

Book Reviews

Orientations Toward Children

Science and Patterns of Child Care. ELIZABETH M. R. LOMAX in collaboration with Jerome Kagan and Barbara G. Rosenkrantz. Freeman, San Francisco, 1978. xvi, 248 pp. Cloth, \$12; paper, \$6. A Series of Books in Psychology.

The social and behavioral sciences are intricately bound with cultural ideologies and events, often taking direction and preferential assumptions from societal issues and concerns. The field of child-development research emerged early in the present century as a multidisciplinary enterprise in response to public concern about the physical and psychological welfare of the nation's children and in accordance with a strong cultural belief in the value of science as a social instrument, capable of determining and delineating programs of societal reform. In the late 1920's child-study institutes were established at major universities by Rockefeller funds with the explicit mandate to disseminate their findings about child development for the guidance of the nation's caretakers of children. The ensuing five decades have produced an impressive volume of data on child development that have been extensively, albeit selectively, conveyed to an increasingly literate and eager audience. Thus the human sciences respond with investigative attention to public demand for information and action and in turn provide a corrective force to cultural conceptions by empirical testing. So runs the argument of the present discourse in considering the investigatory fate of the long-standing cultural belief in the profound effects of early experience upon subsequent development and functioning.

In telling this story Lomax gives particular attention to the behaviorism of Watson and to Freudian theory as buttressing the cultural belief in the importance of infant experience by focusing on the impact of maternal caretaking, an emphasis both flattering and anxiety-evoking for mothers. Watson was bluntly directive in telling mothers ex-

actly what to do and not to do—to control regimes strictly from the start, with no indulgence. In his utopian view of the new scientific world of child-rearing the child was infinitely perfectible, given the appropriate environment in the shape of a mother informed, insightful, consistent, objective, restrained. Freud was never directive, but the implication of his views was that repressive regimes of infant care were harmful and that nurturant guidance was positively facilitating. The Freudian emphasis upon the mother-infant relationship as the foundation of emotional development led to the proposition of the necessity of an ever-present, always nurturant primary caretaker, presumably the mother, with its corollary proposition of the deleterious effects of maternal deprivation. This view of mothering drew attention as a developmental construct of basic social import, especially as set forth by Bowlby in his 1951 report on maternal care and mental health for the World Health Organization. Considerable subsequent inquiry and controversy resulted in some loss of status for mothers as exclusively potent figures but led to increased research attention to early stimulation in general, with the attendant hope for practical solutions to the urgent social problems of academic ineptitude of less privileged children in the 1960's. Thus, early cognitive stimulation became the touchstone of the early education intervention programs of the '60's for poor and minority children. Untold in this account is the controversial outcome of this massive excursion of social scientists into the realm of social action. Although programs such as Head Start were certainly warranted on many counts of improved public health and societal attention to the participants, the hoped-for evidence of subsequently improved cognitive performance in academic work did not clearly materialize. The long-term significance of early emotional and cognitive experiences remains an open and controversial issue among social scientists.

The authors of this extended essay conclude that the bold theorizing of such

figures as Watson and Freud, along with the cautious empiricism of investigators, has enriched the conceptual resources of the culture, the work of the theorists by drawing attention to important social issues and that of the researchers by inhibiting pure speculation. Although this proposition is quite appealing and enhances the professional self-concept of those of us in the field, we must be careful to distinguish between our own edification and that of the public. In reflecting upon this question the prominent personages of the child-development field interviewed by Senn ('Insights on the Child Development Movement in the United States,' *Monogr. Soc. Res. Child Dev.* 40, Nos. 3-4, 1975) had difficulty specifying any precise impact of their work upon public ideas, save in broad, general terms. Not demonstrated in *Science and Patterns of Child Care* is that societal beliefs about the importance of early experience actually have been affected by our altered state of knowledge.

Although the public at times plays a strong role in determining the directions of research, society may be quite selective, in terms of its own needs, in utilization of the resulting ideas and data. The waxing and waning of Watsonian and Freudian propositions provide an important example of the complex relationship between professional theories and cultural ideologies. Though both theorists emphasized infant experience and the crucial role of maternal care, they were diametrically opposed in their views of maternal nurturance, Watson sharing his Calvinistic heritage of wariness about indulgence and Freud emphasizing the necessity of affectionate intimacy. Watson's ideas seem to have been popular in the 1920's as the prophecy of scientific child-rearing, a repudiation of Victorian sentimentality about mother and child. But by the late 1930's the expansive optimism of the '20's had given way to disillusion, the Depression turning attention to basic needs of family and individual survival. During the 1940's and '50's the young mothers so industriously and conscientiously producing the postwar baby boom proved most receptive to the reassurances of Benjamin Spock and others about their own value and competence as caretakers of children, and the concept of maternal deprivation would have furthered this conviction about their domestic role. Now we seem to be experiencing a movement away from an intensely child-centered orientation toward more of an expectation that children can and will fit into adult lifestyles, as many young, educated, middle-

class women move away from an exclusively domestic role. In the process such women might be expected to be eagerly attentive to professional pronouncements liberating them from the taint of maternal deprivation. But this does not indicate that they have given up the cultural faith in the long-term import of early experience. To determine this we need inquiry into the present cohort of working mothers.

