

SCIENCE FOR THE PEOPLE

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page 6, *Appalachian People's History Book*
pages 10 & 32, *Science*
page 11, *Indochina Chronicle*
pages 17, 18, 28, 29, & 30, *Ciencia Nueva*
page 23, *Pedagogy of the Oppressed*
page 24, *School or Scandal*
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FORMATION OF A COLLECTIVE ON RUSSIA.

Members of SESPA or CPP, especially those who have been to Russia, are asked to join in a collective for a critical analysis of Russia. Contact:

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EDITORIAL PRACTICE

Each issue of *Science for the People* is prepared by a collective, assembled from volunteers by a committee made up of the collectives of the past calendar year. A collective carries out all editorial, production, and distribution functions for one issue. The following is a distillation of the actual practice of the past collectives. **Due dates:** Articles received by the first week of an odd-numbered month can generally be considered for the magazine to be issued on the 15th of the next month. **Form:** One of the ways you can help is to submit double-spaced typewritten manuscripts with ample margins. If you can send six copies, that helps even more. One of the few founding principles of SESPA is that articles must be signed (a pseudonym is acceptable). **Criteria for acceptance:** SESPA Newsletter, predecessor to *Science for the People*, was pledged to print everything submitted. It is no longer feasible to continue this policy, although the practice thus far has been to print all articles descriptive of SESPA/*Science for the People* activities. 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 an eight-week period. Help is always appreciated and provides an opportunity for the helper to learn, and for the collective to get to know a prospective member. There are presently plans to move the magazine production to other cities. This will increase the opportunity for participation. For legal purposes *Science for the People* has become incorporated.

ABOUT THIS ISSUE

At the end of the summer, when the rest of the Movement seemed to be in the doldrums, the *Science for the People* November collective was in full swing. United by our lack of vacations, we have pieced together reports and analyses from the disparate areas of SESPA activities.

Attempts at doing people's science—a theme big enough to fill an entire issue—is explored in a challenge to SESPA members to take part in occupational health organizing, and in a description of a rat control project carried out by students at a community college in Philadelphia. The articles approach the same issue from different perspectives, the one how people with technical skills can recognize and ally with a particular constituency, the other how a community aware of its problems can acquire and use relevant technical skills.

Parallel themes emerge in two articles about Latin America. "Questions from Argentina" is an analysis of the alternatives facing progressive scientific workers in the Third World. A review of *Pedagogy of the Oppressed* by Paulo Freire describes how education can be a process of community consciousness raising.

This summer our comrades in Europe attacked the myth of the neutrality of science by demanding that prominent American physicists, members of the Jason Division of the Institute for Defense Analysis, discuss their warmaking activities when they appeared at scientific meetings. We include a report of these actions as a part of our continuing struggle against the complicity of scientists in the maintenance of the imperial war machine.

"Tyranny of Structurelessness," reprinted from *Second Wave*, analyzes problems in the women's movement. A majority of the editorial collective felt that it was also of particular relevance to organizational problems facing SESPA.

Our preparations of this issue took place alongside discussions of SESPA structure and function which are referred to in the introduction to "Tyranny. . ." and in the Boston chapter report. The nature of the magazine should

be part of that discussion. At times the editorial collective felt isolated from the SESPA membership and from the public at large which reads the magazine. *Science for the People* is an organ of communication as well as a literary exercise, educational pamphlet, self-advertisement and organizing tool. That means we want to hear more about what people are actually doing and thinking, especially from the membership outside the Boston area. Contributing an article is not an ego-trip for self-styled heavies. If you want to read material that speaks to your particular concerns, you may have to write it yourself.

LETTER

Dear SESPA.

I am reluctantly re-subscribing to your magazine. I want to support you because you are raising terribly important issues and doing the research in domains long kept under cover. However, no article seems to pass without an overdose of pre-digested ideological pablum. The magazine reads like a poor imitation of the Peking Review.

Struggle, Criticize, Transform,
Jason Wolfe,
Wesleyan University

[Dear J.W.: SFP editorial collectives change every issue, imposing a diversity of opinion just short of paralyzing. We actively solicit and welcome all contributions, but it's not surprising that they fall within a broad spectrum of opinion around SFP's basic critique. After all, establishment science has establishment media, and besides,

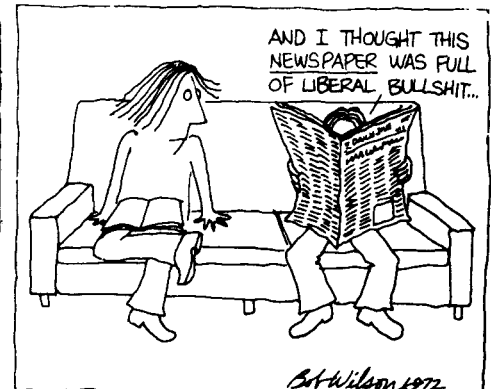
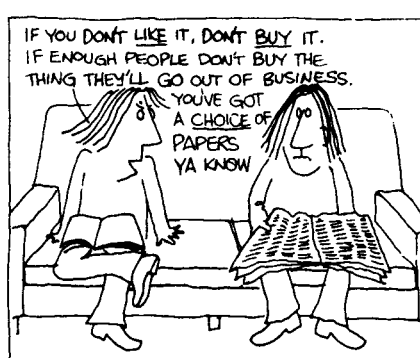
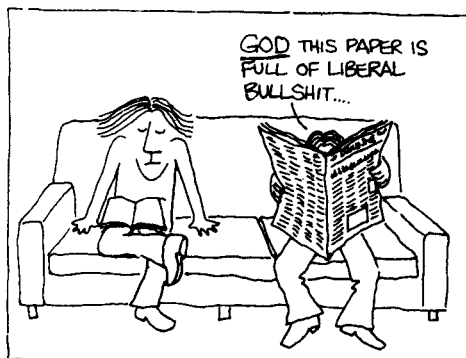
One man's pablum's another man's steak

Chaqu'un a son gout

Give your editorial collective a break

What's wrong with the Peking Review?

Ed. Collective]



OCCUPATIONAL HEALTH: time for us to get to work

Occupational health and job safety issues have yet to become "hot" topics with the left like community health clinics, air pollution, or poisons in food, but lately there have been stirrings of interest. The topic has been discussed a bit in *Science for the People* but I think that it's important that SESPA members do more about it. This article is an attempt to recruit both organizers and technical help. The first part of the article will describe some developments which have led to an upswing in interest. There will be a description of some of the ongoing projects. Finally there will be a discussion of the significance of this type of activity for SESPA.

The potential for occupational health as a focus of political action is seen in the Black Lung Movement in Appalachia. Some 300,000 miners suffer from Coal Workers Pneumoconiosis, a disease which U.S. public health and industry authorities claimed was non-existent up until a few years ago, even though the disease had been well studied in England and elsewhere. For years there had been agitation for relief, but the successful push started in 1968, when the Black Lung Association was formed. In that year, three doctors named Rasmussen, Buff and Wells traveled through West Virginia, lecturing to miners groups, explaining the connection between coal dust and lung failure. Once the miners became conscious that disability and early death were not inevitable risks of mining, there was an upswing in rank-and-file action leading to a 23-day wildcat strike in February 1969 which completely stopped coal mining in West Virginia. This new pressure, combined with interest in the problem outside the mining region, led to state and federal legislation regarding disability benefits and safety standards. The fight still continues, as the Social Security Administration has set up medical criteria for receiving benefits which exclude the majority of the applicants for such funds. What is less familiar is the effect of the Black Lung Association on the United Mine Workers Union (UMW). The BLA is organized into local chapters which provide an arena for the development of local leadership previously excluded by the union and is a focus of insurgent efforts. Arnold Miller, currently challenging Tony Boyle for the presidency of the UMW, is president of the BLA. Joseph Yablonski, murdered for his union reform campaign, was identified with mine safety issues as well.

Another spur to interest is the Occupational Health and Safety Act of 1970 (Williams-Steiger Act, usually re-



fresco by Diego Rivera

ferred to as OSHA). The passage of legislation has set off a round of criteria documents (official statements about scientific issues), fights over the setting of standards, public hearings, and discussion and controversy within the circle of professional industrial health workers. Legally, and in part politically, the situation is very similar to that regarding air pollution legislation. The law could be effective if it were aggressively pushed, but inadequate staffing, lax enforcement, small fines for violations and the like have prompted criticism and investigation of the Department of Labor and the National Institute of Occupational Safety and Health (NIOSH). The prospect of a political contest over technical issues has led unionists to seek aid from progressive medical and scientific workers. The Oil, Chemical and Atomic Workers Union (OCAW, 1126 16th St., N.W., Washington, 20036) has been very important in this effort. OCAW has published a good deal of material about job hazards, including transcripts of a series of 8 all-day conferences in which union members discussed the particular conditions in their shops. So-called "public-interest" and citizens groups such as the Nader organization's Health Research Group have been enlisted.

The increase in general interest has led to organizing activity on the left. This in turn has defined situations in which SESPA members, with some technical knowledge and contact with medical and scientific workers, can perform quite effectively. I will describe a number of pro-

jects and groups, mainly on the East Coast, to give an idea of what people are doing.

The Scientist's Committee on Occupational Health (SCOH) may be familiar to readers of *Science for the People* since it was described in the May 1972 issue (p. 10). Their key activity was to teach an 11-week course in occupational health to rank-and-file members of the OCAW and other unions in the New York-New Jersey area. They later taught other shorter courses. The longer course included a serious and extended discussion of human physiology as well as discussions of various hazards and monitoring techniques. One successful idea was to provide workers with monitoring equipment. After an instructional session on the operation of noise meters, the workers took them into their shops. The next week's session of the course was taken up with excited reports of their findings and of the reactions of management and other workers to the introduction of the equipment. SCOH reports that the sessions devoted to explaining how the body functions were not academic expert trips—as they had feared—but instead were lively discussions among equals. This points the way to the possibility of teaching science for the people. *Occupational Hazards*, a text written by SCOH, is currently looking for a publisher, but is available in limited quantities from OCAW.

Urban Planning Aid Occupational Health Group (UPA, 639 Massachusetts Ave., Cambridge, 02139) has an extensive range of locally oriented activities. The group conducts training courses in health and safety, some directly union organized and some as part of the program of the University of Massachusetts Institute for Labor Affairs. (Many state universities have programs of this type which can provide funds for organizing projects in return for teaching). The courses are designed to lead unionists to diagnose safety problems in their shops, and to continue contact with the project as the problems are cleaned up. Most of the group's effort is directed toward maintaining contact with particular situations, providing technical advice, library research, arranging medical examinations and

plant inspections, and maintaining liason between the workers and the certified "experts." Details about a lot of skirmishes are found in *Survival Kit*, a monthly newsletter. UPA is a community organizing resource group whose effort in occupational health grows out of an interest in community health programs. An approach now being tried in conjunction with neighborhood clinics like the Somerville Women's Health Clinic is to take job histories along with medical histories. This has already produced some results.

Occupational Health has been selected as a major national focus for Medical Committee for Human Rights (MCHR) activities. The style they have adopted is to set up weekend conferences bringing together unionists, health workers, and specialists in industrial hygiene. There is follow-up, mainly in the form of providing technical back-up to union activities. MCHR does some local work and is the major active group in the midwest, particularly in Chicago. However, it views its primary purpose as supplying information and literature, coordinating activities, and acting as a focus for national agitation.

Most people interested in analysis of the politics and economics of America's health care system have read the Health-PAC bulletin. Lately, Health-PAC (17 Murray St., New York 10007) has turned its attention to occupational health, writing mainly about the power structure and such organizations as the American Conference of Governmental Industrial Hygienists and other standards setting bodies. They have also put out case histories of the setting of particular standards (called Threshold Limit Values) such as that for cotton dust, the cause of byssinosis. Two issues of the Bulletin this fall will contain information about occupational health.

The Connecticut Occupational Health Project (44 Linwood Pl., New Haven, 06511) has tried out some new approaches to local organizing. They have distributed questionnaires through high schools, trying to get information about parent's jobs and stir up interest in job safety both in students (who will soon be working) and in working parents. They have also been developing some ideas for





using Neighborhood Youth Corps workers in canvassing workplaces. In addition, the group is in contact with a number of local unions as well as the central labor councils in the area. They are affiliated with a Nader regional PIRG and with MCHR.

Other groups are getting started or are in action in Stonybrook, Philadelphia (Health Information Project), Pittsburgh (Oakland Co-op), Atlanta and Detroit.

In urging people to direct their efforts in this direction, I would like to make an evaluation of the prospects for radicals in general and for SESPA in particular. A lot of my ideas come from discussions at a conference of activists held in June, as well as from my own experiences.

The strongest political argument for working on the issue is very simple—it is important for the left to make contacts with industrial workers. Occupational health organizing is one of the few clear avenues for doing this, one which calls for a real alliance. Also, any issue which has demonstrated the potential for setting people into motion in a progressive direction should be pushed. Further, occupational health is of use to progressives in the union leadership and to activists in the rank-and-file. The legal ram-

ifications of the health laws give workers who are in a weak position another weapon to better their working conditions. This is precisely the sector of the work force we should ally with. Finally, and perhaps most important, this is a humanitarian issue which should not be ignored.

An assessment of present organizing activities is that they have established a good potential for further work. Whenever sufficient energy is generated by a group of activists, they have at least gotten to first base by establishing contacts with working people and union organizations. There have not been large gains in radical consciousness of industrial workers at large, but I think that it is unrealistic to expect such change without a corresponding change in objective conditions (events such as a change in the state of the economy, change in composition of the work force, a cultural crisis). The actions follow the general pattern of more familiar community organizing activities, in this case involving the interaction of union leadership, rank-and-file activists and radicals who usually come from outside the class or cultural background of the constituency they hope to serve. The training courses, plant visits, discussions with union committees and support for local struggles together represent an interesting way for us to approach workplace organizing around worker control demands, one which does not require us to work permanently in the shop. I found that it is also an exciting change from feeling trapped in the student-professional sector. In discussion and evaluation of their activities, organizers tend to focus on the problems that come up—dealing with unions in general, limits to energy in the workplace, relating to other issues such as moveouts, firings, racism and so forth. For instance, one project (name withheld) reports that one of its contacts is at a major defense contractor, and that this raises a series of practical problems such as plant security, while of course bringing up the political question of whether defense work should be done at all. The big question is how to work out the best ways of putting forward a general radical outlook in the face of business union attitudes, an outlook often determined by “crass” politics, not class politics. The consensus is that the most important direction for further activity is contact at the rank-and-file, plant and local union level.

Why is this issue particularly relevant to SESPA? For one thing, organizers feel the need for technical backup, something they are not getting enough of. This is a bit of a paradox. The worst hazards in the shop—either threat of accident or toxic hazards—are usually well known to workers. The first, and ultimately most important push for change could arise spontaneously on the shop floor. But action often awaits the raising of concern about the problem, starting with explanations to workers of concepts about toxic hazards, occupational disease, monitoring procedures, legal issues and so forth. An example of this is the role of doctors in the Black Lung Movement. Teaching and advising on this level is an exciting experience in non-alienated science. There is also a need for materials for training interested technical workers, for course material aimed at introducing college and high school students to the issue, and for written descriptions of specific hazards

or analysis of particular industrial situations. Library and laboratory research in the area is also important.

The field should not be left to straight professionals who, when not in the pay of industry aim at doing what they can for workers only at minimum cost and without challenging management prerogatives in the shop. An advantage of a service project in this area, over other technical assistance projects we've heard about is that the constituency is well-defined, self-conscious, and already organized. There is even the eventual possibility of a union supported institute to provide technical services and do research. Further, while this is a health-related issue, other scientific disciplines such as chemistry (monitoring and analysis), engineering (ventilation, noise control), physics (study of respiratory mechanics, instrumentation) and several others fit in. It's not just a matter of giving away free medical care. Alliance across status lines within an industry is also a reasonable prospect. For instance, in the chemical industry, research chemists, technicians and production workers face many of the same hazards.

There are political issues and problems inherent in the expert function that is part of my proposal. These are often discussed in *Science for the People* and I won't consider them here except to say that they must be struggled with in practice. I will consider the practical problems with being in a technical bag. It's tough to fit into a project if you're only able to make a part-time commitment as many SESPA people would have to do. Considerable thought has to be given to liason with organizers in the field, dividing work into clearly defined tasks and avoiding diffusion of responsibility. The second problem, endemic in SESPA, is the lack of applied knowledge. Given a social problem with a major technical component, we usually have to look outside for information. We know the "correct" answer—that technology is not the problem and that a political solution has to be reached—but most of us would have trouble collecting the concrete technical information to prove that point. This condition is related in part to our alienation from our work and distaste for the expert role. Also, many of us have avoided the applied disciplines, which have been captured and misused, by taking the path of "pure" science, usually physics or molecular biology. I don't believe that every radical scientific worker should seek out a service role, but I do think that it is important for some of us to take on the task of exploring models of this type.

