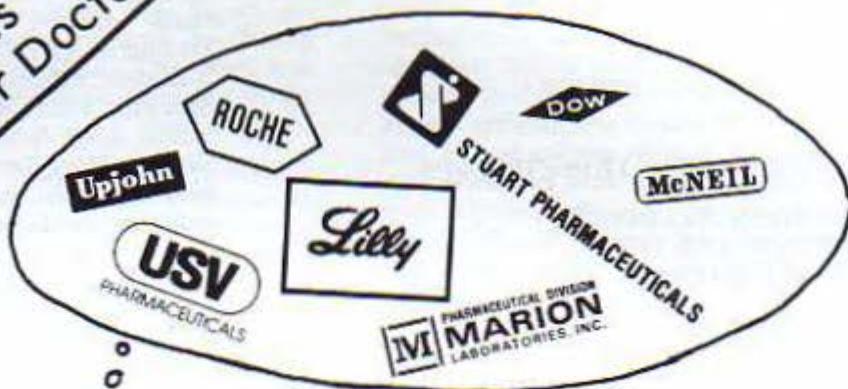


SCIENCE FOR THE PEOPLE

Why Do Drug Companies
Spend \$5000 a Year Per Doctor?



inside

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**We've Moved!!!
Science for the People
has a new address:
897 Main Street
Cambridge, Mass. 02139
phone 617-547-0370**

SCIENCE FOR THE PEOPLE: the organization

Science for the People is an organization of people involved or interested in science and technology-related issues, whose activities are directed at 1) exposing the class control of science and technology, 2) organizing campaigns which criticize, challenge and propose alternatives to the uses of science and technology, and, 3) developing a political strategy by which people in the technical strata can ally with other progressive forces in society.

SftP opposes the ideologies of sexism, racism, elitism, and their practice, and holds an anti-imperialist world-view. Membership in SftP is defined as subscribing to *SftP* and/or actively participating in local SftP activities. (Chapters and contacts are listed on the inside back cover.)

SCIENCE FOR THE PEOPLE: the magazine

SftP is published bimonthly and is intended not only for members, but also for a broad readership within the technical strata and for all others interested in a progressive-radical view on science and technology. The goals of *SftP* are to elucidate the role of science and technology in society, to enrich the political consciousness of readers, and to stimulate participation in concrete political activities.

The subscriber circulation of *SftP* is about 1,500, the total circulation about 4,000. The content of *SftP* derives largely from the experiences and interests of people who read the magazine. In seeking to "rely on the people", we urge everyone both to contribute to the magazine themselves and to encourage others to do the same. We are particularly interested in having articles written, discussed, or at least reviewed, collectively, when circumstances permit. For legal purposes, *Science for the People* is incorporated. *Science for the People* is available in microfilm from Xerox University Microfilms, 300 North Zeeb Rd., Ann Arbor, Mich. 48106, (313) 761-4700.

continued on p.25

about this issue

In the major article of this issue, Concerned Rush Students present a detailed analysis of the drug industry's all-pervasive and subtle influence on doctors' attitudes towards prescription drugs. They clearly expose the contradiction between corporate profit and people's needs in the health care sector. This article is in two parts, with the second half to be published in the January issue of the magazine.

Nancy Folbre's article focuses upon population growth and the economic factors which determine its rise or decline. This article is important because it avoids the pitfalls of current debates between technocrats and the Left.

Folbre criticizes the technocrats for concentrating merely on "technical fixes" to halt population growth in the Third World rather than analyzing the underlying causes. As Folbre points out, population trends are relatively independent of contraceptive innovations. When the new technology inevitably fails, the rulers of developing countries, with the strong support of the US, resort to legal sanctions, bribes and forced sterilization.

Folbre argues that the Left has largely refused to acknowledge that rapid population growth poses difficult problems for the development of Third World countries. Instead the Left has focused on the world capitalist system as the main cause of underdevelopment. According to Folbre, the Chinese view the reduction of population growth as an important goal. Folbre cautions that the question, of whether population growth should be reduced, depends upon an economic analysis of the particular country. She agrees with the Left position that political and economic reorganization is much more important than the population growth rate in determining per capita income. But she recognizes that population growth is a critical factor in the developmental process.

We agree with Folbre's position that rapid population growth is a crucial problem and that the solution is political not technological. But there are some questions and problems we would like to raise. First, in her analysis, Folbre does not give adequate emphasis to non-economic factors which affect population growth. Is it possible that even after economic reorganization, population growth rates remain high because of other factors such as culture, religion, social norms and values, etc.? What has been the impact of the women's movement in reducing the rate of population growth?

Secondly, we believe that the question of whether population growth should be slowed or increased should not be based solely on an economic analysis. For example, in making its decision, a truly human society must also take into account the issues which the women's movement has raised about the family and the sexual division of labor.

The article by Steve Cavrak describes the case of technical workers in Britain's Lucas Aerospace Corporation demanding that the product of their work be socially useful, and that production be meaningfully structured. In doing so, the Lucas workers have made contract demands which encroach upon areas of decision-making traditionally reserved to management. The workers have made steps toward forcing a conversion of their defense-oriented company to a science and technology that would serve people, not work against them.

Many of the articles submitted to *SfiP* are written in a formidable technical style that makes access by non-specialists difficult. We would prefer articles written for a broader readership and ask authors to make sure esoteric words are first clearly defined and then used only with care. Accuracy and depth of coverage need not be sacrificed. Rather, more attention to *how* things are said as well as to what is said improves the chances for accurate communication to readers.

ERRATUM

The following references were inadvertently left out at the end of the article on nuclear power in the last issue, written by the Energy and Environment Group of the NY Science for the People Chapter:

9. C.C. Johnson of the U.S. Public Health Service in a speech before the National Tuberculosis and Respiratory Disease Association, 1969. Cited in *The Nuclear Fuel Cycle*, op. cit. p. 9.
10. American Physical Society, *Efficient Use of Energy: A Physics Perspective*, American Institute of Physics, New York (1975). E.P. Gyftopoulos, L.J. Lazaridis, and T.F. Widmer, *Potential Fuel Effectiveness in Industry*, a report to the Energy Policy Project of the Ford Foundation, Ballinger, Cambridge, MA (1974).
11. *N.Y. Times*, March 10-15, 1976, April 13, 1976.
12. James Ridgeway, *The Politics of Ecology*, Dutton, New York (1971).

13. Robert Engler, *The Politics of Oil*, Univ. of Chicago Press (1961).
14. Union for Radical Political Economics (URPE), *The Energy Crisis, a Matter of Profits* (1974). Available from URPE, 41 Union Square, Rm. 901, New York, NY 10003.
15. Joe Stork, *Middle East Oil and the Energy Crisis*, Monthly Review, New York (1975), p. 26.
16. James Ridgeway, *The Last Play*, Dutton, New York (1973).
17. URPE, op. cit.
18. Engler, op. cit.
19. Stork, op. cit., p. 60.

NEWS NOTES

HOUSEWORK GOT YOU DOWN?

Dr. Walter Freeman, called the "Dean of Lobotomy," recently stated that women who are lobotomized make good housekeepers. He said, "Women of all ages make up the great majority of cases and the successes of psychosurgery. From the available evidence, it would appear that it is difficult for a man to support a family after a lobotomy, but it is easy for a woman to do housework."

—The Guardian,
October 13, 1976

IS DIS A SYSTEM?

Have you noticed your telephone bills rising over the past few years? Rest assured they will continue to rise. There's not much chance that Ma Bell will pass the savings on to you from her latest technological innovation, the Traffic Service Position System. T.S.P.S., as it is affectionately called, makes a "Remote Trunk Arrangement" possible whereby billing information on long distance calls can be released automatically, eliminating the messy human element of operators actually writing things down. In spite of an anticipated cost to Bell Telephone of \$260 million for 167 T.S.P.S.'s, \$490 million will be saved by the company by eliminating 40,000 operators nationwide. If these workers were assured other, perhaps more interesting jobs we would hail these changes as technological advances. As it is, the ranks of the unemployed will swell because it is cheaper for Ma Bell for tens of thousands of former employees to collect unemployment insurance benefits than to have them on the payroll.

—New York Times,
September 29, 1976

FIREPROOF YOUR INTESTINES

That august body, The National Academy of Sciences (NAS) has once again demonstrated its inherent weakness in dealing with real issues of national concern. This time it was the NAS subcommittee on "The health effects of asbestos in the nation's drinking water." No, they didn't come out and say it was good for you because it made your stomach fireproof. But, their interpretation of the "public interest" involved passing the confidential (why confidential?) committee reports on to the Reserve Mining Company, a major asbestos producer. Reserve, you may remember, has been running its own little fireproofing program by dumping large quantities of asbestos into Lake Superior. That program has resulted in a lengthy government suit against the company. One committee member, Dr. Paul Groos of Naples, Fla. has been found by the Justice Department to have passed committee reports to an attorney for Reserve. This shouldn't have been a terrible surprise to the NAS since Gross had testified on behalf of Reserve in earlier court cases and had been listed as a paid consultant by Reserve. How did the NAS miss Gross' obvious bias and appoint him to the committee? What a silly question!

—Science, Aug. 20, 1976

THE EPA IS HAZARDOUS TO ITS OWN HEALTH

The Environmental Protection Agency, the federal agency charged with monitoring industry's tendency to poison our air and water, has failed to protect hundreds of its own scientists engaged in collecting, analyzing, and researching highly toxic substances. According to a recent draft report from the General Accounting Office, the EPA has effectively ignored federal laws requiring it to provide special regular health monitoring programs for workers exposed to dangerous chemicals. Despite the cancer deaths of employees at an EPA pesticide lab in Washington, despite two incidents of exposure to high levels of nitric acid, hydrochloric acid and nitrogen dioxide in North Carolina

EPA laboratories resulting in six sick employees, there are virtually no health monitoring systems in the eleven (of a total of 60) labs that the GAO inspected. According to the GAO, among the toxic substances found in the laboratories are carcinogens like vinyl chloride and asbestos and well-known poisons like Kepone, lead, mercury and nickel carbonyl. Fifty-eight and a half percent of the employees in the EPA labs have been exposed to such substances.

A spokesperson for the EPA did not deny the GAO's charges and said that an "aggressive program" has been started to identify the problems and to correct them.

—New York Times,
September 27, 1976

FALLOUT

The U.S. Energy Research and Development Administration (ERDA) failed to alert the public about radioactive fallout from a recent Chinese nuclear weapons atmospheric test, even though the levels of radioactive iodine-131 in samples of milk from Pennsylvania were four to six times the level at which protective action is urged.

These samples of milk had four to six hundred picocuries (measure of radioactivity) of iodine-131 per litre; the Federal Radiation Council recommends protective action at the level of 100 picocuries per litre.

Dr. Ernest Steingalss of the University of Pittsburgh, said that pregnant women who drank milk in October and November may have received a cumulative thyroid dose of radioactivity that could increase fetal deaths and leukemia by 10 to 30 per cent. After the test, Friends of the Earth, a New York-based environmental action organization, urged that infants not drink milk for the first eight weeks after the test and that adults wait for one month.

The states of Massachusetts, Connecticut, and New York warned farmers to feed their cattle stored grain to prevent iodine ingestion by pregnant mothers and children. This was not done in time in Pennsylvania and, as a result, fetal deaths and thyroid disorders will increase.

Friends of the Earth recommended that residents of North-eastern United States use no fresh local milk during October and November and thoroughly wash and peel all fruits and vegetables. Pregnant women and children were advised to use only powdered milk dated before October 6 with bottled water for eight weeks and to consume no unpeelable vegetables or fruits for eight weeks. Adults were urged to follow these procedures for four weeks. During this period it was advised that only imported dairy products such as cheese, yogurt, etc., or aged dairy products be used.

—Phil Youderian

SCIENCE FOR THE PEOPLE?

According to its executive officer William D. Carey, the American Association for the Advancement of Science (AAAS) is planning a behavioral shift. Carey says that the world's largest interdisciplinary science organization is going to go "beyond the confines of the journal and the annual meeting" and take a more activist role in promoting public understanding of science. Among the planned new departures are the yearly publication of ten "readable" books or long pamphlets on scientific developments; a series of seminars on regional issues organized at the request of local groups; meetings with industrial and business sectors to explain and interpret Federal science policy; and sponsorship of "Interciencia," a bimonthly journal to be distributed in Latin American countries. The organization is thinking of forming an advisory group for television networks which often present "wrong" scientific information to the public.

These planned reforms will not of course interfere with business as usual for the AAAS. Pure science and scientific developments will, according to Carey, "still be the life-line of the association" and, as we all know, it will take more than a few liberal reforms from the AAAS to actively engage nonprofessionals in understanding, planning, and carrying out scientific policy.

—*New York Times*,
October 10, 1976

IQ DATA FRAUD

The most sensational charge of scientific fraud this century is being levelled against the late Sir Cyril Burt, father of British psychology. Leading scientists are convinced that Burt published false data and invented crucial facts to support his controversial theory that intelligence is largely inherited.

The accusation has far-reaching implications. Not only were Burt's ideas fundamental in influencing British education for half a century — from the late 1920's right up to his death in 1971 — but they also inspired the public controversy over race and intelligence, which has been led in Britain by Professor Hans Eysenck and in America by Professor Arthur Jensen, a former post-doctoral student of Eysenck.

There are four main charges:

1. That Burt often guessed at the intelligence of parents he interviewed but later treated these guesses as scientific data.

2. That two of Burt's collaborators who are named as authors of research papers may never have existed and that Burt himself wrote the papers making use of their names.

3. That Burt miraculously produced identical answers accurate to three decimal places from different sets of data — this is a statistical impossibility and he could have done it only by working backwards to make the observations fit his answers.

4. That Burt used this method of working backwards in another way: by supplying data to fit predictions of his favorite genetic theories, he appeared to offer scientific proof where it did not exist.

