome you to this celebration of the struggle for independence of the Puerto Rican people. It is a struggle against the economic and political domination of the island by the United States which threatens the existence of the Puerto Rican nation. Technological abuses resulting from the accelerated development of heavy industry play an important role in the process of economic exploitation. The development of the superport, with increased oil refining capabilities, the proposed strip mining of copper from the central mountain range, industrial waste from pharmaceutical and other factories, the forced sterilization of 1/3 of the women of Puerto Rico, the use of 23% of the arable land as military bases, and the proposed forced migration of one million Puerto Ricans by 1980; all are part of the ploitation — a process over which the peoples of Puerto Rico have no control at present. The struggle for independence from colonial domination by the U.S. is the same struggle as here in the United States against an economic and political system concerned only with the need to make profit, and that benefits a select few. It is these struggles that we seek to build support for at the concert this evening.



January, 1975 33



Dear SESPA Sisters and Brothers:

We have just received information about an experiment in sterilization which has been carried out on women at the Hospital General San Juan de Dios in Guatamala. The idea is to see if the introduction of paraformaldehyde solution into the uterus will cause permanent inflammation of the fallopian tubes and ultimately permanent sterilization. The project is funded by the Population Council and the preliminary experimentation on rabbits and monkeys was done at the University of Colorado Medical School. The experimentation on humans is carried out in Guatamala. Part 1 of the experiment, now completed, consisted of injecting the paraformaldehyde solution into each cornual area of the human uterus prior to surgery in patients which were scheduled for hysterectomies. Part 2 and Part 3 of the experiment will consist of injections at various time intervals before surgery. These patients will not be hospitalized but will be followed in an outpatient clinic or at home. Payments for "transportation" will be given to encourage participation in the experiment. If the experiment looks promising a large study will be proposed.

The proposal acknowledges that the San Juan de Dios Hospital is for indigent patients, speaks of the "current population explosion" and makes no bones about the head of the Gynecological Service being trained at the Mayo Clinic and waiting for the results of his American Board examination. References are made to "qualified men." The proposal is accompanied by drawings that raise serious doubts about the level of competence of the people involved.

This experiment is only one of many such atrocities which are being performed on poor women with increasing frequency these days. As a control strategy for the seventies, population control agencies are allocating enormous sums for new, inexpensive methods which are aimed at "stabilizing" population growth for the poor. The Rockefeller-funded Population Council and the Agency for International Development's Pathfinder Fund are searching for the "quick fix" such as the new protaglandin "injectables," the once a month shots which still have dangerous side effects. They are

performing field trials for sterilizations which can be performed by lay people at minimal cost to the physician.

The funding of birth control over health care illustrates certain political priorities of the American financial elite and the State Department. For example, in the Congressional Foreign Affairs Hearings of February 1973, it was reported that in 1968, AID expended \$164 million on health programs and \$34 million on population programs. By 1971, spending for population/family planning had increased to \$97 million and health had declined to \$66 million.

In order to share our knowledge with sisters and brothers in Europe and Latin America, several women in Cambridge and Canada have begun to prepare a report on population control in Latin America for the International Bertrand Russell Tribunal to be held in Brussels, Belgium in January 1975. The Tribunal, focusing specifically on Latin America, will present reports and personal testimonies which illustrate daily oppression and acts of genocide in different countries in Latin America, and the network and systems which perpetuate this oppression. Regarding population control policy and implementation, we will demonstrate that the American ruling class has very specific "cost/benefit" motives in exercising significant control over the world's largest population control agencies. For further information contact Bonnie Mass, 92 Inman St., Cambridge, MA 02139.

Bonnie Mass



Dear Al,

I must thank you very much for continuing to send me *SftP* and other literature. They help a lot in raising and clarifying issues and in giving a feeling of hope and solidarity. We learn a lot from them.

But there is also something in *SftP* which makes me not fully satisfied — why I cannot clearly tell. It is as if there are too many slogans, too many calls, emotion pitched too high for too long (which is physiologically unhealthy); and as if there are not enough facts, or facts not lucidly presented, or facts rather loosely connected, jumbled up, not systematically arranged, or facts and concusions taken for granted, or bits of facts collected to reinforce a conclusion explicit from the very beginning. This, as I said, is only a vague feeling; but a feeling of something wanting, something not quite proper is there. I am sure if you keep your eyes and ears open and do not feel contempt for naive or vague articulations of discomfort, you will come to diagnose it by and by . . . But all this, of course is no more than just a friendly warning.

