## **Book Reviews**

## Social Molding of Personality

Socialization and Society. John A. Clausen, Orville G. Brim, Jr., Alex Inkeles, Ronald Lippitt, and M. Brewster Smith. John A. Clausen, Ed. Little, Brown, Boston, 1968. xv + 400 pp. \$5.50.

There are almost as many works on the development of personality as anyone would have time to read. Infants, children, adolescents, and, increasingly, adults have come under study. Nothing like this amount of attention has been given to the study of socialization. And for obvious reasons. Studies of personality are conducted in the main by psychologists, and psychologists find it more congenial to think in terms of development than in terms of socialization. Developmental processes are believed to be initiated, and primarily to be controlled, by intrapsychic mechanisms. The study of such mechanisms is at the heart of all psychological research and theory. A psychologist who studies the development of personality can therefore feel that he is investigating matters at the core of his discipline. Were he instead to study socialization, his position would be less comfortable. In socialization, the crucial occasions for a change in personality and the forces that primarily guide that change are provided by agents of a social order. Facts like agency and social order are not treated in psychological theories. Rather, they are taken to be adventitious to psychic processes and have no theoretical meaning.

It might be expected that this area of study would prove of greater interest to sociologists. That has not generally been so. Sociologists tend to be interested in the structural peculiarities of organizations that are designed to socialize, but they have little concern for the processes by which those organizations actually shape the personalities of individuals.

This background of neglect is the occasion for the present book. Six social psychologists, three trained in sociology and three in psychology, formed a

committee-sponsored by the Social Science Research Council and financed by the National Institute of Mental Health-to review what was known about socialization and to select problems that seemed ripe for study. They organized conferences of American and foreign investigators and commissioned the preparation of special reports. Their book contains conclusions from five years of study. It documents the care and good judgment with which the committee worked, the overwhelming predominance of American investigators in this area of research, and the primitive state of our understanding.

Indeed, so underdeveloped is our knowledge that the committee stresses again and again the need for careful, naturalistic observation. Thus we find John Clausen advocating a study of the changing aims, during socialization, of social institutions, of parents, and of children, and a study of the strategies by means of which each tries to direct and manage the others. In like spirit, Orville Brim proposes that the socialization of adults be rescued at last from anecdote, that the middle years and old age receive at least a descriptive treatment commensurate with the magnitude of the changes in personality that they entail and the seriousness of those changes for men and women who undergo them.

Both Clausen and Brim are impressed with the malleability of most adult personalities, with the large and even abrupt changes in personal outlook that ordinary people so often experience and take in stride. So is Alex Inkeles. All three writers call for systematic descriptions of these dramatic events.

And Inkeles calls for more. He is struck by the skill that ordinary people show in socializing their children, their friends, and their relatives. How, he asks, do they know what to do? How do they learn to serve as the kind of agent that is required by the social order they represent? to recognize and cope with the distinctive potentialities

of any person whom they try to socialize? to provide explicit training and not just exhortation? And how do agent and socializee effect a reconciliation of the discrepancies between the standards that the agent advocates and the behavior he displays? Detailed observation is again required,

The committee decided that it was wise, in a scientifically underdeveloped area, to look to relevant questions of social policy, seeking in them the inspiration for fresh lines of scientific work. Their ideas on this subject are drawn together in concluding chapters. The first, by M. Brewster Smith, is concerned with socialization for competence (that is, a justified sense of selfrespect, effectiveness, and responsibility). The second, by Ronald Lippitt, focuses on techniques for improving the work of those who socialize. The two chapters are united by Lippitt's tacit acceptance of competence as a main objective of socialization.

It in no way detracts from the work of his colleagues to say that in Lippitt's chapter the committee's whole enterprise comes to life. He has capitalized upon their surveys and syntheses and insights and has so arranged them as to reformulate, and in part to answer, the urgent questions of parents, educators, and social planners. More than this, he reports-for the first time in a unified treatment—a host of field experiments in which children, parents, teachers, school administrators, and recreational and social service personnel are enabled to identify their common problems and, collaboratively, to solve them. These experiments—so varied in their contents and so uniformly positive in their outcomes—leave little doubt as to their import: new techniques have been created for constructing and evaluating any program that trains for competence, techniques that respect the individuality, the independence, and the interdependence of all participants.

If the committee is to be faulted, it is for its lack of daring. It has brought order into what is known, and sometimes, as in Eleanor Maccoby's review of certain theories of moral development, has done so with a rare precision and grace. The committee calls for better descriptive studies. But is that all that we are able now to do? Is it not possible to provide at least small suggestive explanations for some phenomena in socialization, explanations that illustrate an adequate treatment of the social and psychological facts in-

volved? Is it really beyond our powers to suggest which questions are the more fundamental and to consider the data and methods required to pursue them? Is it relevant for our society's emerging needs to focus so largely on competence? Or is that focus too narrow—too reflective of an individualistic, secular, liberal outlook in a period in which there is fresh awareness of the limitations of that outlook and of the degree to which all socialization is a political act: the degree to which it

is an effort to control as well as to equip, and a selective allocation of skills rather than merely a general enhancement of our personal powers? I do not know the answers to those questions, but I hope that this committee, or another, will be willing to attempt them. The discussions in this book, and its authoritative bibliographies, will be a resource for that attempt.