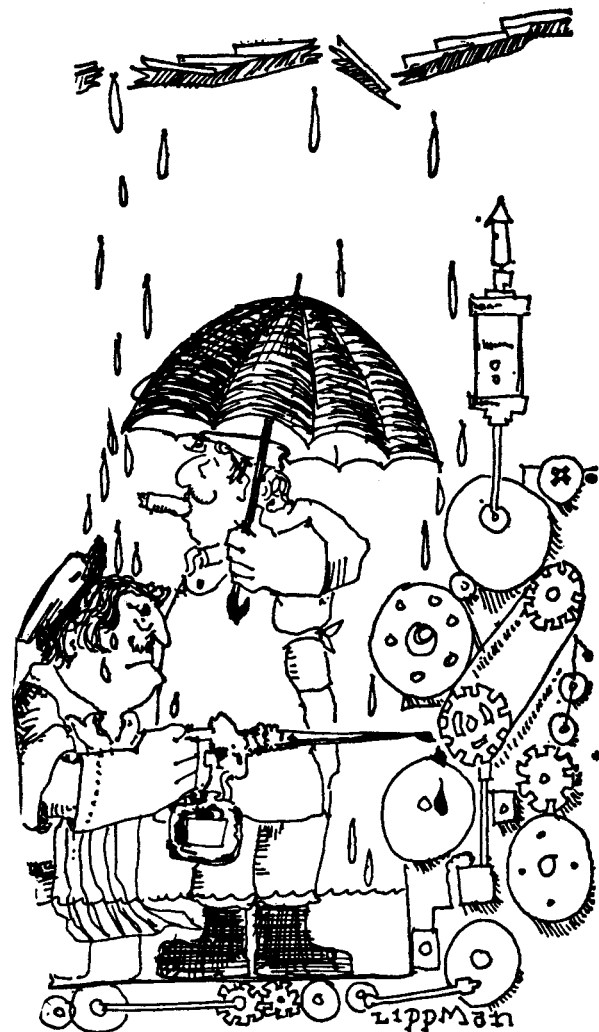
My feeling, after some experience, is that the practical difficulties of fitting into projects can be overcome with some initiative, imagination and effort. The two steps for individuals who want to get into action are technical self-education (not very difficult at the start) and getting into contact with organizers who are already at work. The best way to learn is by doing, and the best people to learn from are the workers in the shop. Useful outlines for self-education in industrial hygiene and toxicology—not just reading lists—are in preparation. MCHR also can supply some technical material. For information about activity going on in your area, contact one of the three names listed below.

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WAR PROFESSORS

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James BJORKEN
Richard BLACKENBECLER
Luis BRANSCOMB
David CALDWELL
Kenneth CASE
Joseph CHAMBERLAIN
Nicholas CHRISTOFILOS
Roger DASHEN
Sidney DRELL
Freeman DYSON
Val FITCH
Henry FOLEY
Edward FRIEMAN

Richard GARWIN
Murray GELL-MANN (Nobel Price)
Donald GLASER (Nobel Price)
Marvin GOLDBERGER
Robert GOMER
Joseph KELLER
Henry KENDALL
George KISTIAKOWSKI
Norman KROLL
Robert LEHEVIER
Harold LEWIS
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Allen PETERSON
Malvin RUDERMAN
Edwin SALPETER
Matthew SANDS
Charles TOWNES (Nobel Price)
Samuel TRIEMAN
Kenneth WATSON
Steven WEINBERG
John WHEELER
Eugene WIGNER (Nobel Price)
S. Courtenay WRIGHT
Herbert YORK
Frederick ZACHARIASEN
George ZWEIG

These Physicists have participated directly in the American war of genocide in Indochina : they were members, as of 1970, of the Jason Division, the technical advisory organ of the Pentagon.

Fields of research of Jason : chemical and bacteriological warfare, military applications of lasers, counter-insurgency techniques, electronic battlefield...

Right now, american pellet bombs are killing thousands of vietnamese peasants ; the american bombing attacks on the dikes and hydraulic works of North Vietnam are threatening the lives of millions of people.

On June 14th, 1972, Gell-Mann was not permitted to give a talk on quarks in the College de France, Paris ; instead, a group of scientific workers threw him out of the College.

PHYSICISTS ! DO NOT LET THE WAR PROFESSORS SPEAK OF «PURE» PHYSICS UNTIL THEY HAVE DENOUNCED THEIR PARTICIPATION IN JASON, AND CONDEMNED PUBLICLY THE AMERICAN WAR CRIMES !

Collectif Intersyndical Universitaire d'Orsay «Vietnam - Laos - Cambodge»

EUROPEAN CONFRONTATION SPOILS JASON'S SUMMER VACATION

The following documents, sent to us by our brothers and sisters in Europe, depict a series of actions this summer centering on the contributions of noted U.S. physicists to the work of the Jason Division, the Institute for Defense Analysis' prime Pentagon advisory committee. At institutes and summer schools in France and Italy, members of the Jason Division have been subjected by their peers to intense questioning about their warmaking activities. First on June 13 at the College de France, Murray Gell-Mann was ushered from the lecture halls after refusing to answer questions concerning his involvement with the Indochina war. Slightly more than a month later, on July 27, the Cargese Summer School in Theoretical Physics was closed prematurely when Sidney Drell likewise refused to discuss his warmaking activities with Jason. Then in August at the Varenna Summer School in the History of Physics, participants prepared and signed a statement condemning scientists who have willingly involved themselves in the waging of the Indochina war and called for the immediate end to the bombing. And in September as this magazine goes to press, European physicists are demanding that there be discussion of the role of science in the military-industrial complex when they convene in Trieste for a meeting on the "Development of the Physical Conception of Nature" where Eugene Wigner and John Wheeler of Jason will be in attendance.

The European physicists have made clear that they do not subscribe to the traditional dichotomy between physics and politics—a basic tenet of U.S. science. In view of the vast quantity of scientific resources being directed by the U.S. government to the suppression of the liberation struggle in Indochina, statements of scientific neutrality are seen as meaningless. Thus the European students and scientists are convinced that they can no longer separate their attitudes on such political issues from their professional activities, and are demanding that such issues be honestly and openly faced within the scientific community. Though their actions this summer have centered on the direct involvement of U.S. scientists in the Jason Division, the documents here indicate that such actions are merely a starting point for a broader analysis of the relationship of scientists to political forces. Those few who willingly contribute their energies to the destruction of the Indochinese people can be easily isolated and denounced, but those who unwillingly or unwittingly contribute—the vast majority of scientists—are beset with more difficult problems. How can scientists become a socially productive and truly progressive force?

In a sense, the actions in Europe this summer are

reminiscent of the events of March 4, 1969—the research stoppage at MIT (Massachusetts Institute of Technology)—when students and faculty here in the U.S. stopped to consider the relationship of science to the Vietnam war, and to discuss their role in the military-university-industrial complex. March 4 was the starting point for a much broader understanding of the social function of science in the capitalist world. From these beginnings, too, has come a better understanding of the source of frustration and alienation of the scientific and technical work force; and consequently, the demand for a radical change in society. As the March 4 Buttons correctly advertised:

"MARCH 4 IS A MOVEMENT NOT A DAY".

Of course the movement has some way to go. We still do not understand how the system produces people like Murray Gell-Mann, of unquestioned intellect, people who speak of the beauty and wonder of science, of the need for a humane rationality, and who with great zest lend their talents to the most uncivilized acts of genocidal barbarism. Are such acts merely the result of a moral, intellectual, and human perversity? Or do their roots lie within the ideology and practice of science in our present social and economic system? These and many other questions must be answered as we stand with our European colleagues in denunciation of the Indochina war and those who perpetrate it.

As a footnote to the following documents it is of interest to note that the Varenna Statement on Vietnam was also circulated in the U.S. among participants of the Batavia high-energy physics conference this September. It received only 21 signatures of a possible 700–800, and most of these signatures were of European scientists. What explains the contrast between the attitude of the U.S. physicists and that of their European counterparts? Perhaps the elite of the Jason Division have such influence that all others fear to criticize them, even indirectly. Perhaps most of these physicists themselves serve on government and war advisory committees. Perhaps these physicists simply hide under an intellectual cloak of political innocence. Whatever the answer may be, it can only mean more work and dedication on the part of those scientific and technical people opposed to the Indochina war. We can all take heart in the initiatives of the New York Regional Anti-War Faculty and Student Group that protested the war research of the Jason Division by occupying the Columbia physics building last April (*see Science for the People, vol. IV, no. 5, Sept., 1972*), and in the initiatives this summer of our sisters and brothers across the ocean.

A.W.

THE COLLEGE DE FRANCE,
THE JASON DIVISION,
AND THE WAR IN INDOCHINA



Since the beginning of the current escalation of the war against North Viet Nam, hundreds of pellet bombs have struck the town of Nam Dinh, killing more than one thousand people. On June 13, 1972, far from Nam Dinh, far from Viet Nam, Mr. Murray Gell-Mann, Nobel Prize-winning physicist, who is one of the most competent and well-known men in his fields, was invited to the College de France to give two lectures on quarks (a revolutionary hypothesis on the structure of elementary particles of which Gell-Mann himself is a co-author). For the first time in the history of the prestigious College de France, a lecturer was not permitted to give his talk; instead, a group of scientific workers from Paris and the suburban research center at Orsay, ushered Professor Gell-Mann to the street. Why? Mr. Gell-Mann has been a member of the Jason Division of the Institute for Defense Analysis (I.D.A.), the Pentagon's technical advisory organ.

As an integral part of the attempt to suppress the resistance of the Indochina people, American policy-makers have encouraged the extensive development of scientific methods well-adapted to serve a policy aimed at destroying human beings and nature. In 1966, Robert McNamara called together, under the umbrella of Jason, 47 of the most eminent American scientists. His intent was to enlist their expertise in the development and implementation of new destruction techniques (cf. The Pentagon Papers, Bantam Extra Edition, p. 483): thus was born the technological war. The true nature of the contribution of these scientists has long remained unknown.

In 1970, American anti-war militants seized a collection of secret documents (including lists of members of work committees, minutes of certain sessions of I.D.A. committees) which they released to the public (cf. "The Student Mobilizer", April, 1970, "New York Review of Books", November 19, 1970). These documents leave no doubt as to the active and creative participation of the Jason Division scientists in the technological war. In a Jason report, recommending the construction of an electronic barrier in Viet Nam, we read:

The key requirements would be (all numbers are approximate because of assumptions which had to be made regarding degradation of system components in field use, and regarding the magnitude of infiltration): twenty million Gravel mines per month; possibly twenty-five million button bomblets per month; ten thousand SADEYE-BLU-26B clusters (pellet bombs) per month... These quantities depend on an average number of strikes consistent with the assumption of 7000 troops/month and 180 tons/day of supplies on the infiltration routes. (Pentagon Papers, Gravel Edition, vol.4, p.122)

We need, instead, systems analysis with heart, and scientists, along with many other kinds of people, can help to develop it so that we can recommend to society a set of incentives for the humanely rational use of technology. (from Physics Today, May, 1971)

Because he participated in producing this report, Professor Gell-Mann was expelled from the College de France by a group of scientific workers.

Gell-Mann is not an isolated case, he is not a scientist gone astray. All 47 men, attracted by the Pentagon to work on Jason technical projects for mass murder, are prestigious members of the Academic Community. Mindful of the freedom and happiness of mankind, Gell-Mann devotes weekdays to his theoretical research which has no possible military applications. Indeed, he is distressed by the progressive deterioration of the environment from industrial pollutants (cf. "How scientists can really help", in "Physics Today", May, 1971). But during university vacations¹, he turns his attention to a new scientific problem: given peoples who resist American imperialism and its puppet regimes, how can one most effectively wound, mutilate, or kill, the maximum number of civilians without employing, for the moment, strategic or tactical nuclear weapons. It is to such madness that "rational" science leads when devoid of human values.

More than three-fourths of Jason's members are physicists, among whom five have received the Nobel Prize². One I.D.A. session was organized on the possible military application of lasers; the cream of America's physicists assembled on the California coast for several weeks to consider this question³. Today, in Indochina, laser-guided



Can we find out what effect increasing police density or ear cutting or other negatives have on villager attitudes? (from Jason documents)

bombs are striking targets as precise as the caves which serve as air-raid shelters for the civilian population. One member of Jason, Charles Townes, has been particularly noteworthy for his failure to disavow laser-guidance systems. Indeed, we do not know that he has not encouraged such development—Mr. Townes received the Nobel Prize for the invention of lasers.

To help the Pentagon, Jason's members do not confine themselves to their fields of expertise, but frequently stray across disciplinary boundaries. One Jason session was devoted to the creation of a social science division, advantageous because "Jason prestige...makes SS (social scientists) available to necessary tasks" and gives "the government...the use of their time."⁴ One "social science" problem: counter-insurgency in Thailand. The minutes of the session read:

Because of their views of responsibilities and because of their lack of commitment to others, villagers cannot be expected to organize effectively for their own protection. One technique, perhaps, for handling this problem would be to recruit villagers (possibly from the same class who now join the insurgents) into an armed, uniformed, paid militia, perhaps responsible to the local police. This force would provide aggressive young village males not only a way of dissipating excess energy, but a possible route for promotion and success.⁵

In this same session, the eminent physicist, Murray Gell-Mann, ventured into social science territory to ask "Can we find out what effect increasing police density or ear cutting or other negatives have on villager attitudes?"⁶

On June 13, 1972, some hundred scientific workers confronted Gell-Mann with this evidence of his complicity with the war machine. Gell-Mann was asked:

You have shown a concern for the environment by participating in Earth Day last year. What do you think of the 26 million bomb craters in Viet Nam?

Are you ready to condemn the American bombing attacks on the dikes and hydraulic works of North Viet Nam?

To these and all other questions, Gell-Mann responded: "I am not free to answer."

The use of advanced technology in the war, introduced and sanctioned by Jason scientists—new doctors Strange-love—is denounced in the United States itself by groups of scientists opposed to the imperialist war waged in the name of all the American people. These groups include: NARMIC (National Action Research on the Military-Industrial Complex), which has researched and produced a slide show documenting the electronic air war in Indochina; and "Science for Viet Nam", whose members include nonscientists, as well as zoologists, doctors, biologists and physicists who attempt to help the scientists of Viet Nam deal with war related problems. But it is not only the Vietnamese and the Americans who are concerned, as certain professors at the College de France would have us believe: each of us at our place of work can demand an accounting of those who have contributed to American war crimes and denounce their complicity.

Collectif Intersyndical Universitaire d'Orsay
"Vietnam-Laos-Cambodge"

FOOTNOTES

- 1 "The primary group activity is an annual summer study in which the Jason members come together for seven weeks of intensive study of significant technical problems related to the national interest."—current I.D.A. recruiting booklet.
- 2 A list of the Jason members as of 1970 can be found in "The University-Military-Police Complex": a directory and related documents, published by NACLA, Berkeley, California, 1970.
- 3 cf. M. Bazin: "Science, Scientists, and the Third World", in "Forum on Physics and Society", American Physical Society, Jan. 31, 1972 (also in "Science for the People", vol. IV no.3, May, 1972).
- 4 Remarks of M. Gell-Mann at the Jason "Thailand Study Group" in "The Student Mobilizer", April, 1970.
- 5 Jason: "Thailand Study Group" minutes.
- 6 "The Student Mobilizer" loc. cit.

Dear Friends,

This is a text signed by the quasi-totality of the participants in the Varenna Summer School, among which "distinguished" scientists, such as H.B.G. Casimir (president of the European Phys. Soc.), L. Rosenfeld (editor of Nucl. Phys.), G. Toraldo di Francia (president of the Italian Phys. Soc.), C. Weiner (director of the Centre for History of Physics).

It has been sent for publication to general scientific journals (such as Nature, Science, etc.). It takes place in a general anti-Jason campaign in Europe, started by the expulsion of M. Gell-Mann off the College de France and continued in Roma, Erice, Cargese (Summer Schools) and which still has developments.

More about it in a few days. Ask for details if you need them

Greetings and Solidarity!

J.-M. Levy-Leblond

Paris August 31, 1972

Translation from Le Monde, June 15, 1972

The Nobel Prizewinner in Theoretical Physics and Indochina

Professor Murray Gell-Mann, who was awarded the Nobel Prize in Physics in 1969, teaches at the California Institute of Technology. On Tuesday June 13 at 5 pm, he arrived at the College de France to speak about a field he knew well: quarks or elementary particles. But Professor Gell-Mann is also closely involved in counter-revolutionary techniques in Asia and it was this that forced him to leave the lecture hall at 5:19 pm.