With greetings and good wishes K. R. Bhattacharya

Letter From a Prisoner to the People,

I am a federal prisoner presently confined at the U.S. Penitentiary in Marion, Illinois. On July 31, 1974, I am charged with attempting a mutiny within the confines of the C.A.R.E. program here. C.A.R.E. is a behavior modification unit where prisoners are experimented on with various techniques of breaking the wills of prisoners to resist in any fashion any repression waged against them by their keepers, thus limiting and attempting to stifle prison protest. Within C.A.R.E. men have been confined for as long as one, two, three, four, five, and more years at a time. Men are here from other countries, having never been in a prison population in the U.S. Other men are in fact state prisoners, and are kidnapped here from state prisons under what is termed "federal and state contract for leasing prisoners."

Since I've been confined here on and off since 1971 I've personally seen over two dozen men kept here till they are driven insane by the confinement. And others yet have even been driven to suicide or attempts at suicide . . . I've also seen countless petitions and civil suits filed against this prison to no avail to the majority of prisoners. I've also witnessed and have written letters to almost every congressperson and senator, to only receive formal replies that their offices are investigating the situation. The general atmosphere within the confines of C.A.R.E. is one of despondency, hopelessness, futility, deprivation, degradation, lonelieness and bitterness. It is so great that it is an atmosphere that one can even feel as soon as one enters C.A.R.E., be it free person or prisoner. Note that one of the demands of the prisoners holding hostages in Washington, D.C. was that they not be sent to the federal prison in either Springfield, Missouri, or Marion, Illinois — and they had not even ever been here!

On July 31, 1974, I admit that I tried to seize a guard hostage. The account official and coinciding with my own is that on that day I possessed a gun within my cage in C.A.R.E., and attempted to take a certain officer Harris hostage through the bars of my cage. That said officer evaded capture and I, left alone with no bargaining power, surrendered after reinforcements of officials were brought in armed with shields, guns, helmets, gas, and other items. In my cage was found a knife and a manifesto of demands but no gun. The gun was supposedly disassembled and flushed down my toilet before surrender. Two officials swear they saw the gun personally and in fact were threatened with it.

What did I seek by the above acts? And why did I resort to violence? First question first. I only sought justice or some semblance thereof for the men confined within C.A.R.E. I saw the situation as urgently in need of immediate relief, after just one and a half weeks ago watching a good friend of mine resort to breaking his own hand against the wall in frustration and halt eating, in hopes of only one thing; release both physically and mentally from C.A.R.E., to some prison population. This man has been in the "hole" and C.A.R.E., for three

straight years, and now the ultimate goal of behavior modification has been reached. I sought only to ask for members of congress, senators, newsmedia, judges and lawyers to visit with me one day — with me and other prisoners in C.A.R.E., and if after that one day they had seen for themselves, I would then release the hostage. Because in that one day I would show them specific examples of mental torture that would repulse any human mind. I would then ask them to consider what they had seen and submit a report from their knowledge and conscience on C.A.R.E. I sought release of men from C.A.R.E. through legal channels by illegal means that I deemed necessary, that I knew I would later be tried on in court. I did not seek personal release or escape or even amnesty.

Why did I have to resort to violence? All other means had been tried here to no avail. While other prisons were taking steps toward prison reform and abolishment this prison was busy taking steps that come from some science fiction book like 1984 or Clockwork Orange. The situation was immediate, as prisoners were dying physically and mentally daily. I personally have condemned behavior modification programs since 1972. I have written over 50 articles in newspapers across the country. I personally filed the first petitions brought against the START program in Springfield, Missouri. I began in 1972, and yet still not one court has officially ruled against START. It is said that START was dismantled by the Bureau of Prisons; but what is to stop them from re-opening it? And while that one is closed we see others opening monthly in almost every prison across the country.