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## In the Wake of the Torrey Canyon

The Biological Effects of Oil Pollution on Littoral Communities. Proceedings of a symposium, Pembroke, Wales, Feb. 1968. J. D. Carthy and Don R. Arthur, Eds. Field Studies Council, London, 1968 (distributor, Classey, Hampton, Middx.). viii + 198 pp., illus. Paper, 45 s.

This little volume deals with the observations made on the fauna and flora of oil-polluted shores and salt marshes of Milford Haven on the Cornish coast. Essentially, this work is an extension of the short-term studies conducted by the staff of the Plymouth Laboratory following the Torrey Canyon disaster in March 1967 (for a review of an earlier publication see Science, 23 Aug.). The area covered by the present investigations extends over 140 miles of the coastline, and the studies have been continued for several months after the major oil spill in March-April. Information given in the 18 articles by various authors materially broadens our knowledge of the effects of crude oil on plant and animal communities, of the chemistry of oil and detergents used to combat pollution, of the role of bacteria in degradation of oil in the sea, and of the pathological consequences for birds poisoned by oil. Of particular interest is a brief article describing the effect of certain pure hydrocarbons derived from crude oil on cellular membrane of amoeba, paramecium, and other cells. The major part of the book reports many ecological and toxicological features which had not been disclosed by previous investigations. Ecological observations of animal and plant communities in the polluted zones reveal great differences in tolerance among various species. In this respect they fully confirm the findings made in this country and in Europe. A new and interesting approach is used to demonstrate the deleterious effect of crude oil and detergents on littoral communities by determining the potential productivity, expressed in kilograms of dry weight per unit area, of the communities. For instance, the following significant figures are given for kelp forest ecosystems: 236 kilograms in clear water and 101 and 20 kilograms, respectively, in slightly and grossly polluted zones.

A study of metabolism of oil hydrocarbons by bacteria and the isolation of the most active bacterial species from polluted sediments are of scientific interest and also are important from a practical point of view as providing a promising approach to combating oil pollution by increasing the rate of oil degradation through bacterial activity.

It is apparent from the text that our knowledge of the physiological effects of various components of crude oil and of the factors that determine plant and animal growth and affect tolerances of marine species is deficient. It is clear that the detergents used in England in major oil spills are so toxic that their application is not desirable except under special emergency conditions, and there is an urgent need for comprehensive laboratory and field studies in order to formulate practical methods of controlling oil pollution. Because of great complexities of ecological relationships in polluted areas, great differences in the chemical compositions of oil, and an obvious necessity to conduct long-term bioassays at different seasons with various species, work of such magnitude and difficulty could be undertaken only by a large and well-financed organization. It is hoped that the present publication, in which these subjects are discussed, will stimulate the implementation of such research.

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## Plants, Mammals, and RNA

Control Mechanisms in Developmental Processes. Proceedings of a symposium, La Jolla, Calif., June 1967. MICHAEL LOCKE, Ed. Academic Press, New York, 1967. xiv + 302 pp., illus. \$12. Society for Developmental Biology Symposium No. 26. Developmental Biology, supplement 1.

At a time when there is rapid progress in the application of new concepts of molecular biology to developmental phenomena and in the application of modern techniques to classical experimental systems, it is increasingly important to have available the concise summaries of specific aspects of development that the symposia of the Society for Developmental Biology have come to represent to biologists around the world. The present volume is a notable addition to the series. The theme announced by the title of the volume is treated in three sections: The Role of Cytoplasmic Units, The Role of the Nucleus, and Regulatory Mechanisms. The second subject receives the greatest attention, in four chapters occupying about half of the book; the last section is comprised of three rather brief chapters. It is of special interest to the botanist that the first five of the ten chapters are concerned with control mechanisms in plants—ranging from mitachondrial control of fungous morphology (Tatum and Luck) and flagellar development in mutants of a green alga (Randall et al.) to plastid ribosomes in plastid development (Bogorad) and gene action in higher plants (McClintock on pigmentation patterns in corn and Stebbins on barley morphogenesis).

In four of the five other chapters, mammalian systems are explored (interspecific somatic hybrids in rodents by Ephrussi and Weiss, erythroid cell differentiation by London et al., development of immunocompetence in the thymus by Auerbach, and estrogen control of development in the rat by Segal). A particularly long, comprehensive, and doubtless controversial chapter by Tyler on masked messenger RNA, especially as it has been studied in sea urchin embryogenesis, completes the list.

Each of these chapters provides sufficient background information to be comprehensible to the advanced student. Most chapters include new experimental data and stress the relationship between these data and current concepts of developmental control. Inevitably, these concepts center around molecular mechanisms controlling protein synthesis in cells, that is, DNA and the hierarchy of