Large numbers of members of the "Collectif Inter-syndical Universitaire d'Orsay Vietnam-Laos-Cambodge" were there. Despite the protests of the French professor who wanted to introduce his American colleague, a leaflet was read to the audience. It related how Gell-Mann had been a member of the Jason Division of the Institute for Defence Analysis from 1961 to 1970. The operations of this institute are concerned with Vietnam; defoliation techniques, the perfection of laser-guided bombs, everything for the electronic war and techniques for a better control of the Asian people. Experts from the Pentagon and the CIA collaborate in this research. (Le Monde of 11 July 1970 described techniques from the Jason Division that have been applied in Thailand).

On Tuesday, the audience reminded Gell-Mann of this practical work, which is far removed from theoretical physics. Many questions were put to him: how could he be interested in the preservation of the American countryside from pollution by highways, without worrying about some 20 million bomb craters that pit the Vietnamese earth? What did he think about the application of scientific research to the destruction of dikes? Why did he advocate the creation of sociological sections in the Jason Division? He was saved from nothing. Tense and smiling

Varenna Summer School in the History of Physics:

STATEMENT ON VIETNAM

In recent weeks diplomats, journalists and responsible visitors to North-Vietnam have reported the bombing of dikes by the United States Air Force. Officials of the U.S. Government have acknowledged that several dikes have in fact been damaged by bombing. They have also admitted that the destruction of the system of dikes would inevitably cause the death of thousands of persons during the monsoon season.

The last tactics in the American war has been made possible by a systematic application of *scientific* discoveries for military purposes. This has included the use of laser-bombs, anti-personnel shrapnel and remote-control fire mechanisms.

These new technologies have been fostered by *scientists* working in such projects as the Jason programs of the Institute for Defense Analysis. These programs have enlisted more than thirty top-rank physicists, including five Nobel Prize winners.

The operational use of scientific knowledge in the Indochina war is of particular concern to us as participants in the 1972 Varenna Summer School on the History of Physics. The applications of science in modern society have been at the centre of our debates and we cannot overlook the professional participation of scientists in the waging of a war against the people of Vietnam.

Our discussions have convinced us that it is no longer possible to separate our attitude on these issues from our professional activities. This is why we express, *as scientists* and *in the publications and institutions of science*, our condemnation of those who have willingly involved themselves in the waging of this war; we ask that these issues should be honestly faced within the scientific community, wherever it meets.

We also call for the immediate ending of the bombing of Vietnam and the total withdrawal of American forces in order to safeguard the independence and freedom of the peoples of Vietnam, Laos and Cambodia.

(original italics—editorial collective)

Signatures of the Varenna Statement or statements of support should be sent to:

*Sergio Zucca
Istituto Regionale di Storia della Resistenza
P. Verdi 1
Trieste, Italy*

at the same time, Gell-Mann pointed out that he had not come to speak about Indochina. However, for nearly all of the people present, the Vietnamese war was of far greater importance than a learned discourse. If there would not be a debate on this subject, then neither would there be, at least in that lecture theatre, an expose on quarks. The Nobel prizewinner collected his notes, walked out and finally spoke to a very much reduced audience in another room.

ACTIONS AT THE 1972 CARGESE SUMMER SCHOOL

The 1972 session of the Cargese (Corsica) Summer School in Theoretical Physics ended one week ahead of schedule, as the administration of the school decided to close it upon occurrence of the following events. A group of students asked one of the invited lecturers to speak on his participation in the activities of the United States Defense Department's JASON DIVISION, of which he was a member as of 1970. The group objected to his lecturing in physics before having a discussion on the Vietnam Conflict and on the association of physicists to war related activities. This action was meant to express the growing apprehension and outrage felt by many physicists about the fact that some members of the physics community give advice on technological warfare to their governments. In this case, it is the American government, which is engaged in the massive destruction of whole areas and the genocide of the civilian population in Vietnam.

The events which lead to the closure of the school had to do with the presence, as an invited lecturer, of Professor Sidney Drell, from Stanford University. It is known that Prof. Drell was in 1970 a member of the Jason Division (of the Institute of Defense Analysis), a committee composed of eminent scientists. It is also known that Jason has done studies, and given advice to the Pentagon, on aspects of technological warfare.

In the week preceeding Prof. Drell's first lecture, a declaration, the complete text of which appears below, was signed by 20 students (out of 30 present at the time) who thereby "...protest against the presence of American scientists in the Jason Division, and more generally state their vigorous opposition to the action of scientists lending their contribution to military activities of massive destruction."

Before the start of Prof. Drell's first lecture, on July 24, a few students took the initiative to write on the blackboards the following sentence, which had appeared, in a form applying to Jason members in general, on a poster issued by the Collectif Intersyndical Universitaire d'Orsay "Vietnam-Laos-Cambodge": "We shall not let the war professor S. Drell speak of "pure" physics until he has denounced his participation in Jason, and condemned publicly the American war crimes." Another student then got up to read the above mentioned declaration, and Prof. Drell left the lecture hall. The director of the Summer School agreed with Prof. Drell to find it intolerable that the regular physics lecture should be proceeded by the discussion demanded by the students, arguing that this was a violation of academic freedom and he declared the school closed.



Statement by a group of students of the 1972 Cargese summer school in theoretical physics:

We, as a group representing a majority of the students attending this school, protest against the authoritarian way in which it was terminated. We also state our belief that there can be no artificial separation between a scientist's work in "pure" science and his contribution to activities related to the military, and we therefore deeply regret that no discussion of this most important issue develops between students as a group and the teaching members of the School.

At the present time, the United States armed forces in Indochina are conducting a war where the most refined techniques are extensively used resulting in the massive destruction of whole areas and in the genocide of the civilian population. The technological war, to be fought with a reduced personnel, is based on devices such as: defoliants, night-vision systems, acoustical detectors, emitters-receivers linked with computers located in Thailand, systems triggering bombing raids automatically, laser-guided bombs, etc...

Studies about the introduction of these techniques into actual warfare and about related strategic problems, have been conducted by the Pentagon with the help of the Jason Division, an advisory committee whose members are scientists considered as the most eminent in the academic community.

The under-signed participants to the 1972 Cargese Summer School of Theoretical Physics, protest against the presence of American scientists in the Jason Division; and more generally state their vigorous opposition to the action of scientists lending their contribution to military activities of massive destruction.

CARGESE July, 1972

TRIESTE

From the 18th to the 25th of September there will be a meeting at ICTP (Trieste) on "Development of the Physical Conception of Nature", sponsored by, among other organizations, NATO (see NATO 1972 list of NATO Advanced Study Institutes Program, N.44/72). The participants, selected by the traditional mysteries from the elite of the scientific community, will discuss the growth of physics in the last half century: the focus will be on the "world view" of the physicists, and on the way it has developed.

The distinguished physicists speaking will include Wheeler and Wigner, whose "world view" includes a view of the Vietnam war that permits them to serve on the Jason committee. This is a body that has, among other activities, advised on the development of plastic fragmentation bombs (rendering x-rays useless—an essentially anti-personnel device, aimed at producing cripples) and the laser guided bombs that are being used to destroy the North Vietnamese dikes, which if successful will kill two million civilians.

Many scientists find it no longer possible to distinguish their "purely scientific" activities from their institutional role; whether or not this distinction ever did mean anything, it is breaking down. In Paris, Gell-Mann (another Jason member) was to speak on a "purely scientific" subject but scientists who no longer held to the distinction attempted to question him on Vietnam—originally, with no intention of disruption; the feeling was that this was a matter on which the scientific community had the right to be informed about the activities of one of its principal representatives, which is one of the roles of Nobel prizewinners. Those who hold to the existence of the distinction may feel that the prevention of his announced talk, on his refusal to discuss Vietnam, was wrong in their terms.

However, concerning the Trieste meeting, there can be no such question: any physicist who does not include Vietnam in the world, when he is actively affecting that war by such institutions as Jason, is proclaiming a "world view" that has dropped all pretension to honesty. And the requirement of honesty is fundamental, on *any* view to science.

It is therefore essential that these matters should be discussed at the Trieste meeting: any attempt to prevent such discussion (and in particular the questioning of those who have taken a position on these issues by participating in Jason) is itself not so much a disruption as a rendering meaningless of the entire proceedings.

We thus demand that the meeting discuss the "neutrality" of science and the role of institutional science in the military-industrial complex of the big powers, taking advantage of the presence of the expert witnesses who have direct experience of this involvement.

If you agree with the above letter, please sign it and send it to:

Bruno Vitale
Istituto di Fisica Teorica
Mostra d'Oltremare pad. 19
80125 Napoli – Italy

The signatures thus collected will be eventually sent to the Director of the Symposium and the Director of ICTP.

WINNING HEARTS & MINDS War Poems by Vietnam Veterans

Winning Hearts and Minds is a collection of poetry about the war and Vietnam, written and edited by Vietnam veterans, compiled and published by Vietnam Veterans Against the War. The book is one of the most powerful and emotionally compelling statements against the war that I have read. The three editor-poets introduce the book by saying:

It is primarily urgency, rather than guilt, that moves these poets to tell others that the war has not ended simply because there are fewer U.S. casualties.

The outrage has been too much, and it still goes on. This poetry is an attempt to grapple with a nightmare, a national madness. It is poetry written out of fire and under fire.

The war still goes on. We were, and are, a part of the evil. And the fire still burns.

This preface is not meant to be an exercise in literary criticism, but I want to sum up my gut responses to the poems in the hope that you'll look for the book. Most of the poems are short, like the three reprinted here. They describe all aspects of Vietnam, each a sort of distillation of intense experiences or emotions. Reading through the collection, over 100 poems, gives you a series of flashes, of images of the human impact of Vietnam that are hard to find anywhere else. The collective impact is much greater than that of any individual poem, because most are only a facet of a larger picture.

F.M.

A Bummer

We were going single file
Through his rice paddies
And the farmer
Started hitting the lead track
With a rake
He wouldn't stop
The TC went to talk to him
And the farmer
Tried to hit him too
So the tracks went sideways
Side by side
Through the guy's fields
Instead of single file
Hard On, Proud Mary
Bummer, Wallace, Rosemary's Baby
The Rutgers Road Runner
And
Go Get Em—Done Got Em
Went side by side
Through the fields
 If you have a farm in Vietnam
And a house in hell
Sell the farm
And go home

—Michael Casey

track: tracked vehicle
TC: track commander

What Kind Of War?

Ask what kind of war it is
where you can be pinned down
all day in a muddy rice paddy
while your buddies are being shot
and a close-support Phantom jet
who has been napalming the enemy
wraps itself around a tree and explodes
and you cheer inside?

—Larry Rottman

... In That Age When We Were Young

The old ones were respected in that age when we were young
And the unreal cliches that spewed from their mouths
Somehow had a ring of truth in them,
So we thought.

"Good things come to those who wait."
That was a favorite of theirs, wasn't it?
But they had waited all their lives
And the only good thing that ever came to them was a
Quick and quiet death.

But other-younger cats began to talk a different talk
And Charlie got uptight when brother Leroi said,
"The magic words are: Up against the wall Motherfucker,
this is a stick up!"

And then I was afraid to come to your house
Funny isn't it?
You used to joke about coming to my place
About how the red-necks were gonna lynch you.

And now I don't walk in the black ghettos
No joke.

So I left the city
And I've managed to resist the epidemic
I haven't bought a gun
Too many memories I guess.

No, I'm afraid to hold a gun now
What if I were to run amuck here in suburbia
And rush into the street screaming
"Airborne all the way!"
 And shoot the milkman.

The Army finished me with guns
But started you.
I wish you luck
And hope somehow both of us can end up winners.

—Charles M. Purcell

Winning Hearts and Minds, edited by Larry Rottman, Jan Barry and Basil T. Paquet, costs \$1.95, and is available in bookstores or from First Casualty Press, P.O. Box 518, Coventry, Connecticut 06238. Proceeds from the sale of the book go to Medical Aid for Indochina. To repeat the words of the editors: "Poetry is a human gift. Use it."

QUESTIONS FROM ARGENTINA: ¿Que Pasa En Los Estados Unidos?

For some time we have exchanged *Science for the People* with *Ciencia Nueva*, a magazine published in Buenos Aires, Argentina. *Ciencia Nueva's* objective is to bring scientific problems in front of Argentine and other Latin American people. In this way science and technology are confronted with the economic and political decisions related to the development of Latin American countries. Whereas some of these problems emerge—under a particular political perspective—in the pages of magazines like *Science*, *Nature*, *The New Scientist*, nothing comparable exists in Latin America. Instead, a crude censorship and a very direct political repression make it difficult and dangerous even to discuss these problems at all.

Recently, *Ciencia Nueva* has sent around a questionnaire for Argentines and other Latin Americans and for us to answer, which is printed below.

1. Why do you think organizations of scientists engaged in the production of knowledge are necessary? How was your organization started?
2. Researchers are mainly wage earners. Why do you think that most of these organizations take a professional attitude rather than a labor union one?
3. This process of organizing, among the researchers and those who teach at the university, has recently accelerated. Why? Does a division exist between these groups in our country?
4. Do you think scientists' organizations should participate in social and economic decision making, particularly in relation to their scientific activity?
5. Scientific workers face many problems. Which ones are the most serious and important?
6. What do you think about the functions and activities of CONACYT?¹
7. The university is a place of creation and generation of knowledge. What is your position in connection to the problems of the development of the universities?
8. Have private universities carried out these functions? Are the new plans for development and foundation of universities correct?
9. What do you think about the plans for large multidisciplinary research facilities like the Castelar project?²
10. Do you deem desirable that researchers' associations (both existing and future ones) federate? Why? If yes, which form should the federation of the scientific associations take?

The problems created by science and technology are not confined within any national boundary. The effort to extricate them from their political and economic ties and to use them as a liberating force to serve the needs of the people, results in an international brotherhood, what some would call an international conspiracy. Argentine scientists are asking themselves, as we are, to what kind of science people's efforts and the country's resources should be devoted. Although their political principles may be similar to those of many scientists in this country, the form their questions take is in some cases different. These differences are interesting, because they are related to the different degree of development of science and technology as a productive force and to the different social and political context in which scientists operate. The brief comments below will try to sketch and analyze some major differences.

Several questions asked by *Ciencia Nueva* deal with

the form of scientists' organizations. A trend to transform traditional academic associations like ACS, APS, etc. into professional guilds like the AMA is visible in the United States. Many are opposed to this trend for various reasons. Sometimes the choice between a professional and a union type of organization presents itself as a choice of the lesser evil. In the U.S. context this choice involves two aspects: (1) the form of the struggle that scientists are prepared for, for instance, shall we go on strike? (2) the content of our demands, how we can go beyond the concern for our economic welfare and security? It appears controversial to many scientists and technicians in this country in industry and in the university which type of organization may be more effective at a political level. However, the examples of the women's and the student movements suggest that some entirely new forms of organization are necessary, although it is also evident they have shortcomings.

