

our most basic problems: food shortages; cures for diseases; new sources of industrial raw materials; and new forms of energy, such as "green gasoline."

Also emphasized are the environmental services of these forests such as the regulation of floods and droughts. The role of the tropics in world wide stabilization of climate is explained.

The book includes a sobering report of the impact of modern man, and the fact that large segments of the forests are being destroyed before countless species can even be classified, much less investigated, for their ecological value and potential for human welfare. There is a powerful plea for the need of a multination plan of conservation before this basic resource is beyond recovery.

This book is written authoritatively and the facts are well documented. Hopefully it will serve to mobilize concern around the world that we cannot afford to lose our tropical forests. Surely as biology teachers we have an important role in making this message known.

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## EVOLUTION

### THE MYSTERY OF LIFE'S ORIGIN: REASSESSING CURRENT THEORIES

by Charles B. Thaxton, Walter L. Bradley, & Roger L. Olsen. 1984. Philosophical Library, Inc. (200 West 57th Street, New York, NY 10019). 220 p. \$14.95 hardback, \$8.50 softback.

This book is very likely to ruffle some evolutionary feathers where origins experiments are concerned. The authors come down hard on what they consider the rather cavalier attitude of present and past investigators.

From the authors' viewpoint the problem involves assumptions of the early earth's composition, what kind of chemistry could have taken place and different degrees of investigator interference. For starters, the prebiotic soup, as it is called, is likely to have been so dilute that concentrations of critical raw materials would have been too low for any meaningful synthesis. The early earth's atmosphere, assumed to have been reducing (no oxygen), could have had at least a small percentage due to photodissociation. Simulation experiments are criticized because many of the cherished as-

sumptions and techniques may not be warranted; the energy sources may not be realistic, the chemistry and thermodynamics may be flawed, and the individuals doing the experiments interfere in various ways. The authors recommend that geochemical plausibility be critically examined in all experiments and an established protocol be followed.

To be sure, the authors have come to a conclusion about the origin of life, but they do that in the Epilogue, a miasma of metaphysics, science, creationism and special pleading. Their conclusion is predictable (special creation, apparently only in the beginning) and most will disagree, as I do, on the basis that it really explains nothing. However, they would surely insist that origins experiments, as presently done, also explain nothing. On this I would disagree also. If you choose to read this book be aware of the Epilogue.

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## GENETICS

### NOT IN OUR GENES

by R.C. Lewontin, Steven Rose and Leon J. Kamin. 1984. Pantheon Books (201 East 50th Street, NY 10022). 290 p. \$21.95 hardback.

Are you really what your genes decide? Is society only as good (or bad) as the sum of its individual parts? Is this really all there is? "T'ain't necessarily so" say the authors of this thought-provoking book.

Beginning with the history of reductionism and biological determinism, the authors show how determinism was and is still being used to legitimate inequality in I.Q., patriarchy and social status. In order to strengthen their case, determinists have resorted to ignoring data that doesn't support their belief or twisting data so it will be supportive. The authors suggest that determinists resort to the use of drugs, sterilization and institutional confinement to make deviant individuals fit their present norm.

It is acknowledged that humans do react to their environment. But the environment is considered an unchangeable entity against which the genotype of the individual is pitted in a game of survival. The authors propose a new theory in which the organism both changes and is changed by its environment, thus both the individual and society are the result of this constant interaction.

The book is primarily a well-written,

very readable repudiation of biological determinism. It would be especially valuable in high school or college courses in biology, sociobiology, psychology and social studies. It is a book that should not only be in every library, but should be read by every adult for it makes one think, rethink and ponder.

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### PATTERNS OF HUMAN HEREDITY: AN INTRODUCTION TO HUMAN GENETICS

by James N. Brennan. 1985. Prentice-Hall (Englewood Cliffs, NJ 07632). 340 p. \$24.95 hardback.

*Patterns of Human Heredity* is one of the best textbooks available for an introductory course in genetics for high school, grades 11-12, and college. The text is well written so that nonmajors interested in genetic diseases, family pedigrees and analysis of hereditary patterns, genes in the population and the genetic future of humans may better understand and rationally think about human individuality.

The text is organized in a historical sequence of the study of inheritance and variation. The author emphasizes a good understanding of the reproductive process to provide a clearer comprehension of the basics of genetics. Topics such as the origin of science, cells, the functional units of life, human reproduction, the chemical mechanism of the gene, human chromosomes and chromosomal abnormalities are dealt with before the mathematics and laws of Mendel. However, the text is written to provide flexibility for the instructor who does not wish to follow its particular sequence.

Helpful student aids such as bold face type to draw attention to essential vocabulary, a concise glossary with simple and understandable definitions, and review questions are included. The review questions purposefully stimulate the student to think and research additional information. At the end of each chapter there is a short list of additional readings. The chapter summaries are well organized, reviewing and highlighting essential facts and principles.

The author has succeeded in providing the reader with excellent and logically written information for a basic understanding of the principles of heredity. He piques one's natural curiosity for further study and challenges individual thought and awareness of the genetic mechanism and the