

PREFACE

In a recent *Current Contents* essay,¹ I explained how I am able to write a weekly column which covers such a wide variety of topics. I would probably not have had to explain anything if I called myself a science journalist instead of an information scientist. Somehow the latter appellation, even when one is also an administrator, connotes a rather narrow view of the world.

But it is precisely because I direct an information company that I am able to and need to exploit its resources for the purpose of conducting my particular brand of public relations and science journalism. The production of most of these essays requires access to a unique array of computerized bibliographic tools, which can be used to retrieve pertinent literature on almost any subject we choose to study.

Most journalists do not have such access. They most certainly do not go to great lengths to cite accurately the important current or seminal works on a subject. Nor do most science journalists have a staff of professional librarians and editors to help them prepare their stories by deadline as I do. In fact, during the period covered by this volume, I realized that I was increasingly calling upon the human as well as the bibliographic resources at ISI to produce these essays. Formal acknowledgments of this help appear at the end of essays beginning in 1980.

The continuing development of my own kind of science journalism during 1979-1980 paralleled a larger phenomenon. Science

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journalism was coming of age in these two years. This volume reflects this change—from a real lack of public science communication to a surge in interest by the public. In these pages you will find profiles of *Omni*, *Science News*, *Science 80*, and *The Sciences*. In several 1981 essays not included here I've also covered *Discover*,² *New Scientist*,³ *Scientific American*,⁴ *Science Digest*,⁵ *Science*,⁶ and *Nature*.⁷

You will also find essays on other aspects of public science communication: examinations of science on television; Three Mile Island and the information explosion; and SIPI, an organization of scientists which is trying to further the cause of accurate scientific communication to the public.

In focusing my attention on the world of science and science communications, I've also been able to reflect on the process of scientific communication *among* scientists. Essays on this theme include alternative forms of scientific communication, publishing 300 years ago, bibliographic plagiarism by scientists, the epidemiology of knowledge and the spread of scientific communication, and multiple independent discovery in science.

Citation studies, of course, remain at the heart of these essays. The newborn field of scientometrics is examined in one of these pieces, and several other essays reflect the sophistication this field has developed. Those who enjoy a liberal smattering of citation analysis won't be disappointed—there are essays on most-cited authors, articles, and journals. Readers interested in citation theory will appreciate the two-part essay on the ABCs of Cluster Mapping which can be used as a primer on this technique for identifying "hot" areas of research in science. Many of the essays examine other information science topics, including Bradford's law and other related statistical patterns, a method of calculating lifetime citation rates, and comparative information science curricula. Two of the great information institutions, the Library of Congress and the British Library, are also profiled.

Interspersed throughout this volume are also essays dealing with

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ISI activities during 1979-1980: our construction of a new headquarters building in Philadelphia, several information services we introduced, and some important new books published by ISI Press™. Also noted is the inauguration of the NAS James Murray Luck Award for Scientific Reviewing, cosponsored by ISI and Annual Reviews, Inc., and administered by the National Academy of Sciences.

As in earlier volumes, some of the essays are very personal. For instance, a piece about the psychedelic art of the Huichol Indians grew out of my contacts with and abiding love of these people and their art. I have taken up this theme again in a recent two-part essay about Huichol culture and a large Huichol mural commissioned by ISI for its new building.^{8,9}

A few readers regard these "personal" essays as an ego trip. Yet I find that many scientists and scholars enjoy my essays on saxophones and noisy restaurants more than my "relevant" science journalism pieces. And the essays in this volume called "What Do You Do for a Living?" and "How It All Began—With a Loan from HFC," two pieces which might be regarded as egocentric, are among those for which I receive the most reprint requests.

While these essays reflect both my personal and professional interests, they also reflect the larger world. Many of the topics I write about come from ideas of others given freely at conferences, meetings, or in private conversations. Many of them come from the journals or magazines to which I have access. To those who have sparked the ideas for these essays I extend my thanks.

Since I am known for my predilection for citation, I hope you will forgive the citation of essays published in 1981 which could not be included. But if you are not a regular reader of *Current Contents*, please feel free to request reprints in anticipation of volume 5.

REFERENCES

1. Garfield E. "How do you do it? Write all those essays, I mean." *Current Contents* (14):5-7, 6 April 1981.

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2. ———. Introducing *Discover*, Time Inc.'s monthly newsmagazine of science. *Current Contents* (11):5-9, 16 March 1981.
3. ———. *New Scientist*: science with a sense of humor. *Current Contents* (16):5-11, 20 April 1981.
4. ———. *Scientific American*—136 years of science journalism. *Current Contents* (21):5-11, 25 May 1981.
5. ———. *Science Digest*—new look, new personality. *Current Contents* (35):5-8, 31 August 1981.
6. ———. *Science*: 101 years of publication of high impact science journalism. *Current Contents* (39):5-12, 28 September 1981.
7. ———. *Nature*: 112 years of continuous publication of high impact research and science journalism. *Current Contents* (40):5-12, 5 October 1981.
8. ———. Huichol mythology and culture. Part 1. World's largest yarn painting is latest in series of ISI-commissioned artworks. *Current Contents* (28):5-11, 13 July 1981.
9. ———. Huichol mythology and culture. Part 2. Can the Huichols absorb modern technology and retain their traditions? *Current Contents* (29):5-11, 20 July 1981.