nsists that an understanding of
hrenia requires investigation at
els of historical, moral, and nar-
discourse. He uses the transcribed
sations of several schizophrenic
s to support his position. I found
ilosophic discussions difficult to
tand, and I called for help from my
pher colleague, Colleen Clements.
response (C. Clements, personal
nication, July 14, 1985) she
"This book's thesis is based on a
nce theory of truth or reality, a
hat hermeneutics or narrative or
elling is workable as a standard for
ining truth or error. Barham
misunderstands the scientific
l and its pragmatic and correspon-
theory of truth. Instead, he tries
ert biological science into a 'story'
the historical saga of the human-
ews of the world, 'human world'
osed to 'natural world.' " In this
, the book clearly reflects the dif-
between the spectator role of the
pher and the participant–observer
the physician, with the latter's
ory accountability.

gratifying to learn that the recent
of a number of clinical investiga-
Europe and the United States have
a great deal to our understanding
hronic schizophrenic patient. The
able sustained observations of
(1978) over a period of many
dicate that even chronic schizo-
patients who have suffered de-
illness remain mentally alive. The
f Brown, Monck, Carstairs, and
.g., 1962) and of Wing (1978), in
l, has also added to our under-
g of the effect of social forces on
rse of schizophrenic illness. The
tudies of Vaughn and Leff (1976)
ized the influences of family and
ctors on the course of psychiatric
Ciompi (1984), who questioned
litional concept of the disease en-
chizophrenia, did support the no-
t in the first premorbid phase of
dition, combined biological and
ocial influences lead to a pre-
vulnerability. In the United
he studies of Talbott (1981), and
larly those of Lamb (1982), have
ized the psychosocial forces that
dify, enhance, or exacerbate the
ologic determinants of the illness.
ne end of the book, the author
ttention to the self-help groups in
l that are part of a worldwide
ent based on renewed interest in
ion of the social network, in the
of the family interaction, and in

the concept of expressed emotion related to the attitude of the family toward the sick person. In general, there has evolved a more sophisticated view of psychosocial factors that does not disregard biologic factors. In the United States (Lieberman, Borman, & Associates, 1979), there has been a prodigious increase in the number of self-help/mutual-aid groups of spouses, parents, and children, which further reduce shame, guilt, and fear through their concerted effort to afford support to each other, to reduce myth and misinformation, and to promote hope.

I find this book to be naive, confusing, inaccurate, and ahistoric with its pervasive belief that social structure can explain totally the complexity of the chronic schizophrenic patient. I cannot recommend it to those who care for patients and their families.

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Psychology in Nazi Germany

C. F. Graumann (Ed.)
Psychologie im Nationalsozialismus
Berlin, Federal Republic of Germany: Springer-Verlag, 1985. 318 pp.
DM 24,00 paperback

Review by
Horst Kächele

C. F. Graumann is full professor in the Institut für Psychologie at the University of Heidelberg. He is author of Grundlagen einer Phänomenologie und Psychologie der Perspektivität. ■ *Horst Kächele is associate professor and head of the section of psychoanalytic methodology in the Department of Psychotherapy at the University of Ulm. He is coauthor, with H. Thomä, of* Lehrbuch der Psychoanalytischen Therapie.

This edited volume does not pretend to convey the definitive history of psychology in the German Reich under Nazi rule. Although quite a few books on the topic have appeared between 1945 and the 1970s, the editor concludes that we are still in a phase of dealing with the problem of how to achieve a balanced view of the affect-laden issues because everyone has been more than just a witness.

The articles collected in this book are the result of a symposium, and they focus on the two leading schools in psychology at the time when the Nazis took over: the wholistic approach and the gestalt theory. These two directions in German psychology are of special interest not only because their leading figures were forced to emigrate but also because the notions of wholeness and gestalt can be scrutinized for their relations to the ideology of the Third Reich. The contributors thus focus on illuminating the relation of theory to ideology, taking into account the changes of everyday university life imposed by special laws and by the servile officiousness of those who filled the empty chairs of the emigrants.

For many years, the thesis of the big "brain drain" of German psychology overshadowed the fact that, although losing in scientific quality, the institutionalization and professionalization of psychology in the dark years increased considerably. The growing number of institutes, chairs, students, and—last but not least—fields for practical application of psychology as a profession from 1933 to 1945 is presented in this book. The

contributors to this volume converge in their understanding that history of psychology is not only the enumeration of scholars and theories but also is embedded in political, social, and institutional contexts.

