

# Supplement to NATURE

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## PROSPECTS OF SCIENTIFIC AND TECHNOLOGICAL ADVANCEMENT

### Science and Resources

Prospects and Implications of Technological Advance. Edited by Henry Jarrett. Pp. xiii+250. (Baltimore, Md.: The Johns Hopkins Press; London: Oxford University Press, 1959. Published for Resources for the Future, Inc.) 40s. net.

THIS is a most unusual kind of book even although it is a collection of essays. It is the result of a plan by Resources for the Future Incorporated. This is an organization in the United States the job of which it is as a non-profit-making organization to look to the future in the field of research and education so far as it affects the development, conservation and use of natural resources.

The book as a whole provides a look into the future in a number of directions. It originated as a series of lectures which were arranged in a rather original sort of way. First, a leading scientist was invited in his own particular field to give his ideas and views as to future developments and requirements in that field. Naturally, the extent to which the lecturer could look into the future depended very much on the subject under discussion. Secondly, two non-scientific commentators were then invited to discuss and examine the first lecture and to put their points of view forward almost as an informed lay person would do. This gives unusual character to the book and makes it especially profitable in that it can be read by scientists and non-scientists alike. Those familiar with the fields under discussion may no doubt disagree with some of the predictions, for that is inevitable; but the purpose of the book is undoubtedly to stimulate thoughts on problems which affect almost every country. Even although speculation is difficult, there is every reason to engage in it so that even in the immediate future misuse and waste of natural resources may be avoided and that those that are known to exist are utilized to the best possible advantage.

The list of authors of the introductory lectures demonstrates at once that the book is absolutely authoritative: "Genetics", by J. W. Beadle; "Weather Modification", by H. R. Byres; "Exploring for Minerals", by J. A. S. Adams; "Chemical Technology", by E. P. Stevenson; "Nuclear Energy", by W. F. Libby; "New Knowledge from Outer Space", by L. A. DuBridge.

The commentators of these essays come from a wide range of professional disciplines and even from politics. This gives a very stimulating series of additional articles often with a very clearly defined personal point of view but none the less interesting in spite of that. It is clear that the editor has not wielded his pen too strongly and has allowed the

authors to give free rein to their thoughts and opinions. This may make the treatment of the topics in the book somewhat uneven; but this is not a text-book or a monograph but eighteen essays devoted to the problems of the future in the fields covered.

H. W. MELVILLE

## MAN AND HIS ANCESTORS

### Mankind in the Making

The Story of Human Evolution. By Dr. William Howells. Pp. 382+8 plates. (Garden City, New York: Doubleday and Company, Inc., 1959.) 4.95 dollars.

### An Introduction to Physical Anthropology

By Prof. M. F. Ashley Montagu. Third edition. Pp. xvi+771. (Springfield, Ill.: Charles C. Thomas; Oxford: Blackwell Scientific Publications 1960.) 116s.

DR. HOWELLS has set himself the task of giving a full and detailed account of our knowledge of human evolution, and of telling the story in an informal and light-hearted style. The result is something of a clash between instruction and entertainment. The theme is interlarded with whimsicalities and with technicalities smoothed over by a jocular familiarity ("Man, the hero of the tale" . . . "Proconsul . . . bless his heart!" "Miss Middle Pleistocene" and "Fräulein Steinheim") all done with the best pedagogic intentions. That this exercise in popular writing may not be to everyone's taste should not be allowed to detract from the soundness and competence of Howells's interpretation. The evidence is well marshalled, controversies of the past and present are fairly presented and his judgments appear consistently reasonable. This is particularly evident in his treatment of the rather complex problem of the specific and subspecific relations within the genus *Homo*, involving the allocation of fossil specimens of a diversity ranging from the late but 'fully' Neanderthaloid to the early but more *sapiens*-like varieties, notably Swanscombe man. His handling of the still-vexed problem of *Oreopithecus* (which he regards as a primitive hominoid possibly near the hominid stem) is judicious. So also is his analysis of the status of *Australopithecus* and of *Atlanthropus*. The latter he sees as related to Peking and Java man, but unworthy of a generic status. The evolutionary chapters are preceded by informative sketches of the living primates and of their vertebrate and mammalian background. Dr. Howells concludes with a description of present-day races which is rather disappointing. There is no serious attempt to utilize the great body of available genetic data in an analysis of the dynamics of human