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Medical Self-Help

Medicine without Doctors. Home Health Care in American History. Papers from a symposium, Madison, Wis. GUENTER B. RISSE, RONALD L. NUMBERS, and JUDITH WARNER LEAVITT, Eds. Science History Publications (Neale Watson), New York, 1977. x, 124 pp., illus. Cloth, \$7.95; paper, \$4.95.

The present day is not the first time in American history that conventional medical practice has come under the gun of social criticism. It happened before, during the middle of the 19th century, and this book, the outgrowth of a seminar on the subject, is an attempt to describe and explain that earlier movement. With an eye half cocked on the present the authors have tried to understand what it was about the American character or the particular historical conditions of the time that produced such massive disaffection.

The book consists of five articles and an introduction by one of the editors. (What, incidentally, are we to make of a book that has almost as many editors as authors?) Since the five authors do not differ from each other in methodology or theoretical stance they seem, as it were, to be speaking with one voice about different aspects of the same subject. John B. Blake discusses domestic medical manuals, most of them written by "regular" physicians who believed that the informed patient was the best patient. Ronald L. Numbers describes the "irregular" self-help movements—herbalism, homeopathy, and hydrotherapy in particular—that were explicitly opposed to the norms of medical practice, and James H. Cassedy attempts to explain what made those movements so popular. Regina Markell Morantz assesses the relationship between medical self-help and the changing role of women, and James Harvey Young describes the pro-

ducers of patent medicines, purveyors of yet another form of self-help. Guenter B. Risse's introduction attempts to tie the five pieces together, not a terribly difficult task considering how similar they are in tone and how well articulated in content.

All the articles are based on standard published sources, principally the books and articles written by proponents of self-help. None of the authors has attempted the considerably more difficult task of assessing the movement from the users' rather than the purveyors' point of view; none of them has gone to the letters and diaries that exist for the period (in other words to the unstandard and largely unpublished sources) to find out what people thought about home remedies, patent medicines, and "irregular" practitioners or, more crucially, how often people made use of them. This leads the authors to make sweeping judgmental pronouncements about what the self-help movements offered (for example, "a means of coping with an imprecise, undependable, and often hostile environment"; Morantz, p. 81) without giving us any idea whether the offer was ever taken up. Cassedy points to this and other failures when he writes (p. 47), "We are unfortunately almost totally ignorant of the various dimensions of domestic medicine. . . . We have hardly the slightest idea of its numerical extent and we know little of its distribution," but unfortunately for us those sentences appear at the very end, not the beginning, of Cassedy's article.

Most of the descriptions offered by Numbers, Blake, and Young can be found in other places, often in greater detail, and most of the explanations offered by Cassedy and Morantz (rise of democracy in the Jacksonian period, failure of "heroic" medicine to cure effectively, lack of physicians on the frontier, general popularity of no-nothingism in this period, disappearance of traditional feminine roles after industrialization, and so on) are also much bruited about. Historians who specialize in the development of American medicine will perhaps find it convenient to have the descriptions and the explanations lodged in one, fairly inexpensive place, but they will otherwise find very little that is novel in this volume, except perhaps Morantz's discovery that many 19th-century feminists were health reformers. Other readers may well find it a useful brief introduction to the subject.

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Communication Between Cells

Intercellular Junctions and Synapses. J. FELDMAN, N. B. GILULA, and J. D. PITTS, Eds. Chapman and Hall, London, and Halsted (Wiley), New York, 1978. x, 246 pp., illus. \$35. Receptors and Recognition, Series B, vol. 2.

By the late 1950's there was substantial evidence for chemical transmission at synapses. It therefore came as a surprise when in 1957 Furshpan and Potter reported that at the giant motor synapse of the abdominal nerve cord of the crayfish transmission was "electrical," that is, the local currents generated by an action potential in the large presynaptic fiber directly depolarized the smaller postsynaptic motor fiber. This was the first clear demonstration that apparently separate excitable cells were "electrically coupled," and it suggested that a mechanism existed to allow ions to move directly between the cytoplasm of adjacent cells. (The synaptic junction studied by Furshpan and Potter had the unusual and interesting property of being asymmetric or rectifying, with ionic currents in the prefiber easily spreading to the postfiber but not vice versa. Most "electrical" junctions that have since been found are symmetric.) Today electrical coupling, mediated by what are called low-resistance junctions, is known to occur not only between excitable cells in both invertebrates and vertebrates but, surprisingly, between nonexcitable cells as well. Furthermore, in some cases coupled cells have been found to transfer not only ions but also large molecules (up to molecular weight 1000) such as intracellularly injected dyes or biologically relevant molecules such as nucleotides. The transfer of normally present intracellular molecules between cytoplasm of adjacent cells has been termed metabolic cooperation.

It is with electrical coupling, low-resistance junctions, gap junctions, metabolic cooperation, and chemical synapses that this book of nine chapters by ten authors deals. Although the editors state that they planned the book to draw attention to the similarities and differences in structure and function between gap junctions and chemical synapses, it is not obvious that this was achieved. The book can be divided into two roughly equal parts: the first five chapters deal with the structure and function of gap junctions, the remaining four with chemical synapses. It is surprising that there is practically no mention in either group of the material in the other, let alone any discussion pointing