Psychology in Two Small Towns

Qualities of Community Life. ROGER G. BARKER and PHIL SCHOGGEN. Jossey-Bass, San Francisco, 1973. xiv, 562 pp., illus. $35. Jossey-Bass Behavioral Science Series.

This culminating magnum opus in Roger Barker's lifetime program to develop and illustrate the concepts and methods of an ecological psychology is an important book. It is also an oddly uncompromising and unreadable book, and (therefore) a very expensive one. Not that the exposition is difficult or obscure: it is not. But the detailed tabular analyses of the human habitats of "Midwest" and "Yoredale," and the accompanying text, which make up the bulk of the book, are interesting primarily as a laboriously drawn-out demonstration that Barker's methods can be applied to the comparative study of small communities. Full publication of what might normally be regarded as appendix material makes this demonstration a matter of public scholarly record. This is at a heavy cost to library budgets, but on the balance a warranted one. The strengths and limitations of Barker's approach are visible to the social scientific community through this full report, as they could not have been in a more readable and efficient summary.

Ecological psychology, as Barker and his group have been developing it, is not to be confused with "environmental psychology," now struggling to be born as a response by psychologists to the environmentalist social and intellectual movement. Indeed, the main title of the book, which would seem to evoke a central environmentalist preoccupation, is misleading. (The subtitle given on the copyright page—Methods of Measuring Environment and Behavior Applied to an American and an English Town—is accurately descriptive. It does not appear on the title page, and a slightly different version is given in the preface.) Environmental psychology, as practiced for example by Altman, Craik, Fairweather, Proshansky and Ittelson, and Wohlwill, is a hopeful subdiscipline that presents us with an attractive name, has appropriated a set of exceedingly difficult problems, but as yet has not established even the outlines of a consensual paradigm or orienting framework that could define scientific progress in its intended realm. In contrast, Barker and his associates have a paradigm, but the issues that they address are quite other than those raised in psychology by the environmentalist movement. In their case the intellectual heritage is that of Kurt Lewin and Egon Brunswik, and their principal concerns lead them away from the customary territory of psychologists to a terrain usually occupied by sociologists and cultural anthropologists.

As a stream of scientific development, ecological psychology Barker-style is remarkably compact and self-contained. The brief bibliography with which the book concludes lists virtually all the publications that fall within it—and very few others. Wisely or not, Barker and Schoggen pay no heed to other relevant streams in psychology, or—what is more serious—to the relation of their own concepts and methods to ones customarily employed by sociologists and anthropologists sharing much the same concerns. This presentational strategy is an explicit choice, but it tends to encourage our swallowing their venture whole or rejecting or ignoring it totally. The strategy puts us at a disadvantage if we wish to digest and incorporate it selectively, as is the common and appropriate fate of most proud new contributions to social science.

The concepts and methods of the present volume are essentially those expounded by Barker in his *Ecological Psychology: Concepts and Methods for Studying the Environment of Human Behavior* (Stanford University Press, 1968), and the critical reader needs to have the former volume at hand since the abridged account of method and theory in the present book hardly stands on its own feet. Over the years, Barker has argued persuasively that a very high proportion of everyday behavior is appropriate to and in some sense under control of the settings in which it occurs. Baseball-playing occurs at baseball games, not in church; buying and selling of particular products and services occur in the appropriate stores and offices, much less frequently elsewhere. If psychologists really aspire to give an orderly account of behavior, let alone to predict or control it, they should attend as closely to the structure of the human environment as to the properties and predispositions of the behaving person. To say as much is to belabor the obvious—a realm of the obvious that sociologists and anthropologists acknowledge but that psychologists in the main have trained themselves to ignore.