The extraordinary conclusions that Burt falsified his evidence to fit his theories has emerged from a Sunday Times inquiry which followed up independent academic criticisms of Burt in Britain and the United States. In the wake of the argument set off by Jensen and Eysenck, Dr. Leon J. Kamin, professor of psychology at Princeton, has been collating Burt's figures. He discovered that they varied seriously from one paper to the next. At Hull University, Dr. Ann Clarke and her

husband, Professor Alan Clarke, have been checking the consistency with which Burt's figures fitted his theories. The Sunday Times, following these leads, has tried to speak to Burt's collaborators and found that there are serious doubts whether they exist.

His educational theories are still important. His belief that the commonest cause of educational retardation was "inborn inferiority of general intelligence" — incorporated in the Wood report of 1929 played a part in confirming the policy of segregating the mentally subnormal so that they would not reproduce.

Burt's ideas strongly influenced the 1944 Education Act. Burt suggested that there should be three types of school for children with different abilities — grammar, technical and secondary modern — the Act echoed his theory that intelligence was innate and unlikely to change during teenage years.

—Oliver Gillie,
The Sunday Times (London)
October 24, 1976

SCIENCE WALKS ON MANY LEGS

This past summer a scientist from Harvard Medical School visited his parents' homeland, China. He had discovered that his mother, whom he had not heard from in many years, was still alive and living in a rural village in the mountainous regions of Hunan province.

After he had been in the village for a short time, word got around that a visitor from the United States was there. He was soon approached by a local school teacher who had heard that an English-speaking scientist was there.

The teacher presented his dilemma — he had a copy of a publication that was of great interest to him, but was written in English. He understood some English, but not enough to get the gist of each article. He asked if the visitor would be willing to translate a few articles for him.

The visitor from the States agreed and asked the name of the magazine the teacher was interested in. The answer — *Science for the People!*

M.D.'s in the Drug Industry's Pocket

By Concerned Rush Students

Concerned Rush Students is a group of nursing and medical students at Rush Pres. St. Luke's Medical Center, Chicago. During the past four years, through discussions, weekly literature tables, speakers, films, and written exposes, we have raised the political issues which surround the health care delivered in our hospital. We have also succeeded in making changes. A series of unethical experiments on Black pregnant women was ended through our efforts, as was the segregation of Black and white inpatients on the Obstetrical-Gynecology floor. Our most recent project was an analysis of the US drug industry—one of the most important forces behind medicine's distorted practices and ideology. We presented the paper as a six-week program to our classmates and the hospital community. We are presently discussing the issue of health-care cutbacks both within our hospital, where elimination of outpatient clinics is imminent, and within Chicago and the country at large. Our goal is to develop a strategy to attack this problem at the level of education as well as direct action. Perhaps most importantly, the group provides support for its members and a constant reminder of the political nature of medicine.

Medical Education and Gifts

"How do doctors get this way?"
—statement by hospital worker at Ob-Gyn Speak-Out, May 1973

The drug industry works hard to contact and influence students throughout their medical education. In the classroom, drug companies reach students by providing films, slides, speakers, research grants, and even pharmacology teachers. Drug advertising dominates the pages and budgets of medical journals. From the time they enter medical school, students are bombarded with "gifts" of stethoscopes, reflex hammers, pamphlets, and books, culminating at graduation with engraved black bags to keep it all in. Many medical students accept these gifts, and most do so uncritically. Students find these contributions benevolent, helpful, or at worst, innocuous. We think it is crucial to ask why drug companies are so interested in medical students and to analyze the goals and effects of the industry's "generosity."

We must understand that the drug companies' "educational resources," their advertising, and their salespeople all have the same ultimate goal: maximization of profits. To quote Dr. Dale Console, former medical director of the E.R. Squibb & Son drug firm:

It seems impossible to convince my medical brethren that drug company executives and detail men are either shrewd businessmen or shrewd salesmen, never philanthropists. They make investments not gifts.[1]

Their gifts, literature, and advertising are designed to influence the future medical and prescribing practices of students. These companies know that by the time they receive their degrees, students have well-formed prescribing habits. The industry attempts to establish itself as a legitimate purveyor of information, and as a result, students gain confidence in its products, dependence on its literature and quickly learn the "pill for every ill" concept of health care.

If any student or practicing physician were offered \$5000 per year in return for pushing drug industry products, he or she would probably shrink in horror at the prospect of such a bribe. Yet, on the whole, the industry has been remarkably successful in achieving its goals. In return for their \$5000 annual investment in advertising per doctor, the industry is able to induce an 89% rate of brand name prescribing, and many millions of dollars of unnecessary drug prescriptions.[2]

What are the steps in the process which allow the drug companies such influence over doctors? First of all, by opening its doors to the drug company gifts, literature, and representatives, medical schools sanction the legitimate and established place of the drug industry in medical education. The individual beginning medical school is anxious, insecure and uncertain about expected performance and behavior. These initial gifts can convey a sense of importance and identity. Furthermore, these gifts are practical and helpful aids for learning medicine. Students delude themselves by believing they are outwitting the drug industry because they are giving nothing in return for these gifts. However, the "rip-off" of the drug industry by students is a carefully devised strategy on the part of the industry, calculated to maximize the effectiveness of their own rip-off of the American public.

The two essential characteristics of the interactions between medical students and the drug industry are that the student/doctor increasingly 1) depends upon the drug companies as a source of medical information and 2) accepts passively the industry's priorities and directions. The drug industry's strategy is sometimes subtle, but almost always effective. The process is a series of gradual changes for the student becoming a doctor. Students insist that they are fully aware of their own intentions and the drug companies' involvement with the industry. Eventually, many doctors *do* give their patients samples of those slickly packaged starter-kits left by the detailmen,* as well as writing prescriptions for the same expensive brand-name product rather than a less expensive generic one.

Generic vs. Brand Names

One of the ways that the profit motive of the drug industry distorts health care is illustrated by the issue of generic and brand names. When a new drug is introduced, it is given two names, a generic and a brand name. The generic name is usually related to the class of chemicals to which the drug belongs. The brand name is usually shorter, catchier, and easier to remember. An example of a generic name is chlorthalidone, which most people know by the company's brand name, Librium.* For the seventeen years of patent monopoly, only the company that developed the drug can market it under either name. After the patent has expired, other companies can market the drug, but only under the

**RUSH
MEDICAL
COLLEGE**

1743 WEST HARRISON STREET, CHICAGO, ILLINOIS 60612

George C. Flanagan, M.D.
Associate Dean
Curriculum and Evaluation

October 1, 1974

TO: Phase I Students

FROM: George C. Flanagan, M.D.
Associate Dean

The Eli Lilly Company is again offering to all incoming medical students a free gift of a stethoscope, tuning fork, and percussion hammer. If you are interested in receiving this gift, stop by my office before Tuesday, October 8 and fill out the form. You will receive the gift prior to the time that you start your clinical tutorials.

Best Wishes for Success in Your Career from Eli Lilly and Company

Greeting card enclosed with gifts.

Medical school Dean inviting students to pick up their "free gifts."

We can clearly see that the industry designs its strategy so that no single conscious decision needs to be made by the student to enter into the collusion. It becomes easy for students to deny the reality of this *process*. When confronted with their complicity, most see the issue as only their individual choice and right to receive a certain gift or prescribe a certain drug. We feel that this view must be challenged so that the drug industry's manipulations will be exposed and so that medical students and doctors will begin to take responsibility for their actions.

* We consider it important to avoid sexist language, and recognize that the word "detailman" negates the existence of those few women the industry does employ to push their products. However we choose "detailmen" rather than "detail-people" because 1) the reality that virtually all of their salespeople are (white) men, 2) it is a graphic term that most readers associate with the crassest industry practices and 3) we did not want to imply advocacy of more detailwomen as a positive alternative—the role they would play would be equally undesirable.

generic name or a new brand name; the original brand name (e.g. Librium) is permanently owned by the company that developed it.

Drug companies invest heavily in advertising their brand names to permanently imprint them on people's minds. Thus, even when the patent expires and other companies start marketing the drug at much lower prices under the generic name, the company continues its monopoly on the market.** The drug company's gain, however, is the consumer's loss—brand name products

* In Great Britain, the Monopolies and Mergers Commission recently found Hoffman-La Roche guilty of unfair monopoly practices and ordered them to reduce the price of Librium by 60%. The West German government issued a similar order. US consumers pay 700% more for Librium than what the British government considers fair. (*HealthRight*, Volume II, number 1)

** Antisubstitution laws forbid a pharmacist from substituting a less expensive generic drug for a brand-name prescription. These laws, enacted and maintained through drug-industry lobbying, still exist in 37 states.

are consistently more expensive than generic name products, sometimes 10-20 times more costly.

Each time we write or say a brand name, we should examine the origins of the habit. All legitimate sources of information, including pharmacology textbooks, medicine and nursing textbooks, and respected medical journals (e.g. *The New England Journal of Medicine*), refer to drugs by their generic names. To quote the major pharmacology textbooks:

...the immediate answer to the question for most drugs (and the ultimate answer for all drugs) is straightforward. The physician should prescribe by nonproprietary [nonbrand] name.

—Goodman and Gillman[3]

Prescribe by generic rather than brand name.

—*Lange Pharmacology Review Book* [4]

There is considerable advantage to prescribing drugs by their official or generic names. This often allows the pharmacist to dispense a more economical product than a trademarked preparation of one company. It would eliminate the expense of each pharmacy's maintaining a multiplicity of very similar preparations, a saving that could ultimately benefit the patient.

—Goth, *Medical Pharmacology* [5]

Through these sources, students can learn about drugs in a systematic fashion, relating the mechanisms of action, uses and side effects to the particular class of drugs. For example, the name sulfisoxazole helps health workers think about the sulfa group of antibiotics.

Then why does everyone learn the name Gantrisin instead of sulfisoxazole? Brand names are infused into the medical vocabulary through thousands of pages of drug ads, glossy educational booklets and well-labelled giveaways such as pens, rulers, prescription pads, and tourniquets. Students themselves become walking billboards, their pockets stuffed with these trinkets advertising brand-name drugs. None of these sources contribute

MEDICAL TEXTBOOKS PEDDLE SEXISM

Both [6-year-old] boys and girls like to pretend, but there is a sex difference. Boys pretend that they are conductors, astronauts or soldiers or imitate some other masculine role in which there is plenty of activity. Girls dress up in costumes and play at being mothers or teachers, with younger children or dolls as their children.

—D.R. Marlow, *Textbook of Pediatric Nursing*, 4th ed., W.B. Saunders, 1973, p. 618

The fundamental biologic factor in women is the urge of motherhood balanced by the fact that sexual pleasure is entirely secondary or even absent.

—W.R. Cooke, *Essentials of Gynecology*, J.B. Lippincott, 1973, p. 59

The traits that compose the core of female personality are feminine narcissism, masochism and passivity.

—J.R. Willson et al., *Obstetrics and Gynecology*, 5th ed., C.V. Mosby, 1975, p. 43

Women are usually more patient in working at unexciting repetitive tasks... Women on the average have more passivity in the inborn core of their personality.... I believe women are designed in their deepest instincts to get more pleasure out of life—not only sexually but socially, occupationally, maternally—when they are not aggressive. To put it another way, I think that when women are encouraged to be competitive too many of them become disagreeable.

Benjamin Spock, *Decent and Indecent*, rev. ed., Fawcett World, 1971, p. 32 [!]

These and other examples are given in "Sexism in Medicine," by Richard Levinson, *American Journal of Nursing*, March 1976, p. 426

—Editorial Committee

COMPARATIVE WHOLESALE PRICES OF SELECTED BRAND-NAME AND GENERIC-NAME DRUG PRODUCTS, 1972

Product	Price	Price Ratio	Product	Price	Price Ratio
Reserpine: 1,000 0.25-mg			Oxytetracycline: 100 250-mg		
Serpasil (CIBA)	\$39.50	35.9:1	Terramycin (Pfizer)	20.48	
Reserpine (Vita-Fore)	1.10		Oxytetracycline (H. L. Moore)	1.95	10.4:1
Chlorpheniramine: 1,000 4-mg			Theophylline, ephedrine, and phenobarbital: 1,000		
Chlortrimeton (Schering)	21.66	18.0:1	Tedral (Warner-Chilcott)	32.85	8.4:1
Chlorpheniramine (American Quinine)	1.20		Theophylline, ephedrine, and phenobarbital (Kaspar)	3.90	
Meprobamate: 1,000 400-mg			Tetracycline: 1,000 250-mg		
Equanil (Wyeth)	68.21	13.9:1	Achromycin (Lederle)	52.02	5.9:1
Meprobamate (Interstate)	4.90		Tetracycline (Interstate)	8.75	
Chlorpheniramine, timed disintegration: 500 12-mg			Penicillin G: 100 400,000-units		
Teldrin (Smith Kline & French)	32.50	13.0:1	Pentids (Squibb)	10.04	5.7:1
Chlorpheniramine (American Quinine)	2.50*		Penicillin G (Midway)	1.75	

to a rational, balanced understanding of the products. In fact, their success depends on their ability to do just the opposite. Students learn brand names both directly from these sources and indirectly from their teachers (residents and attendings) whose drug habits have the same origins, thus perpetuating the vicious cycle.

The drug industry argues that generic drugs are inferior to brand-name products. In sifting through the industry's propaganda, we find that their charge of inferiority takes two forms: 1) innuendoes relating to inferior quality, such as impurities and lack of potency of the chemicals produced, and 2) differences in biological actions inside the body, that is, bioequivalence or therapeutic equivalence.

