premises are frankly "supernatural" and therefore not susceptible of scientific examination; one believes them, or one doesn't. Yet it has scientific importance for the cultural anthropologist, and especially for the sociologist and medical man, who constantly meet defeat, through the political pressures exerted by the group Fr. Gibbons represents, as they attempt to solve some of the world's most critical problems by a rational approach to population control. Here is warfare of theology against science, on a level affecting the earthly lives of millions of people. What it may be doing to their lives in the next world, I do not consider myself competent to judge.

The discussion of resources by Profs. Black of Harvard and Bradfield of Cornell contains a great deal of useful material and sharpens their criticisms of a number of recent writers who have expressed concern over rapid population increases and reckless destruction of resources. It is unfortunate, it seems to me, that they elected to devote nearly all their attention to food, instead of looking at the total environments in which the food must be produced. Every physical environment consists of an extremely complex, four-dimensional system of dependent variables upon which is imposed a powerful human cultural complex that may include factors as deadly as any lethal gene. Until we begin to organize our thinking in such terms, it is going to be extremely difficult to understand that what is possible at Beltsville may be impossible for many decades in the so-called backward areas, plagued by exploding populations. Dr. Thompson, in his discussion, brings the problem into focus in more of its complexity.

One more point should be noted: a popular estimate of potential agricultural land is uncritically cited (p. 74). Many people consider this too high; E. S. Archibald, director of the Experimental Farms Service, Dominion of Canada, on a recent CBC broadcast, characterized the estimate of 300 million available acres of northern podsol as "fantastic," based on his experience in Canada. I should apply the same word to one billion acres of potential tropical agricultural land, based not on what American soils scientists *might* do with the land, but on what the people of the tropics are doing *to* it, and are likely to continue doing for decades.

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***Theory of Hearing.*** Ernest Glen Wever. New York: John Wiley; London: Chapman & Hall, 1949. 484 pp. $6.00.

Professor Wever's book is an important one for a variety of reasons. As a general source of information on theories of hearing it has no equal in English. The reader, whether expert or naive, will find here adequate summaries of old and new ideas on how we hear, and if he wishes to pursue these matters further, the bibliography will point the way.

A lucid synopsis of the present state of our knowledge on both cochlear anatomy and acoustic neurology is presented. The author shows how advances in understanding have followed "accretion to anatomical knowledge," and he describes for the first time certain of his own measurements on the cochlea of man. In view of this emphasis on anatomy it is strange to find no mention of the acoustic projection to the cerebellum which was convincingly demonstrated some eight years ago.

The author's current concept of the volley theory is expounded in detail, and experimental evidence of many kinds is impressively marshaled in its support. His selection of material from the literature of physiology and psychology, and his willingness, throughout, to take a positive stand on controversial matters will provide considerable stimulation for the initiated among his readers.

In this readable and scholarly work, the substantial advances of the past twenty years march past in orderly fashion. They are reviewed by one of the most prolific workers in the field, who makes here still another contribution to it. As seen through his eyes—and the expanded version of his views of auditory theory is well worth having—"The place and frequency principles have been assigned their respective roles as well as may be on a basis of the evidence now at hand, . . . and it will remain for further experimentation and discussion to determine how reasonable they are and to work out the revisions, large and small, that are found to be necessary."

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***Adaptation.*** John Romano, Ed. Ithaca, N. Y.: Cornell Univ. Press, 1949. 113 pp. $2.00.

In dedicating a new department of psychiatry at Strong Memorial Hospital, University of Rochester, Dr. Romano, the psychiatrist-in-chief, called upon a group of distinguished scientists representing biology, physiology, psychology, psychiatry, and social anthropology to participate in a symposium on the general topic of adaptation. This book is a collection of their presentations.

Dr. Romano's modest hope was that with psychiatry setting the stage, his guests might, by a few well-chosen observations from their own special fields, help bridge the gap in scientific thinking between the physical and the social sciences. The present pocket-size volume thus offers a surprisingly rich fare of stimulating comments on the phenomena of adaptation to life on various levels from the protoplasmic molecule to group cultures.

The concept of adaptation is almost as immanent and provocative as was the subject of Rochester's earlier symposium on man's behavior, where love was summed up as the harmony of man with himself and with all things in heaven and earth. On this occasion the treatment is somewhat less speculative. In five concise interpretations it is shown that from the lowliest of bacteria to the highest of animals, individuals and social groups maintain their integrity against the stresses of the world by following the same general principles of change in structure or in pattern of behavior to achieve long or short term adaptations.

In his introduction, Dr. Romano states that modern psychiatry has the responsibility to provide firm ground, especially in methodology, for the development of the social sciences, much as physics and chemistry provide for the biological sciences. Application of strictly scientific methods to such urgent but sensitive problems as infant and