

sary to show fault, negligence or lack of caution." To take another approach, limited health and accident insurance could be written on each subject.

Practical problems remain. Which experimenters would be protected? How would psychological or physical damage be assessed? There are already legal precedents, of course, for reimbursement for injury. It would seem probable that something like these could be applied to this new area. "But the fact that such details and the underlying legal and moral issues are being seriously considered constitutes somber

evidence that scientific inquiry will prove increasingly powerful in gaining knowledge of man himself" (7). In this process those responsible for the growth of knowledge must be protected.

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#### NEWS AND COMMENT

## Smoking and Health: Closing the Ring on the Cigarette

Four years ago, when the first major legislative struggle on the smoking and health issue was taking place, lobbyists for the tobacco industry and their congressional allies handled the antismoking forces as deftly as a cowhand from Marlboro country might rope a calf. Now, however, the smoking and health question is again agitating Washington, and this year the tobacco industry's problems look less easily manageable.

In coping with the health issue in 1965, the industry clearly made the best of adversity. The 1964 report of the Surgeon General's Advisory Committee on Smoking and Health had said that cigarette smoking was causally related to lung cancer in men; that it was the most important cause of chronic bronchitis; and that it was associated closely enough with other ailments, including coronary heart disease, to be highly suspect as a possible causal factor. Here, for the first time, was a warning against cigarette smoking by a federally sponsored panel of experts whose membership had been approved by the tobacco industry—a warning which, moreover, was stated as plainly as a skull and crossbones.

In light of this development, voluntary health agencies such as the American Cancer Society had reason to hope that, if Congress took no effective action of its own to discourage smoking,

it would at least not prevent such action by the state and federal regulatory agencies. But Congress, aided by the tobacco lobbyists and its own talent for grinding sharp edges off unpleasant facts, enacted the Cigarette Labeling Act, requiring on each cigarette package the message "Caution: Cigarette Smoking *May Be* (emphasis supplied) Hazardous to Your Health."

Worried as it was about court suits being brought by cancer victims or their survivors, the tobacco industry itself saw an advantage in having a warning label, particularly if worded as mildly as the one Congress adopted. Yet, from the industry's standpoint, the labeling act had a still greater merit: It largely preempted other action in the smoking and health field for a 4-year period. Principally, this meant that the Federal Trade Commission (FTC), which had been moving to require a strong health warning on cigarette packages and in all advertising, was powerless to act.

Despite this setback in Congress to their cause, the antismoking forces—led by the U.S. Surgeon General and private groups such as the Cancer Society, the National League for Nursing, and the National Congress of Parents and Teachers—have persevered in their crusade, using every means of publicity and persuasion at their com-

mand. Though their financial resources have been limited compared to the tobacco industry's, these forces nevertheless represent a broad, powerful coalition of health and civic organizations which are active in nearly every community. Furthermore, the propaganda resources of a major government agency such as the U.S. Public Health Service are substantial. For example, the PHS once had 53,000 U.S. mail trucks displaying a large poster reading "100,000 Doctors Have Quit Smoking (Maybe They Know Something You Don't)."

In June of 1967, the Federal Communications Commission (FCC), to everyone's surprise, applied its "fairness doctrine" to cigarette advertising, holding that broadcasters who carry cigarette commercials must also carry some antismoking messages. The result was that the PHS and the Cancer Society and other voluntary health agencies suddenly found their anti-smoking "spots," which most broadcasters had been leery of using, in heavy demand.

Clearly, the smoking and health issue has been kept alive, and smokers gradually are responding. Per capita consumption of cigarettes has gone down by almost 3½ percent since release of the report by the Surgeon General's committee in early 1964. Furthermore, production during the first 3 months of 1969 was about 1.5 million packs a day below that for the same period in 1968; this suggests that there are now about 1.5 million fewer smokers, inasmuch as the average smoker consumes about a pack a day.

