

became clear that it also had practical significance for industry.

In 1956 Battelle had a single trained economist on its staff working in what was called "research economics." Proceeding on the theory that technological change generates new social and spending patterns and that predictions about trends in these areas would prove of great use in corporate planning, Battelle enlarged the professional staff studying the broad effects of R&D on society and industry until today it numbers about a dozen social scientists at Columbus. The work has been supported primarily with institute funds. Similar studies have been started at Frankfurt and Geneva.

Aiding Corporate Thinking

The result has been the evolution of a new Battelle service called "aids to corporate thinking," scheduled to start this year. Subscribers will receive annual detailed reports on the United States and seven Western European countries. Research until now has concentrated on obtaining data on income, occupation, and education, and the analysis will be broadened to give more complete information on consumer potential and business and political prospects in the countries under study. There would also be scheduled meetings between Battelle researchers and clients, and Battelle obviously hopes that some subscribing companies would wish to negotiate special contracts for work on special subjects.

Socioeconomic research is not the only instance of Battelle's movement away from its earlier concentration on engineering and hard sciences. Work on human-factors research, systems engineering, operations research, and information research are other examples.

With its broadened research base, Battelle has prospered in the postwar years, with research volume for both industrial and government contracts increasing steadily, government-sponsored research building the more rapidly. In 1940, the record shows, Battelle had research contracts totaling \$600,000, and all but a minor four-figure sum came from industry. Total research volume at Battelle in 1950 was \$6.6 million—\$3.4 million in industrial contracts and \$3.2 million in government contracts. In 1955 the total was \$16.7 million—\$8.9 million industrial and \$7.8 million government. Last year the

total was \$28.6 million—\$11.9 million industrial and \$16.7 government.

The growth in the institute's staff over the years has been accordingly impressive. And the alteration in the makeup of the staff has reflected fundamental changes in American science and technology over the past generation. Scientists are much more in evidence at Battelle than they were in the early days when work at the institute was mainly applied research in engineering. The proportion of staff members with advanced degrees is also much higher.

Organizationally, Battelle has inevitably changed. The original idea of seeking to hire good men, giving them space to work and then leaving them alone as much as possible, remains policy. Autonomy has been extended to the new labs at Frankfurt and Geneva, with the result that the staffs are now reportedly all-European. The same rule of independence is to be applied at Hanford. A new director has been appointed from the Columbus staff and a few aides will accompany him, but no major transfer of staff is expected. Present GE employees in most cases will become Battelle employees. With luck in keeping present contracts and winning new ones, there will be no sizable layoffs among the 1800 employees of the lab, which, incidentally, is to be renamed the Pacific Northwest Laboratories of Battelle Institute.

Changes in the management structure of the institute are also in process. A new director of the Columbus lab was appointed at the first of the year, that job being separated from the presidency in a move to streamline the organization of the institute. To deal with some problems of bigness, two wholly owned subsidiaries have been set up. One is a nonprofit auxiliary to take over the task of developing inventions spawned at the institute and to handle affairs related to licenses and patents. The other is a for-profit tax-paying business that is devoted to development work and manufacturing.

Battelle, a pioneering industrial research laboratory, has become a successful international general research organization which, as its officers like to say, lives by its reputation. With assumption of responsibility at Hanford, Battelle has committed itself to operations on a considerably grander scale, with the opportunities and the risks which that implies.—JOHN WALSH

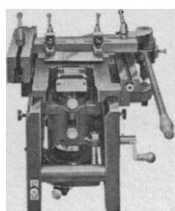
Consumer Motivation: Handy Handbook Reveals Discovery— "Mystery Surrounds the Cheese"

One difference between the researchers who have put their talents to work in defense industries and those who have undertaken research into consumer motivation for business enterprises is that, unfortunately, the discoveries of the latter are not classified. As one recent public monument to their efforts we have a handy compendium entitled *Handbook of Consumer Motivations* (McGraw-Hill, New York, 1964), in which the "communications expert, whether he is in advertising, sales, marketing, promotion, public relations, teaching or politics," can learn what psychological factors are thought to affect the attitude of the consumer toward his purchases. The handbook was written by Ernest Dichter, a Viennaborn psychologist who holds degrees from the University of Vienna and the Sorbonne, and who is generally credited with having introduced the practice of "depth interviewing" into market research. The book is a collection of findings accumulated by Dichter and his associates in the Institute for Motivational Research, which he heads, during the course of 2500 studies conducted for a variety of commercial and other institutions. The reader must thus be prepared for such casual introductory comments as, "In a psychological report conducted for a mustard company . . . ;" or, "One of the classical studies of motivational research has been conducted in the field of prunes."