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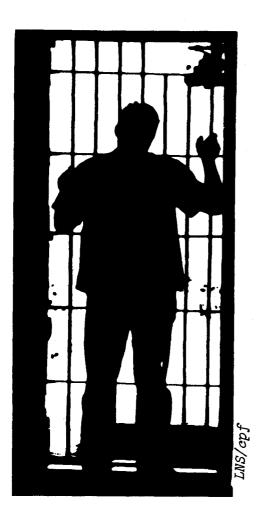
"Science and the Quality of Life" among other things

For further information contact:

Joe Schwartz 212-989-6304 SftP office 617-427-0642

I went before a prison disciplinary committee on 8/2/74 on the charges resulting from the above attempt. They charged me with possession of a deadly weapon, threatening another with bodily harm and conduct which disrupts or interferes with security or the orderly running of the prison. They have referred me to the FBI for prosecution. They also verbally accused me of being a "revolutionary martyr," saying that I was bearing the weight of everyone in C.A.R.E. and that I should do my own time or I would never get out of prison. How, may I ask, is one to do their own time when one can see people being destroyed physically and mentally around him daily? I would really have to be sub-human to just be able to do this. I can't ignore human suffering even of people I don't know. (Maybe if I could do this I would not be in C.A.R.E.) Can you do it?

Eddie Sanchez 18827175
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Leavenworth, Kansas
(Contact: Free Eddie
Sanchez Committee
P.O. Box 124
W. Somerville,
Massachusetts 02144)





Dear Mike:

I am happy to subscribe to Science for the People. Your back-page note about welcoming comments, criticism etc. does prompt me to express a few questions that I have, as a result of seeing just one issue.

I read a few other what you might call polemical journals, and I guess I should not be too surprised to see that this one is written in much the same style. That is, the articles are directed at already sympathizers — sort of reflecting an internal harangue, with all the bases for the group's beliefs more or less left out. There is a tendency for the reader to be expected to accept what is written, without complete documentation or a logical case made. Since science is presumably what it is all about, I guess I expected to see a little bit more rational approach taken... A magazine like SftP may have more credibility in the scientific community if it emulates — to a certain extent — a scientific journal in its approach to problems.

Which brings me to my work . . . I work on [deleted], though I am not involved directly with nuclear technology. My line is atmospheric pollution research — pretty much basic work related to fossil-fuel emissions impact on the environment. I have no particular moral qualms about my present work, but I am concerned about some other research in our group which is defense related. I think some of my colleagues do not fully examine the potential impact of some of the jobs they take on. It is often easy to "do your job" and not fully project what may come of your work. I hope that SESPA is making them more fully aware of the potentials of science, and also making them aware of the control that they can exert on research policy if they are willing perhaps to take a chance or two.

I will give the extra copies I have ordered to some of my colleagues (I don't think they'll be interested, but . . . hell!). . .

Best regards, [name withheld]

We're always concerned with how well we express our ideas, and so we're glad to receive your impressions. Many people who feel isolated in conservative work situations comment that our magazine does not completely serve their organizing needs. However, many of us think that arguing for "social responsibility" in science, while a start, isn't enough to transform science or revolutionize society. Misuse of science isn't an individual moral failing, it's a result of our economic and political system. Yet our attempts to go beyond either moral outrage or technical curiosity are called illogical and unscientific.

CRITIQUE OF ESTABLISHMENT SCIENCE AND SCIENTISTS

Toward an Anti-Imperialist Science V, 5; 9/73; 18
The Green Revolution — A Critique V, 6; 11/73; 41
Exposing Military Math VI, 1; 1/74; 28
Cable T.V. VI, 1; 1/74; 44
A New Battle in an Old War VI, 2; 3/74; 5
The Inherited Ideology of Science VI, 2; 3/74; 38
Violence Center: Psychotechnology for Repression VI, 3; 5/74; 17
SftP Activist Rejects National Academy VI, 4; 7/74; 25
Science: Political and Personal VI, 5; 9/74; 8
Women as Objects: Science and Sexual Politics VI, 5; 9/74; 8
XYY: Fact or Fiction? VI, 5; 9/74; 22
First Our Land, Now Our Health VI, 5; 9/74; 26
USE AND MISUSE OF SCIENCE