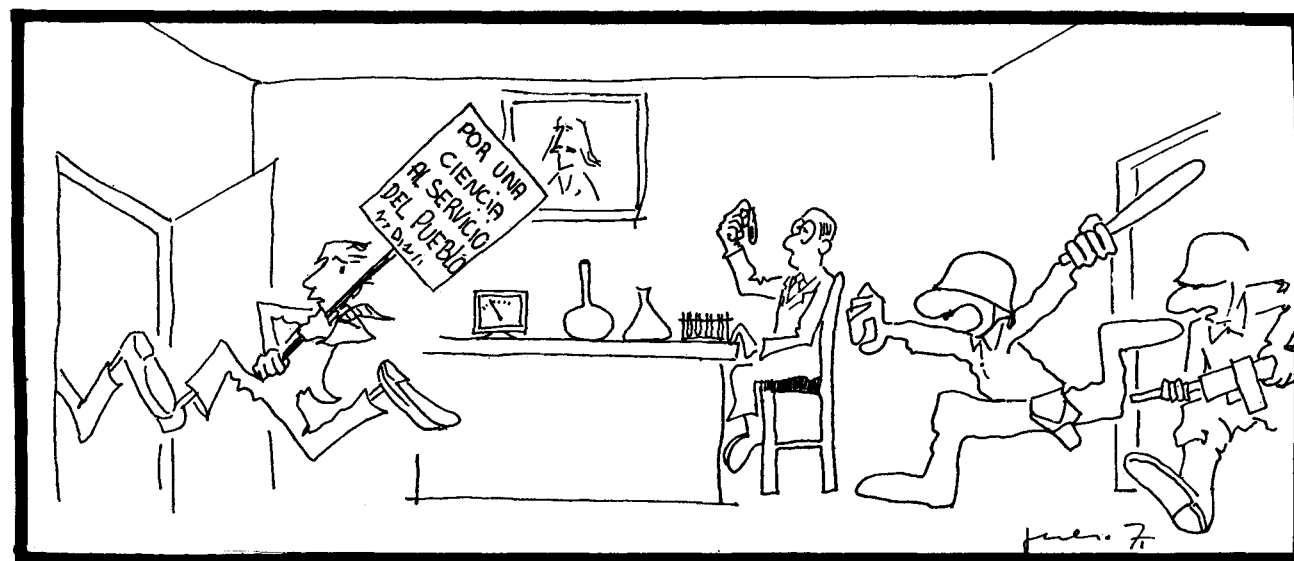
In Argentina trade unions are involved in a years long struggle which is not confined to economic demands, but is part of a general political confrontation. The reasons for this militant unionism are both economic and political. On one hand, average salaries are below the subsistence level; on the other the company owner is often a foreign corporation or the state itself. The Argentine university also belongs to the state. Therefore, one may expect a scientists' union in the university and in industry not only to be more militant, but also to take a position over the political control of science and technology. However, some experiments in this sense in Italy and France have been criticized as inadequate to spread the limited privileges of the scientists (their relative freedom in their laboratories and offices) to the other workers, even within the same union, so that the goal of a real and general workers control over all kinds of production, including science, is not attained anywhere. The struggle to achieve this goal in Argentina (and in part of capitalist Europe) is a direct confrontation with the state.

It is probably to evade this direct confrontation—and the students' rebellion—that private universities and research institutions are blooming lately in Buenos Aires, the city

where one third of all the Argentine people live. These private institutions are funded mainly with foreign money, through the local branch of the World Bank and U.S. foundations. They are administered according to the U.S. model, rather than as a special section of the public administration. They are planned as the school for the middle managers, professionals and technicians. They hope to become the only school for the local middle class, should the deterioration of the state university, due to political repression, continue for the worse. As for the Argentinian elite, there is traditionally a college in Europe or, more recently, in the U.S.

Another aspect which appears in *Ciencia Nueva's* questions is some trend to plan the scientific and technological development of Argentina (CONACYT)¹ and to create the infrastructure for such development in the form of large interlocked research institutions (project Castelar²). Such things (NSF, R&D, the large research centers) have existed for many years in this country. They seem to be plunging into a deepening crisis, since they cannot solve the contradictions between social needs and capitalist profits. Very few politically conscious people here want more of *that* science and technology: in the third world *that* science and technology are the only existent model that they can build upon, short of socialist revolution. Moreover, there is no convincing model for what science and technology should be in a technically advanced socialist society.

The productive forces in the U.S. and elsewhere—altogether in ¼ of the world—have reached such a development that science and technology are an indispensable part of the economy. Although many scientists and technicians don't see themselves as workers—neither in the university nor in industry—their privileges with respect to other workers are limited. In the rest of the world these privileges are relatively larger and the relevance of their work to the economy of their countries is much less clear. Therefore the alienation of the Argentinian scientist is deeper: not only she or he does not control the use of her/his work, but this work is actually of very little use for the society as it is. In



Ciencia Nueva explains its position in the editorial of its first issue (April 1970):

. . . Two-thirds of humanity live in desperate conditions with regard to food, shelter and education. The other third is forced to consume indiscriminately in order to keep the economy of their country going. Only a tiny minority has access to decisions concerning the goals of science, economy and culture. In that sense, the great majority of Argentinians and Latin-Americans belong to that part of the world that has no possibilities—yet—to determine which are its own interests and find solutions to its own problems.

Humanity has today the technological and scientific resources to end its most pressing inequalities. However, the great concentration of political and economic power in the hands of small privileged groups has as a result that these resources are used only for the benefit of the elites of power. Thus large sectors suffer today more misery and deprivation than at any other time in history. This divorce between the consequences of science and the interests of workers makes deeper the breach between the scientific worker and the rest of society. . .

. . . We need an organization of scientific research which stresses the fulfillment of the needs of social groups that are today exploited and oppressed. It will certainly produce a body of results in mathematics, physics, chemistry, biology and medicine rather different from the kind of science we know today. However this will only be possible with the full participation of these oppressed groups.

Science is not the only place, and by no means the most important one, where the struggle for the fulfillment of our needs takes place. But it is another place where our presence—critical towards the past evolution, constructive with regard to the roads we want opened—is necessary if we want to start making decisions about our own future.

Ciencia Nueva wants to be a forum for discussion, a place where we can resort to mature criticism to judge and decide what kind of science we need. We also want to report on current scientific activity in Argentina, Latin-America and the world. However we do not want to be another popular science magazine, i.e., to present a passive spectator with the results of research done elsewhere and inaccessible to discussion, as if science was to be shown finished to the non-expert.

Our pages belong to all those who wish to engage in this discussion.

For information write:

Ciencia Nueva
Diagonal Roques, Rena 825 P. 4 Of 43
Buenos Aires, Argentina

these conditions, a plan of economic development which provides a place for the application of scientific research, is a primary necessity. In its absence, the third world scientist is actually working for the U.S. in conditions of special economic and cultural dependence. Economic, because her/his work is likely to be useful in the U.S., the largest technological empire in the world, however her/his salary is not as high there as it is here. Cultural, because the specific language, the research context and the institutions of modern science, as they exist in the U.S., represent an unattainable goal and a powerful attraction.

Finally, we can see where the struggle of scientists and other workers in different societies and cultures may converge. A real program of scientific and economic change—a program of science for all the people—is also needed in this country. But it is possible only in a socialist society, where the contradictions between the goals and the uses of science and technology, between the immediate and long-range interests of different social groups, can be solved without oppression and exploitation.

Some of *Ciencia Nueva's* questions may appear naive, misplaced or not at all understandable to U.S. scientific workers. We hope our comments may help understanding them better. In any case we think it useful for *Ciencia Nueva* and for us, to confront ideas and questions which come from the two ends of this continent. We invite all our readers to think and comment on them the way they prefer and to send us their answers. We plan to compare these answers to those that *Ciencia Nueva* is gathering from Argentinian and other Latin American fellow scientists. This plan may be a first step in our preparation for the scientific establishment's imperial meeting in Ciudad de Mexico (AAA\$, Mexico City, June 1973).

A.B.C. M.S. P.S.

1. CONACYT (National Council of Science and Technology). It's a bureaucratic institution created in 1968 by the military dictatorship, to make a study of the present situation of science and technology in the country and of its potential for further development. So far, the study has just collected a lot of data which isn't being used to formulate any scientific and technological policy in accordance to the national reality.

2. Castelar project is a plan to create a huge research institution in the Buenos Aires area. It was born in the CONICET (National Scientific and Technological Research Council of Argentina). The planning is being done in a climate of secrecy, without allowing scientists to participate in it. There are foreign loans involved (from the International Bank of Development). It is a very ambitious project which doesn't take into account the priorities of the Argentine reality.



COLLEEN MEIER 1946-1972

Colleen Meier, a founder of Science for the People, part of the Helen Keller Collective, veteran of many actions for peace and against the misuse of science, physiologist and graduate student took her life on August 3rd at the age of 26. The following text was part of a memorial service organized by friends in her department.

Colleen Meier was a beautiful, sensitive, generous and gifted person. Those of us who knew her well miss her love, her warmth and her sense of humor.

The word tragedy is much overused, yet Colleen's death is a tragedy. It was her way out of a set of oppressive and irresolvable contradictions. All of us have been brought up to seek success and to dread failure. However, what is success worth if its pursuit involves dehumanizing pressures and humiliations? What is the success worth if its achievement means merely that one has earned the right to oppress others?

Colleen was well aware of this problem. She responded to doubts by working harder, not by dropping out. This is a dilemma that all graduate students face to a greater or lesser degree. The five people, of whom I know, who have taken their lives in Boston research departments in the last two years represent merely the tip of the iceberg of the pain and suffering with which degrees are earned there and elsewhere.

There is no point in laying the blame on any particular individual, for no individual is to be blamed. Rather, I feel very angry at a system which requires that its best minds be developed in a dog-eat-dog atmosphere of jealously guarded professional secrets rather than in cooperation with one another; a system in which being at the top means oppressing others rather than helping them; a system in which women are lured into the success ethic and yet systematically denied the rewards for their efforts. Much as we may not like the rewards, this system itself is full of contradictions.

A compassionate human being like Colleen was all the more likely to have been crushed by such conditions.

We have failed on at least three counts.

One, in our immediate environment the extreme outcries of men and women in an unbearable situation, i.e., the previous suicides, have mostly been hushed up and not

been talked about. That may be an understandable defensive reaction, but it brings us no closer to preventing such acts from happening again.

Two, we have failed to discuss and take actions against the oppressive conditions in the institutions where we work. How many times have we regretted that we were not capable of a quick and effective response to events for lack of organization. The time has come for the sake of our survival and that of our brothers and sisters to organize in the face of our oppressors and to work at it and stick with it even when there is no entertainment.

Colleen was, in fact, one of the finest examples of a dedicated, hard-working, politically aware person, our comrade in Science for the People for all the years of its existence.

Three, we have failed among ourselves to find new forms of relationships based on love and trust and capable of giving real emotional support. We did not recognize the signs of a person in anguish and desperation. For one, because we are taught to hide and be ashamed of our distress which is another manifestation of a system which glorifies destructive strength and teaches us to despise weakness. For another, because we can always find a rationalization for why someone won't commit suicide so that we don't have to seek out and deal with the problems.

The time has come for us to relate to one another as trusting human beings at work, at home, in a collective or organization. Only when we don't allow ourselves to be too busy to stop and talk in depth with our fellow workers, friends, roommates, can we hope to help each other. It takes time and effort, and if it slows down our experiments and papers—so be it. This is not a call for organized sensitivity training which is merely a trick on the part of administrators to create false togetherness so that people will produce more. Rather this call for more genuine personal relationships recognizes that some differences cannot be ironed out and that some people cannot get along together and should not be forced to either.

We have to get to know each other as whole human beings, not merely as the fragments or roles into which we are divided in our daily lives.

Colleen was a woman of action and not of many words. She was exemplary in working with and helping others. She was less capable of opening herself up to others and that may have cost her her life. We should all think in what ways we can be more encouraging, more giving, more loving to overcome another's reticence about expressing herself or himself.

Let us stop being afraid of one another and let us, in Colleen's name, build a world worth living in.

B.F.

We would like to collect material on the general subject of the oppression and exploitation of graduate students. Please send us descriptions (and analysis if possible) of experiences you and people you know have had. We are planning an article on this subject for a future issue.

RAT CONTROL - PEOPLE'S SCIENCE IN PHILADELPHIA

During the summer of 1969 a group of Black students of Community College of Philadelphia challenged the Chemistry department to make chemistry relevant to Black students and their communities. Many communities surrounding Community College of Philadelphia have problems that can be solved by technical and scientific knowledge. We identified such problems as rat and insect extermination, sewerage overflow, consumer education, practical fire prevention etc. as the kinds of problems we would like dealt with by our work in science.

The Black students, some Community College of Philadelphia faculty members and some interested residents of the communities concerned formed a planning group. The outcome of the planning sessions was that fifteen students organized themselves into a community services project. One of the chemistry instructors was invited to be their faculty advisor. Students were paid for their work through work study funds. Actual work on the project started in January of 1970.

We demanded that our school work be geared to the needs of our communities and to us. The Black students took chemistry instructors on a visit to a few communities to see first hand what some of the problems are. After the visit, students, faculty and neighbors selected one problem from the list previously mentioned that they considered most serious and most urgent as the first Community Services Project. The problem of rat control was the one selected. In the Community Services Project, laboratory program students are encouraged to use their imaginations in

planning the laboratory work, unrestricted by formal course requirements.

We spent long hours being trained on the job in rat control and community organization. The instructor who lives and works in the Mantua community was an expert in vector control [control of disease carrying animals] and in working with neighbors. We were trained in offices, neighbors' homes and other places that were made available to us.

Our survey of the neighborhood in Mantua showed a number of vacant houses. Vacant houses contain dirt which harbors rats and other pests. Many of these houses were boarded up by Community Services Project students because vacant houses are hazardous to our children. There is considerable decay in the neighborhood. Rubbish is dumped in backyards because there are not enough trash containers for people to use. New fences around the backyards are one of the many efforts by community people to rehabilitate their properties, but conditions are still deplorable. Almost all the buildings in one block are vacant. Efforts are being made by community leaders to find money to finance rehabilitation of houses. Trash and debris is left in yards and on lots for long periods of time with little effort being made to remove it. Community Services Project students with the help of some neighbors took on the job of cleaning up some of the lots.

Block organization begins when Community Services Project members begin to contact each block resident. We have found that the most effective way of reaching our



neighbors is on a door-to-door basis. Just as we gain accurate knowledge of neighborhood conditions by taking a physical survey of the area, so face-to-face communication is the most accurate preliminary means of gaining community attitudes towards the health and sanitation problems in the area.

The residents are contacted about four times by Community Services Project members with the purpose of setting up a block meeting. The initial contact is to introduce ourselves and state the reasons underlying our presence in the community. The second visit with the community member is to inform him of the need of a long range vector control program and to let him know that we have some ideas and expertise in vector control which may help to alleviate our community's problems to some degree. At this time we ask him if he would be willing to attend a block meeting to discuss these health problems on a day and at a time most suitable to all concerned.

When all the blocks have been organized and all the block meetings have been held, we are then ready for the pre-baiting. Pre-baiting is the setting of the initial bait or poison. In this process we are concerned with depositing bait in all the homes that are present in the area. It is hoped that this first baiting process will be able to destroy many of the rodents which are present in the houses. Equipped with bait, flashlight, plastic bags and other tools we enter the homes ready to begin work. We usually work in male-female teams.

The block clean up, which has to occur about a week

after the pre-baiting in order to give the rat bait enough time to be effective, closes out all of our work in the area. In this operation we attempt to massively clean up the entire area in which we are working. This includes the removing of large useless house items such as stoves, beds, T.V.'s, refrigerators, etc.

The clean up also includes the cleaning of all the alleys as well as the vacant lots in the area. The sweeping and washing of the streets are also involved in this. There is very much planning needed for the clean up. There has to be work assigned to the different helpers and all the equipment has to be given out. It is necessary that we go to each house to ask the residents to take their bulk items out. Many times we help them remove heavy items which are difficult for them to handle. A very important part of the clean up is the cleaning of vacant lots. By cleaning these lots we make it safe for the children to play. We use rakes, shovels and wheelbarrows to clean off much of the trash and weeds in the lots. Some of the lots contain much trash. This trash has many times been thrown in the lots because there were no trash cans available. It takes many hours of hard work to do a decent job on the lots. But this is necessary in order to make the lot a safer place.

All S.N.A.P. workers have done some laboratory work. A special breed of laboratory rat, known as the Wistar strain, are the animals used for S.N.A.P. experimental work. The work with rat urine is intended to result in separation and isolation of a hormone which when added to rat bait will make the rat more willing to eat the bait. Workers who are experienced in rat extermination asked us to give special attention to the possibility of finding an attractant which, when added to rodenticides, will make the rodenticide more effective. We make alcohol and ether extractions in order to separate the urine components. We need to further refine our methods of separation in order to isolate the component we want.

Infrared curves of urine extracts show that there are several substances present. These separations are not refined enough to differentiate between male and female rat urine in alcohol extractions. From these spectra we conclude that aromatic acids are prominent in the alcohol fractions of the urine extract. Bait that had fermented urine added to it, was tested against bait without additives in a maze, to see which one the rat preferred.

Another part of the S.N.A.P. program sent students out to the Strawberry Mansion community to help in the lead poisoning prevention program. A portable chemistry laboratory was transported out to the community. Students collected paint samples from all neighbors' homes who were participating in the project. These samples were analyzed for their lead content right on the spot. Students removed lead containing paint in some houses. Several young children, who would be susceptible to lead poisoning, live in these houses.

Students who work in the Students and Neighbors' Action Program get the opportunity to use some of the things they have learned in school to work on some real life problems.

S.N.A.P.