Current Food and Drug Administration regulations demand that generic and brand-name drugs be chemically identical. In implementing these regulations, the F.D.A. has found essentially equal percentages of brand and generic products failing to meet potency requirements. In 1972 Dr. Henry E. Simmons, director of the F.D.A.'s Bureau of Drugs, in summarizing thousands of tests conducted by his agency, stated, "We cannot conclude there is a significant difference between the

CONTROLLED CIRCULATION

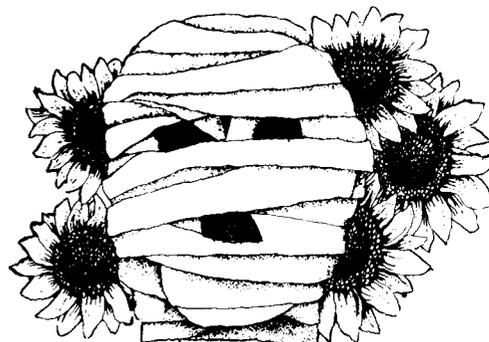
Much of the written and audio-visual teaching material supplied to the MD on all medical subjects...is also supported by the pharmaceutical industry. This includes the vast majority of medical magazines which fill his mailbox, the clinical symposia that discuss specific drugs or general approaches to therapeutics, the audio-visual teaching systems he studies in his spare time, the films and closed-circuit TV tapes he sees in his hospital conferences, and even the scientific exhibits and presentations by panels of experts he encounters at medical meetings....A list was compiled of the 28 medical publications having a circulation of 70,000 or more...only one, *New England Journal of Medicine*, is financed to any major extent by subscriptions. Twenty-five of these 28 leading publications are sent to MDs free of charge and are paid for entirely by industry funds...Only two, *New England Journal* and *JAMA [Journal of the AMA]* are scholarly journals, i.e., journals which primarily print reports of original research submitted by the investigator after review by independent expert reviewers. The remainder are publications which the pharmaceutical and publishing industries call "controlled circulation" publications. They are also known popularly as "throw-aways." They generally do not publish original work and usually do not have a rigorous review of papers of the type conducted by the scholarly journals.

—from the presentation of FDA Bureau of Drugs Director J. Richard Crout to the Senate Subcommittee on Monopoly, April 28, 1976

—Editorial Committee

generic and brand-name products." [6]

In arguing that there are variations in "bioequivalence" among differing brands of the same product, they mostly contend that different brands achieve different blood levels ("bioavailability"). In some cases they claim a better therapeutic effect for the brand-name product, despite identical blood levels. Meaningful clinical differences in bioavailability have been demonstrated in very few drugs. [7] One example considered to be the most important and certainly the most highly publicized is among brands of digoxin (a digitalis-derived heart drug).* The industry argues that this "worrisome" evidence of variations in bioavailability among digoxin products justifies physicians' "fears" of generic drugs. To examine this question, a study was recently conducted of prescriptions written at Rush-Presbyterian-St. Lukes Hospital, a major academic teaching hospital. Despite the fact that the hospital's physicians and medical students were aware of the digoxin issue, the drug was *prescribed generically 90% of the time!* For all of the other drugs prescribed in the hospital, brand names were used for $\frac{2}{3}$ of the prescriptions. The study concluded that "bioavailability has little to do with the reasons students and doctors use brand names." [8]



The drug companies have used this whole issue as a smokescreen for the real issues—rational prescribing, drug costs, and profits. For years they have opposed virtually all attempts to more closely monitor the quality, safety and effectiveness of drugs. Now the industry is hypocritically leading a crusade to protect the public from the "risks of variations in bioequivalence." Rather than making a meaningful contribution toward ensuring bioequivalence among identical chemical products, they have exploited the issue. Their efforts are directed towards mystifying the problem, leaving health workers and patients sufficiently confused that they can do nothing but trust the reputation of the big name brands. What is needed, instead of trust, is unbiased, constructive research on the biologic effects of drugs.

Prescribing drugs by generic rather than brand name

*FDA testing now assures that adequate blood levels are delivered by all digoxin products sold. (9) The FDA also monitors a host of other drugs to prevent similar problems. For example, antibiotics are now bio-assayed before marketing and each batch is individually certified by the FDA (10).

continued on p. 20

Economics and Population Control

Nancy Folbre

Intense concern over rapid rates of world population growth burst into the mass media and public consciousness in the late 1960's with the publication of Ehrlich's *The Population Bomb* (1) and the Meadows' *Limits to Growth* (2). The impact of these studies upon the public lay in their bold assertiveness and attractive simplicity: resources are finite and, given present technologies, the global ecosystem cannot sustain present rates of population growth. Evidence for this, they argued, lies in the "over-populated" areas of the world in which low incomes and abject poverty are the rule. These sweeping generalizations were met by vehement criticism from many quarters. Many scientists argued that the notion of fixed resources was nonsensical; that a flexible, technologically innovative economy would easily cope with such problems. Radicals argued that concern over population growth was merely a smokescreen to disguise the real cause of underdevelopment, the capitalist structure of the world economy. (3)

Today the controversy over population growth has matured and become more complicated. Demography is one of the hottest new areas for research in the social sciences, giving rise to proliferating studies on the implications of population growth. Private consulting firms, such as General Electric's TEMPO (Technical Military Planning Organization) have received extensive Agency for International Development funds to provide the intellectual rationale for U.S. sponsored family planning programs. (4)

Recent developments in the People's Republic of China suggest that reduction of population growth in a socialist economy may be a desirable goal. Comprehensive health care programs there have included extensive distribution of contraceptives and education in their use. Simultaneously, events in Puerto Rico and India have shown that family planning may assume vicious forms. Over 40 per cent of Puerto Rican women of childbearing age have been sterilized, many of them without understanding the full implications of the operation. In India, the suspension of civil liberties, and government pronouncements concerning the "need for mandatory sterilization", have lent an ominous tone to developments there. (5)

In order to develop an effective criticism of population control, it is important to have an adequate theory of population growth. This article outlines such a theory by examining the role of the family as a unit of production. It offers an explanation of why population

growth creates a problem for capitalist economies, focusing on the *causes*, rather than the consequences of high fertility. It is argued that high fertility persists in many areas because it is economically advantageous to individual families, and a decrease in desired family size will not occur until changes in the social relations of production erode the material rationale behind large families.

Such a transformation of the family production unit occurred through the process of capitalist development in the United States; however, since capitalist growth is uneven and hampered by the imperialist structure of the world economy, this "demographic transition" may not be forthcoming in the Third World. The Chinese example illustrates an alternative strategy: changes in peoples' relation to production were effected relatively quickly through political reorganization. (5) This analysis suggests that capitalist regimes face a serious dilemma: **They would like to limit population growth, but are unable or unwilling to change the economic structures which promote high fertility.**

Effects of Population Growth

Despite a great deal of attention being focused on this issue, economists have failed to prove that rapid population growth slows the growth of per capita income in developing economies. (6) It is hardly surprising that empirical work has failed to confirm such a broad generalization. The main reason that social scientists have focused upon this generalization rather than upon specific historical case studies of individual countries is that their major concern is the articulation of a theory which posits the developmental ideal of rapid growth within the capitalist framework. In their efforts to construct a theory of underdevelopment which supports a technological, rather than a political solution, and calls for the distribution of contraceptives rather than a redistribution of the means of production, they have lost touch with reality.

It is important not to react to these false generalizations with counter claims that are equally unsubstantiated. The question of whether population growth should be slowed should rest upon careful analysis of the economic situation of a particular country. The point is that even if a rapid rate of natural increase does slow the increase of per capita income, its contribution is less than that of the overall political strategy and organization of development. For instance, one of the

most striking contrasts in the developing world, that between India and China, can hardly be explained by differences in population density or growth. Nevertheless, radical analyses must go beyond the truism that capitalism, rather than population growth, is the source of underdevelopment.

In many areas of the underdeveloped capitalist world, high rates of population growth together with stagnant employment have increased the reserve army of labor and thrust peasants from small farming areas into wage work. In England and the U.S., the capitalist's need for cheap industrial labor stimulated changes in land tenure (the enclosures in England, for example) and brought about technological change which freed agricultural workers for factory work. In many areas of the Third World such change has been unnecessary, because rapid rates of population growth and falling rural employment have provided a steady stream of rural-urban migrants. The role of population pressure in proletarianization of the peasantry has been documented in India, Java, and parts of Mexico. (7) Such growth in the available labor force swells the "reserve army" of labor, exerts downward pressure on wages, and makes union organization more difficult. This clearly benefits the capitalist class, but, if carried too far, creates its own problems. The lack of transformation in agriculture leads to significant agrarian unrest, a difficulty which many of the now developed countries did not experience.

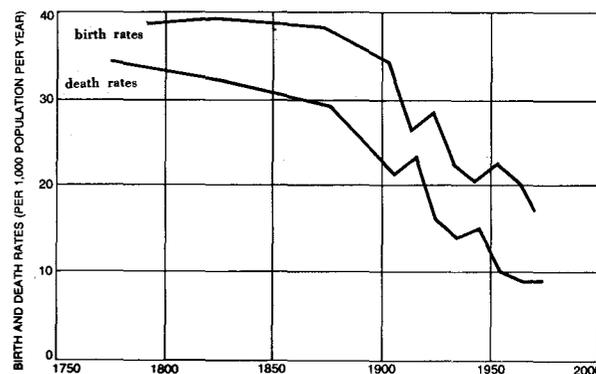
If technological change does not take place, an increase in the supply of labor leads necessarily to a decrease in the productivity of labor. If the supply of capital and land remains unchanged, more and more workers must share available resources, and their individual contribution to output diminishes. Given the initial assumption, rapid population growth clearly will slow the growth of per capita income. But the assumption is incorrect: Technological change is the essence of economic development. If assumed absent at the very beginning, it can hardly be expected to reappear.

Technological change does not require the introduction of new technology. In most of the underdeveloped world, the problem is the redistribution of available resources and the spread of existing techniques. Political change, rather than new technical innovation, or capital investment, is the key to increased productivity. But the capitalist structure of production is resistant to such change, and therefore, population growth *can* have a negative effect. Shrewd politicians are increasingly interested in population control in order to stave off political disaster. Decreasing population growth, however, is not an easy task, as the following discussion of the mechanics of fertility declines should demonstrate.

Why Fertility Declines

"Fertility", as demographers use the term, refers not to a population's potential for childbearing, but to the actual number of children born. There are various

measures of fertility which can be used — average completed family size, the ratios of the number of children under 14 to the total population, the ratio of children to women, and others. By any of these measures, fertility has been dropping steadily in the developed countries since at least 1850. (8) (See graph).



Mortality rates, also shown above, have fallen even faster. Much of the rapid population growth of the 19th and 20th centuries can be attributed to the difference between the rates of decline of fertility and mortality. These rates have fluctuated somewhat, and there are wide differences among countries. Nevertheless, fertility decline may, in the long run, lead to stabilization of birth and death rates and to the achievement of a no-growth population. Analysis of such effects is somewhat confounded by the complicating influence of age structure. For example, in the U.S., a woman of childbearing age bears, on the average less than 2 children. However, these young women represent a larger proportion of the population than previously. Even though the fertility rate is now below replacement, the U.S. population will continue to grow for some time. The number of children born in coming years will exceed the number of persons dying, because there will be a great many women having children.

What is particularly striking about this population trend, and not widely enough appreciated, is the fact that it has occurred relatively independently of contraceptive innovations. It is certainly true that the pill, the diaphragm, and the IUD have had enormous social impact, giving women an unprecedented degree of control over their own fertility. However, the history of fertility decline seems to indicate that these technological accessories have been less important than another factor — a decrease in desired family size.

The fact is that contraception is an old art. Though books on the subject, such as Hime's *Medical History of Contraception* (9) refer to some bizarre remedies such as tying wolves' testicles about the waist, they also revealed widespread knowledge of condoms, diaphragms, and douches. Coitus interruptus and abortion both have a history older than the Bible. Although such methods are not foolproof on the individual level, they work in the aggregate to reduce fertility considerably. Since pressures to contracept are normally greater outside of marriage, changes in social norms, such as pressure to

marry at a later age, may exert great influence upon population growth rates. Simple contraceptive methods were used by the English, the Irish, and the French to slow population growth considerably. Such methods also contributed to a reduction in family size in the U.S. and Japan, where new contraceptive technologies, and, in the case of the latter, legalized abortion, played a more important role.

Metamorphosis in the Home

This decrease in the birth rate has accompanied a larger process of social change which is highlighted by a comparison of women's roles in developed and underdeveloped areas. Women in the U.S. today give birth to, on average, 1.8 children. They bear these children at a relatively early age. Most women past the age of 30 have already achieved their desired family size and survived the most difficult and time-consuming period of child care. With their offspring safely stowed away in the public schools, they begin a new period in their lives that often includes reentry into the formal labor force. In fact, many women must find jobs to ensure their family's financial security and provide higher education for their children. Although there are many facts which contribute to the contemporary woman's life cycle, the drastic reduction in the average number of children born from 7.04 in 1800 to 1.80 in 1973 is obviously central. (10)

Child rearing has become a less time consuming occupation. The basic needs of reproduction and nurture are met by a family which is less durable as an institution and less stable over time. Many traditional women's functions have been mechanized or commercialized — cooking, laundry, nursing, babysitting are now services which may easily be purchased. In the United States, over half of the female population between the ages of 16 and 65 are wage workers. (11) The housewife's occupation, shorn of its holy aura of perpetual motherhood, is gradually being stripped of prestige. It is increasingly possible for new forms of sexuality to flourish within the system since they no longer pose a threat to its efficient reproduction.

Contrast this situation with that of women in Third World countries. In urban areas or highly urbanized countries, the number of children per family is not strikingly different from that in the U.S. This is not surprising, since these are the areas in which "Western" culture and capitalist forms of work organization have penetrated. In rural areas, however, in the predominantly agricultural economies which characterize vast regions of the world, the average number of children per family is very high. In Mexico, for instance, most women have borne six children by the end of their childbearing career. (12) Women's fertility is strongly reinforced by cultural norms which value children and childbirth very highly. If a woman's place is in the home, it is because she hardly has time to leave.