The special use of psychology in the Nazi state is another focus of the studies presented. To summarize the contributions, it is evident that wherever psychologists could provide a service to the system (as within the German Army and other institutions of the overorganized Nazi society) they flourished. Diagnostic tools were well received, whereas basic research, not being amenable to the service of the Volk, suffered and lost influence. Some documents from prominent leaders of the new German psychology complete the careful and balanced discussion of a topic that hardly can be dealt with sine ira et studio—without anger and with zeal. ■

What Is the Study of Animal Learning About?

Timothy D. Johnston and Alexandra T. Pietrewicz (Eds.)
Issues in the Ecological Study of Learning
Hillsdale, NJ: Erlbaum, 1985.
462 pp. $49.95

Review by
Sara J. Shettleworth

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"What should the study of animal learning be about?" Jenkins (1979) posed this question in his short history of the field and suggested that there are currently several answers. The one favored by the editors and most of the contributors to this book is that the study of animal learning should not be about learning mechanisms in isolation from their functions in the natural environments of the creatures that possess them; rather, it should be about what animals learn in nature and how they learn it.

As well as having some commonalities with ecological approaches to other areas of psychology (the text is part of a series, *Resources for Ecological Psychology*), the ecological approach to learning has some of its roots in the discussions of "constraints" or "biological boundaries" on learning that took place in the early 1970s. At that time, a number of newly discovered and apparently anomalous phenomena such as conditioned taste aversions and autoshaping underlined the fact that even simple associative learning is not without species- and situation-specific constraints or biological boundaries. Although these phenomena largely have been successfully assimilated to the general process view of learning, as testified by Revusky's chapter in this volume, it is still true that they are best understood in terms of the functions of learning in natural conditions. In coming to grips with biological boundaries, the general process approach to learning has broadened considerably. For advocates of the ecological approach, however, this viewpoint is still not nearly broad enough. Advocates suggest that rather than starting from anthropocentric notions about what kinds of learning to analyze (e.g., association formation), students of learning should start by observing animals in their natural environments and by discovering what behavioral changes they undergo throughout the course of development. Armed with these observations, followers of the ecological approach hope to go on to build a natural science of learning.

This book is the result of a 1981 symposium of the Animal Behavior Society on various aspects of the ecological approach, which previously had been propounded in detail by the first editor and which he discusses in an introductory chapter. The main part of the volume is divided into four sections. "Historical Background and Methodological Issues" contains a clear and useful chapter by Hailman that traces ethological and comparative psychological approaches to learning and calls for more sophisticated evolutionary thinking on the part of those trying to understand learning in a functional context.

The longest section, "Empirical Research," includes Galef's account of his work on mechanisms of social transmission of food preferences and feeding behavior in rats. This is an excellent example of what the ecological study of learning is apparently supposed to be about, showing how the mechanisms underlying a phenomenon observed in the field can be analyzed in the laboratory.

Because one of the best-known examples of learning studied from an ecological viewpoint is song learning by birds, it is not surprising that there is a chapter on it in this section, that by West and King. Recent research, including that of these authors, has revealed numerous complications to the simple view of song learning suggested by the classic cases of the chaffinch and the white crowned sparrow. In their thoughtful and stimulating chapter, West and King make an important contribution to settling the ferment this research has created by discussing possible directions for future work aimed at a more broadly based account of the processes underlying vocal learning.

This section contains a third noteworthy chapter, Coss and Owings's account of their thoroughly ecological studies of ground squirrel antipredator behavior. They show how the intensity of antisnake behaviors in different ground squirrel species and populations can be related to the prevalence and species of snakes in their habitats. This is the best example in the text of a detailed study of behavior in its ecological context, but, like too many other chapters, it is not explicitly about learning.

The third section of the book, "Theoretical Problems," is the worst in this regard, because three of the four chapters are not about learning at all but consist mainly of obvious generalities about how behavior should be studied. The fourth of these chapters, "How to Draw Learning Curves," manages to discuss the subject without a single reference to modern learning models. In doing so, the authors of this chapter (Shaw and Alley) reveal a shortcoming common to a number of the authors, which is to appear ignorant of contemporary developments in learning psychology. Fortunately for readers of the book as a whole, this balance is redressed by the two chapters in the final section, "Alternatives to the Ecological Approach." The skeptic needs only these chapters, by Bolles and by Revusky, to become convinced that the contemporary study of learning is much more than the simple-minded stimulus–response connectionism caricatured in some of the other chapters and that it has come much

further toward being the general study of what, why, and how animals learn than many of these chapters appear to recognize.

