

Tracking science

Essays of an Information Scientist, Vol. 11, Science Literacy, Policy, Evaluation, and Other Essays. Eugene Garfield. ISI Press, 3501 Market Street, Philadelphia, PA 19104, USA. 1990. 451 pp.

In his preface Garfield says, 'Fortunately, though, some things don't change . . .', and fortunately for us one of those things is his penchant for comprehending science as it really is, warts and all, and his insatiable desire and undoubted ability to communicate his comprehension to his worldwide audience in a provocatively engaging style.

Endowed with an insightful and perceptive mind, this chemist-turned-librarian won a doctorate in structural linguistics on his way to becoming probably the world's most celebrated information scientist. Right from the beginning, he realized the need to bring order into the world of scientific information. To begin with he produced *Current Contents*, the weekly alerting service now appearing in seven editions to cover all of science, technology, social sciences, the arts and the humanities. Then he transformed the lowly footnotes, usually relegated to the bottom of the pages of research papers, into a powerful tool not only for retrieving relevant information but also for mapping the cognitive structure of knowledge.

Garfield's continuing effort to bring in greater levels of order, his uncanny ability to marshal information, the great

felicity with which he can communicate his thoughts are all evident in his writings. Added to these is the wide range of topics on which he can write authoritatively.

Essays in this volume, all of which appeared under the column 'Current Comments' in *Current Contents* in 1988, cover topics as varied as noninvasive medicine, chronobiology, epidemiology and tracking down diseases, ethics, the mysteries of hibernation, science and technology policy, warts and moles, tools for studying the history of science, a tribute to Sir Henry Wellcome, ozone depletion, research on venom, midwifery, and the increasing interest in publishing research papers in English-language journals by French scientists. As usual, each essay is researched well and often Garfield has sought the opinion of acknowledged experts. For instance, for his two-part essay on science and technology policy, he spoke to five experts: Harvey Brooks, Maurice Goldsmith, Craig Sinclair, John Gibbon and Jurgen Schmandt.

Apart from his own essays, Garfield has also reprinted a few essays by others, along with his own remarks. These essays include one on genetic recombination in bacteria by Nobel laureate Joshua Lederberg (in two parts)—from the horse's mouth as it were—, and another on the American tendency to ignore work done elsewhere (the well-known 'Not invented here' syndrome) by French science writer Françoise Harrois-Monin. Also reproduced are an essay on measuring R&D productivity of industrial laboratories

by Halperin and Chakrabarti, and another on sleep deprivation by Emanuel Garcia.

Like the previous volumes, this volume also includes essays on highly cited papers and on the prize-winning work of the 1987 Nobel prize-winners in chemistry, medicine, physics and economics.

It was in 1988 that *Science Citation Index* became available in the CD-ROM (compact disc read only memory) format, which has brought in a whole new dimension of creative and intuitive quality to desktop literature searching and information discovery. This development and Garfield's immense faith in the role of high technology in information processing and retrieval form the subject of another lucid essay.

Of particular interest to researchers in the Third World are two brief essays on boosting science in the Third World and on how the World Bank helped Brazil perform better in science.

While this book, as well as the earlier volumes in this series, is compulsory reading for students of information science and science studies, it has also much to offer those who have a curiosity and fascination for scientific knowledge. This is a book I would unhesitatingly recommend to every college and university library in India and to science writers for whom these essays can serve as models.

SUBBIAH ARUNACHALAM

*Publications and Information Directorate
CSIR
New Delhi 110 012*