We are not as remote from these women as we may think. The origins of our capitalist economy lay in sub-

sistence agricultural systems which had some similarities to those in the Third World today. In the U.S., our demographic heritage is startling. It was, in fact, rapid population growth, characteristic of the U.S., which inspired Malthus' famous *Essay on Population*. The cultural differences between the colonial population of the U.S. and areas of the underdeveloped world today are immense — but in subsistence agricultural economies the family is a unit of production just as it was in 19th century U.S.

From Large Families to Small

The desire for large families is rooted in the material conditions which define people's work. In agricultural economic systems where there is little division of labor or production for exchange, children are a valuable resource. Nascent capitalism creates a competitive system in which the family is the chief social unit. Primitive tribal systems (in which there are classic examples of fertility control) (13) can provide for the sick and aged, as can advanced state bureaucracies with their welfare and social security institutions. But under the competitive conditions of small farm ownership children are the only source of security. They are an aid not only to aging parents, but to brothers and sisters, cousins, aunts and uncles. Spread out in a variety of jobs, perhaps some of them migrating to the city, some marrying into wealthier families, relatives create a web of security. Those who decide to have fewer children would be penalized. They are deprived of the security which a large family might afford, but they enjoy none of the increases in wages which would occur with a future decrease in the reserve army of labor. Where medical care is nonexistent, and people have grown to expect only the barest necessities of food and clothing, children are not a very large drain on family income. However, their contribution to the family as they grow older is significant.

Oscar Lewis in one of his classic studies of the Mexican family, *Pedro Martinez*, quotes a Mexican mother, "It didn't matter to us whether the child was a boy or a girl. Pedro said it was all the same to him. Whatever the ladle brings. All children mean money, because when they begin to work, they earn." Her understanding is borne out by the budget which Lewis calculated for the Martinez family. Although the parents are only in their 40's, over half their family income comes from their two adolescent sons. (14)

Social values bearing on family size reflect the underlying material factors and have arisen historically, in large part, because of them. Other important factors include the sexist roles and authority relations which themselves are products of class structured societies, and are often reinforced by religious institutions.

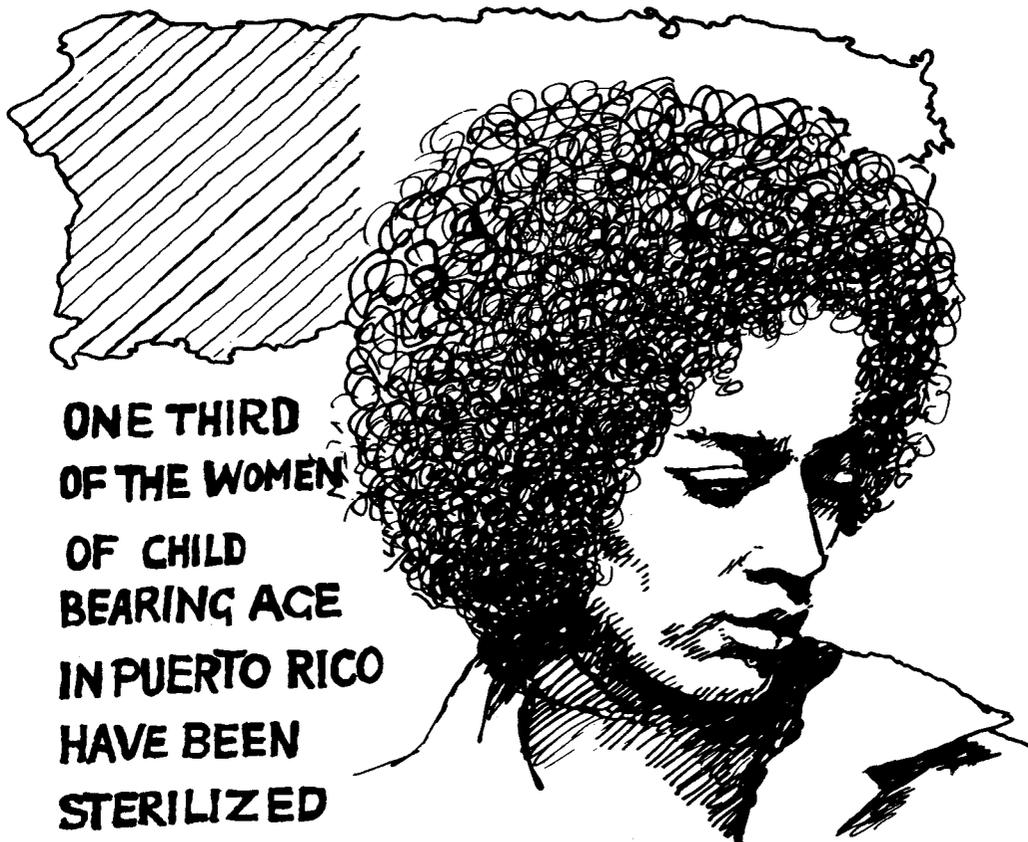
I spent the summer of 1975 doing field work in Zongolica, Mexico, an area in which population has increased ten fold since 1900. While there, I asked women if there were any local herbs they used to prevent childbirth. "Sure," they said, there were a few, but they were more eager to show me the ones which would

guarantee a successful pregnancy. To them, raising a large family implied winning male approval, fulfilling a God-given role, and making an economic contribution to their family's welfare. As Barry Commoner has aptly put it, "Poverty breeds overpopulation, and not the other way around." (15)

In a fascinating study of villages in India where a family planning experiment failed to have an independent impact upon fertility, Mahmoud Mamdani (in *The Myth of Population Control*) shows that, because the agricultural techniques being used required intensive labor, those property owners who did not have family help at certain times of the year were at a distinct disadvantage. However, in the experimental time period, between 1957 and 1968, there was a significant decrease in fertility in the "control" villages that had no family planning facilities as well as in the experimental villages. (16) A gradual process of technological and economic development was having some important effects. Migration and mobility had begun to weaken old ties. Marriage was occurring at a later age as the possibilities of education were being realized. These changes offered new options to women and decreased reliance upon family labor. Family size began to diminish slightly.

Such an autonomous decrease in fertility is characteristic of some Third World areas. However, their transition to lower birth rates is happening at a later

stage in their development, and under conditions of much lower mortality than that which occurred in Western Europe and the U.S. Nevertheless, in both developed and currently underdeveloped regions, capitalist development is lessening the economic significance of the family. In a process of proletarianization which is still taking place, family workers and independent producers are being converted into wage laborers. When wage labor offers an alternative to work on family-owned, rented or share-cropped land, the economic incentive for the family begins to diminish. When education offers an alternative to the socialization and training which once took place in the family, the job of being a parent becomes less time-consuming. Profit-oriented institutions begin to replace women's tasks; corn for tortillas is machine ground, tomato sauce is factory canned. These commodities are produced far more efficiently than their hand-made counterparts, and are therefore cheaper. Until these changes occurred, times spent in caring for children was effectively complemented by useful and productive work performed in the home. To the extent that industrialization proceeds, women's participation in the formal labor force tends to increase. The benefits each child brings must be weighed against the contribution which the mother's wages might make to family income. The costs of childbearing increase until they become a liability rather than an asset.



**ONE THIRD
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OF CHILD
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HAVE BEEN
STERILIZED**

TO MAKE WAY FOR AMERICAN CORPORATIONS

Demographic Transition in the Third World?

This process of demographic transition, if completed, would eventually eliminate rapid population growth. To the extent that economic development occurs, we may expect average family size to diminish and rates of population increase to decline. This expectation is growing among academic demographers. (17) Nevertheless, this approach to the theory of population growth is as misleading as the Malthusian assumption that population growth will never abate. There is little reason to believe that capitalist "economic development" in the Third World will occur as it did in the "advanced" countries of Europe and North America.

A growing amount of research documents important differences in the process of economic development in the now developed, or "central" imperialist countries, and the dependent underdeveloped areas, or "periphery". Countries with a history of colonization and continuing European or American penetration of their economies are subject to the removal of economic surplus, which slows their economic growth. (18) In their largely foreign owned manufacturing sector, they utilize highly sophisticated technology employing relatively few industrial workers. This leads to a pronounced dualism, or uneven development, between agriculture and industry, country and city, subsistence farms and profit oriented agribusiness. This coexistence of radically different modes of production is reflected in widespread differences in family structure, incomes, and the economic participation of women. In large cities, a relatively larger proportion of women may be employed and women in general have fewer children. Within this cosmopolitan urban context, women may play an important role in national politics. Nevertheless, the vast majority of women play out traditional roles in which large numbers of children are desired. As long as this is the case, no amount of free contraceptives will quell population growth.

China: Shackling the Stork

The contrast between futile Indian attempts to reduce fertility and the Chinese experience in family planning generously illustrates this point. Family planning programs have had enormous success in China, bringing the birth rate down dramatically. Rienert Ravenhold, head of the U.S. Agency for International Development, has gone so far as to comment that within 10 years, China's birth rate could be lower than this country's. An April 12, 1976 *Wall Street Journal* article describes "A Success Story in China". (19) The October 1975 issue of the Population Council's *Studies in Family Planning* provides many details of the nature and structure of the family planning program. (20) Its distinctive feature is the integration of contraceptives into a comprehensive health care system.

The most important element in the Chinese model, which makes it virtually inapplicable to underdeveloped capitalist countries, has been the integration of family planning into a transformed institutional setting which

more adequately serves collective needs. For instance, social security in old age is no longer dependent upon the immediate family, but rather on the commune. There is also less economic incentive for children because their labor goes toward improving the commune, rather than aggrandizing the family. Women have an important role in production which supercedes their child and house care functions. Even the *Wall Street Journal* acknowledges the importance of these factors: "... many China specialists attribute the family planning successes more to the unusual nature of Chinese society." (21)

It is also true that government policies have played a role, raising the recommended marriage age to 28 for men, 25 for women; in many communes the production brigade itself has a subcommittee which decides upon the desired rate of natural increase, and, if necessary, "allocates" births to those who have fewer children and desire more. The weight of tradition might lead to a suspicious response to government dispensed contraceptives, but their distribution has been integrated into a larger health care delivery system which enjoys not only the confidence of the people, but also their widespread participation through the training of "barefoot doctors" or lay medical people.

There is no doubt that such a process of fertility reduction operates partially through the development of new norms concerning family size, and strong social sanctions against early marriage or high fertility. Therefore, it has a coercive element. However, there are no legal penalties in China for "undesirable" reproductive behavior. In contrast, in India legislation concerning forced sterilization is pending in several states. Government officials have said that, with civil liberties suspended in India since June, 1975, the "time is ripe for tougher action on population control." (22) (See box)

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SEABROOK, NUCLEAR POWER, AND THE CLAMSHELL ALLIANCE

Concern over the hazards of nuclear energy has existed in the world for thirty years. In 1974, at Wyhl, West Germany, 28,000 people occupied the site of a proposed nuclear station in an area which was and is a nature preserve. Several hundred people continue to occupy the site at all times; the nuclear plant has, in effect, been stopped. The events at Wyhl have been the model for the recent actions aimed at mobilizing a broad-based coalition to halt construction of a nuclear power plant at Seabrook, New Hampshire.

The Seabrook story began seven years ago when the Public Service Company, which supplies New Hampshire with 90 per cent of its electricity, quietly announced its intention to build the plant. Opposition to PSC emerged this January 4th when Ron Rieck, a young apple picker from Weare, N.H. spent 36 hours atop a 175 foot weather tower PSC erected at the proposed site. In March the town voted against the plant 768 to 632. Several organizations had been formed in the state by residents who didn't want reactors in NH and wanted to figure out how to stop them. Absent from this nascent movement was the preponderance of environmentalists, scientists and college students usually associated with anti-nuclear protests in the US. On April 10, a rally drew 300 people to the site accompanied by the joining of town and environmental groups in a decision to establish a broad New England Coalition to halt nuclear plant development first in Seabrook and then in the entire region.

The Clamshell Alliance, an umbrella organization of 15 anti-nuclear groups, was formed at a July meeting of 50 people, almost all of whom were NH residents. The goal of the Alliance is the halt of Seabrook construction and to force PSC to cancel the project by employing any means necessary within the context of non-violent, direct action.

Events have moved quickly since July. Two rally-occupations were planned at the July meeting. At the first, on August 1, a rally of over 500 nuclear opponents from all over New England culminated in a sit-in by 18 New Hampshire Clamshellers at the plant site. All 18 were arrested while planting pine and maple saplings. Three weeks later, a rally drew well over 1,000 and 180 were arrested at an occupation.

Since August, action has proceeded on several fronts. The seven-year old New England Coalition on Nuclear Pollution has fought in the courts to have an August 13 moratorium by the federal Nuclear Regulatory Commission on new licenses for plant construction extended to include the Seabrook site. The results to date have been discouraging. An initial favorable ruling by a board of the NRC to postpone the Seabrook construction until official publication of the Woolrich Report on waste disposal was rescinded five days later. The New England Coalition is continuing its expensive legal battle, but Clamshellers believe that Seabrook and other nuclear plants can only be stopped by non-violent, direct action.

Scheduled for October 23 is an anti-nuclear fair in the town of Seabrook with the next occupation scheduled for the spring. In the meantime, Clamshell is committed to grassroots organizing towards building strong local chapters and analyzing how their region fits into the New England power plan.

SftP shares the goal of Clamshell as expressed in its founding statement: to "re-assert the right of citizens to be fully informed and then to decide the nature and destiny of their own communities." What separates the Clamshell Alliance from other anti-nuclear organizations is that it is committed to achieving its goal through direct, non-violent action culminating in the physical occupation of the site.

Several SftP groups have over the past few years concerned themselves with issues related to nuclear power. Perhaps it is time for the organization to choose nuclear energy as a nationwide focus. Further, we should consider direct action and other approaches to local organizing as possible forms of political activity in which we might take part. Only by involvement in struggles like the Clamshell Alliance can SftP hope to reach out beyond our current membership.