Paulo Freire~ pedagogy of the oppressed

~A Review

Paulo Freire's *Pedagogy of the Oppressed* (New York Herder and Herder, 1970) is a critical book for all those who are seeking alternative life styles in the teaching of science—life styles which are grounded in and have bearing on the social, political and economic reality of the contemporary world. It is a book for those who would make science truly of value for the people. It is not, however, a book about the teaching of science *per se*, but therein lies its true value. It is concerned with a method of perceiving reality which emphasizes the interaction among people as a means of developing their perceptual and analytical powers. True education, according to Freire, leads to liberation and thus to the degree it stifles or encourages freedom, the process of education is powerful political tool. This book forges a vital link between education and politics which those of us who profess to have radical views and want to help in one form or another of radical political organizing should take to heart.

Born in Brazil in 1921, Freire became a Marxist early in his life, largely out of the extreme conditions of poverty amidst which he and his family lived. At the age of 38 he received his doctorate from the University of Recife and remained there as professor of history and philosophy of education for several years. As a part of his work, he began developing conceptions (first) and methods (later) for teaching illiterates (mostly adults) in Recife. So successful was his approach, not only in teaching skills but also in helping peasants recognize that they had the innate ability to learn and perceive reality on their own, that Freire was jailed immediately after the 1964 coup in Brazil. Freed some months later, he was exiled and spent several years (each) in Chile, the United States and Switzerland. Most recently he has returned to Chile as an educational advisor to Salvador Allende's Marxist government.

The importance of Freire's book is that he considers education a process—a process of perception, analysis and discovery. This approach is in itself not new—the reforms

in science teaching in the United States during the past ten or fifteen years have largely been based on the idea that students should learn to think through and analyze problems on their own, rather than memorizing what someone else calls "facts". However, Freire's ideas go much further than this and, among other things, help explain why the movement to reform science teaching in this country has achieved only a very limited success. Although by no means limited to the arena of science teaching, Freire's philosophy is particularly applicable here because science (and the teaching of science) has been one of the areas of modern education where authoritarianism, elitism and mystification have run most rampant.

Freire characterizes traditional education as based on a "banking conception," where the so-called facts of the subject are "deposited" by a teacher into the minds (considered empty like vaults) of the students. With this metaphor goes the idea that the depositor is the active agent, the receiver the passive. The depositor, the teacher, knows all (is rich), the student knows little or nothing (is poor). The process is one-way and, in Freire's view, morbid because it is static—the information is not questioned and the receivers do not actively participate in organizing and re-arranging it. Such a process mirrors well the oppressive societies which have given birth to the style of education practiced in western countries. It builds a rigid class distinction (the teacher-student barrier) with one group the "haves" and the other the "have-nots." Even more oppressive, it supports the idea that the most appropriate form of behavior for a have-not is silence, passivity, and a feeling of inferiority. Those who have some ambition are channelled into becoming "haves"—depositors who can then dictate to and control the lives of other "have-nots." How many budding graduate students are following this latter course?

Freire's concept of education is a totally different one based on socialist principles of equality between teacher and student, the dialectical method, and the notion that our ideas about reality are not fixed and final, but

necessarily change and evolve over time. It is central to Freire's ideas that there is no ultimate answer to any problem, only answers with varying degrees of correspondence to reality. The purpose of education is to learn a process of comprehending that reality, rather than to learn what someone else (an authority) believes that reality to be. The goal for each individual is the development of what Freire calls *conscientizacao*, the overt awareness not only of a process of analysis, but also of the liberating, humanizing effects of using such a process to better understand the world. The method by which people develop *conscientizacao* is through two-way dialog in which students and teachers together determine what questions or problems (what Freire calls "generative themes") they wish to understand, and exactly how they should go about trying to investigate them. Teaching literacy for example, Freire and a group of peasants or workers would focus at the outset not only on the skills of reading and writing, but especially on why the particular people in the group wanted to become literate. From the peasant group some themes eventually emerged. These might be to get better jobs, to keep from being swindled by their employer or the rich merchants, or to give their children a better life. Investigating these themes raised other, deeper themes, which came back to the underlying reality of people's lives. Why do some people get good jobs and others bad jobs? Why do some get to go to school and others not? Why do the rich act as though they are smarter than the poor? Why do the poor spend so much of their time drinking or fighting among themselves? Attempting to answer such questions, questions which arose out of their own reality, peasants could begin to separate the fabrications from the fabric of reality. Learning to read and write was a tool which helped in that process, but by itself was not the main goal of Freire's educational plan. That goal is ultimate freedom, for by answering such questions the individual gains not only a deeper understanding of the concrete and material conditions of the world in which he or she is living, but also a confidence in his or her own ability to understand that reality. Such confidence is a crucial and necessary step toward freedom from oppression. It is not a step anyone can take for anyone else—and thus it cannot be taught by one person to another. Together, people can discover the process by exchanging ideas and experiences about the world. A true conception of reality does not consist of a set of rules or facts about the world so much as a viewpoint, a perspective which is consistent with the experience of many people. Only by common experiences and understanding can a whole people be free; otherwise there is freedom only for some, and oppression for the rest.

Freire's point should not be misconstrued to indicate that no differences exist between teacher and student. Not only are they different individuals with different experiences, but their experiences are often of quite different kinds. Students have much to learn from older and/or more experienced people around them; but Freire goes on to point out that this does not preclude, and in fact actu-

ally necessitates, the process going in the other direction as well. Teachers must know what is meaningful to students—must in Freire's terms determine the generative themes that grow out of and are thus applicable to both their own and the students' lives. Only by developing a process of dialog can this two-way street become a reality. As soon as the teacher thinks that he or she knows more of everything, and has little to learn from the student, the process of education becomes nothing more than banking with ideas. It reverts to a class-structured society with a dominant and a dominated, an oppressor and an oppressed. It is no longer education but subjugation. It is the enemy of freedom.

What is important about Freire's approach is that he links the style of traditional education closely and inextricably with the oppressive nature of capitalist society. It is not by accident that he terms traditional education the "banking conception", for it is based upon a concept of human relations and human development which is a central part of (but perhaps not limited to) capitalist psychology. That relationship is characterized first and foremost by dominance and subjugation. The teacher decides what is to be taught, how it is to be taught, and how the students should go about learning the material. The essence of this practice is one of the most important aspects of capitalistic mentality; the psychological need to control. In the banking conception the teacher controls the educative process. In benevolent



moods he or she may consult the students about their wishes, but in the last analysis all decisions belong to the teacher. The traditional teacher-student relationship is also characterized by an exaggerated sense of human worth based on personal possession. The teacher is considered a superior human being by virtue of possessing something—knowledge in this case. The student is considered inferior by virtue of not possessing that knowledge. It is in some ways the private property ethic, so dear to capitalism, extended to the realm of ideas. The student becomes more superior by obtaining knowledge, which is often represented categorically as a grade or credit “earned”. Freire would not for a moment deny that people grow and improve through learning—that is after all what education is about. But he does point out that knowledge comes in many different forms, and that even the young or the “uneducated” have had experiences and formed perceptions that may help the older and the “educated” see the world more realistically. In Freire’s work the illiterate peasant had much to teach the educators, based on a set of experiences rich in emotion, perception, and all too frequently, in suffering. By the dialogical process this exchange of experiences, through analysis, leads to heightened perceptions of the true nature of reality. If practiced in full, Freire’s educational process becomes subversive because it leads people to recognize the true oppressors in society, and eventually to throw off the yoke of oppression.

Freire’s concept of freedom is not anarchy, nor should it be misinterpreted in our current jargon of “doing your own thing.” It is not license for libertine radicalism or the other modes of reaction to contemporary capitalist society which we have all seen in the United States (drugs, the youth culture, religious mysticism). To Freire, true communism and collective activity is only possible when individuals are internally free, able to think critically and independently and form true conclusions on their own. When people begin to see reality in a common way, bonds are built between them that can lead to collective action. Thus, *Pedagogy of the Oppressed* is a primer not for heightened individualism but for heightened communalism. It is both a political and a psychological treatise in the end. It recognizes that people cannot be free to join with others in a meaningful and perceptive way until they have the confidence and independence internally that allows them to see realistically themselves and those with whom they come into contact. This confidence and perception can only be developed by a pedagogy that treats people as human beings and encourages the learning of a process rather than a body of facts chosen and doled out by experts.

If Freire’s book has any major faults, it is in the occasional high level of abstraction to which it climbs. I for one found some of it, particularly parts of Chapter 3 where he relates his views to existential philosophy, difficult to follow. He employs on occasion a terminology that mystifies rather than clarifies. For example in describing the work of a young Chilean literacy worker Gabriel Bode, Freire says that initially, with a group of peasants who just learned to read and write, Bode “projects a very simple codification of an existential situation.” This means, trans-

lated, that Bode showed the peasants a picture of some type of activity, for example some men drinking wine together. Freire goes on to write: Bode “terms his first codification ‘essential’; it represents the basic nucleus and opens up into a thematic fan extending to ‘auxiliary’ codifications”. This means that Bode showed the peasants pictures of other situations which might or might not appear overtly to be related to the first, but which in some way grew out of it. Jargon and abstract writing is not a characteristic of Freire’s writing style in general, but it does appear on occasions, making some of the reading slow and tedious.

It is obvious why many of us who want to bring science to the people should take Freire’s philosophy and politics seriously, for he speaks to aspects of our everyday lifestyles (especially as teachers)—indeed our psyches—that need re-examination. How many of us teach by lecturing? How many of us teach large courses with hundreds of students, dispensing established ideas of a field rather than encouraging students to develop perceptions and ideas of their own. How many of us view students with disdain, or lay our heavy lines (political or otherwise) on them rather than determining the “generative themes” which might be meaningful starting places for a dialog? How many of us hide our ignorance behind a rigid authoritarianism, and think that because we own more information on a specialized subject, we must own more about every subject? How many of us continue to learn for ourselves, continue sharpening our perceptions of the world, continue to modify our picture of reality? One can teach the most radical politics, for example, in a banking way—one reason why the reforms in science teaching over the past decade have fallen short of their marks. They have emphasized methods and thought processes, but the teachers remained largely bankers, so that the active engagement of students’ minds was kept at a minimum. Freire’s book tries to emphasize how education for freedom must begin internally, with the consciousness of those who would act as the teachers. If we are serious in our stated aims to organize within the scientific, engineering and university communities, to work with people in those communities in a common task of throwing off oppression (and that means first capitalism), then we must grow to recognize the oppressors within ourselves. Freire’s book is a very important step toward that goal.

G. A.



YANQUI DOLLAR



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PSYCHOLOGY AND WOMEN

A selected, annotated Bibliography, prepared by the Psychology and Women seminar of the Feminist Studies Program at the Cambridge-Goddard Graduate School for Social Change. The Bibliography is divided into six topic sections:

- Philosophy of science, methodology and statistical uses
- History of psychology
- Sex differences, sex role development and socialization of children
- Individual psychology and personality theory
- Individual development and group dynamics
- The small group in the development of political organization

Each section is preceded by an introduction describing how we selected and used the materials in that section. We tried to include descriptions of the process followed by our small group in creating a reading/study program relevant to feminists interested in psychology and social change.

The Bibliography will be ready by mid-September, 1972 and costs 25 cents plus postage. Bulk orders are available upon request. Please address requests and checks to:

Sheli Wortis
Feminist Studies Program
Cambridge-Goddard Graduate School
1878 Massachusetts Avenue
Cambridge, Massachusetts 02140

The following article deals with a question of central importance to all groups engaged in the struggle for radical political change—which organizational forms are appropriate at different times for different purposes. We are reprinting it here from the *Second Wave* (vol. 2, no. 1), a feminist magazine, because we feel that it has particular relevance to *SESPA/Science for the People* at this time. One of the characteristic features of *SESPA/Science for the People*, as compared to others on the left, has been the looseness and fluidity of its structure; the organization has been defined really only by its activities and those who participate in them (there are no officers or formal decision making procedures). This has allowed everyone to grow freely and to develop their political understanding. However the apparent structurelessness cannot hide the fact that an informal structure does in fact exist, and we in the editorial collective feel it important for all of us in *SESPA/SftP* to be always conscious of what that structure is and whether it is best serving our political needs. For example, in Boston where many subgroups are actively working, there has recently been felt a lack of coordination and direction (see Boston chapter report). Since the structure of the Boston chapter is mirrored in the national organization, and because of the generality and importance of the question, we want to bring these matters to everyone's attention. We hope that people around the country will come together in local chapters or other groups and give thoughtful consideration to the political objectives of *Science for the People* and the organizational questions which follow. We encourage and welcome your responses here in the pages of *Science for the People*.

During the years in which the women's liberation movement has been taking shape, a great emphasis has been placed on what are called leaderless, structureless groups as the main—if not sole—organizational form of the movement. The source of this idea was a natural reaction against the over-structured society in which most of us found ourselves, the inevitable control this gave others over our lives, and the continual elitism of the Left and similar groups among those who were supposedly fighting this overstructuredness.

The idea of structurelessness, however, has moved from a healthy counter to those tendencies to becoming a goddess in its own right. The idea is as little examined as the term is much used, but it has become an intrinsic and unquestioned part of women's liberation ideology. For the early development of the movement this did not much matter. It early defined its main goal, and its main method, as consciousness-raising, and the "structureless" rap group was an excellent means to this end. The looseness and informality of it encouraged participation in discussion, and its often supportive atmosphere elicited personal insight. If nothing more concrete than personal insight ever resulted from these groups, that did not much matter, because their purpose did not really extend beyond this.

The basic problems didn't appear until individual rap groups exhausted the virtues of consciousness-raising and

decided they wanted to do something more specific. At this point they usually floundered, because most groups were unwilling to change their structure when they changed their tasks. Women had thoroughly accepted the idea of "structurelessness" without realizing the limitations of its uses. People would try to use the "structureless" group and the informal conference for purposes for which they were unsuitable out of a blind belief that no other means could possibly be anything but oppressive.

If the movement is to grow beyond these elementary stages of development, it will have to disabuse itself of some of its prejudices about organization and structure.



There is nothing inherently bad about either of these. They can be and often are misused, but to reject them out of hand because they are misused is to deny ourselves the necessary tools to further development. We need to understand why "structurelessness" does not work.

Contrary to what we would like to believe, there is no such thing as a structureless group. Any group of people of whatever nature that comes together for any length of time for any purpose will inevitably structure itself in some fashion. The structure may be flexible; it may vary over time; it may evenly or unevenly distribute tasks, power, and resources over the members of the group. But it will be

formed regardless of the abilities, personalities, or intentions of the people involved. The very fact that we are individuals, with different talents, predispositions, and backgrounds makes this inevitable. Only if we refused to relate or interact on any basis whatsoever could we approximate structurelessness—and that is not the nature of a human group.

This means that to strive for a structureless group is as useful, and as deceptive, as to aim at an “objective” news story, “value-free” social science, or a “free” economy. A “laissez faire” group is about as realistic as a “laissez faire” society; the idea becomes a smokescreen for the strong or

rules of how decisions are made are known only to a few and awareness of power is limited to those who know the rules. Those who do not know the rules and are not chosen for initiation must remain in confusion, or suffer from paranoid delusions that something is happening of which they are not quite aware.

For everyone to have the opportunity to be involved in a given group and to participate in its activities the structure must be explicit, not implicit. The rules of decision-making must be open and available to everyone, and this can happen only if they are formalized. This is not to say that formalization of a structure of a group will destroy the informal structure. It usually doesn't. But it does hinder the informal structure from having predominant control and make available some means of attacking it if the people involved are not at least responsible to the needs of the group at large. “Structurelessness” is organizationally impossible. We cannot decide whether to have a structured or structureless group, only whether or not to have a formally structured one. Therefore the word will not be used any longer except to refer to the idea it represents. *Unstructured* will refer to those groups which have not been deliberately structured in a particular manner. *Structured* will refer to those which have. A Structured group always has a *formal* structure, and may also have an informal, or covert, structure. It is this informal structure, particularly in Unstructured groups, which forms the basis for elites.

“Elitist” is probably the most abused word in the women's liberation movement. It is used as frequently, and for the same reasons, as “pinko” was used in the fifties. It is rarely used correctly. Within the movement it commonly refers to individuals, though the personal characteristics and activities of those to whom it is directed may differ widely. An individual, *as an individual*, can never be an elitist, because the only proper application of the term “elite” is to groups. Any individual, regardless of how well-known that person may be, can never be an elite.

Correctly, an elite refers to a small group of people who have power over a larger group of which they are part, usually without direct responsibility to that larger group, and often without their knowledge or consent. A person becomes an elitist by being part of, or advocating the rule by, such a small group, whether or not that individual is well known or not known at all. Notoriety is not a definition of an elitist. The most insidious elites are usually run by people not known to the larger public at all. Intelligent elitists are usually smart enough not to allow themselves to become well known; when they become known, they are watched, and the mask over their power is no longer firmly lodged.