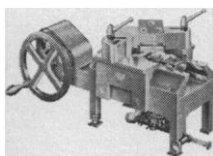
If Dichter's main assumption, that "our everyday habits have a much deeper basis than we ordinarily assume," is literally true, it is not surprising that women in supermarkets occasionally have a glazed or stupefied look. If they manage to survive the tangle with the asparagus which, "because of its peculiar shape, easily acquires a phallic significance," they still have to cope with the soft drink, which, "unlike coffee, does not have a psychologically firmly established place in the daily life of most adult Americans," and they must prepare for disappointment when the outrageous demands they make on bread are left unfulfilled. ("... most people wanted a bread which satisfied the hidden hunger for sensory satisfactions, indivi-

(Continued on page 974)

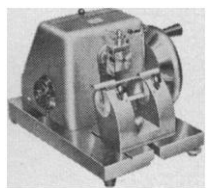
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NEWS AND COMMENT

(Continued from page 907)

duality, family associations, and home-made connotations. They wanted a bread that afforded them status because it was the most desirable bread emotionally as well as nutritionally.") At every counter, further passions are aroused: "oranges and grapefruits are supercharged with excitement," "sugar is a conflict product," "soup is a profoundly emotion-charged food," "mystery surrounds the cheese," and the "truly modern cereal" must combine "all the warmth and affection of the substantial old-fashioned cereal with the fun, lightness and convenience of the modern dry cereal." Not only that, but people are afraid of raisins: "... raisins cooked in a sauce represent to many people an unpleasant sudden discovery. One explanation of this reaction is fear of the unknown. . . . Discovery of a raisin, different in consistency, texture, and often temperature from the rest of the cake or sauce seems to represent a threat."

The world outside the market is filled with hazards of its own. Vacuum cleaners can be either "friend or foe," depending on how secure a woman feels about her virtues as a housekeeper. Homeowners, insecure in their taste about wallpaper and bewildered by the amplitude of designs, should be "permitted" by wallpaper advertisers to combine paper with the more popular paint. Too much leniency, however, is bad for sales: iced coffee—another item of limited appeal—should not be permitted to be a simple reflection of hot coffee but should have its own personality. If you have trouble classifying your male friends, a useful method is to look into their shampoo habits: "Secure males are easy to distinguish from both other groups [of male hairwashers—"masculine rebels" and "resentful conformists"] in that their choice of a hair cleanser is not determined by inner psychological needs."

Heavy psychic burdens also fall on the shopkeepers of our society. Consider the man who sells shoes to women: "He must be an understanding, sympathetic father or brother figure and he must accept her needs without question. He must be a guardian protecting her from any error in judgment and reassuring her of the rightness of her decision. Finally, he must be the lover demonstrating by his words, appearance, tone of voice, and



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and the way he looks at her that she is an attractive woman." The butcher is "the biblical Esau in modern dress. He is the primordial hunter, the real man. The modern housewife admires him. He is the only one who is allowed to flirt with the female. He can throw the good piece of prey her way or he can cheat her." Because many people apparently have the feeling that all major brands of gasoline are alike, the psychological "extras" may make an important difference; thus, "the gas station must play a more active role in helping to fulfill some of the very real psychological needs of the motorist." And "the job for the gasoline company that wants to conquer the market is one of helping the motorist to achieve a mature relationship with the gas station." Even our instructors in recreation are not immune from responsibility. With skiing representing "a sort of defloration—a raping of the virgin snow," the ski instructor becomes a dangerous threat to home and hearth. His role "involves a parallel to traditional voyeurism. It is almost as if you were taking a public course in sexual intercourse, the skiing instructor giving you lessons and everybody watching." In this, the ski instructor has something in common with the cigarette lighter (as well as with asparagus), because the lighter is "bound up with the idea of sexual potency." Such is the modern version of the oneness of things.—ELINOR LANGER

Announcements

Purdue University has established a new **political science** department that will concentrate on the relationship between public policy and the sciences. The department will offer the same type of undergraduate political science courses that had been presented in the department of history, government, and philosophy. Graduate work, however, will aim to meet the need for persons trained in both science and government. The head of the department is Boyd R. Keenan, a former political science professor at Marshall University, Huntington, West Virginia, and associate director of the Committee on Institutional Cooperation, an independent organization based at Purdue.

The formation of the **National Council on Radiation Protection and Measurements (NCRP)** was announced recently. The organization aims to "col-

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