—The Boston members of the Editorial Committee

WORKERS DEMAND PRODUCTION FOR PEOPLE

Steve Cavrak

The working class in the developed countries of the West forms a major part of the population. Yet since World War II, workers, especially in the industrial unionized sector, have not made serious widespread attempts to challenge the prevailing economic structure.

Traditional union leadership, with or without the consent of the rank and file, seems to have emphasized material, bread-and-butter issues over nonmaterial concerns. In negotiating contracts, it is not the pay raises but the demands for control over the workplace, grievance procedures, occupational health and safety issues, and worker input into management decisions that get thrown out when it comes down to signing papers.

At Lucas Aerospace Corporation in Britain, workers have made specific, detailed demands that go beyond the usual material ones. These demands, if implemented, have the potential of seriously challenging the present economic system. The overall goal of their plan is to guarantee all workers meaningful jobs producing socially useful products. In many ways, it is reminiscent of the idea of "defense industry conversion" spawned during the Viet Nam War period, but is potentially more far-reaching.

The Lucas Aerospace Corporation is a large British industry employing 13,000 people. Its major business consists of supplying a wide variety of mechanical and electrical systems to the aircraft industry. The parent company, Lucas Industries, controls a number of other firms, and is a major supplier of electrical components for automobiles manufactured in the United Kingdom. As is characteristic of a high technology corporation, Lucas Aerospace is organized to produce small batches (several to a hundred) of items with a high degree of precision. Its workforce includes some 2,000 engineers,

Steve Cavrak is a longtime member of SftP. Interested in alternative technology and workers control, he is now teaching courses in radical environmental studies at Franconia College in New Hampshire. He is also organizing a new SftP chapter there.

draftspeople, and technicians. The workers in the majority, however, are highly skilled manual laborers operating about 5,000 machine tools.

The employees of Lucas Aerospace are represented by the Lucas Aerospace Combine Shop Stewards Committee. This union includes as members all Lucas employees. It is "unique in the British Trade Union Movement in that it speaks for the entire spectrum of workers by hand and by brain, from laborers to senior technicians and engineers."⁽¹⁾

As is the case with most aerospace industries, much of Lucas's business depends on either defense contracts or commercial contracts sensitive to luxury spending. Both of these sections of the British economy have experienced cutbacks as part of the wider economic crisis. Lucas has reacted to this slowdown by laying-off large numbers of workers. In the last five years, 5,000 workers out of an original 18,000 have been laid off. Many of these layoffs are the result of the elimination of what are called "redundant" jobs through industry reorganization.

Lucas workers and British workers in general have been involved in a number of bitter fights against these "redundancies." Rather than approaching each of these layoffs individually, the workers have organized their struggle around a "right to work" campaign. The Lucas workers use the "right to work" slogan to assert their rights to perform work; it is the obligation of society to provide jobs for every worker.

The workers at Lucas, however, have extended this notion beyond that of a traditional job. They want the work to be meaningfully structured, i.e., neither alienating, dehumanizing, nor fragmented, and provide socially useful products as well. In mid-1975, the Lucas Combine Committee began to formulate an impressively detailed, multi-volume alternative corporate management plan. This plan shows that Lucas Aerospace can be transformed so that no worker need be laid off. The plan emphasizes the conversion of Lucas Corporation away from a defense industry orientation. In addition to outlining changes to the product

line, the committee's plan addresses the alienating methods of production, documenting concrete alternatives and detailing how these can be implemented within Lucas's capabilities, and how they would be economically viable. In announcing the plan, the Lucas workers emphasized that the "initiative for the plan came entirely from the workforce itself, through the Combined Shop Stewards Committee, and as such was completely independent of the normal considerations of a large company of this kind."(1)

Another important aspect of this plan is the invitation to people outside the Lucas workforce to participate in developing the list of alternative products. This constitutes a unique form of "market research" which would allow the plan to directly respond to the needs of the larger community. In addition to addressing national needs, the committee wanted to develop plans for products useful for the developing nations. The Lucas workers recognized that many of the capital intensive technologies are often inappropriate to the needs of Third World countries.

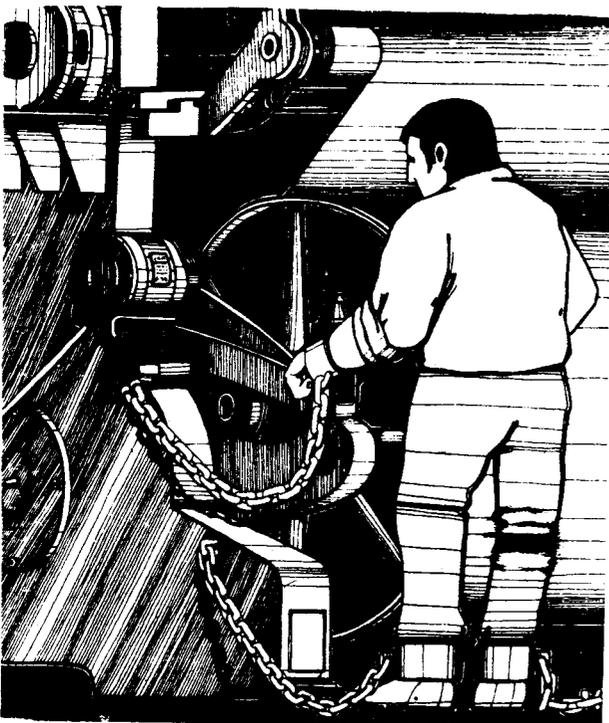
The combine committee's plan was announced in January of this year. In addressing the range of alternative products, the plan was organized into five technical sections detailing the new products. The proposal contained plans for a number of items familiar to the alternative technology movement (which in Britain has strongly supported the Lucas workers), including components for solar heating, windmill electrical generators, fuel cells, and energy conserving braking system for buses. In addition, it included a number of "high technology" items such as remotely controlled machines for fire fighting and underwater use, increased production of kidney machines, and plans for airship "vectoring" of railroad vehicles. The plan details how the production of each of these products can be accomplished with Lucas' current facilities and working force.



In addition to these proposals for new products, the plan speaks to important social and political issues in an introductory section. The plan points out that "there is something seriously wrong about a society which can produce a level of technology to design and build Concorde, but cannot provide enough simple urban heating systems."⁽²⁾ This has its roots, the report states, in the way the skills of scientists and technicians are misused. The combine committee felt that "scientists, engineers, and workers in these industries have a profound responsibility to challenge the underlying assumptions of large scale industry; to seek to assert their right to use their skills and ability in the interest of the community at large."⁽²⁾

A large section of the plan is concerned with the internal structure of the industry. It sees the problem lying in not just the specific products manufactured, but also in how the production process itself is organized. Besides addressing the general problems of alienating and dehumanizing working conditions, it tackles the specific problems of providing more opportunities for women and for the retraining of older staff.

The Lucas Combine plan, then, has several elements which are missing from most alternative technology schemes. It is not a reversion to a "do it yourself" subsistence society, but one addressed to the needs and aspirations of the industrial workers who produced it. It allows these workers to develop their skills to the fullest, engages them in the production of socially useful products, and gives them control over their own work in an industry responsive to social need rather than private profit. By recognizing that the economic and



environmental problems we face do not lie in industry *per se* but in the social organization of industry, the plan is able to present a sensible and viable alternative.

The plan is so attractive, that it seems that Lucas Aerospace could adopt major segments of it and grow as a profitable, capitalist firm. The actual response of Lucas management, however, indicates that there are elements of the plan which are just too dangerous to implement. On May 6th, they responded to the combine's plan by rejecting it. In framing their rejection, they stated that Lucas "intends to concentrate on its traditional business which involves development of aircraft systems and components for the aerospace and defense industries . . . Lucas Aerospace maintains that aircraft are obviously socially useful. We need aircraft for defense."⁽³⁾

For the owners and management of Lucas, producing aircraft is indeed socially useful: the "socially useful" product in this case being private profits. If profits get squeezed by declining business, the firm merely has to lay off a few more workers. In fact, while Lucas was rejecting the worker's plan, they were simultaneously announcing the layoffs of 273 more "redundant" workers.

The rejection by Lucas management may not be final, however. Growing popular knowledge and support may force a change in parts of the management's decision. In any case, as workers in other industries become aware of these events, it is probably not the last time these kinds of demands will be raised in such a concrete and detailed manner.

The threat to Lucas Aerospace, and the reason for their rejection of the plan, is not in the visions of alternative products and alternative technologies it presents. Rather it stems from the radically different idea of industry it furthers: an industry where the workers understand, plan, and control their own work. This vision, whether it is called workers' control, industrial democracy, or self-management, threatens not only the particular interests of Lucas Aerospace, but that of the present capitalist class as a whole.

REFERENCES

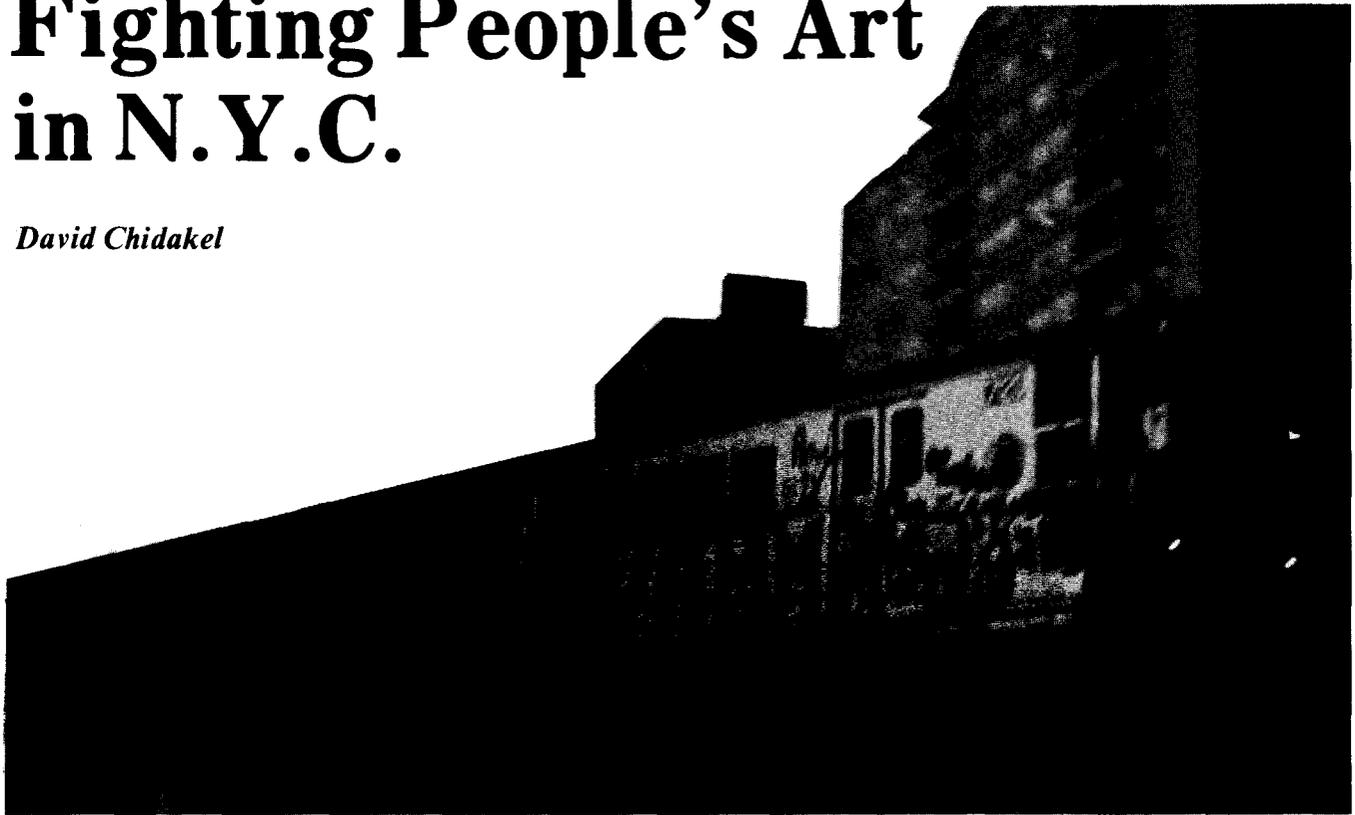
1. "The Lucas Letter," *Undercurrents*, Number 12, p. 14, September-October 1975.
2. "Lucas Workers 'Look to the Future,'" *Undercurrents*, Number 14, February-March 1976, p. 3.
3. *New Scientist*, May 1976

SOURCES

1. "Aerospace workers: In the dole queue or useful projects?" Lucas Aerospace Combine Shop Stewards Committee, *New Scientist* 3 July 1975, p. 13-15.
2. *Where is Lucas Going?* CIS Anti-Report, 52 Shaftesbury Avenue, London, S.1V 7DE, 45p.
3. *Undercurrents*, a magazine of alternative technology, has a running series of articles on the Lucas Plan since issue 12. It is available for \$7.50 annually from *Undercurrents*, 11 Shadwell, Uley, Dursley, Gloucestershire, England GL 11 5BW.

Fighting People's Art in N.Y.C.

David Chidakel



In a bizarre struggle, little known outside of New York City, the N.Y.C. Transit Authority (T.A.) is waging war against the kids. It all began in the late sixties when dilapidated subway cars, in service for thirty-five years and more, began to get elaborate midnight paint jobs signed with names like "Jose" and "Mo." Using aerosol spray paint, kids in the Bronx, Brooklyn and elsewhere proved themselves more resourceful than the T.A. cops by their continuing ability to penetrate the yards and sidings where the trains are kept at night. As a result the dirty iron-rust patinas gave way to polychromatic garlands and graffiti. A whole new genre of people's art developed which can be seen daily, streaking along over endless tenements, dingy schools, and traffic jams.