Because elites are informal does not mean they are invisible. At any small group meeting anyone with a sharp eye and an acute ear can tell who is influencing whom. The members of a friendship group will relate more to each other than to other people. They listen more attentively, and interrupt less; they repeat each other's points and give in amiably; they tend to ignore or grapple with the “outs” whose approval is not necessary for making a decision. But it is necessary for the “outs” to stay on good terms with



the lucky to establish unquestioned hegemony over others. This hegemony can be so easily established because the idea of “structurelessness” does not prevent the formation of informal structures, only formal ones. Similarly “laissez faire” philosophy did not prevent the economically powerful from establishing control over wages, prices, and distribution of goods; it only prevented the government from doing so. Thus structurelessness becomes a way of masking power, and within the women's movement is usually most strongly advocated by those who are the most powerful (whether they are conscious of their power or not). As long as the structure of the group is informal, the

the "ins." Of course the lines are not as sharp as I have drawn them. They are nuances of interaction, not prewritten scripts. But they are discernible, and they do have their effect. Once one knows with whom it is important to check before a decision is made, and whose approval is the stamp of acceptance, one knows who is running things.

Elites are not conspiracies. Very seldom does a small group of people get together and deliberately try to take over a larger group for its own ends. Elites are nothing more, and nothing less, than groups of friends who also happen to participate in the same political activities. They would probably maintain their friendship whether or not they were involved in political activities; they would probably be involved in political activities whether or not they maintained their friendships. It is the coincidence of these two phenomena which creates elites in any group and makes them so difficult to break.

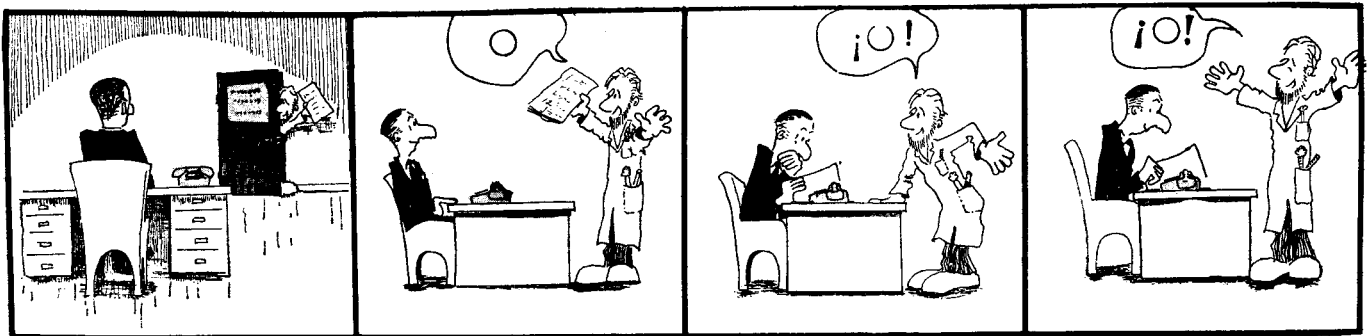
These friendship groups function as networks of communication outside any regular channels for such communication that may have been set up by a group. If no channels are set up, they function as the only networks of communication. Because people are friends, because they usually share the same values and orientations, because they talk to each other socially and consult with each other when common decisions have to be made, the people involved in these networks have more power in the group than those who don't. And it is a rare group that does not establish some informal networks of communication through the friends that are made in it.

Some groups, depending on their size, may have more than one such informal communications network. Networks may even overlap. When only one such network exists, it is the elite of an otherwise Unstructured group, whether the participants in it want to be elitists or not. If it is the only such network in a Structured group it may or may not be an elite depending on its composition and the nature of the formal Structure. If there are two or more such networks of friends, they may compete for power within the group, thus forming factions, or one may deliberately opt out of the competition, leaving the other as the elite. In a Structured group, two or more such friendship networks usually compete with each other for formal power. This is often the healthiest situation, as the other members are in a position to arbitrate between the two competitors for power and thus to make demands on those to whom they give their temporary allegiance.

The inevitably elitist and exclusive nature of informal

communication networks of friends is neither a new phenomenon characteristic of the women's movement nor a phenomenon new to women. Such informal relationships have excluded women for centuries from participating in integrated groups of which they were a part. In any profession or organization these networks have created the "locker room" mentality and the "old school" ties which have effectively prevented women as a group (as well as some men individually) from having equal access to the sources of power or social reward. Much of the energy of past women's movements has been directed to having the structures of decision-making and the selection processes formalized so that the exclusion of women could be confronted directly. As we well know, these efforts have not prevented the informal male-only networks from discriminating against women, but they have made it more difficult.

Since movement groups have made no concrete decisions about who shall exercise power within them, many different criteria are used around the country. Most criteria are along the lines of traditional female characteristics. For instance, in the early days of the movement, marriage was usually a prerequisite for participation in the informal elite. As women have been traditionally taught, married women relate primarily to each other, and look upon single women as too threatening to have as close friends. In many cities, this criterion was further refined to include only those women married to New Left men. This standard had more than tradition behind it, however, because New Left men often had access to resources needed by the movement—such as mailing lists, printing presses, contacts, and information—and women were used to getting what they needed through men rather than independently. As the movement has changed through time, marriage has become a less universal criterion for effective participation, but all informal elites establish standards by which only women who possess certain material or personal characteristics may join. They frequently include: middle-class background (despite all the rhetoric about relating to the working class); being married; not being married but living with someone; being or pretending to be a lesbian; being between the ages of twenty and thirty; being college educated or at least having some college background; being "hip"; not being too "hip"; holding a certain political line or identification as a "radical"; having children or at least liking them; not having children; having certain "feminine" personality characteristics such as being "nice"; dressing right (whether in the



traditional style or the antitraditional style); etc. There are also some characteristics which will almost always tag one as a "deviant" who should not be related to. They include: being too old; working full time, particularly if one is actively committed to a "career"; not being "nice"; and being avowedly single (i.e., neither actively heterosexual nor homosexual).

Other criteria could be included, but they all have common themes. The characteristics prerequisite for participating in the informal elites of the movement, and thus for exercising power, concern one's background, personality, or allocation of time. They do not include one's competence, dedication to feminism, talents, or potential contribution to the movement. The former are the criteria one usually uses in determining one's friends. The latter are what any movement or organization has to use if it is going to be politically effective.

The criteria of participation may differ from group to group, but the means of becoming a member of the informal elite if one meets those criteria are pretty much the same. The only main difference depends on whether one is in a group from the beginning, or joins it after it has begun. If involved from the beginning it is important to have as many of one's personal friends as possible also join. If no one knows anyone else very well, then one must deliberately form friendships with a select number and establish the informal interaction patterns crucial to the creation of an informal structure. Once the informal patterns are formed they act to maintain themselves, and one of the most successful tactics of maintenance is to continuously recruit new people who "fit in." One joins such an elite much the same way one pledges a sorority. If perceived as a potential addition, one is "rushed" by the members of the informal structure and eventually either dropped or initiated. If the sorority is not politically aware enough to actively engage in this process itself it can be started by the outsider pretty much the same way one joins any private club. Find a sponsor, i.e., pick some member of the elite who appears to be well respected within it, and actively cultivate that person's friendship. Eventually, she will most likely bring you into the inner circle.

All of these procedures take time. So if one works full time or has a similar major commitment, it is usually impossible to join simply because there are not enough hours left to go to all the meetings and cultivate the personal relationship necessary to have a voice in the decision-making. That is why formal structures of decision-

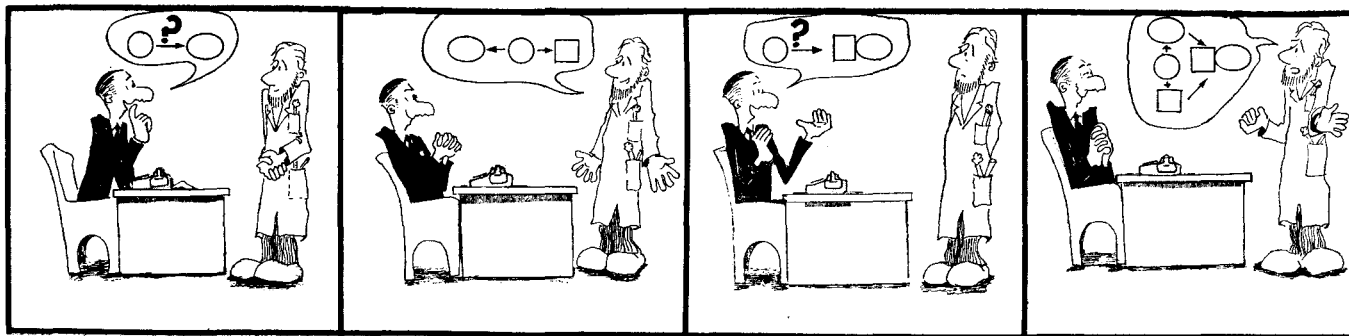
making are a boon to the overworked person. Having an established process for decision-making ensures that everyone can participate in it to some extent.

Although this dissection of the process of elite formation within small groups has been critical in perspective, it is not made in the belief that these informal structures are inevitably bad—merely inevitable. All groups create informal structures as a result of interaction patterns among the members of the group. Such informal structures can do very useful things. But only Unstructured groups are totally governed by them. When informal elites are combined with a myth of "structurelessness," there can be no attempt to put limits on the use of power. It becomes capricious.

This has two potentially negative consequences of which we should be aware. The first is that the informal structure of decision-making will be much like a sorority—one in which people listen to others because they like them and not because they say significant things. As long as the movement does not do significant things this does not much matter. But if its development is not to be arrested at this preliminary stage, it will have to alter this trend. The second is that informal structures have no obligation to be responsible to the group at large. Their power was not given to them; it cannot be taken away. Their influence is not based on what they do for the group; therefore they cannot be directly influenced by the group. This does not necessarily make informal structures irresponsible. Those who are concerned with maintaining their influence will usually try to be responsible. The group simply cannot compel such responsibility; it is dependent on the interests of the elite.

The idea of "structurelessness" has created the "star" system. We live in a society which expects political groups to make decisions and to select people to articulate those decisions to the public at large. The press and the public do not know how to listen seriously to individual women as women; they want to know how the group feels. Only three techniques have ever been developed for establishing mass group opinion: the vote or referendum, the public opinion survey questionnaire, and the selection of group spokespeople at an appropriate meeting. The women's liberation movement has used none of these to communicate with the public. Neither the movement as a whole nor most of the multitudinous groups within it have established a means of explaining their position on various issues. But the public is conditioned to look for spokespeople.

While it has consciously not chosen spokespeople, the



movement has thrown up many women who have caught the public eye for varying reasons. These women represent no particular group or established opinion; they know this and usually say so. But because there are no official spokespeople nor any decision-making body that the press can query when it wants to know the movement's position on a subject, these women are perceived as the spokespeople. Thus, whether they want to or not, whether the movement likes it or not, women of public note are put in the role of spokespeople by default.

This is one main source of the ire that is often felt toward the women who are labeled "stars." Because they were not selected by the women in the movement to represent the movement's views, they are resented when the press presumes that they speak for the movement. But as long as the movement does not select its own spokeswomen, such women will be placed in that role by the press and the public, regardless of their own desires.

This has several negative consequences for both the movement and the women labeled "stars." First, because the movement didn't put them in the role of spokesperson, the movement cannot remove them. The press put them there and only the press can choose not to listen. The press will continue to look to "stars" as spokeswomen as long as it has no official alternatives to go to for authoritative statements from the movement. The movement has no control in the selection of its representatives to the public as long as it believes that it should have no representatives at all. Second, women put in this position often find themselves viciously attacked by their sisters. This achieves nothing for the movement and is painfully destructive to the individuals involved. Such attacks only result in either the woman leaving the movement entirely—often bitterly alienated—or in her ceasing to feel responsible to her "sisters." She may maintain some loyalty to the movement, vaguely defined, but she is no longer susceptible to pressures from other women in it. One cannot feel responsible to people who have been the source of such pain without being a masochist, and these women are usually too strong to bow to that kind of personal pressure. Thus the backlash to the "star" system in effect encourages the very kind of individualistic nonresponsibility that the movement condemns. By purging a sister as a "star," the movement loses whatever control it may have had over the person, who then becomes free to commit all of the individualistic sins of which she has been accused.

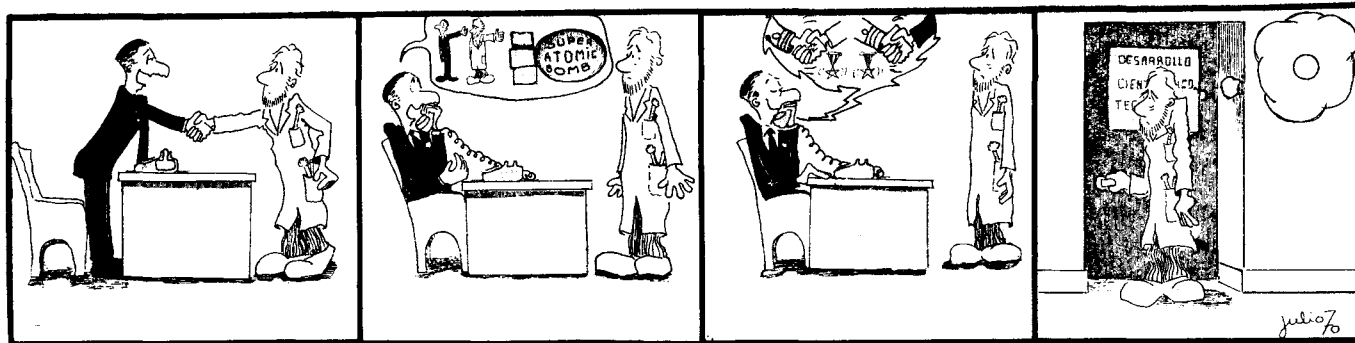
Unstructured groups may be very effective in getting

women to talk about their lives; they aren't very good for getting things done. It is when people get tired of "just talking" and want to do something more that the groups, unless they change the nature of their operation, flounder. Since the larger movement in most cities is as Unstructured as individual rap groups, it is not too much more effective than the separate groups at specific tasks. The informal structure is rarely together enough or in touch enough with the people to be able to operate effectively. So the movement generates much motion and few results. Unfortunately, the consequences of all this motion are not as innocuous as the results, and their victim is the movement itself.

Some groups have turned themselves into local action projects if they do not involve many people and work in a small scale. But this form restricts movement activity to the local level; it cannot be done on the regional or national. Also, to function well the groups must usually pare themselves down to that informal group of friends who were running things in the first place. This excludes many women from participating. As long as the only way women can participate in the movement is through membership in a small group, the nongregarious are at a distinct disadvantage. As long as friendship groups are the main means of organizational activity, elitism becomes institutionalized.

For those groups which cannot find a local project to which to devote themselves, the mere act of staying together becomes the reason for their staying together. When a group has no specific task (and consciousness-raising is a task), the people in it turn their energies to controlling others in the group. This is not done so much out of a malicious desire to manipulate others (though sometimes it is) as out of a lack of anything better to do with their talents. Able people with time on their hands and a need to justify their coming together put their efforts into personal control, and spend their time criticizing the personalities of the other members in the group. Infighting and personal power games rule the day. When a group is involved in a task, people learn to get along with others as they are and to subsume personal dislikes for the sake of the larger goal. There are limits placed on the compulsion to remold every person in our image of what they should be.

The end of consciousness-raising leaves people with no place to go, and the lack of structure leaves them with no way of getting there. The women in the movement either turn in on themselves and their sisters or seek other



alternatives of action. There are few that are available. Some women just "do their own thing." This can lead to a great deal of individual creativity, much of which is useful for the movement, but it is not a viable alternative for most women and certainly does not foster a spirit of cooperative group effort. Other women drift out of the movement entirely because they don't want to develop an individual project and they have found no way of discovering, joining, or starting group projects that interest them.

Many turn to other political organizations to give them the kind of structured, effective activity that they have not been able to find in the women's movement. Those political organizations which see women's liberation as only one of many issues to which women should devote their time thus find the movement a vast recruiting ground for new members. There is no need for such organizations to "infiltrate" (though this is not precluded). The desire for meaningful political activity generated in women by their becoming part of the women's liberation movement is sufficient to make them eager to join other organizations when the movement itself provides no outlets for their new ideas and energies.

Those women who join other political organizations while remaining within the women's liberation movement, or who join women's liberation while remaining in other political organizations, in turn become the framework for new informal structures. These friendship networks are based upon their common nonfeminist politics rather than the characteristics discussed earlier, but operate in much the same way. Because these women share common values, ideas, and political orientations, they too become informal, unplanned, unselected, irresponsible elites—whether they intend to be so or not.