In Congress the smoking and health issue has been an embarrassment because it touches the financial nerves of a sizable block of southern and border states (some of them potentially repre-

sented in the House or Senate) and of the broadcasting and other media which carry cigarette advertising. Smokers spend \$9 billion in the United States each year on cigarettes. They are egged along in their habit, and sometimes lured into it, by advertising, for which the cigarette companies spend more than \$300 million annually, some \$245 million of that amount being used to buy commercials on television and radio. For no other product does the volume of broadcast advertising come even close to equaling this amount. And tobacco farming and manufacturing also are big businesses, on which some 600,000 farm families and 36,000 factory workers depend for all or part of their income.

However politically sensitive and inconvenient the matter may be, Congress is again having to consider the smoking and health issue. The 4-year preemption with respect to action by the regulatory agencies is about to expire, and both the FTC and the FCC propose to take strong measures. The FTC has called a public hearing for 1 July, the first day following expiration of the preemption, on a proposal to have all cigarette advertising warn that "cigarette smoking is dangerous to your health and may cause death from cancer, coronary heart disease, chronic bronchitis, pulmonary emphysema, and other diseases." According to tobacco industry spokesmen, a requirement for such warning could lead cigarette manufacturers to give up advertising altogether. The Federal Communications Commission has, for its part, proposed a direct ban on cigarette advertising on radio and television, though it has raised the question of whether an exception should be made for messages about cigarettes of low tar and nicotine content.

#### Industry Ally

This time, the tobacco industry may find it difficult to persuade Congress to block the proposed agency rules. Yet the industry has a major ally in the House Commerce Committee, which recently approved, by a vote of 22 to 5, a bill extending for 6 years the preemption against agency rule-making. State action also would again be preempted. As a concession to the antismoking forces, the bill would strengthen a bit the cautioning label on the cigarette package.

But there is no reason to think that the antismoking people can be bought off so cheaply. Sentiment in the House

Commerce Committee is not to be taken as typical of that in the Congress as a whole. On this committee, which often finds spiritual guidance on controversial issues in chamber-of-commerce manuals, there are nearly a dozen congressmen from tobacco states and they seem to dominate the group's deliberations on the smoking and health issue.

When the Commerce Committee reported out the bill, Representative Harley O. Staggers of West Virginia, chairman of the committee, showed no great confidence in what had been wrought, saying that the measure is likely to be amended on the House floor. "I felt this should get to the floor so the debate would be before the American people instead of in a closed room here," he told a newsman. As this is written, the prospects are that the bill will reach the floor soon, possibly this week. Various proposals to restrict cigarette advertising or to require strong warnings were defeated in committee, but they will be heard again on the floor. More than 50 members of the House have introduced bills to require a strong warning on the cigarette package and in all cigarette advertising.

Should the committee bill nevertheless pass the House more or less intact, its chances of receiving favorable action in the Senate are poor. In his reelection campaign last year, Senator Warren Magnuson of Washington, chairman of the Senate Commerce Committee, presented himself to the voters as the consumer's champion, a kind of paunchy Ralph Nader who would "keep the big boys honest." But for Magnuson, the Cigarette Labeling Act of 1965 would have preempted action by the regulatory agencies permanently, not just for 4 years. And, while Magnuson has been known to make a deal, if he makes one this year with the tobacco lobbyists, he probably will exact stiff concessions.

Given the right terms, a deal indeed may be possible. "If the cigarette industry were to agree to the elimination of substantially all broadcast advertising, I think it just might be given freedom from regulation of advertising in the print media," says one observer who is close enough to Magnuson and the committee for his speculations to carry weight. Many conservatives in Congress, seldom in accord with agency rule-making that puts new limits on the freedom of business, probably would applaud a settlement that would take the smoking and health issue out

of the hands of the FTC and the FCC.