Although some riders and residents found the graffiti a bit much, it was the T.A. management that really freaked. Unhindered by latent appreciation of the aesthetics of subway decoration, they instituted an acid car-washing program said to cost nearly ten million dollars. This involved moving the rolling stock through a process at great risk to the "motormen" and workers who have to breathe the spray and fumes. An assessment of these conditions was reported by *Spark* magazine:

For two days this fall, an apparently healthy mouse was placed on the ground in a cage and exposed to the fumes of the car wash. Total exposure was approximately four hours. No immediate signs of

illness were noted. The mouse was then removed to a house whereupon he died two weeks later.[1]

Now, with union grievances and demands growing around the slapdash attitude toward worker safety under the carwash program, the T.A. has initiated a new phase in its campaign against graffiti. Subway cars are to be painted with a new, urethane-based paint which does not absorb the dyes from the graffiti paint and which is less vulnerable to the corrosive solvents used to remove the graffiti. The paint however will be three times more costly than normal paint, and the routine cleaning operation will be "three to four times more expensive.[2]

While horrendous noise intensities and high levels of asbestos (from subway brake shoes) and steel dust (from wheels and rails) continue to plague subway riders and transit workers,[1] the money-strapped T.A. is forging ahead to protect the people's eyes from people's art.... Chances are the kids will figure out what urethane- and epoxy-based paints can do for them in dealing with the adversities of subway art.

REFERENCES

1. "New York City Subway Project," *Spark*, Fall, 1975, p. 11.
2. "Paint Helps Fight Subway Graffiti," *New York Times*, May 25, 1976.

Continued from p. 9

will not solve all of the problems related to drug costs, nor will it solve the abuses inherent in drug production for profits. It would, however, reduce the industry's ability to fix prices, thus saving consumers millions of dollars per year. More importantly, struggling against the monopolistic power of the industry can reduce their influence over the practice of medicine and further the movement toward "medicine for the people."

Drug Industry Alliance with the Medical Profession

In every hospital, the drug companies push their products daily in the form of the *Physician's Desk Reference* (PDR). The PDR is the bible of prescription medicine, distributed free to most physicians, and found on the wards of every hospital. According to one AMA survey, the PDR is more important in dictating prescribing practices of doctors than are all other forms of drug company advertising. In fact, many people are surprised to learn that the PDR is not a reference of unquestionable objectivity, but actually a collection of *paid advertisements*. Even though these drug descriptions must correspond to FDA regulations, the presence or absence

of a substance in the listings indicates nothing more than the willingness of a company to pay for the inclusion. Inexpensive generic preparations are rarely included in this official-looking volume.[11]

In contrast to the insidious influence of the PDR is the aggressive salesmanship of the detailman. There is approximately one detailman for every ten practicing doctors in the United States. So at an average of \$25,000 per year, detailmen cost consumers \$600 million per year.[12] Detailmen are present in most hospitals and serve as walking advertisements for their brand-name products. Free of the restraints of government review of written advertisements, these drug pushers can cajole, smile, and handshake their drugs to doctors. They have become a fixture in almost every medical setting, armed with free samples and ready to talk with the first white-coated object they see. They are selected for their good looks and gregarious nature, and use standard sales techniques to encourage the use of more drugs. Physicians often see detailmen as a convenient source of quick information on new drugs, ignoring the strong bias introduced by the detailman's desire to sell and increase his commission. Detailmen are trained to make the art of selling *appear educational*.

Drug industry's influence on medicine is not confined to the PDR and detailmen. The industry sponsors millions of dollars of research in universities, medical centers, and private laboratories. This control greatly influences the priorities of medical research. Researchers, competing for drug industry grants, must demonstrate that their work will be worthwhile to the company. Since the company's interest is in recouping its investment, it encourages research in those areas most likely to be profitable, and not necessarily those areas most in need of additional research. For example, there is a tendency to concentrate in fields already fully explored, with the hope of reaping quick short-term profits,[13] such as diuretics or antibiotics.[14]

The industry influence creates an environment where scientific data become "trade secrets." Thus, efforts are duplicated and results are not shared. The latter sometimes delays the recognition of serious side effects that would be apparent from pooled data. Furthermore, academic institutions which depend heavily on drug company research money are reluctant to challenge the company's practices in their hospitals (e.g. by banning detailmen) for fear of jeopardizing this support. In short, the advancement of scientific knowledge is strongly shaped by the industry's power and goals.

It seems obvious that the aims of good patient-oriented doctors are very different from the aims of the drug manufacturers. The manufacturers wish to maximize their profits by encouraging doctors to write as many prescriptions as possible, for the most expensive drugs. Good doctors, on the other hand, should want to minimize writing prescriptions and should do all they can to keep the cost of necessary medications as low as possible. It is therefore disconcerting to uncover the coziness between the medical profession and the drug industry.



The separate "competitive" drug firms work together to protect their image and influence through an organization called the Pharmaceutical Manufacturers Association (PMA). During the past fifteen years the PMA has been closely allied with its counterpart in the medical establishment, the AMA. The president of the PMA, C. Joseph Stetler, was formerly general counsel to the AMA for 12 years. The AMA relies heavily on PMA financial support through drug company advertising in all of its journals. In 1973, this advertising support represented 26% of the total income of the AMA. Similarly, the AMA's retirement fund in 1973 owned stock in 16 companies in the drug or health-care fields. The AMA is even an "associate member" of the Pharmaceutical Manufacturers Association.[15]

In return, the AMA has used its powerful well-endowed legislative lobby to support the drug companies' interests. In 1967 and 1970, they openly and successfully lobbied against passage of a measure sponsored by Senator Russell Long to establish a system of generic prescribing of drugs.[16] This lobbying process included not only "talking" to members of Congress, but also making considerable financial contributions to their campaigns. Since direct political contributions are illegal, the AMA set up the "Physicians Committee for Good Government in the District of Columbia," channeling funds via this committee to individual campaigns. In the 1972 elections, the AMA was the second leading contributor to campaigns.[17]

In 1972, the AMA-PMA alliance was made even more manifest in the abolition of one of the AMA's most vital committees, the Council on Drugs. This committee evaluated all drugs, and published the comprehensive *AMA Drug Evaluations*, a book many physicians looked to as an independent source of drug information. In the final draft of the second edition of *AMA Drug Evaluations*, the committee stated that the use of some of the most profitable prescription drugs on the market was "irrational" and "not recommended." The past chairman of the committee summarizes what happened:

...they (the AMA) did not like the "not recommended" phrases we included in the evaluation of some drugs. They also wanted us to send the book to the drug companies for evaluation. Because we refused, they dissolved the committee.[18]

The second and final edition of the *AMA Drug Evaluations* was published with these "objectionable" recommendations deleted.

Thus, in each of these examples (PDR, detailmen, research, the PMA) we can see the incompatibility of patients' interests and the powerful influence of the profit-oriented drug industry. Those examples do not represent cheap shots at some isolated scandals within the industry. Rather they reflect the daily interactions, both at an individual and an organizational level between doctors and the drug industry.

In order to share the ideas and ammunition to offset the industry's \$1 billion annual propaganda campaign, we are making copies of the paper available. There will also be a list of specific proposals for change that is being worked on by those who participated in our programs and will be available in about a month. Write for copies:

Parts I-VI

1 copy \$.50 plus \$.26 postage

3 for \$1.00 plus \$.45 postage

20 for \$5.00 plus \$1.30 postage (our cost)

Concerned Rush Students Box 160

c/o Bob Schiff

1743 W. Harrison St.
Chicago, IL 60612

REFERENCES

1. Hearings before the Senate Subcommittee on Monopoly, Select Committee on Small Business (Nelson Committee), U.S. Senate, Part II, p. 4480.
2. Burack, *New Handbook of Prescription Drugs*, 1975, p.xxiii.
3. Goodman and Gilman, *The Pharmacologic Basis of Therapeutics*, 1975, p. 44.
4. Meyers, Jawetz and Goldfien, *Review of Medical Pharmacology*, 1974, p. 28.
5. Goth, *Medical Pharmacology*, 1974, p. 693.
6. Silverman and Leed, *Pills, Profits and Politics*, p. 162.
7. "The Pharmacist's Role in Product Selection," position papers issued by American Pharmaceutical Association, 2215 Constitution Ave. N.W., Washington, D.C. 20037, March 1971, February 1972. Also see Silverman and Leed, Chapter 6.
8. Schiff, R., "Prescribing Practices of Medical Students," unpublished paper, February 1976, available from Concerned Rush Students.
9. Sim, "Digoxin Tablets — a review of the bioavailability problems," *American Journal Hospital Pharmacy*, January 1976, p. 44. For a complete history of the "digoxin incident" see Burack, pp. 56, 100-106.
10. Meyers, Jawetz and Goldfien, p. 29.
11. Silverman and Leed, *Pills, Profits and Politics*, 1974, p. 75.
12. Goddard, "The Medical Business," *Scientific American*, Sept. 73.
13. Garattini, "Curative Research for 'Anti-Economic' Disease," *Impact of Science on Society* (UNESCO), Vol. XXV No. 3, Fall 1975.
14. For example one of the most heavily promoted drugs at present is metolazone (Zaroxolyn) a diuretic which *Medical Letter* found added little to an already overpopulated therapeutic field (Vol. 16, p. 77). Similarly there has recently been a proliferation of cephalosporin antibiotics marketed despite being "superfluous" to existing drugs (i.e. cephradine (Velosef) identical in effect to cephalexin according to Goodman and Gillman, op. cit., p. 1162; and cephalixin (Cefadyl) discussed in *Medical Letter* Vol. 16, p. 53).
15. Hines, "What's Behind AMA Drug Suit," *Chicago Sun Times*, Aug. 4, 75, p. 56.
16. Auerbach, "Drug Firms Gave AMA \$851,000" (secretly to lobby against efforts to end industry abuses), *Washington Post*, July 1, 75, p. 1.
17. Auerbach, "Sore Throat Gives AMA High Fever," *Washington Post*, July 13, 75, p. 1.
18. Hines, *Chicago Sun Times*, Aug. 4, 75.

INDIA: PIONEERING DEMOGRAPHIC FASCISM

The Indian State of Maharashtra has taken the lead in legislating forced sterilization and several other states are close behind. Under a proposed law, men who fail to be sterilized after the third child face jail sentences with sterilization followed by parole, loss of employment, exclusion from housing and refusal of medical assistance. One of the chief technocrats involved, Dr. D. N. Pai, Harvard-educated Director of Family Planning in Bombay, described last minute changes in the Maharashtra bill as "sugar coating to make it sound a little nicer and not scare people."

When the bill becomes law, one million men in the state will become eligible for sterilization. Dr. Pai dismisses the "abuses", which in the past included deaths and round-ups of childless men. "If some excesses appear, don't blame me...The excesses occurred in all fields. You must consider it something like a war. There could be a certain amount of misfiring out of enthusiasm. There has been pressure to show results." The bill rewards people who inform on their neighbors. Society, Pai says, must act against "people pollution."

Forced sterilization of males has limitations — especially if organized resistance develops. Accordingly, international population planners are looking to new technology. One candidate is a vaccine now being developed in India with U.S. funds which utilizes a woman's immune system to terminate pregnancy. Following a single injection, the woman is presumably 'immune' to the successful development of a fetus for years. A few unanswered questions remain, these are the object of animal studies and studies on "small groups of women" in various countries. The attraction of this new fix is high. Dr. Sheldon Segal of the Population Council says, "such a vaccine would be a tremendous advantage", particularly in the Third World where people are accustomed to injections and realize that injections can do good. It could be easily integrated into other immunization programs.

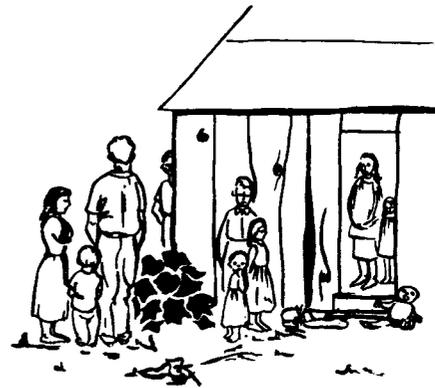
In the state of Kerala population growth has been declining. At the local level, Kerala's several communist parties have been a strong progressive force. Kerala has repeatedly had one of the communist parties voted into statewide office only to have it removed by edict of the central government. The communist parties have contributed to major gains in social services — education, health care and social security — and in employment. Many population experts now acknowledge these gains as the real reasons for Kerala's declining birth rate.

Bob Park

Esta familia planeó su futuro



Esta familia no planeó su futuro



The Future

The history of population dramatizes the relationship between the family and the larger organization of production. The family is one of a complex of complementary structures which both mirrors and reproduces the larger society. As the family loses its integrity as a unit of production, either through rapid capitalist development or socialist revolution, its reproductive logic changes. At the same time, the dynamics of the family can give rise to economic change; it can create demographic pressures which expose the limitations of the capitalist organization of production.