USE AND MISUSE OF SCIENCE AND TECHNOLOGY

1. Imperialism

Actions at Imperial Science Meeting in Mexico V, 5; 9/73; 10
Toward an Anti-Imperialist Science V, 5; 9/73; 18
Technical Aid to Indochina: A Report on the London Conference V, 5; 9/73; 24
Chile: A History of Imperialism and Struggle. Chronology 1847-1970 V, 6; 11/73; 10
Prelude to a Coup; an Analysis from Chile V, 6; 11/73; 14
Quick Coup or Slow Strangulation V, 6; 11/73; 14
Bibliography on Chile, Latin America, and Imperialism V, 6; 11/73; 23

Actions at the International Genetics Conference V, 6; 11/73; 38

The Green Revolution — a Critique V, 6; 11/73; 41
Under the Green Thumb — Imperialist Uses of Ecology VI, 1; 1/74; 12

Population Control (letters) VI, 1; 1/74; 16 Not Better Lives Just Fewer People VI, 1; 1/74; 18 Exposing Military Math VI, 1; 1/74; 28 The AMRC Papers: Excerpts VI, 1; 1/74; 30 Population Control (letter) VI, 3; 5/74; 5 Phillippines: The Next Vietnam VI, 4; 7/74; 5 Fascist Junta Strangles Chilean Health Care VI, 4; 7/74;

Evolution or Revolution: Lessons from Chile VI, 6;

2. Technology of Control

Not Better Lives Just Fewer People VI, 1; 1/74; 18
The Trial of Karl Armstrong VI, 1; 1/74; 25
Cable T.V. VI, 1; 1/74; 44
What Is the IQ Test?? VI, 2; 3/74; 17
Look What They've Done to My Score VI, 2; 3/74; 26
Genocide of the Mind VI, 3; 5/74; 8
Australian Account VI, 3; 5/74; 16
Violence Center: Psychotechnology for Repression VI, 3; 5/74; 17
Prisoners' Verdict VI, 3; 5/74; 22
Solitary Is an Old Story VI, 3; 5/74; 26
Now Kids VI, 3; 5/74; 29

3. Health

The Green Revolution — a Critique V, 6; 11/73; 41 Population Control (letter) VI, 3; 5/74; 5

The Green Revolution — a Critique V, 6; 11/73; 41 Population Control (letters) VI, 1; 1/74; 16

Not Better Lives Just Fewer People VI, 1; 1/74; 18 Population Control (letter) VI, 3; 5/74; 5

Genocide of the Mind VI, 3; 5/74; 8

Australian Account VI, 3; 5/74; 16

Violence Center: Psychotechnology for Repression VI, 3; 5/74; 17

Now Kids VI, 3; 5/74; 29

Emma Goldman: Women's Health Center VI, 4; 7/74; 8

Midwest Workers Fight for Health and Safety VI, 4; 7/74; 12

How to Look at Your Plant VI, 4; 7/74; 17 Complaints and Disorders (book review) VI, 4; 7/74; 20 Fascist Junta Strangles Chilean Health Care VI, 4; 7/74; 22

Women as Objects: Science and Sexual Politics VI, 5; 9/74: 8

INDEX TO SCIENCE FOR PEOPLE

The following listing is a compilation of the articles appearing in Science for the People Vol. V, no. 5 through Vol. VI, no. 6. The articles have been categorized under the following headings:

Critique of Establishment Science and Scientists Use and Misuse of Science and Technology

Imperialism, Technology of Control, Health, Ecology and Environment, To Justify Ideology

Scientists and Technical Workers

Analysis of Work and Working Conditions

Workers' Actions and Struggles

SESPA/SftP Actions and Activities

Actions at Scientific Meetings, Workplace Actions, Science for Vietnam, Other Actions and Activities, SESPA/SftP Politics

Alternative Science and Technology

Science Teaching

Racism, Sexism, and Liberation

Economic Analysis

Many articles are listed under more than one heading. Within headings articles appear in chronological order. Each entry gives the title, volume and number of magazine; date; and page. Regular features not included are News Notes, chapter reports, and letters.

For a complete index of the first four years' issues of Science for the People write to us at 9 Walden St., Jamaica Plain, Mass. 02130. Please suggest ways we might improve the listing.