But any bill passed by the House would go to the Senate Commerce Committee's consumer subcommittee, chaired by Frank E. Moss of Utah—and the Moss strategy is to block congressional action in the smoking and health field this year and have the FTC and the FCC act on their proposed rules. Moss, a Mormon, is deeply concerned about the health hazards of smoking and insists that he is not interested in bargaining with the tobacco lobbyists. His strategy is promising, for Congress is a place of labyrinthine rules and procedures, and one of the things it knows best is how to do nothing. Moss says that, if necessary, he will filibuster against any legislation that would prevent the agencies from regulating cigarette advertising. He claims to have the support of more than enough senators to keep the foe from mustering the two-thirds majority necessary to invoke cloture. For the tobacco-state senators, mostly southerners who swear by the right of unlimited debate, even to try to break a filibuster would be a historic switch.

#### New Circumstances

As this year's struggle between the cigarette industry and the antismoking forces is joined, it is pertinent to note the following new circumstances:

- In its efforts in 1965 to forestall agency regulation, the tobacco industry promised to carry out an effective program of self-regulation. The industry's "Cigarette Advertising Code," administered by Robert B. Meyner, former governor of New Jersey, was to put a stop to all abuses, including appeals to juveniles. But in the FTC's view, the code has been a failure. In its 1967 report, for example, the commission noted that "the average American teen-ager sees more cigarette commercials on network television than does the average American." Moreover, the FTC denounced the industry last year for first planting in *True* magazine an article debunking the proposition that smoking is a cause of cancer, then promoting it surreptitiously through newspaper advertising. The National Association of Broadcasters has a cigarette advertising code also, but a former NAB employee is now charging that it is a public relations "facade."

- Since 1965 Congress has become far more consumer-conscious than ever before. In the pre-Nader era, one scarcely could have imagined, for example, Congress defying Detroit by

## NEWS IN BRIEF

### ● WEST COAST SCIENTISTS URGE DDT BAN:

Sixty West Coast marine scientists are urging Governor Ronald Reagan to seek a ban on the use of DDT in California. In an open letter, scientists led by John H. Phillips, Jr., director of Stanford University's Hopkins Marine Station, called for support of pending state legislation that would bar the use of DDT. California is reported to use more DDT than any other state.

### ● PRESIDENT'S ENVIRONMENTAL COUNCIL:

President Nixon on 29 May formally created a cabinet-level Environmental Quality Council and assigned it certain priority tasks; the Council is to study methods of solid waste disposal, air pollution, and the harmful effects of prolonged use of DDT. Presidential Science Advisor Lee A. DuBridge has been designated executive secretary of the council.

### ● DADDARIO SUBCOMMITTEE REPORT:

A background report, prepared for the Daddario Subcommittee on Science, Research, and Development proposes that a commission be established by Congress to study federal science organization and the desirability of centralizing government science activities. The report discusses alternatives of centralization that have been advanced in recent years and proposes a prototype for discussion. The National Institutes of Research and Advanced Studies, which would combine the functions of the more than 20 government agencies that now handle scientific activities. *Centralization of Federal Science Activities* is available from the Committee on Science and Astronautics, 2321 Rayburn Building, Washington, D.C.

### ● NEWARK TO GET MEDICAL AND DENTAL SCHOOL FACILITIES:

The New Jersey College of Medicine and Dentistry will soon begin to build a new medical school complex in Newark, which was blocked in part 2 years ago by a racial dispute over the college's plan to centralize its facilities (see *Science*, 19 April 1968). The college will begin construction with the help of a \$35.3 million grant—the largest award ever provided under the Federal Health Professions Assistance Act. The federal grant, which will be

coupled with \$30 million in state money, will enable the school to replace largely obsolete, inadequate, scattered facilities in Jersey City with a modern, centralized \$100 million 46-acre medical complex in Newark. The new medical center will include a basic sciences building, a teaching hospital, and a dental education building. Two summers ago the black community, strongly supported by state and federal officials, blocked the college's attempt to relocate its facilities in Newark until the college agreed to coordinate its activities with community needs. On 10 January 1968, in a letter to New Jersey Governor Hughes, HUD Undersecretary Robert C. Wood and the then HEW Undersecretary Wilbur J. Cohen, set forth strict conditions that were to be met by the college before the grant would be approved. In March 1968, the college agreed to help relocate Negroes displaced by the new school, to hire community persons in the construction and operation of the medical facilities, to provide community health services, and to grant medical scholarships to students in the community. The new medical complex will enable the school to increase its present enrollment from 500 to 800 students; it is expected to provide more than 50 new places for first-year medical and dental students.