Population control is on the agenda for capitalism for the following reasons: Despite a great deal of state participation in economic planning, most Third World governments have been unable to make significant

economic growth happen. Even when it has happened (e.g. Brazil), their inability to meet the basic needs of people has been exacerbated by rapid rates of population growth. They are caught in a basic dilemma. Until they reach certain levels of industrialization, female labor force participation, and education, there will be no incentive for families to reduce their size. But current rates of population growth, as well as their position in the world capitalist system and internal class structure, are slowing the economic development which could lead to demographic transition. In their rural, family centered, competitive economies, families want large numbers of children. The ruling classes are fully aware of the pressures this creates, but are unwilling to change the social relations of production, because this will undermine their own hegemony. Because their ability to persuade, cajole, or bribe women to voluntarily use contraceptives is severely constrained, legal sanctions, forced sterilization and new technologies like injectible

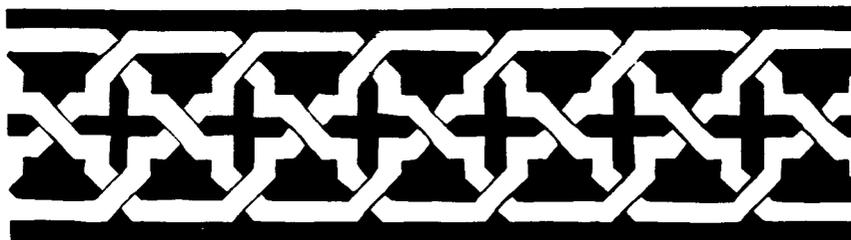
contraceptives, will become increasingly widespread, unless challenged. The fight against the misuse of contraceptive technologies must become part of the larger struggle for democratic control over employment, social services and education. Only the formation and expansion of organizations such as peasant leagues and labor unions will give men and women the power to defend themselves against coercion, and to organize for new alternatives in both production and reproduction.

Nancy Folbre is a graduate student in economics at the University of Massachusetts, Amherst. Before that, as an undergraduate, she was a Latin Americanist at the University of Texas. She is an active contributor to Dollars and Sense, a publication of the Union for Radical Political Economics.

REFERENCES

1. Ehrlich, Paul, 1968, *The Population Bomb*, New York, Ballantine Books.
2. Meadows, Donella, et al. *Limits to Growth: A Report to the Club of Rome's Project on the Predicament of Mankind*, New York, Universe Books.
3. Mass, Bonnie, 1972, *The Political Economy of Population Control* Editions Latin America.
4. Brown, Richard, 1974, Survey of TEMPO Economic-Demographic Studies, Washington, D.C. GETEMPO Center for Advanced Studies.
5. *Wall Street Journal*, April 16, 1976.
6. Conroy, Michael, and Nancy Folbre, 1976, "Population Growth as a Deterrent to Economic Growth: A Reappraisal of the Evidence", occasional paper prepared for the Project of Cultural Values and Population Policy of the Institute of Society, Ethics, and the Life Sciences, Hastings-on-Hudson.
7. Grigg, D $\frac{1}{2}$ B $\frac{1}{2}$, 1976, "Population Pressure and Agricultural Change," in *Progress*, in *Beographym* C. Bonds, R.T. Chorley, D. Haggett, D.R. Stoddard, editors, Edward Arnold, LTD, London; and Folbre, Nancy R., 1976, "Population Growth and Capitalist Development in Zongolica, Veracruz," *Latin American Perspectives*, forthcoming.
8. Westoff, Charles, 1974, "The Population of the Developed Countries", *Scientific American*, September 1974, p. 112.
9. Himes, Norman, 1963, *A Medical History of Contraception*, New York, Gamut Press.
10. Smith, Daniel Scott, 1974, "Family Limitation, Sexual Control, and Domestic Feminism in Victorian America", in *Clio's Consciousness Raised*, ed., Mary Hartman, Lois W. Banner, Harper and Row Publishers, New York.
11. Women's Study Group, 1976, "Loom, Broom and Womb:

- Women in American Economic Development *Radical America*, Spring, 1976.
12. Mexican Census, 1970.
13. Armelagos, George, and Swedlund, Alan, 1976, *Demographic Anthropology*, W.C. Brown, Publishers, New York.
14. Lewis, Oscar, 1967, *Pedro Martinez*, Vintage Books, New York. This quote implies that there is no sex preference in Mexican families. However, other sources indicate that male children may be preferred — they make an even contribution to the family budget than do females.
15. *Wall Street Journal*, April 16, 1976.
16. Mamdani, Mahmoud, 1973, *The Myth of Population Control*, Monthly Review Press, New York.
17. Kirk, Dudley, 1972, "A New Demographic Transition?" in *Rapid Population Growth*, National Academy of Science, Baltimore, Johns Hopkins Press and Beaver Stephen, *Demographic Transition Theory Revisited*, Lexington, Mass. D.C. Heath.
18. Baran, Paul, 1959, *The Political Economy of Growth*, New York, Monthly Review Press, Andre Gunder Frank, 1969, *Capitalism and Underdevelopment in Latin America*, New York, Monthly Review Press, Samir Amin, 1974, *Accumulation on a World Scale*, New York, Monthly Review Press.
19. *Wall Street Journal*, April 12, 1976.
20. Pi Chao Chen, 1975, "Lessons from the Chinese Experiences and its Transferability," *Studies in Family Planning*, vol. 6, no. 1.
21. An excellent analysis of changes in the Chinese family structure which offers some perceptive criticisms of the Chinese system is Judith Stacy, 1975, "When Patriarchy Kowtows: The Significance of the Chinese Family Revolution for Feminist Theory", *Feminist Studies*, vol. 2, no. 2-3.
22. *Wall Street Journal*, April 16, 1976



Book Review:

Marty Jezer

FOOD FOR NOUGHT by Ross Hume Hall, Harper and Row (Medical Department, Harper and Row Publishers, Hagerstown, Md.) \$8.75.

(This review was first published in the April 1976 issue of The Natural Farmer, the newsletter of the Natural Organic Farmers Association)

Food For Nought is probably the most comprehensive book available on the subject of food cultivation, food manufacturing, food marketing, and food consumption. Hall, a professor of biochemistry at McMaster College, in Hamilton, Ontario systematically describes how the corporate world, agribusiness, and government work together to produce nutritionless food that is hazardous to the health of the consumer, ruinous to the soil it is cultivated upon, but profitable and easy to manufacture for the corporations that market it.

Hall writes easily with a sophisticated understanding of social and economic factors, as well as the scientific and technical aspects that go into food production. His material, thoroughly documented, is presented in an historical context, so that we see not only the result of the misuse of technology, but also the process by which it went wrong. For instance, in discussing "lifeless bread", he goes into the history of the milling process, and his essay becomes a mini-history of bread.

Much of the material in this book will be familiar to those who have read books by Beatrice Trum Hunter, Rachel Carson, Jim Hightower, Murray Bookchin, the Ralph Nader organizations and other muckrakers. But the presentation here is inclusive — we get information on agribusiness and soil, food processing, food additives and nutrition, the misuse of chemicals and mistreatment of animals, food technology, medicine and the Green Revolution — all in one 290 page book with a valuable glossary and useful appendices.

Hall focuses his anger not so much on specific outrages that he talks about, but on the system that produces these nutritional monsters. He attacks scientists who are so specialized in their fields that they have no interest in the societal results of their research. He notes that food technologists — they're the people who keep the supermarket shelves fresh with new products — are rarely trained in nutrition and that the food processing business is more interested in marketing than it is in the value of their food products.

A paradigm of the way the food business works is the Green Revolution, an attempt by the U.S. to export its agricultural system to the third world. As Hall notes, the new seed pioneered by American agricultural research is dependent on irrigation, pesticides and heavy doses of fertilizers. Because of the investment needed, only large



farmers can afford to become part of this movement. They prosper — or at least they prospered (in recent years, yields have gone down) — but at the expense of their smaller neighbors who can't afford this new technology. As the rich get richer they buy the poor farmer out. The rich soon own the land, while the poor flock to already overcrowded cities where there is neither housing nor work. In addition, the Green Revolution creates a market for American technology — tractors, fertilizers, pesticides, etc. Before its ban, 70 percent of the DDT manufactured in the United States was for export. This policy is deliberate and it parallels agricultural policy in the U.S. Moreover, the values that motivate it are the same values that operate in the American food business: profit, efficiency, bigness over all.

Unfortunately, Hall neglects to give an overview of the system in which these mad scientists and technologists work. This is surprising, because throughout the book are pictures of advertisements that food processors take out in trade publications that graphically describe the dishonesty and greed of our corporate homemakers. (This is a value judgement, understand.) To me an advertisement from LaRoche — the drug corporation — that says “Our Red Coloring Looks So Natural You’d Swear It Grew On A Vine” is an example of corporate dishonesty; but to food processors who might use LaRoche coloring, it’s useful information.

But Hall stops his analysis there. No mention of the words “capitalism”, or “competition”, nothing about the insane logic of the corporate system which assures the production of shoddy, useless, dangerous and unnecessary goods for the sake of corporate growth and corporate profit. (And there is a perverse logic to it; if corporations can’t grow, how are people going to find jobs?)

Hall’s work is valuable as is the work of the other muckrakers in food production. But reform has never come (and won’t come) from an enlightened public that has no access to power, that is helpless against the logic of the system. Government can’t force change either (Fred Harris notwithstanding), as the government bureaucracy is the corporate world’s willing collaborator. What is needed to put good nutritious food into our bellies is a revolution: a revolution in consciousness so that people will stop supporting the different facets of this

system and begin organizing themselves into a counterforce, and a corresponding revolution in terms of institution that topples capitalism and replaces it with a human form of cooperative socialism with a politically active public in charge.

Marty Jezer
(The following paragraph was added to the review by the editors of *The Natural Farmer*)

Much of Hall’s blame for adulteration and industrialization of food is directed toward what he terms an antiquated and limited scientific paradigm for analyzing the effects of additives, antibiotics, preservatives, etc., as well as the traditional nutritionist’s analysis of food into vitamins. The scientific approach which dwells on the measurable parts of food buttresses the whole trend toward industrialization, and sanctions the steady, but slow poisoning of the population while passing off the erroneous belief that a refortified bread or milk is equal to the natural, unprocessed food because vitamins add up to the same. In an article “Is Nutrition A Stagnating Science,” Ross wrote: the “concept of nutrition, grew out of 19th century science...out of a single-cause-effect adding machine concept. Known vitamins number 17...why limit themselves to a selected few? The short listing results from a desire to simplify nutrition theory to as few elements as possible. And then, what of simultaneous interaction between a vitamin and its biochemical and physiological milieu? This milieu includes the other accessory factors: a shortage of or excess of one vitamin perturbs utilization of another.

Continued from page 2

EDITORIAL PRACTICE

1. *Operations:* *SftP* is published through the activities of the Editorial, Production and Distribution Committees under the direction of the Magazine Coordinating Committee (whose members are drawn from the other committees). All committee members (part-time, unpaid and serving 6-12 months) and the Magazine Coordinator (part-time, paid) are from the Boston area except for some members of the Editorial Committee who are from other cities. All committees are accountable to the general membership by way of 1) the annual Northeast Regional Conference (the most regular and widely attended conference of *SftP*) which reviews the magazine and makes general policy, 2) the different chapters of the Northeast Region through the Northeast Regional Coordinating Committee, and 3) local chapters through selection, review and direction of their participants on the Editorial Committee. Nationwide representation on the Editorial Committee by active *SftP* members is encouraged.

2. *Material for Publication:* To be in accord with established guidelines, material for publication 1) should deal with issues of science and technology, from a radical perspective, 2) should raise the political awareness and involvement of the general readership, and 3) should stimulate activities of individual persons and groups and the formation of chapters, but should not generally have the character of an “organizing manual.”

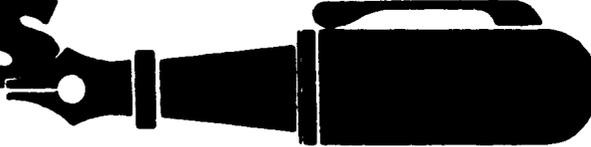
3. *Kinds of Contributions: Articles.* Good articles can evolve from our work and from community-based or other, political, investigation and activity. Topics may reflect research, teaching or other interests, and can take the form of book reviews, reports of events, or analytical articles. Writing done for another purpose often can be adapted for *SftP* and is welcome.

Procedure: 1) articles written for another purpose and roughly conforming to above guidelines: submit 3 copies along with a letter describing the article’s origin, how it might be adapted, and whether the author(s) are willing to do so. 2) new articles: if convenient, send an outline of a proposed article so that the Editorial Committee can point out possible conflict with the guidelines and make suggestions concerning content, resource material, emphasis and magazine context. In this way, some assurance can be given that an article will be used. Writing articles collectively is encouraged. Submit articles in 3 copies. In attempting to give authors constructive criticism and support, the Editorial Committee expends considerable effort in reviewing articles and discussing them with authors. Final substantive editorial changes are cleared with authors. In discussing the magazine’s content, in the “About This Issue” column, the Editorial Committee may point out unexplored questions, describe the range of opinion within *SftP* on a particular issue and draw some additional political interpretations of its own from the articles.

Current Opinion. Short, tightly argued positions on timely subjects are required for the Current Opinion feature. These contributions, including an occasional one from the Editorial Committee, should rely on facts and analysis generally accepted by the membership. It is the responsibility of the Editorial Committee to try to select those which best clarify the debate; this will include discussing changes with authors. Contributions should be 500 words or less, in 3 copies.

Other Contributions: Letters: contributions for continuing debate, commenting on previous magazine content, initiating new discussion, etc. News Notes: news items illustrating the social and political role of science and technology, especially reporting people’s actions on these kinds of issues (300 words or less). Chapter Reports and *SftP* Activities: brief summaries having essentially assured publication, with editing. Graphics: all kinds, including cartoons, designs, photographs, etc., not necessarily original but with credits.

letters



Dear SESPA:

Congratulations on a magnificent magazine. It is not plagued by factionalism. It does not split hairs. It is not bogged down in jargon and lingo of specialized "movements". It does deal with the problems and straight out. I have subscribed to similar journals over the years, mostly from Europe and England, but yours is far and away the best.

Comradely,
Jack Frumin, MD

Hi,

I would like to subscribe to *Science for the People*, and to that end am enclosing \$13. Please send the issues to my home. I have decided to subscribe, rather than buy occasional copies at the local counter-cultural bookstore (Full Earth Books) because your July, 1976 issue had several articles of relevance to feminist scientists. I particularly thought the Male Contraception article was tremendous, although I noted at least one factual error on page 14. While it is true that LH stimulates androgen production and FSH stimulates sperm production, my understanding of the current literature is that there is a subtle interaction, such that interference with FSH production will have effects on androgen levels. This makes a hormonally-targeted contraceptive more difficult. Nevertheless, the rest of the article was really superior, and I am having my undergraduate class in Human Sexuality read it!

hang in there, Leonore Tefer

To whom it may concern:

I would like to introduce an idea that will be of benefit to the people as a whole.

