

The Ethical Dilemma of Science and Other Writings

by A. V. HILL,
Honorary Research Associate,
University College, London

A DELIGHTFULLY informal collection of writings and speeches covering the long and distinguished career of the celebrated British physiologist and Nobel laureate, A. V. Hill. Many of the articles are personal and most are nontechnical. Included are selections about the author's government service during two world wars, his years as a Member of Parliament from Cambridge, and his associations with scores of distinguished persons on both sides of the Atlantic and in India and Pakistan.

1960 416 pp. \$7.50

The Rockefeller Institute Press

IN ASSOCIATION WITH

Oxford University Press • N. Y.

**Get UNITRON's FREE
Observer's Guide and Catalog on
ASTRONOMICAL TELESCOPES**

**This valuable 38-page book
is yours for the asking!**

With artificial satellites already launched and space travel almost a reality, astronomy has become today's fastest growing hobby. Exploring the skies with a telescope is a relaxing diversion for father and son alike. UNITRON's handbook contains full-page illustrated articles on astronomy, observing, telescopes and accessories. It is of interest to both beginners and advanced amateurs.

Contents include—

- Observing the sun, moon, planets and wonders of the sky
- Constellation map
- Hints for observers
- Glossary of telescope terms
- How to choose a telescope
- Amateur clubs and research programs



UNITRON

INSTRUMENT COMPANY • TELESCOPE SALES DIV.
66 NEEDHAM ST., NEWTON HIGHLANDS 61, MASS.

Please rush to me, free of charge, UNITRON's new Observer's
Guide and Telescope Catalog. 4-1-4

Name _____

Street _____

City _____

State _____

Meetings

Biochemical Anthropology

On 6-8 July a group of 24 scientists from three continents gathered at the Fels Research Institute in Yellow Springs, Ohio, for a conference on biochemical anthropology. Under discussion were biochemical differences that have, or may have, adaptive value under particular circumstances. Inevitably the conference, concerned with biochemical polymorphisms in man, overlapped the growing new field of geographical medicine.

Considerable attention was paid to the abnormal hemoglobins, especially where the heterozygote is at an adaptive advantage in malarial areas. Of particular interest were those parts of the world where more than one of the abnormal hemoglobins are present, or where both abnormal hemoglobins and glucose-6-phosphate dehydrogenase deficiency states are coexistent. Of interest, too, were iron requirements in hemolytic disorders having a genetic basis.

Interestingly, discussions on the various serological factors and on the globulin fractions both took a developmental tack. Since maternal-fetal incompatibilities will not arise where the relevant antigen does not develop during prenatal life, "late developing" blood types are obviously at a selective advantage. The ontogenetic timing of other serum fractions may prove useful in phylogenetic comparisons as well, as several participants suggested.

To the anatomists and physical anthropologists present at the conference, the implications currently read into human biochemical polymorphisms proved exceptionally stimulating. Traditionally, morphological variability has been viewed as having no particular significance. Clearly, variability in form and function now suggests either competing directions of selection or a selective advantage associated with heterozygosity.

Mentioned, too, were various "genetic" diseases whose frequency in contemporary populations demands explanation. Here nutritional variables were introduced, as in the interaction between diet and genetic disease. Other immunochemical reactions, chief among them allergies, suggested a fertile field for investigation. Are the disadvantages of being allergic balanced by enhanced resistance to infectious disease?

The meaning of human polymorphisms has emerged only recently as a major area of investigation. Most authors followed Darwin in assuming that polymorphisms exist because they are neutral with respect to natural selection. The conference on biochemical anthropology, aided by the Wenner-Gren Foundation for Anthropological

Research, casts new light on this old question. People differ at the molecular level, and in enzyme content and concentration. We are beginning to know why, and we are increasingly able to define the situations that are responsible.

STANLEY M. GARN
*Physical Growth Department,
Fels Research Institute,
Yellow Springs, Ohio*

Forthcoming Events

December

1-16. Commission for Climatology, 3rd session, London, England. (World Meteorological Organization, Campagne Rigot, 1, avenue de la Paix, Geneva, Switzerland)

2-5. Central American Medical Conf., 8th, Panama City. (A. Bissot, Departamento de Salud Publica, Ministerio de Trabajo, Prevision Social y Salud Publica, Panama)

3-6. Visual Communications, 4th annual intern. cong., Chicago, Ill. (Visual Communications Cong., 10600 Puritan Ave., Detroit 38, Mich.)

3-8. American Acad. of Dermatology and Syphilology, Chicago, Ill. (R. R. Kierland, First National Bank Building, Rochester, Minn.)

4-6. Spectroscopy, annual southern seminar, Gainesville, Va. (Annual Seminar on Spectroscopy, Univ. of Florida, Gainesville)

4-7. American Inst. of Chemical Engineers, annual, Washington, D.C. (F. J. Van Antwerpen, AICE, 25 W. 45 St., New York 36)

4-9. Radiological Soc. of North America, Cincinnati, Ohio. (D. S. Childs, 713 E. Genesee St., Syracuse 2, N.Y.)

5-7. American Soc. of Agricultural Engineers, winter, Memphis, Tenn. (J. L. Butt, 420 Main St., St. Joseph, Mich.)

5-7. Electronic Industries Assoc., 3rd conf. on maintainability of electronic equipment, San Antonio, Tex. (E. B. Harwood, Office of the Secretary of Defense, Room 3D1018, Pentagon, Washington 25)

5-8. American Rocket Soc., 15th annual, Washington, D.C. (R. L. Hohl, ARS, 500 Fifth Ave., New York 36)

5-8. American Soc. of Agronomy, annual, Chicago, Ill. (L. G. Monthey, ASA, 2702 Monroe St., Madison 5, Wis.)

7-13. American Acad. of Optometry, San Francisco, Calif. (C. C. Koch, 1506-08 Foshay Tower, Minneapolis 2, Minn.)

9-10. The Myocardium—Its Biochemistry and Biophysics, New York, N.Y. (A. P. Fishman, New York Heart Assoc., 10 Columbus Circle, New York 19)

9-11. American Psychoanalytic Assoc., New York, N.Y. (D. Beres, 151 Central Park West, New York 23)

10-11. Academy of Psychoanalysis, New York, N.Y. (J. H. Merin, 125 E. 65 St., New York 21)

11-14. Hot Laboratory and Equipment Conf., 8th, San Francisco, Calif. (J. R. Lilienthal, Los Alamos Scientific Laboratory, P.O. Box 1663, Los Alamos, N.M.)

12-14. American Nuclear Soc. (Isotopes and Radiation Div.), San Francisco, Calif. (O. J. Du Temple, ANS, 86 E. Randolph St., Chicago 1, Ill.)