### ● PH.D.'s IN BIOSCIENCES GROW:

Although considerably more doctorates were awarded in the physical sciences, a National Academy of Sciences (NAS) report shows that the biosciences outpaced the physical sciences with respect to the rate of increase in the number of research doctorates awarded in the 1967–68 academic year. In the biological sciences, the number of degrees awarded has more than doubled to 18.1 percent last year from 8.6 percent the year before. In the physical sciences, on the other hand, the growth rate has dropped from 13.5 percent in 1966–67 to 7.1 percent last year. In 1967–68, about 4600 Ph.D.'s were awarded in the physical sciences and about 3700 in the biological sciences. The NAS report, which was conducted by the Office of Scientific Personnel of the National Research Council, is based on an annual survey of 22,834 research doctorates earned in the 1967–68 academic year.

passing strong automobile safety legislation. As Senator Magnuson and others have demonstrated, doing battle for the consumer is good politics, and few if any consumer-protection issues are more on the public's mind than the smoking and health issue.

● Four years ago a potent coalition of tobacco, advertising, and broadcasting interests was behind the Cigarette Labeling Act. While this alliance still exists, it is showing signs of strain and even some cracks. For instance, the Washington Post Company's several broadcasting stations are now refusing cigarette advertising, and some other companies, including Westinghouse Broadcasting, are doing the same. Recently, *Advertising Age*, an advertising trade publication, called for the tobacco companies to practice better self-regulation in their advertising and observed that "the rest of the advertising business cannot be expected to support unyielding resistance indefinitely."

● The view that cigarette smoking is a threat to health has been supported by a broadening consensus of medical opinion. The membership of the National Interagency Council on Smoking and Health presently includes such groups as the American Academy of Pediatrics, the American College of Physicians, and the American College of Surgeons, as well as such charter members as the American Cancer Society and the American Heart Association. Though it has never joined the council, the American Medical Association last year took a strong stand against cigarette smoking.

In successive annual reports to Congress, the Department of Health, Education, and Welfare has added progressively to its indictment of smoking. For example, cigarette smoking is now described as the *main* cause of lung cancer in men and as a factor contributing to many deaths from coronary heart disease.

In attempting to cope with the current threat, the cigarette industry's Washington lobbying organization, the Tobacco Institute, is playing on two major themes. One is its contention that to allow the FCC and FTC to go ahead with their proposed rule-making would wipe out cigarette advertising in all media. The industry lobbyists argue that rule-making of this kind could ultimately be extended to other products now being legally sold. According to this view, the advertising of

whiskey, beer, or even milk (with its cholesterol content), for example might be made subject to special rules and restrictions.

The lobbyists' other major theme, and the more basic one, is that the case against the cigarette has not been made—that the smoking and health issue is an unsettled "controversy." And, in fact, during the hearings of the House Commerce Committee several weeks ago, nearly a score of expert witnesses testified at the Tobacco Institute's request and still others submitted statements. These witnesses, who included some medical researchers of distinguished credentials, challenged the reliability of data or noted inconsistencies in data used in past studies linking smoking and illness; others suggested that unknown factors, such as possibly a constitutional susceptibility to heart disease by the kind of people who tend to become heavy smokers, may explain the association between smoking and illness and death. A statement frequently heard—and one that has long been central to the tobacco industry's argument—was that cigarette smoking and illness are only linked statistically, and that this is no proof of causality.