This book is one of several that have appeared recently on biological themes in learning. Others are those edited by Zeiler and Harzem (1983) and by Marler and Terrace (1984) and the November 1984 special issue of *Learning and Motivation* ("Ecological," 1984). The present volume is perhaps the most ambitious because many of the contributors are proponents of what they see as a radically new approach to the study of learning. In my opinion, however, it is one of the least successful of its genre because there is too much theorizing about what investigators of learning ought to be doing and too little about real examples of learning and the organizing principles they may suggest. There are already some shining examples of what an ecological approach to learning can produce, bird song learning being just one, and these have developed without the aid of the kind of theorizing found in some of the chapters in this book. In the long run, any evolution of the field toward something more broadly based and biologically oriented will come about more because of a persuasiveness of well-worked-out examples than because of anything ecological theorists may tell other students of learning about what they ought to be doing.

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One Step Too Far?

Ralph M. Reitan
Aphasia and Sensory-Perceptual Deficits in Adults
Tucson, AZ: Reitan Neuropsychology Laboratories, 1984. 178 pp. $27.00

Review by
Robert A. Bornstein

Ralph M. Reitan is professor in the Department of Psychology at the University of Arizona and director of the Reitan Neuropsychology Laboratory (Tucson, Arizona). He has recently published a companion volume on developmental dysphasia and learning disabilities titled Aphasia and Sensory-Perceptual Deficits in Children. ■
Robert A. Bornstein is chief of the Neuropsychology Laboratory in the Department of Psychiatry at Ohio State University College of Medicine. He serves on the editorial board of the Journal of Clinical and Experimental Neuropsychology.

The Reitan-Indiana Aphasia Screening Test and the Reitan-Klove Sensory-Perceptual Exam have been in use since the mid-1950s in conjunction with what has come to be known as the Halstead-Reitan Neuropsychological Test Battery. This book is essentially an expanded test manual and casebook, the primary purpose of which is to provide examples of the brain-related deficits that can be elicited by these measures. In addition to the 25 cases discussed, Reitan also provides his views on the nature of aphasia as well as a summary of the research data obtained with these instruments. In an interesting section, the author describes the historical evolution of the test and the origin and development of his interest in aphasia. The text includes a brief overview of different approaches to the classification and identification of aphasic deficits and also a review of other tests used for the assessment of aphasia.

Reitan differentiates his approach to aphasia from others on two bases. First, in his model, attention is directed toward the deficits of individual patients with no implicit goal of fitting them into a fixed diagnostic scheme. Second, dysphasic deficits are conceptualized as disorders of language function rather than as variations of normal language function. In fact, Reitan criticizes other tests because they emphasize the scaling of level of performance and the classification of aphasic syndromes, and "they tend to provide assessments of verbal and language abilities that would apply to the entire population rather than to aphasic patients specifically" (p. 12). He acknowledges, however, that his test does not cover some of the important areas of language function that have been incorporated into some of these other measures (p. 33).

As noted earlier, Reitan argues that the focus in the Aphasia Screening Test is directed toward identifying specific brain-related disabilities rather than toward fitting symptom patterns into a fixed nosology of aphasic disorders. Importantly, he explicitly recognizes that abnormalities on specific items can be due to a variety of input, output, or processing deficiencies. Although he eschews labels of conventional aphasic syndromes, Reitan applies labels of his own to describe the deficits elicited by the test as well as a conceptual scheme to explain these deficits. The labels he uses represent (to some extent) the underlying assumptions that there are several possible explanations for deficits on particular items. However, in the attempt to provide a scheme that describes both language and nonlanguage deficits, he characterizes some deficits in a manner that fails to recognize other contributing factors, or he attributes the mechanism of failure to factors that are inconsistent with most theories of aphasia. For example, he explains deficits on items that require the naming of an object (dysnomia) on the basis of "naming dyspraxia" (p. 33). This implies that the underlying problem is one of output, whereas alternate explanations would implicate a reduced store of words or reduced access to that store of words (Goodglass & Geschwind, 1976).

Performance on the Sensory-Perceptual Exam is not discussed in the context of the same terminology but nonetheless suffers from some ambiguities in interpretation. This is most problematic in regard to the test of Finger Agnosia. Reitan emphasizes that "this is a test of tactile perception rather than a test of the subject's adequacy in reporting" (p. 30). Nevertheless, the method used for reporting entails the application of a cognitive scheme (a naming or number system), and the potential for deficits due to a more general cognitive deficit is not discussed. In addition, there is no mention of other methods of examination of these behaviors, although authoritative sources are available (Benton, 1985).

Considerable space is devoted to detailed description of data related to the