These new informal elites are often perceived as threats by the old informal elites previously developed within different movement groups. This is a correct perception. Such politically oriented networks are rarely willing to be merely "sororities" as many of the old ones were, and want to proselytize their political as well as their feminist ideas. This is only natural, but its implications for women's liberation have never been adequately discussed. The old elites are rarely willing to bring such differences of opinion out into the open because it would involve exposing the nature of the informal structure of the group. Many of these informal elites have been hiding under the banner of "anti-elitism" and "structurelessness." To effectively counter the competition from another informal structure, they would have to become "public," and this possibility is fraught with many dangerous implications. Thus, to maintain its own power, it is easier to rationalize the exclusion of the members of the other informal structure by such means as "red-baiting," "reformist-baiting," "lesbian-baiting," or "straight-baiting." The only other alternative is to formally structure the group in such a way that the original power structure is institutionalized. This is not always possible. If the informal elites have been well structured and have exercised a fair amount of power in the past, such a task is feasible. These groups have a history of being somewhat politically effective in the past, as the

tightness of the informal structure has proven an adequate substitute for a formal structure. Becoming Structured does not alter their operation much, though the institutionalization of the power structure does open it to formal challenge. It is those groups which are in greatest need of structure that are often least capable of creating it. Their informal structures have not been too well formed and adherence to the ideology of "structurelessness" makes them reluctant to change tactics. The more Unstructured a group is, the more lacking it is in informal structures, and the more it adheres to an ideology of "structurelessness," the more vulnerable it is to being taken over by a group of political comrades.

Since the movement at large is just as Unstructured as most of its constituent groups, it is similarly susceptible to indirect influence. But the phenomenon manifests itself differently. On a local level most groups can operate autonomously; but the only groups that can organize a national activity are nationally organized groups. Thus, it is often the Structured feminist organizations that provide national direction for feminist activities, and this direction is determined by the priorities of those organizations. Such groups as NOW, WEAL, and some leftist women's caucuses are simply the only organizations capable of mounting a national campaign. The multitude of Unstructured women's liberation groups can choose to support or not support the national campaigns, but are incapable of mounting their own. Thus their members become the troops under the leadership of the Structured organizations. The avowedly Unstructured groups have no way of drawing upon the movement's vast resources to support its priorities. It doesn't even have a way of deciding what they are.

The more Unstructured a movement it, the less control it has over the directions in which it develops and the political actions in which it engages. This does not mean that its ideas do not spread. Given a certain amount of interest by the media and the appropriateness of social conditions, the ideas will still be diffused widely. But diffusion of ideas does not mean they are implemented; it only means they are talked about. Insofar as they can be applied individually they may be acted on; insofar as they require coordinated political power to be implemented, they will not be.

As long as the women's liberation movement stays dedicated to a form of organization which stresses small, inactive discussion groups among friends, the worst problems of Unstructuredness will not be felt. But this style of organization has its limits; it is politically inefficacious, exclusive, and discriminatory against those women who are not or cannot be tied into the friendship networks. Those who do not fit into what already exists because of class, race, occupation, education, parental or marital status, personality, etc., will inevitably be discouraged from trying to participate. Those who do fit in will develop vested interests in maintaining things as they are.

The informal groups' vested interests will be sustained by the informal structures which exist, and the movement will have no way of determining who shall exercise power
(continued on page 38)

CHAPTER REPORTS

BOSTON CHAPTER REPORT

The Boston chapter is made up of subgroups, some concerned with specific areas of technological impact (Science Teachers Group, China collective, Off-Control Project, Industrial Group, meeting action groups—AAAS, American Chemical Society, etc.—study groups, technical assistance projects) and some concerned with the general coordination and functioning of Science for the People (the Bagholders, the editorial collectives, the Science for the People Center Office Collective).

During August and September the Boston chapter experienced encouraging activity and political growth among many of the project groups as well as frustration about serious problems with central organization and coordination. While the subgroups were active, and an increasing number of people were contacting the Center, letters piled up at the Center as evidence that the office was in need of care. A small group of active members

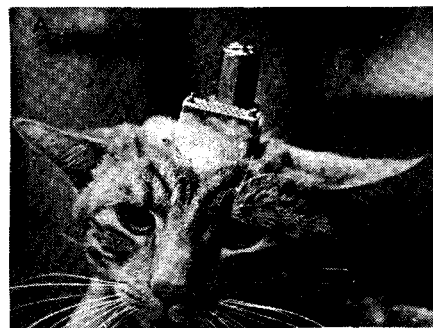
OFF CONTROL: ON THE TECHNOLOGY OF REPRESSION AND CONTROL

Areas of Interest

- A. People control technology (WHAT)
 - 1. Weapons used by police and military (non-lethal chemicals, non-lethal projectiles, police hardware, police communication systems, crowd control and domestic military control).
 - 2. Surveillance and information gathering systems (educational testing and measurement, bugging, undercover agents, monitor/closed circuit TV, night vision, records compiled for schools, hospitals, credit, employment, taxes, social security, and census, auto and property registration, and police dossiers).
 - 3. Security systems as applied to property (new locks, security clearance requirements, ID cards, and property safeguards).
 - 4. Behavior manipulation (management techniques, advertising, socialization in schools, and applied sociology and psychology).
- B. Use of control technology in institutions (HOW, WHERE)
(Education, industry, detention facilities, medical institutions, the military, and larger public institutions, i.e., political repression).
- C. Development of control technology (WHO)
 - 1. Organizations that fund, research and de-

velop technologies (DOD, Law Enforcement Assistance Administration [LEAA], private corporations, university involvement in the military-industrial complex).

- 2. Level of involvement (budget, number of people, etc.).
- D. Historical and contextual analysis (WHY)
 - 1. Survey of reports from congressional committees, special advisory committees, research institution reports, American Civil Liberties Union (ACLU) proceedings, and related conferences.
 - 2. Why and how much emphasis exists now? What is the nature of the instability? What is the status on indices such as disorder, subversion, etc. in comparison to the growth trend of the technology?
- E. Survey of propaganda for and against control technology. (TV programs, news and magazine attitudes: How do people deal with it?).





called a general meeting of the chapter to discuss the problem.

The situation was characterized as one of the "Tyranny of Structurelessness" (*reprinted here from the Second Wave, vol. 2, no. 1*) in which there is no formalized decision making apparatus, with decisions and coordination dependent on circles of friends. Thus organizational work suffers in this vacuum.

The meeting, September 19, was attended by about 45 active members (out of 200 on the mailing list) including people from all the Boston subgroups. There was a sense of importance of the meeting as well as tension about its purpose. It was agreed that the practical administrative problems were partly the result of lack of communication between the subgroups. It was also argued that the problems arose out of a political problem—the absence of a clear program or central focus of the organization. Steps were taken to clear up the administrative backlog in the office. Plans were begun for meetings in which the subgroups would discuss their political purposes, ideas and activities with the chapter in general, including attending a conference of Computer People for Peace (CPP) Sept. 30, and another general meeting in Boston Oct. 10. The results of our efforts at resolving organization problems will be reported in subsequent issues of *Science for the People*.

Reports of the Project Groups

Women's Issue Project: We are a group of 13 women currently writing articles for a proposed women's issue of *Science for the People*. We are primarily concerned with the use of science and ideology past and present to oppress women. Any women interested in working on this project should contact us c/o 9 Walden St. (*SftP Center*). We hope to broaden our activities after these articles are finished.

China Collective: The group in Boston, as well as collectives in other parts of the country, has been meeting through the summer. A trip may be scheduled for some time this winter. We have been negotiating with a publisher to do a book on the trip and science practice in China. The book would be aimed at a mass audience, rather than an academic or self-consciously radical audience. Proceeds from the sale of the book would go to Science for the People. Several regional meetings have been held in the East and in the Midwest, and a tentative list of delegates has been made up, including people from Boston, New York, Stony Brook, Chicago, Minneapolis, St. Louis, Vermont and Berkeley. The Boston collective is coordinating national activities, and would appreciate comments and suggestions as to the projected book, questions to look into while on the trip, and ways to exploit the opportunity on return. Suggestions should be sent to China Collective, c/o 9 Walden St., Jamaica Plain, Mass. 02130.

Off Control: is (a) out of control; (b) under control; (c) all of the above; (d) none of the above.

People have been meeting over the summer and a core group has elected to set up a research center for material for public use. If anyone has material on specific areas, such as those defined in the box, please send to Off Control, c/o 9 Walden St.

Science Teaching Group: is alive and well. . . see box for details about NSTA actions.

N S T A

Science for the People is organizing for a third year (see *Science for the People, vol. iv, no. 5*) activities at the National Science Teachers' Association (NSTA) annual convention. The convention in 1973 will be held in Detroit from March 30 to April 3. NSTA is an organization of high school and elementary school science teachers and faculty from schools of education. Our actions at NSTA have been designed to challenge the structures and social and political implications of science teaching and to offer alternative sources and materials. The SESPA—Boston Science Teaching Group is already preparing for workshops on the teaching of specific issues (e.g. ecology, energy) and on method. Readers who are interested in efforts to change science education in the schools should contact us about our plans. We may be able to give you names of people in your area who are in touch with us. Start a working group now! We particularly need help from the Detroit area and the midwest. Write to:

SESPA—Science Teaching Group
9 Walden Street
Jamaica Plain, MA 02130

LOS ANGELES

Dear Friends,

We are not so much a chapter of SESPA as we are a group working with, and lending special talents and abilities to, other community, anti-war and political groups. Thus, we have helped supply information and speakers to local campus groups on the technology of the war in S.E. Asia—electronic battlefield, air war, ecocide. Articles on these and related topics, and on the relationship of the scientist to modern capitalistic society, have been written for the local 'alternative' press. A similar role has been played with respect to the radical Peace and Freedom Party, for which some of us have been doing organizing work for several years.

Our chief activity currently is organizing a free clinic in the San Fernando Valley. We hope to offer a broad spectrum of services in a manner which will be a model of humane and democratic health care. We are also initiating research projects and workshops which focus on the inadequacies of health care delivery in this society and on remedies for their correction.

Al Huebner
Los Angeles, California

Dear People,

A few items to keep you in touch with events in S. California. We would like you to consider the *Vietnam, The Pentagon Papers and Science in the U.S.* leaflet for publication in *Science for the People*. There is much interest in the radio program idea and I think it will be a good thing.

Ken Ziedman
Venice, California

Space does not permit inclusion of the leaflet mentioned above, but copies can be obtained from the SESPA office in Boston. The following is the proposal from Ken's group, SWSA (Science Workers for Social Action) for a series of:

SCIENCE for the PEOPLE RADIO PROGRAMS

to be broadcast on a regular basis, at least over KPFK in Los Angeles. Our overall purpose will be to provide news and analysis, within a radical perspective, of current developments and issues in US science and technology. The audience we are aiming at includes the interested general public and those involved in movements for fundamental social change who feel the need to acquaint themselves with the forces of science and technology as they bear upon the problems confronting our society and our movements. But we also definitely see this on-going series of programs as a way to provoke discussion and promote organization around these issues among those of us engaged in scientific work.

Especially, we want the series to provide a focus and

a forum for radicals in the sciences who need to find ways of developing radical politics around our own particular situations. We expect that the program itself will be one such way, and we will encourage many people to put together tapes in areas of special interest to them.

While each program in the series would be primarily the work of those particular people taking on responsibility for that program, SWSA will function as a co-ordinating and editorial body. Those interested will meet regularly to discuss upcoming and proposed programs, to work out changes with those responsible for a particular tape, and generally to relate the content of each program to the political objectives of the series as a whole. Beyond the objectives discussed above we will emphasize general themes such as: that science need not be the mysterious domain of a privileged priesthood; that many 'technological' problems arise from the undemocratic, private control of productive plant run for profit; relations of US science to other areas of US society; need for collective action to promote science for the people; problems of scientific workers and how these problems relate to struggles going on throughout the society.

WASHINGTON

Dear Brothers and Sisters,

The local chapter of Science for the People has been active only on a small scale this year, after we sent out a questionnaire in the early spring and received only two replies back from our larger mailing list. We have decided to cease regular mailings and meetings because of the lack of tangible results and support, and concentrate on programs organized by a small core of more interested individuals. We have also continued to discuss and struggle among ourselves to develop a clearer idea of why a local chapter should exist and what its aims are. This discussion has not concluded by any means, but events in the next few months make it necessary to try again to contact a larger number of people.

A brief summary of activities includes the following:

1. We have been supplying the DC Black Panthers with supplies and equipment for their sickle-cell anemia testing program and with other needed help, and have also been working with a local church community group to develop a lead-based paint testing program. The assistance to the Panthers has been well received, but the lead paint program is stalled by the lack of active interest from the community.
2. We sent a package of material pertaining to weather forecasting technology to North Vietnam by way of Science for Vietnam, and have been supplying data to the Senate Foreign Relations Committee for their recent hearings on geophysical warfare.
3. Several of us have been to scientific and political meetings in several places in the last few months, and have participated in a wide range of activities, often in conjunction with other groups. These conferences and conventions have included the National Science Teachers Association convention in New York, The American Physical Society convention in Washington, and the Democratic Party convention

in Miami Beach, Florida.

Finally, the local collective at 639 E St., NE will be undergoing a considerable change in membership in September. We are looking for new people, radical feminists especially, as well as Black or Third World people with interests in science and a desire to struggle with the rest of us to develop collective consciousness. If you are interested in coping with the problems of collective living (which sometimes requires the patience of a saint, the wisdom of Solomon and a revolutionary consciousness superior to Mao Tsetung) call Dan, Dave or Norman at 547-1459.

Science for the People.

The DC Collective.

MADISON

Dear Friends:

We are revving up for a very active and hopefully productive year. By pooling portions of our salaries we have been able to liberate one member of our group from the necessity of a full time job and that person will be available for fulltime science organizing. To help us in our educational campaign we need literature and that explains the check. Please send us as many copies of *Science for the People* by Zimmerman, Radinsky, Rothenberg and Meyers as is possible. As we are going into classrooms very soon and would like the booklets for that purpose, please send us the copies at your earliest convenience.

We should be completing a full article shortly for the SESPA journal on our activities to block the Army Math Research Center in Madison.

In struggle,

Lorne Taichman,
Madison Science for the People,
2612 Gregory Street,
Madison, Wis. 53711.

REPORT FROM THE ACS COLLECTIVE

SESPA people from both the New York and Boston ACS collectives made their second appearance at an American Chemical Society national meeting in New York, Aug. 27-Sept. 1. With about a dozen active people we were able to carry out several useful actions and stimulate much needed dialogue as well as to be just generally provocative. After our first ACS meeting (see Vol. IV, No. 4) the ACS seemed willing to tolerate our presence, but in New York, better planning and larger numbers allowed us to challenge the ACS's activities and attitudes more decisively. The deadline for submission of articles to this issue of *Science for the People* was too soon after the meeting for us to put together a detailed description and analysis but that effort will be forthcoming by the next issue.

We are trying to organize for the next national meeting scheduled for this spring in Dallas. Persons interested in being involved, particularly those in the Texas area, should contact the ACS Collective, c/o SESPA, Boston. We are also hoping to hear from anyone interested in organizing at the level of ACS regional or sectional meetings or activities.

CONFERENCE CALLED BY THE WASHINGTON, D.C. CHAPTER OF SESPA/SCIENCE FOR THE PEOPLE

To be held on Friday and Saturday, November 24 and 25 (Thanksgiving Weekend) at Mt. Airy, Md. to plan actions for the December meetings in Wash. of the American Association for the Advancement of Science (AAAS).

Local groups, please meet and formulate action plans, position papers, displays, symposia, guerilla theater, etc. (Preliminary programs are being mailed to all local groups.) Each local group, please communicate proposals and suggestions to all groups to prepare us all for the conference.

The DC-AAAS 72 Committee urges all groups and individuals interested in participating and planning this year's AAAS activities to contact

Dave Westman
639 E St. N.E.
Washington, D.C.
(202) 547-1459

with all your suggestions or requests. We hope there will be a very wide range of activities covering all ways in which the American way of science affects our lives and those of our brothers and sisters. We are especially eager to hear from women, blacks, spanish-americans, gays, and others in science who challenge the usual assertion that science is an unbiased and objective, essentially neutral body of knowledge free from racism, sexism, and oppressive characteristics.

Local groups, please contact the DC-AAAS Committee for map and directions for the Thanksgiving Weekend Planning Conference, and to notify us of the number of persons planning to attend. Plenty of room is available; bring sleeping bag and be prepared to share food expenses. Conference will be at the farm of C.J. Swet, RFD 4, Mt. Airy, Maryland 21771, telephone (301) 829-0477.

