

Sigma Xi, The Scientific Research Society

Odd Perceptions by Richard L. Gregory

Review by: James E. Cutting

American Scientist, Vol. 76, No. 4 (July–August 1988), p. 408

Published by: [Sigma Xi, The Scientific Research Society](#)

Stable URL: <http://www.jstor.org/stable/27855353>

Accessed: 24/06/2013 09:34

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Sigma Xi, The Scientific Research Society is collaborating with JSTOR to digitize, preserve and extend access to *American Scientist*.

<http://www.jstor.org>

the Research Society on Alcoholism, for several years has provided an annual review of major advances in alcoholism research. Using leaders in each field as section editors, this series has consistently provided quality work in a timely fashion.

Volume 5 maintains the excellence of the series. The first section lays out several models for how and why alcohol affects the brain, both in its ability to remember and in its cognitive functions. Chapters in the next section present sociological and historical reviews of treatment models, review their social ecology, and summarize the impact of controlled drinking studies. Shifting to the molecular level, the third section looks at how ethanol influences the physiology of ion channels in cells, a new area which holds great promise for understanding how such a simple molecule can have such profound consequences on organ function and behavior. The fourth section covers several ways of understanding and intervening in "hazardous and early problem drinking," that nebulous area between normal drinking and clear-cut alcoholism. All four sections are quite well done, but each requires some background in the field for full understanding.—*Jerome M. Schnitt, Psychiatry, Yale University School of Medicine*

Odd Perceptions. Richard L. Gregory. 230 pp. Methuen, 1986. \$19.95.

Richard Gregory is founder and editor of the journal *Perception*, and an influential theorist on the topic. He has espoused the same theoretical position for three decades—he is both a mechanist and a constructivist. That is, he views perception, the process of gathering information about the world, as a process best explained through models and one heavily influenced by cognition. His constancy is almost refreshing, but in this book, his fifth, he only touches lightly on these themes.

Instead, the volume is a selection of essays on a broad range of topics, collected from his journal. Gregory has neither the grace of Lewis Thomas nor the didac-

tic clarity of Stephen Jay Gould, and his book suffers from a staccato of disconnected thoughts that form its 31 essays. Nonetheless, there are some interesting pieces here. Gregory is at his best when he allows himself sufficient space for historical exposition of a contemporary theme.

The book has three sections. The best is the second, called "Musing," which contains essays of two types. Some have fine insights on cognition, consciousness, explanation, intelligence, and mirrors. With regard to cognition, for example, he traces its etymology to *gnomen* and to astrology, then proceeds in the same vein with the notion of mechanism, before moving on to a discussion of contemporary artificial intelligence; with regard to mirrors, he demonstrates a common set of misunderstandings about axes of rotation found in Lucretius, Kant, and Martin Gardner. Other essays in this section are historical vignettes involving Samuel Butler, Kenneth Craik, Johannes Kepler, Julian Offray De La Mettrie, and Alan Turing.

The last section of the book, called "Using," shows Gregory the mechanist, the inventor, and the tinkerer. The best essay is an introduction to Bristol's Exploratory (a participatory science museum not unlike San Francisco's Exploratorium) through the works of Francis Bacon. The first section, called "Amusing," contains notes on laughter, scientific meetings, simulation, truth, and even driving a car. These discourage the reader from going on to the morsels that follow. *Odd Perceptions* is true to its title and is a convenient place to touch base with an important perceptual theorist.—*James E. Cutting, Psychology, Cornell University*

The Development of Behavioral States and the Expression of Emotions in Early Infancy: New Proposals for Investigation. Peter H. Wolff. 291 pp. University of Chicago Press, 1987. \$32.50.

Wolff presents a detailed account of infant behavior related to behavioral states, the development of emotional

expression, and relationship to things and persons. Indeed, except for a methods chapter and the conclusion, these three areas of interest represent the volume. The work is an etiological examination of some 20 infants' behavior; some of these infants being studied for a month, some for three months, and some for six months. In general, Wolff gives a detailed and fine observational picture of children's behavior. Thus, for example, in the chapter on behavioral states, we can follow children's development of active and inactive patterns, and, in the chapter on the development of emotional expression, we follow the careful and detailed observations of their smiling, laughter, and crying as well as non-cry vocalizations. Although the book discusses overall data on children's behavior, it is also concerned with individual differences. Nonetheless, this account tends to focus on the average development of behavior, while it masks to some extent the large individual difference that children exhibit in these behaviors.

One has the wish only that these observations could have been integrated into the extensive literature of the past 20 years.—*Michael Lewis, Pediatrics, University of Medicine and Dentistry of New Jersey*

Pottery Analysis: A Sourcebook. Prudence M. Rice. 559 pp. University of Chicago Press, 1987. \$45.

This comprehensive and up-to-date synthesis on pottery (low-fired clay containers) supplements Rye's *Pottery Technology* (1981) and somewhat replaces Shepard's classic *Ceramics for the Archaeologist* (1976). Although it is of special interest to archaeologists, Rice's compendium is also directed toward a wider audience, including social, physical, and materials scientists. Her broad work provides both an introduction to the topic and an exceedingly valuable asset to the most advanced researcher; hence, it could justifiably bear the subtitle of "Everything You Wanted to Know about Pottery but Were Afraid to Ask!" The book is logically organized and written in a clear, most readable style, and is supplemented with 134 well-chosen illustrations and 52 tables.

The five sections (15 chapters) provide an inclusive overview of the principles, terminologies, technologies, and goals of pottery analysis. Following a brief review of the origins of pottery-making in the Old and New Worlds, Rice details the sources and definitions of clays, inclusions, clay-water systems, firing behaviors, and glaze compositions. Manufacturing technologies (forming, finishing, decorating) vessel forms and functions, decorative styles, and stylistic analyses, as well as the economics of production and distribution, are elaborated. Classification and quantification methods are



Richard L. Gregory, author of *Odd Perceptions*.