Science Will Survive The Recurring Tension Among Researchers, Librarians, And Publishers

By Eugene Garfield

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The relationship between libraries and the scientific journals they carry has its troubles now and then, but has proved to be enduring over time--like any long, if perhaps imperfect, marriage. Most of the problems that spring up periodically--like the proverbial seven-year itch--to threaten the stability of the marriage arise from the sometimes competing needs, demands, and claims of researchers, library administrators, and publishers.

Scientists would like libraries to be comprehensively stocked with specialized journals that support their investigative work. Conscientious library administrators, while sympathetic to clients' needs. nevertheless their complain that rising costs of science publications. along with space constraints and lack of personnel. frustrate their efforts to accommodate all users. Meanwhile, many publishers. while professing the desire to serve the broadest possible audience. perceived as pricing their products to maximize profits, thereby putting them out of reach of individuals and smaller institutional subscribers.

A recent article in The Scientist (F. Hoke, "Scientists Press For Boost In Federal Library Funding," Feb. 21, 1994, page 1) noted

the formation of a committee of scientists concerned about this issue. They warn that insufficient financial support for libraries is causing a "declining accessibility" of materials that, in time, may threaten their investigations. The committee seems to suggest that an emergency exists, and that the future of research is in peril unless the government subsidizes libraries to solve the purported acquisitions crisis.

The situation is troublesome, to be sure. But in spite of this latest manifestation of frustration about science library budgets, I doubt that the process of scientific research is in peril. More than 30 years ago, science historian Derek de Solla Price forecast consequences of continued exponential growth in the number of people doing scientific research. One of these was the number of published papers and journals by new "invisible colleges"-- his term for emerging scientific specialties.

Price's predictions have been borne out in the ensuing years. But the machinery of science has not come to a halt, despite the alarmist warnings sent up every few years by researchers, library administrators, or publishers. One way or another, scientists will find a way to publish and be read. So, in my opinion, the melodramatic lobbying of this

committee is excessive. Or, I might say, if there is a crisis, it's nothing new.

Libraries should have adequate archives, of course--a core of stable publications that the majority of researchers find useful--but they do not have to subscribe to and keep every issue of everything. I remember when university libraries proudly proclaimed that they subscribed to 25,000 or more scientific serials per year. If that figure were to drop to 5,000, you would still have on hand five times the 1,000 core journals whose articles account for 85 percent of what is cited by subsequent researchers. Greater selectivity by library administrators could ease their burden without compromising the level of service to the user to any significant degree.

If, by reducing subscriptions, librarians in effect cause some scientific journals to merge or to fold, others, history tells us, will emerge in response to shifting tastes and trends in scientific investigation. Publishers are, generally speaking, sufficiently resourceful and financially motivated to accommodate such change with new journals. This is especially true today, when new technology has made it economically feasible to produce journals in print runs of fewer than 200 copies.

I believe that the cyclical show of discontent centering on research libraries will continue to repeat itself every so often in the future. And I believe that-with or without financial support from the government--the problems will be resolved according to the dictates of prevailing research patterns, library acquisition trends, and publishing economics.

In this regard, one can only speculate on what the impact of the burgeoning information highway will have on researchers, librarians, and publishers.

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