Ignorance May Be a Virtue in the Age of Information Overload

Reprinted from THE SCIENTIST ® 3(8): 10, 17 April 1989.

Information overload is a frustrating problem that is all too familiar to those of us engaged in research. No matter how many articles, reports, and books we manage to plough through, the stack seems only to grow higher. Like the Sorcerer's Apprentice in Walt Disney's Fantasia, we wish for a magical command to stop the bucket brigade of information before it drowns us. The problem of too much information and too little time to manage it is not a new phenomenon. It is just much more obvious and prevalent today than in the past. In fact, information overload is spreading to infect the general public, too.

A new book by Richard Wurman, Information Anxiety (Doubleday, 1989), capitalizes on the growing popular awareness of the problem. Its title refers to a condition that arises from an "ever-widening gap between what we understand and what we think we should understand."

Those who suffer from information anxiety will find that the book doesn't demand too much reading time. Actually, it seems to have been carefully designed to be browsed, rather than read. You're even encouraged to begin with any chapter, browse forward or backward, or scan only the even-numbered chapters.

Of course, browsing is a natural and unsystematic method that the layperson employs to cope with information. The publication Current Contents, a weekly digest of journal contents pages, was introduced more than 30 years ago precisely because scientists are inveterate scanners. Researchers now use this publication much as the average person uses a newspaper----to stay current with recent developments and maintain a general awareness of science. The value of a good contents page in easing the burden and frustration of information overload should not be underestimated.

Over the years, I have frequently urged authors and editors to make article and book chapter titles more informative. Wurman clearly caught this message. His table of contents takes up 21 liberally annotated pages. But it is ironic that Wurman's book doesn't include a subject or author index, one of the simplest tools for accessing information. Without an index, one wonders whether the book can really live up to its claim of giving readers an "essential map through the information jungle."

What is perhaps most interesting about Wurman's book is its celebration of ignorance. Many of us are probably guilty of having feigned knowledge of a subject that came up in casual conversation. It's only natural for people to want to avoid the embarrassment of appearing illinformed and out of touch. But by doing so, we lose the opportunity to learn something new. As Wurman states, "If we could instead delight in our ignorance, use it as an inspiration to learn...there would be no information anxiety."

Ignorance may indeed be a virtue in an age of information overload and highly specialized knowledge. This is especially true for science journalists and others involved in communicating complex ideas to the lay person. It may seem paradoxical, but the more you know about a subject, the less certain is your ability to explain it in terms that a layperson can understand. There are notable exceptions to this uncertainty principle of popular scientific communications, such as Lewis Thomas, Carl Sagan, Stephen Jay Gould, and others.

My own naivete about certain complex subjects leads me to ask the simple questions that others, including my readers, would like to have answered. These simple questions are the starting point of a discovery process that sometimes results in frustration but often ends in a particularly gratifying conclusion new understanding. The knowledge that stands at the end of this process of discovery is the motive behind all simple "Why?" questions, whether they are asked by wondering children or Nobel scientists.

Science journalists are successful when they convert their personal ignorance into the reader's information gain. This conversion is the primary role, value, and satisfaction of the profession. ■