LET'S GET IT TOGETHER FOR AAAS '72



SESPA—CPP AT THE DEMOCRATIC CONVENTION

Although the conventions and even election will be long past by the time most people read this issue, we include the following account of the combined CPP (Computer People for Peace) and SESPA presence at the Democratic Convention in Miami in July, as a kind of diffused chapter report and an example of valuable cooperation between like-minded organizations. It consists of random recollections from two widely-spaced (geographically) members of this ad hoc group.

Lorraine—We arrived in Miami on the Saturday night before the convention, after two gruelling days on the road, a grimy quintet from Boston SESPA (me), from D.C. SESPA (Dan), from New York CPP (Paul and Laird) plus Juan, a student McGovern worker. The night before had been great—impromptu, comradely hospitality at a drug half-way house in Fayetteville, N.C., home also of the 82nd Airborne, which had been sent on ahead, to Miami, to welcome us there. The drive the next day was hard, though, with lots of ideological, and not so ideological, struggle going on in the car.

Laird—The ideological struggle in the car was over the radical role of science and technology, and broke down along organizational lines. Agreed that science and technology were universally misused by imperialism and the corporate state, at present, we disagreed about potential. CPP (members present) took the position that technology was inseparable from imperialism and had to be checked or destroyed until a revolutionary state was created. The SESPA people argued for continuing use of science and technology from a radical perspective. We traced much of that disagreement to SESPA's base in universities and CPP's base in corporations. Dan took strong exception to this, pointing out that SESPA-D.C. is almost entirely non-university based. Anyway, we agreed that our immediate objectives were to participate in the People's Expose (of the Indochina War) being sponsored by the Miami Conventions Coalition, communicate with McGovern delegates about our concerns over the use of technology in the war and the role of corporations in the war, peddle our literature to delegates and other in-

terested people, participate in the actions and demonstrations planned, and swim a little. By Sunday night we had accomplished all these objectives.

Lorraine—Sunday was great! Miami looked just the way it's supposed to. Refreshed from the road by a night on the floor of a CPP member's commune in Miami, the MBSTW(M)C [Miami Beach Scientific and Technical Workers (Motley) Collection^{ivc}] advanced upon Flamingo Park to get the lay of the land. The Land (as the park came to be known to its inhabitants that week) was *alive*—with Gays, Zippies, Jesus Freaks (praying or reading from the Bible, aloud), capable and determined VVAW's, guitars, dope, Legalize Marijuana'ers, plus political heavies like SDS, Miami Women's Coalition, SCLC, PL, Farm Workers and us. It was a circus, but with a core of dead serious, determined dedication. We contacted the Miami Coalition about our arrival, and then went swimming.

Laird—We set up a literature table in front of the Expose tent and started selling and giving away CPP and SESPA literature. We went on an action that evening at the Playboy Plaza Hotel, called jointly by SDS, PL and the Miami Women's Coalition to protest the Sponsors' Dinner (served by Bunnies) for Democratic Fat Cats, to honor Henry Ford. It was a good tight action, with about 200 people militantly and non-violently blocking access to the hotel until the police moved in. There was no confrontation. We then picked up a 19-year old McGovern delegate from Michigan and rapped with him for a couple of hours over dinner about technology and politics and got him to agree to bring some of our proposals up on the floor, proposals regarding weather modification warfare, bringing all war technology out of S.E. Asia and corporate reparations. We attended a demonstration-planning meeting to plan Expose and delegate workshops (an idea later dropped) and we ran off a leaflet we had written to distribute to delegates. We returned to Miami for the night feeling like we had had a very good day.

Monday morning we returned to the Land, prepared to move in and camp there for the rest of the convention.

We again set up our literature table and the CPP Automated Battlefield computer exhibit as part of Expose. We went on the Anti-Imperialist March to Convention Hall. The demonstration, about 1500 strong, marched through Miami Beach streets in a complete absence of police forces and with the sympathy of most residents, calling for an end to U.S. imperialism in Asia, Africa and South America. The afternoon was largely wasted trying to get to a youth caucus meeting of delegates which never came about. In the evening, we concentrated on Expose and our table, the only political table in the park except for PL and SDS. We missed the Poor People's March which wound up with a small band of white youths breaking away and tearing down a section of the fence surrounding Convention Hall.

Lorraine—That night, Monday, the first night of the convention, Paul and Laird took part in attempts to coalesce, politically and socially, some of the disparate groups in the park, and counter the increasingly disruptive and openly fascist ideology and tactics of some of the Jesus groups present. These groups ended up exposing themselves. There was also the question, raised in our group as well as the larger one, of SDS and PL trying to take over, along with the usual absence of serious consideration of the content of their positions.

Laird—After a night of little sleep, since on the Land everything but sleep happened all the time, we determined to spend most of the day there with our literature table and Expose. The Yippies moved next to the Expose tent to solidify a political center for the camp. Expose was fully organized for the first time. It was contained in a huge circus tent donated by Dade County. The CPP Automated Battlefield Computer was spread out on top of the tent. Inside were exhibits from Project Air War, Vietnamese paintings and cultural history exhibits, and a set of posters made by Tom Hayden and the Vietnam Resource Center. The Expose drew thousands of tourists, delegates, campaign workers and camp people for a heavy political education experience. Everyone who came by went in curiously, perhaps sceptically, and came out very quietly. Expose was such a hit that we had to keep it open to 3 AM before people stopped coming. Beside the tent was a sound stage with a non-stop political program involving every group in the camp.

Lorraine—Expose was terrific and a perfect focus for SESPA and CPP literature enlarging on the technology and science tie-in with the war and opening up to the larger area of science's use under capitalism and its current stage of imperialism. The streams of people were endless, we lost track of time about midnight and forgot our fatigue in the exhilaration of talking and listening to so many. Our collective had expanded by this time, adding Norman (SESPA-Utah), Esther (SESPA-Boston) and Jennie and Elliot (SESPA-D.C.). Dan and Esther made a sortie to sell magazines and spread the word at the local Florida Atlantic Univ. campus, two blocks from the Land, and Jennie and Elliot handed out leaflets and contacted delegates.

Laird—We kept the literature table up all day and almost used up all our literature. Norman and Lorraine spent the afternoon leafletting and rapping with McGovern

people at the Doral. In the evening we marched with the camp to the convention hall, skipped the anti-racism rally and distributed our leaflets to about 1000 delegates as they entered the convention hall. Paul and I stayed up almost all night with the Expose tent and helped out with camp security.

Wednesday morning, we attended a 'Grass Roots McGovern Workers' meeting, called by McGovern staffers who were concerned about his changing positions on the war and other issues they had worked very hard for. We leafletted and rapped with them about technology, corporations and the necessity of a strong anti-imperialist campaign.

Lorraine—At this Grass Roots thing, we got one of the best breaks of the week, as far as media exposure goes. Laird suddenly found himself on camera and was seen on CBS news that night, giving a terrific rap about the war, technology, computers and a warning to McGovern, from the people on the Land, not to renege on the withdrawal issue. We also viewed a typical exercise in liberal parliamentary paralysis, as the assembled delegates spent an hour on debate, motions, counter-motions, tablings, votings, etc., on the question of the mechanics of approaching McGovern's campaign manager, whether as a group or a delegation, on his statement about leaving a residual force in Thailand. While this was going on, the first contingent of an SDS/Yippie/PL/SCLC coalition from the Land, plus many interested unaffiliates, was moving into occupation of the lobby of McGovern's hotel down the street, to demand a confrontation with him on the pullout question and the SDS anti-racism resolution, among others. Six hours, and a thousand degrees of heat later, he complied!

Laird—In the evening we helped build a dike in front of Convention Hall to dramatize the demand to stop the bombing of the N. Vietnamese dike system. Inside, the Mass. delegation unfurled huge "STOP BOMBING THE DIKES" banners in sympathy. At times, during the convention, it was hard to tell the politics or appearance of the delegates from the demonstrators, at least on the surface. Wednesday night was a very quiet political night on the Land; happiness over McGovern's victory combined with commitment to anti-imperialist politics and struggle, despite his nomination. We left early the next morning, tired, out of literature, exhilarated by the experience and generally happy with our efforts. On the way back we had some ideological struggle over supporting McGovern versus maintaining radical "purity". That argument was on individual rather than group lines. The majority opinion in the end was that we should work with the McGovern forces, but continue a radical critique and pressure to move his campaign further to the left. That argument will have been repeated millions of times by the time of the election. It will have been, in all cases, a radicalizing experience.

Lorraine—It was hard to explain, back home, why the trip seemed so exhilarating and important to us. The impact wasn't that much, nationally. It was a matter, I guess, of the spirit down there on the Land, of solidarity and militant hopefulness, and that had to be experienced to be appreciated.

L.C. and L.R.

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within it. If the movement continues deliberately to not select who shall exercise power, it does not thereby abolish power. All it does is abdicate the right to demand that those who do exercise power and influence be responsible for it. If the movement continues to keep power as diffuse as possible because it knows it cannot demand responsibility from those who have it, it does prevent any group or person from totally dominating. But it simultaneously insures that the movement is as ineffective as possible. Some middle ground between domination and ineffectiveness can and must be found.

These problems are coming to a head at this time because the nature of the movement is necessarily changing. Consciousness-raising as the main function of the women's liberation movement is becoming obsolete. Due to the intense press publicity of the last two years and the numerous overground books and articles now being circulated, women's liberation has become a household word. Its issues are discussed and informal rap groups are formed by people who have no explicit connection with any movement group. The movement must go on to other tasks. It now needs to establish its priorities, articulate its goals, and pursue its objectives in a coordinated fashion. To do this it must get organized—locally, regionally, and nationally.

Once the movement no longer clings tenaciously to the ideology of "structurelessness," it is free to develop those forms of organization best suited to its healthy functioning. This does not mean that we should go to the other extreme and blindly imitate the traditional forms of organization. But neither should we blindly reject them all. Some of the traditional techniques will prove useful, albeit not perfect; some will give us insights into what we should and should not do to obtain certain ends with minimal costs to the individuals in the movement. Mostly, we will have to experiment with different kinds of structuring and develop a variety of techniques to use for different situations. The Lot System is one such idea which has emerged from the movement. It is not applicable to all situations, but is useful in some. Other ideas for structuring are needed. But before we can proceed to experiment intelligently, we must accept the idea that there is nothing inherently bad about structure itself—only its excess use.

While engaging in this trial-and-error process, there are some principles we can keep in mind that are essential to democratic structuring and are also politically effective:

1. *Delegation* of specific authority to specific individuals for specific tasks by democratic procedures. Letting people assume jobs or tasks only by default means they are not dependably done. If people are selected to do a task, preferably after expressing an interest or willingness to do it, they have made a commitment which cannot so easily be ignored.

2. Requiring all those to whom authority has been delegated to be *responsible* to those who selected them. This is how the group has control over people in positions of authority. Individuals may exercise power, but it is the

group that has ultimate say over how the power is exercised.

3. *Distribution* of authority among as many people as is reasonably possible. This prevents monopoly of power and requires those in positions of authority to consult with many others in the process of exercising it. It also gives many people the opportunity to have responsibility for specific tasks and thereby to learn different skills.

4. *Rotation* of tasks among individuals. Responsibilities which are held too long by one person, formally or informally, come to be seen as that person's "property" and are not easily relinquished or controlled by the group. Conversely, if tasks are rotated too frequently the individual does not have time to learn her job well and acquire the sense of satisfaction of doing a good job.

5. *Allocation* of tasks along rational criteria. Selecting someone for a position because they are liked by the group or giving them hard work because they are disliked serves neither the group nor the person in the long run. Ability, interest, and responsibility have got to be the major concerns in such selection. People should be given an opportunity to learn skills they do not have, but this is best done through some sort of "apprenticeship" program rather than the "sink or swim" method. Having a responsibility one can't handle well is demoralizing. Conversely, being blacklisted from doing what one can do well does not encourage one to develop one's skills. Women have been punished for being competent throughout most of human history; the movement does not need to repeat this process.

6. *Diffusion of information* to everyone as frequently as possible. Information is power. Access to information enhances one's power. When an informal network spreads new ideas and information among themselves outside the group, they are already engaged in the process of forming an opinion—without the group participating. The more one knows about how things work and what is happening, the more politically effective one can be.

7. *Equal access to resources* needed by the group. This is not always perfectly possible, but should be striven for. A member who maintains a monopoly over a needed resource (like a printing press owned by a husband, or a darkroom) can unduly influence the use of that resource. Skills and information are also resources. Members' skills can be equitably available only when members are willing to teach what they know to others.

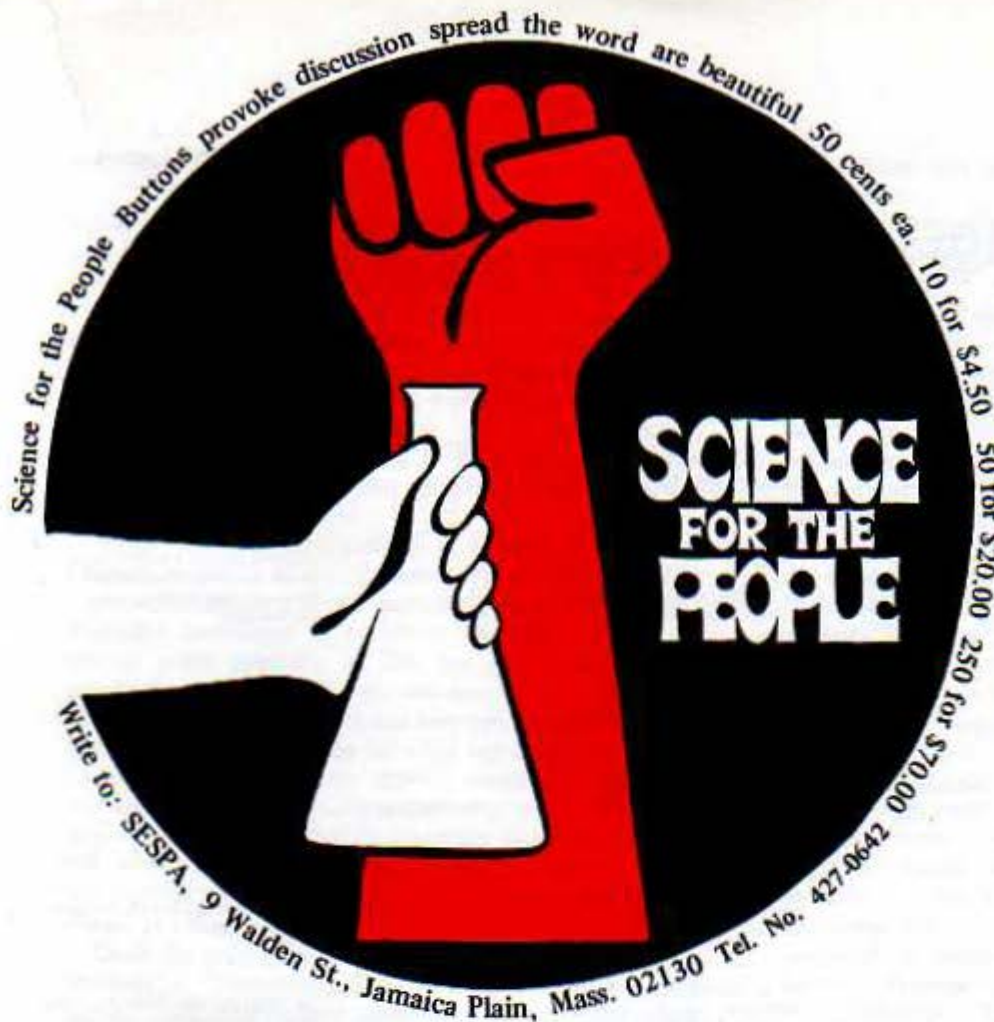
When these principles are applied, they insure that whatever structures are developed by different movement groups will be controlled by and responsible to the group. The group of people in positions of authority will be diffuse, flexible, open, and temporary. They will not be in such an easy position to institutionalize their power, because ultimate decisions will be made by the group at large. The group will have the power to determine who shall exercise authority within it.



J.

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

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

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

1. Name:

Address:

Telephone:

Occupation:
(if student or unemployed please indicate)

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

2. Local SESPA chapter or other group in which I'm active:
3. I am enclosing money according to the following scheme: (a) regular membership—\$10, (b) indigent membership—less than \$10, (c) affluent or sacrifice membership—more than \$10, (d) completely impoverished—nothing, (e) I have paid already.
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5. I am attaching a list of names and addresses of people who I believe would be interested in the magazine. Please send them complimentary copies.

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.

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