Witches, Midwives, and Nurses (book review) VI, 5; 9/74; 12
Aiding Workers' Struggles VI, 5; 9/74; 16
What You Don't Know Can Harm You. What You Do Know Can Harm You (Health and Nutrition Column) VI, 5; 9/74; 21
XYY: Fact or Fiction? VI, 5; 9/74; 22
First Our Land, Now Our Health VI, 5; 9/74; 26
Evolution or Revolution: Lessons from Chile VI, 6; 11/74; 6
Women Hospital Workers VI, 6; 11/74; 13
1199 VI, 6; 11/74; 16

Health and Nutrition Column VI, 6; 11/74; 17

4. Ecology and Environment

Energy VI, 1; 1/74; 4 Under the Green Thumb — Imperialist Uses of Ecology VI, 1; 1/74; 12 The Power Belongs to the People (chapter report) VI, 4; 7/74; 32

5. To Justify Ideology

A New Battle in an Old War VI, 2; 3/74; 5 IQ and Class Structure VI, 2; 3/74; 10 Heritability: A Scientific Snow Job VI, 2; 3/74; 21 The Case for Zero Heritability VI, 2; 3/74; 23 A History of Eugenics in the Class Struggle VI, 2; 3/74; 32 Violence Center: Psychotechnology for Repression VI, 3; 5/74; 17 Solitary Is an Old Story VI, 3; 5/74; 26 Now Kids VI, 3; 5/74; 29 Complaints and Disorders (book review) VI, 4; 7/74; 20 Pushing Professionalism or Programming the Programmer VI, 4; 7/74; 26 Science: Political and Personal VI, 5; 9/74; 6 Women as Objects: Science and Sexual Politics VI, 5; 9/74; 8

SCIENCE AND TECHNICAL WORKERS

1. Analysis of Work and Working Conditions

Workers' Control: Its Structure under Allende V, 6; 11/73; 26
At the Side of the Workers V, 6; 11/73; 28
SftP Activist Rejects National Academy VI, 4; 7/74; 25
Pushing Professionalism or Programming the Programmer VI, 4; 7/74; 26
Aiding Workers' Struggles VI, 5; 9/74; 15
Evolution or Revolution: Lessons from Chile VI, 6; 11/74; 6
Women Hospital Workers VI, 6; 11/74; 13
1199 VI, 6; 11/74; 16
Engineers and Unions VI, 6; 11/74; 23
Computer Workers as Professionals VI, 6; 11/74; 28

2. Workers' Actions and Struggles

Workers' Control: Its Structure under Allende V, 6; 11/73; 26
At the Side of the Workers V, 6; 11/73; 28
One Battlefront VI, 2; 3/74; 40
Prisoners' Verdict VI, 3; 5/74; 22
Now Kids VI, 3; 5/74; 29
Aiding Workers' Struggles VI, 5; 9/74; 16
Technicians and 1199 VI, 5; 9/74; 18
Women Hospital Workers VI, 6; 11/74; 13
1199 VI, 6; 11/74; 16
Engineers and Unions VI; 6; 11/74; 23
Computer Workers as Professionals VI, 6; 11/74; 28

SESPA/SftP ACTIONS AND ACTIVITIES

1. Actions at Scientific Meetings

Actions at Imperial Science Meeting in Mexico V, 5; 9/73; 10

Actions at International Genetics Conference V, 6; 11/73; 38

Report on the San Francisco [AAA\$] Meeting VI, 3;

Actions at NSTA Convention VI, 4; 7/74; 34

2. Workplace Actions

Aiding Workers' Struggles VI, 5; 9/74; 16

3. Science for Vietnam

Technical Aid to Indochina: a Report on the London Conference V, 5; 9/73; 24

4. Other Actions and Activities

The Trial of Karl Armstrong VI, 1; 1/74; 25 Exposing Military Math VI, 1; 1/74; 28 Midwest Workers Fight for Health and Safety VI, 4; 7/74: 12

Computers for People Organized in Chicago VI, 4; 7/74;

The Power Belongs to the People VI, 4; 7/74; 32 Natural Birth of a Women's Group VI, 5; 9/74; 15 Genetic Engineering Group in Boston VI, 5; 9/74; 24 China: Science Walks on Two Legs VI, 6; 11/74; 18