Barker and his colleagues have developed criteria and rating methods according to which the term "behavior setting" acquires a stable technical meaning. The core of their conception is a fusion of physical and cultural criteria (significantly and annoyingly, the term "culture" does not occur in this book): an identifiable physical milieu to which is linked a specifiable "standing pattern" or program for behavior. It then becomes possible to catalog the entire array of behavior settings that occur in a particular community or social institution (schools were studied productively in this vein by Barker and P. Gump in *Big School, Small School,* Stanford University Press, 1964); to identify similar settings as "genotypes" (for example, bowling alley, drug store); and to classify the behavior settings on a variety of dimensions—such as their "action pattern" qualities (esthetics, business, education, government, nutrition, personal appearance, physical health, professional involvement, recreation, and social contact); "behavior mechanism" qualities (affective behavior, gross motor activity, manipulation, and talking); "attendance attributes" (by age group); "beneficence attributes" (the age group benefited); "local autonomy" qualities (is the setting under local control?); "authority system" qualities (private enterprises, government agencies, churches, schools, and voluntary associations); and "inhabitant attributes" (age, sex, social class, and race). Measures or estimates of "behavior output" can then be linked to the characterizations of behavior settings or "habitat." Five quantitative measures are employed in the present work: person-hours of behavior, inhabitant-setting intersections (in which each encounter of person with setting counts as a unit), "claim-operations" (in effect, the number of identified individuals performing roles essential to the operation

of the setting or class of settings, though again, the term "role" does not appear in the book), leader acts (inhabitant-setting intersections in a leader or executive capacity), and number of leaders (correspondingly identified).

The book reports data collected in a long-term comparative study of two very small rural towns in 1954–55 and in 1963–64: "Midwest" (Oskaloosa, Kansas; population 830 in 1964) and "Yoredale" (Leyburn, North Yorkshire, England; population 1310 in 1964). Only public settings are included (homes, hotels, and public lavatories are excluded). The data base from the two towns for the two time periods is used for the bootstraps derivation of a standard measure of habitat extent, the "urb" or "centiurb." This measure weights equally the number of behavior settings observed per year, the mean number per day, and the mean number per hour. (Thus, in Midwest, the fewer settings per year under the authority of churches, as compared with voluntary associations, is compensated by the fact that these settings occur on more days.) The relative prominence of various types of settings in Midwest and Yoredale is expressed in this metric, a fraction of a total "standard" habitat.

In the central portion of the book, the public behavioral habitats of Midwest and Yoredale and changes in these habitats over a decade are described and compared, by means of these concepts and categories. Further, the behavioral output of the two towns and of segments of their total habitats variously categorized is comparatively analyzed. The task is immense, and the mind boggles that it was done. (Just *how* it was done is unclear, and this is a serious defect inasmuch as the book is an extravagant documentation of a method. The reader is referred for details to Barker's 1968 book, which is by no means explicit about the steps by which documentary, observational, and questionnaire data get transformed into the neat figures that populate the tables.) The chapters follow a standard format, not only in their tables but also in the precise linguistic patterns that are used to characterize them. So the book reads as if it were written by computer.

The point of all this description, and especially of the comparison, eludes the reader until rather late in the volume. There it is brought to bear on a genuinely interesting cluster of predictions, having to do with the ratio of the number of inhabitants to the "size" of their habitat, and particularly to the number of jobs that have to be done if the various behavior settings that comprise the habitat are to be operated and maintained. Midwesterners, according to the data, are fewer than Dalesmen but have about as rich a human habitat, one that requires the inhabitants to man more "slots" to keep it going. So the Midwesterners—like the students in the "small" school studied by Barker and Gump—are busier, more involved, and more important. This state of affairs is positively evaluated by the authors (an American bias?), but data on such important psychological consequences as commitment versus alienation are implied rather than reported.

For the purpose of testing this theoretical prediction, the fact that the comparison is cross-national is a distraction rather than a help. By and large, the authors avoid the pitfall of considering tiny rural towns as representative of nations. But then, why the cross-national design? In the final synoptic chapters, a possible benefit appears in the authors' use of their data to highlight contrasting systems of child-rearing that *may* be typical of national patterns. They characterize Midwest as having a "melting pot" approach:

> Children are best prepared for adulthood by participating in a wide variety of the town's settings.

