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The Need for Quality Filters in Information Systems

The American Psychological Association has just launched a new communications system which "distributes descriptions of problems, ideas, research findings and methods with minimal editorial processing. The responsibility for assessing the quality of the material rests primarily with the author." One of its main virtues is that it has a maximum delay of 65 days from input to circulation, whereas journals have a lag that runs to about a year. Its main weakness is that it compounds the information explosion by circulating more material, some of which might otherwise never have seen the light of day. Other professional associations also have provided their respective disciplines with information systems that ease the circulation and retrieval of material (usually only published material).

Typically, the systems have little or no quality control. Any paper that meets some very loosely defined criteria (for example, it is in psychology) is circulated, and the potential user is provided with no clues as to the relative merit of each item. It might seem that the user would be delighted at having all the material he wishes at his fingertips, but actually much of his time is being wasted as *a high proportion of the material circulated and retrieved is without discernible value.*

In the informal "system" the new devices seek to replace, users seek out, chiefly, material whose reputation has been communicated by word of mouth or by frequent references in the literature. This system may have caused occasional duplication of research and occasional failure by a researcher to take into account some previous relevant findings. But what is frequently overlooked is that this informal system of data retrieval is highly selective and hence very economical.

It seems a hopeless task to raise the standards of the tens of thousands of scientific and scholarly publications. But the information circulation and retrieval systems are very small in number, usually supported by public funds, and carefully controlled. It is *here* that quality control—or at least differentiation—can and should be introduced. If all papers must be circulated, some simple ranking should be introduced to allow the users to choose between a printout of all the papers on a given subject and those that meet only some specified criteria. For instance, papers may be differentiated according to whether they present limited or extensive data; the speculative studies may be separated into informally or mathematically conceptualized theories. Many other divisions may be constructed. For example, a self-editing computerized index, already at work in other systems, may be provided in order to reveal how often a paper has been requested by previous users or how often it has been referred to in published papers within a recent period of time.

This is not the place to spell out how the filters should be designed; such a task requires considerable study, consultation with potential users, and experimentation. The main point is that the filters are needed to save precious working years for the scientific community, which now faces the options of being flooded by unneeded information, devising its own ad hoc filters as the system spouts out its publications (or lists of references), arbitrary skimming of the endless pulp, or ignoring it altogether.—AMITAI ETZIONI, *Chairman, Department of Sociology, Columbia University*, and *Director, Center for Policy Research*