5. SESPA/Science for the People Politics

Forge Better Words . . . Science for the People V, 5;

9/73; 2 Report — West Coast Regional SESPA Conference V, 6; 11/73; 42

Northeast Regional Conference VI, 1; 1/74; 36 Letters: Response to MCC Questionnaire VI, 1; 1/74; 41 Midwest Regional Conference Report VI, 3; 5/74; 36 Future Directions for *Science for the People* VI, 4; 7/74

Reflections on the May Issue VI, 6; 11/74; 36 Membership Survey VI, 6; 11/74; 37

ALTERNATIVE SCIENCE AND TECHNOLOGY

Energy VI, 1; 1/74; 4

Cable T.V. VI, 1; 1/74; 44

This Magazine Ends Where America Began VI, 3; 5/74;

Emma Goldman: Women's Health Center VI, 4; 7/74; 8 Women as Objects: Science and Sexual Politics VI, 5; 9/74: 8

Evolution or Revolution: Lessons from Chile VI, 6;

China: Science Walks on Two Legs VI, 6; 11/74; 18

SCIENCE TEACHING

Bibliography on Chile, Latin America, and Imperialism V, 6; 173; 23

Science Teachers' Report VI, 2; 3/74; 46 This Magazine Ends Where America Began VI, 3; 5/74; 40

Science Teaching (column) VI, 4; 7/74; 35 Inside Prison Walls (science teaching column) VI, 5;

China: Science Walks on Two Legs VI, 6; 11/74; 18

ECONOMIC ANALYSIS

Quick Coup or Slow Strangulation V, 6; 11/73; 20 Energy VI, 1; 1/74; 4 IQ and Class Structure VI, 2; 3/74; 10 What Is the IQ Test? VI, 2; 3/74; 17

A History of Eugenics in the Class Struggle VI, 2; 3/74;

Pushing Professionalism or Programming the Programmer VI, 4; 7/74; 26

Women Hospital Workers VI, 6; 11/74; 13 Engineers and Unions VI, 6; 11/74; 13

Engineers and Unions VI, 6; 11/74; 13 Engineers and Unions VI, 6; 11/74; 23 Computer Workers as Professionals VI, 6; 11/74; 28

RACISM, SEXISM, AND LIBERATION

Population Control (letters) VI, 1; 1/74; 16 Not Better Lives Just Fewer People VI, 1; 1/74; 18 A New Battle in an Old War VI, 2; 3/74; 5 Look What They've Done to My Score VI, 2; 3/74; 26 One Battlefront VI, 2; 3/74; 40 Population Control (letter) VI. 3: 5/74: 5 Prisoners' Verdict VI, 3; 5/74; 22 Science Teaching (column) VI, 4; 7/74; 35 First Our Land Now Our Health VI, 5; 9/74; 26

2. Sexism

Emma Goldman: Women's Health Center VI, 4; 7/74; 8 Complaints and Disorders (book review) VI, 4; 7/74; 20 Women as Objects: Science and Sexual Politics VI, 5; 9/74; 8

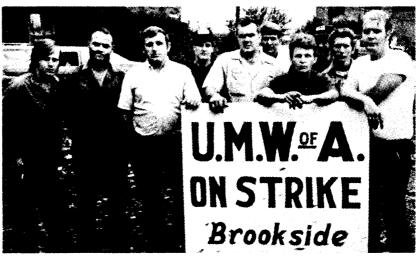
Witches, Midwives and Nurses (book review) VI, 5; 9/74;

Women Hospital Workers VI, 6; 11/74; 13

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PERMIT NO. 52696 ST Z MASS G

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:

Name:

Address:

Telephone:

Occupation: (if student or unemployed please indicate) If you are working, do you work in industry [], government [], university [], other

- Local SESPA chapter or other group in which I'm
- 3. I am enclosing money according to the following scheme: (a) regular membership-\$12, (b) indigent membership-less than \$12, (c) affluent or sacrifice membership-more than \$12, (d) completely impovcrished-nothing, (e) I have already paid.
- 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)
- 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.
- I would be willing to provide technical assistance to community, movement, or Third World groups in the areas of:

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