U.S. Surgeon General William H. Stewart, in a recent letter to the chairman of the Commerce Committee, has

rejected all of these criticisms and has observed: "We do not impugn the sincerity of the witnesses when we say that, in our opinion, the main thrust of their testimony is a threat to medical practice in this country, to the progress of our medical and health agencies, and to the health of our people." To be in disagreement with a medical consensus does not, he conceded, necessarily mean one is wrong; but, Stewart added, "it does not entitle one to say, as one witness said, that medical opinion about cigarettes has come about because physicians are gullible and have been brainwashed by the Public Health Service and the voluntary health agencies."

Earl Clements, president of the Tobacco Institute and a former U.S. Senator from Kentucky, has expressed "shock and amazement" at the Surgeon General's words. Sheldon C. Sommers, director of the industry-sponsored Council for Tobacco Research and director of laboratories at Lennox Hill Hospital in New York, has charged that Stewart's statement was "irresponsible" and "demagogic."

But, clearly, the tobacco industry's minority position is not an easy one to maintain. Unless a compromise can be reached with the antismoking forces, and the latter may see no need to make

a deal, the tobacco industry could conceivably find its cause in grave trouble. Success of the Moss strategy would leave the FCC free to ban cigarette advertising from the air and would leave the FTC free to require a conspicuous warning in advertising in all media. The voluntary health agencies probably could persuade many broadcasting stations to carry, as a public service, antismoking messages, even though the fairness doctrine would not be relevant in the absence of cigarette commercials. The PHS, no doubt, would continue, through the schools, the health professions, and the media, its campaign against smoking.

In short, the groundwork for an effort to eliminate cigarette smoking as a pervasive social habit may be further along than many imagine. As a PHS official has noted, one forgets that the history of the weed has been brief, the cigarette having first appeared in the United States in 1910, as a cheap, attractive substitute for tobacco chewing, an "evil" that was soon largely to disappear from polite society. Now, the cigarette itself may just possibly be on the verge of a precipitous decline, though perhaps it may never be as outmoded and offensive to good taste as the plug of tobacco and the spittoon.

—LUTHER J. CARTER

## Nanterre: A Year Later at Campus Where French Student Revolt Began

*Nanterre.* The world of scholarship is yet to accord high rank to the University of Paris annex that opened here 5 years ago, but, in the annals of academic upheaval, this mushrooming, neo-penitentiary-style campus merits a notable place. It was here, at the alma mater of student revolutionist Danny "The Red" Cohn-Bendit, that France's great student revolt broke out a little over a year ago, and to that revolt can be traced the abrupt resignation of President de Gaulle as well as the forced-draft passage of legislation designed to liberate French education from its Napoleonic mold. In the meantime, what has happened at Nanterre?

The 15,000-student campus, located

just to the west of Paris, has shed a dean or two, and has also undergone extensive administration reorganization that, in accordance with the educational reform law, is supposed to let students, junior teachers, and other campus employees into the decision-making councils that were traditionally the exclusive domain of senior professors. In parallel to this apparent shift of power, the level of strife on campus has receded from virtually full-scale combat to an occasional skirmish. And, in recent months, there have even been substantial periods of unbroken peace, which may be something of a record, considering the fact that Nanterre's reputation for combativeness goes back to

at least the spring of 1967, when police and firemen were summoned to settle the now seemingly harmless issue of whether boys might be present in girls' dormitories. It is questionable, however, whether there is any significant link between the current relative quiet and the newly instituted organizational reforms, since factors more potent than reform have been at work to dampen the French student movement; furthermore, the reforms, upon close examination, are not likely to be mistaken for the millennium by those who last year took to the streets so eagerly. In fact, last winter's voting for delegates to the university's newly established governing bodies was boycotted by virtually all members of the sociology staff—largest of all the campus faculties—on the grounds that the proposed reorganization was a sham and would have no effect on the power of the reigning *patrons*. About 44 percent of the students voted—a figure which is cited as healthy by supporters of the reform and as sickly by opponents.

In any case, the organization chart