According to the contrasting "enlightened colonial" approach attributed to Yoredale,

> Children are best prepared for adulthood by removing them from the general, public settings and placing them in specially arranged and reserved children's settings under the direction of experts who, over a period of time, are able to prepare the children for entrance into the life of the community [p. 405].

And these differences, in turn, are traced to the fact that Midwest, but not Yoredale, has bitten off more than its adults can manage unaided.

> The behavior-generating system of Yoredale could probably be maintained and operated by its adults alone, but it is clear that the habitat-claims [jobs to be done] of Midwest are far beyond the capacity of its adult inhabitants. . . . *The Midwest system requires the responsible participation of other than its most able class of human components* [p. 407—italics are the authors'].

There is an element of circularity here that is characteristic of Barker's theory: settings requiring the central participation of children and youth, which would not exist and would not need to exist without it, are differentially characteristic of Midwest, and contribute to its quantitatively richer human habitat. Think, for example, of school plays, present in Midwest but not in Yoredale. Still, the comparison is psychologically provocative.

What, all told, are we to think of this arduous and expensive venture? As ethnography for a time-capsule, it surely tells us more about Midwest and Yoredale than we would ever think to ask. In quantification and in behaviorally relevant description, it is obviously an improvement on the less formal methods to which anthropologists are accustomed in the description of even smaller communities. But the cost and labor are far too great for the result, except to show, once and for all, that the task really can be accomplished. Another analogy drawn from anthropology may be apt. The "componential analysis" of particular conceptual domains like kinship or flora has been hailed as a "new ethnography," though no one could sanely claim that these methods can practically be extended to the entire symbolic lexicon of a culture. Nevertheless, it is theoretically important to show that the venture is conceivable in principle. So with Barker's ecological psychology. What took decades to complete with Oskaloosa and Leyburn could hardly be done at all with Lawrence—or Kansas City, much less Chicago or London. Well and good: it is still important to show that the analysis can be carried out in the simpler case. I do not expect to see this study repeated, and I certainly do not expect its methods to be extended directly to the entire texture of modern metropolitan life. I do expect that the concepts and methods, and the rather simple theory that goes with them, can be drawn upon selectively and adapted for use in other, more complex settings.

A shortcoming of the present work must be noted in connection with its stimulus value to subsequent research. Because of its heavy emphasis on a classified inventory of the behavioral habitat, its treatment of behavioral "output" measures is skimpy and not very psychological. Such units as person-hours and inhabitant-setting intersections do not tell us much about what is really going on. "Leader acts" gets a bit closer. But in this book we nowhere approach the level of behavioral analysis into meaningful molar "episodes" that Barker and his associates have previously employed. The result is

that only rather abstract behavioral consequences of the habitat as a manpower system get examined. We could also learn much more about the *quality* of the human environments provided by Midwest and Yoredale had more psychological questions been asked and reported.

The book is important, and a qualified success, as a demonstration that closer attention to the environmental setting of social behavior is needed and pays off. In the division of labor that has become customary in the social sciences, most research at the level at which Barker and Schoggen have placed their claim will be done by social scientists calling themselves sociologists and anthropologists, not ecological psychologists. It would be a shame if members of these disciplines miss this potentially provocative book because of the authors' obstinate refusal to refer to relevant concepts and methods that sociologists and anthropologists honor. As for psychologists, the concepts of this book provide a framework within which the more essentially psychological aspects of man's relationships with his human environment remain to be explored.

M. BREWSTER SMITH
Division of Social Sciences,
University of California, Santa Cruz

Critique of a Field

The Study of Behavioral Development. JOACHIM F. WOHLWILL. Academic Press, New York, 1973. xiv, 414 pp., illus. $19. Child Psychology Series.

Imagine the effect on an adolescent of being told by a psychiatrist: "You will (or ought to) have an identity crisis soon, and nearly all the strategies you have learned will simply be inadequate to cope with it." Wohlwill's penetrating critique of the science of human growth and development may have an analogous effect on workers in that field.

