

Historiographs, Librarianship,  
and The History of Science

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At the centerfold of this issue there is a reprint of an article originally written in 1971 for a *Festschrift* in honor of Jesse Hauk Shera.<sup>1</sup> Some people might be careless enough to refer to Shera (formerly dean at Case-Western Reserve University) as "a legend in his own time." As made clear by the late Verner Clapp, formerly Chief Assistant Librarian of Congress, in his foreword to the book, Dean Shera has never been that. The phrase suggests a certain hang-on tedium. Even in retirement Jesse Shera continues to be the "phenomenon" Clapp named him. He remains one of the few people who have provided the "brilliant flash" and the "fireworks" to push librarianship and information science into the future.

Like so many other papers written for *festschriften*, my contribution was not directly linked to Shera's own work. But the connection is not trivial. Shera is uniquely qualified as historian

and documentalist.<sup>2</sup>

The paper will introduce you to the concept of the historiograph, which is a special summary type of citation network. The paper attempts to show what historiographs are and how they can be constructed. And by using the example of the genetic code, the paper illustrates a concrete example of "algorithmic" historiography. The work on DNA was originally completed in 1964 and issued, unfortunately, as a government technical report. In this way, it has enjoyed a kind of oblivion that was not intended.<sup>3</sup>

The original and still primary purpose of the *Science Citation Index*• (*SCI*•) remains information retrieval. But even in the early stages of the experimental work which eventuated in the *SCI*, it became apparent to me that data compiled to produce the *SCI* could be manipulated in ways that would be of great interest to historians and sociologists of science as well as to sci-

ence librarians. Manual and computer-produced historiographs can become extremely complicated. The paper records the research done to produce a legible, easy-to-follow computer print-out. ISI® is continuing research on these problems. In future essays we will discuss the problems involved in on-line computerized citation network displays.

Some people may quibble with the word historiograph. The end result of such systems as the telegraph or polygraph are telegrams

or polygrams. The machines that produce "grams" are usually *-graphs*. *Historiograph* was deliberately chosen to emphasize this particular and new *system* of historical mapping. If, however, anyone insists that a particular result is an *historiogram*, I won't quibble with that. Hopefully, the entire purpose and intent of the paper will become self-evident in its reading—if you can afford the time. Alas, in this instance I could not afford the luxury of brevity that I urge so frequently on others.

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1. Garfield, E. Historiographs, librarianship, and the history of science. In *Toward a theory of librarianship: papers in honor of Jesse Hawk Shera*, ed. by Conrad H. Rawski (Metuchen, N.J.: Scarecrow Press, 1973), p. 380-402.

2. Shera, J.H. *Historians, books, and libraries*. (Cleveland: The Press of Western Reserve University, 1973) 126pp.

3. Garfield, E., Sher, I.H., & Torpie, R.J. *The use of citation data in writing the history of science*. (Philadelphia: Institute for Scientific Information, 1964) 76pp.