That is, a correspondence course of medical education relevant to the revolutionary struggle and in general health as a whole. This information would be preventive and curative in nature, at a minimal cost or free to those who subscribe.

Your magazine is very informative, but as far as your terminology is concerned I would like to suggest that owing to the illiteracy and low reading levels are concerned, that you should give definitions for your medical terms, i.e. carcinogenicity, Dieldrin or any other non-familiar words that the ordinary lumpen wouldn't understand if she or he decided to read your magazine.

I would like to suggest also that you include in your magazine a listing of medical terms in your magazine along with definitions, if that is possible. Like to hear from you soon.

Seiter Amin

To the Editors,

We wish publicly to protest the treatment given, in the Sept-Oct. issue of *Science for the People*, to our critique of the Berkeley nuclear power pamphlet.

The lesser of our objections is to the sloppiness involved in preparing the article for print. An entire page of references (number 9-19) was omitted, symbols were not filled into a footnote on p. 25, and one sentence (on p. 27) was rendered unintelligible by the omission of the word "coal" ("... by using the Marshall plan to force European countries to shift from consuming coal (largely indigenous) to oil . . .").

Much more serious were a change and an addition made without notifying the authors, even though one of the authors (Joe Shapiro) is a member of the Editorial Committee (EC) and attended an EC meeting in Boston at which the article was discussed in detail and several changes agreed to.

The original title of the article was "A Response to the Nuclear Power Pamphlet". This title was selected by the authors for two main reasons. First, it was descriptive of the content of the article. Second, it emphasized the belief of our group that SftP magazine should be more of a vehicle for debate over issues. The latter point was discussed at the EC meeting mentioned above, with agreement by the rest of the EC, as shown by the comments on the article in "About This Issue". However, unknown to us, current magazine procedures give final say over title of articles to the Production Committee. Apparently, without consulting either us or the EC, they changed the title to "Health Hazards of Nuclear Power", which has nothing whatsoever to do with the intent of the article and very little to do with its content (perhaps 10 per cent of the article dealt with some occupational health problems). In our view, titles are part of an article's content, and should have the same review procedures as the rest of the article, i.e., substantive changes should be cleared with authors.

Our biggest objection is to the box, on page 27, entitled "Nuclear Power in the Soviet Union". Boxes frequently are submitted by the authors themselves. Since there is no statement to the contrary in this case (i.e., the box is not signed by the EC), the implication is that either we submitted the box or that we agree with its content. Neither is true. We weren't even consulted. The box has little to do with the article, which is a discussion of the use of nuclear energy under capitalism. The box adds nothing to the issues raised. Indeed, by introducing extraneous statements, whether accurate or not, it confuses and weakens the arguments raised in the article itself.

Our group has not developed a detailed position vis-a-vis the Soviet Union, nor did we think that such a discussion was relevant to the objectives of the article. We would welcome a serious, critical discussion of nuclear power in the Soviet Union, but wish to disassociate ourselves from this particularly blatant attack and the unprincipled way in which it was done, with no consultation with our group and citing as its sole source that bastion of the bourgeois press, *Business Week*.

The treatment accorded this article raises serious questions about the relationship of the EC to authors and about how political input from the EC should occur. Once an article has been mutually agreed to, it should not be changed. Boxes added by the EC should be marked clearly as being from the EC, not the authors. The action of the EC in this case seems to contradict the rules of "Editorial Practice" printed in each issue of the magazine. We quote: "Final substantive editorial changes are cleared with authors. In discussing the magazine's content, in the "About This Issue" column (emphasis ours), the EC may point out unexplored questions, describe the range of opinion within SftP on a particular issue and draw some additional interpretations of its own from the articles."

Energy and Environment Group
New York Chapter, SftP

The Editorial Committee replies:

The Editorial Committee would like to clarify several points raised by the authors: 1) The references were unfortunately misplaced during production of the magazine. They have been printed in the current issue. 2) The reason the authors did not know about the change in title, despite one of them being a member of the EC, is that titles are decided upon by the Production Committee. Starting with the next issue of the magazine (Jan-Feb), all titles will be cleared with the authors. 3) The box should have definitely been signed by the EC. As to the relevance of the box, we feel that the use of nuclear energy under any economic and political system is relevant to its use under capitalism. Without such a comparison, it is impossible to come to an understanding of the basic forces which shape technology. Starting with the next magazine, all boxes will be discussed with the authors. If a disagreement ensues, the EC and the authors will attempt to argue their respective positions and resolve the issue. If the EC feels absolutely committed to the box, the authors can of course withdraw their article.

To Science for the People:

The Sociobiology Study Group of SftP has done an immense service for everyone who is fighting the spread of sociobiological ideas. Not only has the group prepared the most thorough critical analysis of E.O. Wilson's book *Sociobiology — the New Synthesis*, yet to appear in print, but they have persisted in having their views aired in a variety of mass publications. The group has rightly pointed out the overt sexism present in Wilson's book, his popular talks and articles, and the film, "Sociobiology — or Doing What Comes Naturally." Yet there is another political implication of Wilson's work which the Sociobiology Study Group has persistently de-emphasized, and one which, in the long run, has the greatest potential for political misuse. This is racism.

How is Wilson's book armament for racism as well as sexism? Wilson makes no direct reference to race. However, the very title of his book makes the connection clear. While Wilson chooses to focus his sociobiological argument on male-female social differences, it is obvious that if his arguments hold for sexual differences, they will logically hold for racial differences as well. Once the door is opened for biological explanations of social differences of one sort, it is opened for differences of all sorts. Whether his is personally aware of it or not, Wilson's work leads to inescapable racist conclusions for anyone so disposed to use his work toward that end.

There is certainly enough sexism explicitly displayed in Wilson's book to afford ample opportunity for criticism. Why, I have often

been asked, is it necessary or important to bring out the racism that is less obvious? The answer to this question raises an important political point: the historical difference between racism and sexism.

Racism and sexism are so ingrained as part of the political and social heritage of capitalism that it is difficult to find instances where one exists without the other. Both have been used as tools for dividing people and reducing their political strength. It has been, and continues to be, important to fight both at all times. Historically, however, there is one important difference. Racism bears within it an ultimate political potential for the ruling class which sexism has never displayed. Because even the ruling class is composed of both sexes in approximately equal numbers, sexism has never been used, and probably never will be used, to the same extent as racism as a divisive tool. The profound divisions which racism is capable of creating seem always to have been greater than those which sexism can create. Colonialist, imperialist, or fascist wars have been waged and justified on racist grounds. While sexism has also been a component of colonialist, imperialist or fascist nations, it has not formed the central rationale for the major historical developments those nations have undergone. For example, in the United States today a kind of fascism appears to be on the rise (e.g., the renewed prominence of the Nazi Party, the KKK, Boston's ROAR, White Citizens' Councils, etc). That movement has a lot of sexism in it, but it is overtly and diabolically racist in its stated intent.

Let me hasten to add that in emphasizing racism I do not want to downplay sexism. It is real, ever-present, and a very destructive force in its own right. Sexism must be fought at every turn. I am suggesting that E.O. Wilson has chosen to advance a theory of biological determinism on sexist grounds that can and no doubt will be, used as a basis for a very racist world view as well. I do not think the Sociobiology Study Groups should de-emphasize the sexism in Wilson's writing, but only draw more clearly the relation between sexism and racism which is implicit in the new field of "sociobiology." Wilson's work lays a strong foundation for the racist way of thinking — of explaining people's social roles by biological factors.

For those who think that racism is not inherent in Wilson's work, it should be kept in mind that *Sociobiology* was published in 1975, after five years of "preparation" by more crude examples — Jensen, Shockley, Herrnstein, and Banfield, to name only a few. Wilson's work shows a little more refinement in many places than his predecessors. But given the atmosphere into which the book was launched, its seemingly cautious and sophisticated presentation only appears to be the final truth at which the others grasped imperfectly. It must also be pointed out that the argument of all those opposing sociobiology is not against abstract ideas *per se*, but against how those ideas come to be used in a social and political context. Wilson's book has now become, whether he likes it or not, the standard-bearer for all "scientific" attempts to explain human social behavior in biological terms. It is being marketed to the public at an alarming rate, a process in which Wilson himself is an active participant. Racism and sexism in Boston, New York, Chicago or Los Angeles have been given a shot in the arm by the "authority" of established biology. As the Sociobiology Study Group has so well pointed out, the fountainhead of such movements as Social Darwinism or Eugenics in the past has been academia. To fight against the political trends of which such theories are the harbingers, is an important arena for political activism. But the fight cannot be against sexism alone, but sexism and its deadly counterpart, racism.

Gar Allen
St. Louis, Mo.

Dear Science for the People,

I enjoyed reading Meredith Turshen's interesting and perceptive article in your last issue. I agree with her analysis of the strengths of the women's health movement and with her suggestions for broadening its scope. I think that there is an additional question which is of considerable importance for the women's health movement (and for the health left in general) which has not received the attention it deserves.

This is the question of how our society generates illness. Particularly relevant for the women's health movement is an analysis of why women's life expectancy is eight years longer than men's in the U.S.

The sex difference in life expectancy has been growing since about 1920 and appears to be due largely to the unhealthy effects our society has on men's lives. For example, because of their role as breadwinners in our competitive society men more often develop the hard-driving, rushed, competitive Type A or Coronary Prone Behavior Pattern and this is one reason why men have more coronary heart disease.

Job hazards contribute to higher accident and cancer rates for men. Some of the ways of coping with stress that men use more than women do (for example, drinking and smoking) also contribute to men's higher mortality. These and other findings in a more detailed analysis* indicate ways in which men's role in our society is bad for their health.

The most important conclusion from this study and others like it is that we will not be able to have truly healthy lives unless we change the economic and social organization in the U.S. For example, at the same time as women demand equal occupational opportunities, both women and men need to struggle to improve working conditions and to reduce the competitive, driven aspects of many jobs, since these contribute to coronary heart disease, the foremost cause of death in the U.S.

Sincerely,
Ingrid Waldron
Philadelphia, PA

*Waldron, I. and S. Johnston, "Why do women live longer than men?" *J. Human Stress*, March, pp.2-13 and June, pp. 19-29, 1976. I will be happy to send reprints to any reader who would like one. My address is Biology Department, Leidy Laboratory-G7, University of Pennsylvania, Philadelphia, PA 19174.

Dear SftP folks,

Enclosed is \$5 to assist in the present crisis. I read the appeals and wish us all well.

You may be interested to know that a group of angry farmers are rising up in the Ozarks region against the use of 2-4-5-T to clear land for pastures. It is being used by some land owners in order to graze more cows. The Forest Service is also using it in order to convert some parts of the St. Francis-Ozark National Forest from hardwoods (mostly oak) to pine.

At this time the organized opposition is taking the tactic of county-wide petition drives to make it illegal to use the stuff. I am working on a paper here in Fayetteville which is publicizing the issue.

If you wish you may print this to give the rest of our membership some idea of what is happening around here. I would like to hear from people in other parts of the country with information or suggestions about 2,4,5-T.

Thank you — for your good work —

Joe Neal
PO Box 1772
Fayetteville, Ark. 72701

Greetings Sisters and Brothers,

The publication put out by your collective is one of the few attempts (the only one that I know about!) by progressive-radical activists in the scientific community to return "social knowledge" back to the originators, the people. Being a recipient of a gift subscription to this priceless magazine, I have had occasion to get up on many things in various fields of endeavor that wouldn't have been available in other media, especially bourgeois journals. It was through reading "Science For The People" that the vast contamination of filth in the food industry become known to me and it hasn't ceased to enlighten me with each issue.

To be sure, the latest copy of the manual completely amazed me to learn that black people in this country were more victimized by incidents of different kinds of cancer than Whites. Yet, after a bit of pondering, it became quite understandable in light of their (our) position in this capitalist society. Little wonder that we have even survived to be included in any statistics, let alone cancer ratings! Be that as it may, with people in the struggle as yourselves, the conditions which gave rise to these circumstances will be swept away with the downfall of bourgeois rule and capitalism.

Tackle this problem if you will: what is the relationship between trichinosis and pork eating today as opposed to the past? There is much confusion centered around this question throughout the prison system in Illinois and probably across country. For many prisoners, the eating of any pork is looked on as courting eventual death from the trichina worm that "naturally and inherently" exists in any form of pork. Now, I have gathered some information that refutes these assumptions in most instances, but my sources have been just the agencies that have an interest in denying such charges. We know how the regulatory agencies are in the pay of the industries they are to oversee!! Could your collective send me some data dealing with this pork issue that is both factual and verifiable — the authorities and sources cited also. In an upcoming issue of "Science For The People," perhaps a detailed article on the incidents of trichinosis in pork eating can be featured. Do many of the hogs bred today contract the trichina worm in view of the improved methods of feeding? Some hog farmers still raise their animals on "slop," which is where most hogs used to obtain the parasite. When using refuse to feed these animals, the farmers are required by law to cook it at a specified temperature to render all organisms dead and to mix certain chemicals in it too. Whether this law is enforced or not is a horse-of-another-color. What are the cases of the worm being found in slaughter houses? Can these meat inspectors be relied on, knowing the nature of capitalist society?

Please, if such is available, send us here some answers to this seeming irreconcilable debate and it will serve to remove ignorance from your midst.

Toward still greater victories!

Omwale

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

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

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

1. Name:

Address:

Telephone:

Occupation:
 (if student or unemployed please indicate)

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

active. (If none, would you like us to help you start one?)

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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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