Developmental psychologists have rarely studied ontogenetic change per se, a fact Wohlwill attributes to their predilection for borrowing the attitudes, theories, and methodologies found successful in the experimental study of static behavioral events. Wohlwill proposes that the proper object of disciplines calling themselves developmental is the study of changes that occur over time. Accordingly, the most fruitful approach is to study development in the same manner as other time-based phenomena—forgetting, adaptation, habituation, and so on. The implication of this prescription is not apparent until one distinguishes between age differences and age changes. Wohlwill argues that contrasts in behavior between groups of subjects differing in age—and these have provided many of the data of developmental psychology—are far less germane to understanding development than are assessments of change over age within individuals. Since the rate and pattern of change embody age in their definition, "age" is incorporated in the dependent, not the independent, variable; thus debate over using age as an explanatory concept becomes irrelevant.

The force of Wohlwill's approach may be represented by a sampling of his observations on the contemporary mores of developmental psychology:

1) Developmental change is an inherent characteristic of behavior and takes place in a matrix of ongoing natural transitions. Consequently, experimenters can do less to produce (or accelerate) a developmental process than to retard it. Therefore we are unlikely ever to fully uncover the causes of developmental change per se; we can hope to isolate some necessary, but not the sufficient, determinants. While "enrichment" studies may serve pragmatic and therapeutic goals by improving skills, the enrichment procedures may be quite different from the processes nature invokes to accomplish the same end. (Does the regimen used to teach a second language tell us very much about the natural developmental processes of learning a first language?) If it is fruitless to pursue the sufficient causes of natural development through experiments with training or other strategies, the human developmentalist faces a genuine impasse: the deprivation experiment is the primary approach to determining the necessary causes of development, but it is socially and morally reprehensible. Even given an experimentally imposed deprivation, the interpretation of experimental results is more complicated when studying an ongoing developmental process than when these same procedures are applied to unchanging phenomena. For example, if a child suffers a temporary nutritional deprivation, his physical growth may slow during the period of adversity but accelerate beyond the normal rate immediately following. Traditionally, if the adversity were a manipulated experimental condition, we would suggest that the experience "caused" the observed consequences, but in this case is one to suggest that the "catch-up growth" is "caused" by the adversity, or by its termination?

2) Although longitudinal studies are currently maligned, there is simply no substitute for longitudinal data when studying change. Would a neurophysiologist investigating the habituation of response to repeated stimulation rely solely on a cross-sectional design in which one group of subjects was subjected to zero, another to 10, and another to 20 stimulus presentations? Despite its convenience and utility as a control procedure, the cross-sectional study of development is essentially static, relatively uninformative, and possibly misleading. Moreover, the proposed shortcuts to a complete longitudinal design (such as overlapping short-term studies) depend upon debatable assumptions and yield markedly less information.

3) "Developmentalists have, by and large, been content to bushwhack their way across the field they wanted to study" (p. 40) without adequate description of the dimensions along which development proceeds, the measurement scales appropriate to chart such processes, and the nature of developmental patterns. There needs to be a greater emphasis on description, especially when the basic phenomena are defined in terms of change. For example, the photopic-scotopic functions would not have been discovered as readily without the careful charting of the pattern of dark adaptation.

4) "A good case could be made for the proposition that correlational analysis, however denigrated in certain quarters, is the method par excellence for developmental study" (p. 240). But since development does not proceed along neatly isolated tracks, sophisticated multivariate methods must replace simple cross-age bivariate correlational techniques, which not only ignore developmental change entirely but can reveal only one type of developmental continuity.

Whatever his attitude toward these more controversial points, the developmental researcher will appreciate Wohlwill's balanced discussions of a variety of methodological and statistical approaches to developmental data. Particularly notable are his analyses of developmental stages versus sequences, of the liabilities of employing change scores, of the problems in using cross-lagged correlations to infer causality,