

To Remember Ralph Shaw

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In 1954, I was under consideration for a job teaching at the Graduate School of Library Services at Rutgers University. There was only one slot open. The Dean, Lowell Martin, told me I had the position if my friend Ralph Shaw—who was already an eminent librarian, inventor and publisher—did not accept it. He did, and my career as a full-time academic came to an end before it began. This was probably the best thing that ever happened to me. I went on to establish ISI<sup>®</sup>, and Ralph went on to have ten innovative years at Rutgers and a brilliant teaching career, until his life was cut short by cancer in 1972.

Before he died, Ralph compiled an impressive list of credentials and accomplishments that left his mark on librarianship and information science and on those of us who knew and admired him.

From his first library-related job as a page in the Cleveland Public Library in 1923 to his last as Professor and Dean of Library Activities at the University of Hawaii

from 1964 to 1968, Ralph aggressively initiated creative programs, invented and applied systems to better serve library patrons, stimulated students to turn out a body of directed research and prodded stodgy institutions into action.<sup>1</sup> An intensely political man, Ralph could confound any opponent on a public platform. His unique knack for demolishing an antagonist with a few succinct (but not necessarily relevant) remarks was unnerving.

In his relationships with colleagues, students and friends, Ralph demonstrated his marvelous sense of humor. I experienced his ability to turn a phrase in 1953 when I arranged a documentation seminar and buffet luncheon at Johns Hopkins University, which Shaw attended.<sup>2</sup> After the meeting, he wrote me a note that said: "Garfield, as a documentalist you make a great caterer." Other Shaw aphorisms are quoted on page 9.<sup>3</sup>

I first met Ralph Shaw when he attended a meeting of the committee of consultants that supervised

the work of the Welch Medical Library Indexing Project at Johns Hopkins. Ralph was instrumental in my receiving the first Grolier Society fellowship at Columbia University, since Frank B. Rogers (National Library of Medicine), Verner Clapp (Library of Congress), and he were my "references."

Ralph was born May 18, 1907, in Detroit and received his B.A. from Western Reserve (now Case Western Reserve) University in Ohio. He then moved to New York, first landing his B.S. from Columbia University's School of Library Services in 1929 and then an M.S. in 1931. During his years in New York he was employed as Senior Assistant Chief Bibliographer of the Engineering Societies Library, a post he held until 1936.

Throughout his long career, Ralph was responsible for many innovations and inventions in the library field. One of his well-known contributions during his tenure as chief librarian of the Gary, Indiana Public Library from 1936 to 1940 was the trailer bookmobile concept. Ralph's version of the bookmobile used a single motorized cab to haul three different book trailers to their destinations. It was less costly than using individual bookmobiles with their own engines.<sup>3</sup>

While at Gary, Ralph also made an important innovation in the way libraries record circulation information. In the 1930's the prevailing method of book charging involved

stamping the "date due" and writing the borrower's name or identification number on a card. When the book was returned, the card had to be retrieved from a file and replaced in the book before the volume could be shelved. A librarian with overdue notices to write had to go through the entire file of cards to find which books were late.<sup>4</sup>

Ralph conceived "transaction card charging" to simplify this process. In transaction card charging, the librarian uses due date cards, each numbered in serial order. A due date card, a card identifying the book, and the borrower's identification card are photocopied at the charge desk. The due date card is put into a pocket in the book. When the book is returned, the card is removed, and the book is immediately reshelved.

The returned due date cards may be quickly sorted in serial order. If the books issued on, for example, June 1 used cards 1-1000 and all cards have been returned, the librarian knows that there are no overdue books to be called in. If numbers are missing, a clerk can turn to the copies of those transactions and write overdue notices. This system or some variation of it is used today in many libraries throughout the world. As an integral part of his system, Ralph invented the Photoclerk, a small photostat machine (since superseded by more sophisticated copiers).<sup>3</sup>

During his next fourteen years

(1940 to 1954) as Director of the US Department of Agriculture Libraries in Washington, D.C., Ralph helped pioneer the development of miniprint. Later, he published some of his students' dissertations in the reduced-size print format, to demonstrate the effectiveness of the concept. Miniprint is still under discussion as a way to cut publishing costs.<sup>5</sup>

In 1942, Ralph planned and produced the first *Bibliography of Agriculture*, which consolidated into one source bibliographies of botany, irrigation, entomology, forestry, agriculture economics and plant science literature. To those topics, Ralph added animal husbandry and food processing. The first *Bibliography of Agriculture* was produced by photocopying the original index cards.<sup>3</sup> Still published today, the present version is produced from computer tapes and appears monthly, indexing about 150,000 articles a year.

Also in the 1940's, Ralph developed the Rapid Selector, a device of which he was particularly proud. Before the machine's existence, there had been no fast way to search a reel of microfilm for a specific bit of information. With the Rapid Selector, microfilm could be electronically scanned at the rate of over 10,000 frames per minute. When the desired frame of text was located, a camera would automatically photograph it. The Rapid Selector received a great deal of fanfare and was described as an



Courtesy Library Journal.

*Ralph R. Shaw*

“electronic marvel” which could “revolutionize the whole science of bibliography.”<sup>6</sup>

Ralph credited the basic electronic principles applied in his Rapid Selector to Dr. Vannevar Bush, who had produced an earlier version at MIT. With Dr. Bush's permission, Ralph used his concepts to develop a more effective and commercially viable machine.<sup>7</sup>

For the Rapid Selector, a code of dots describing the frame's content was placed beside each frame of microfilm. When a library patron needed specific information, a clerk input a card punched with the appropriate code. Using a photocell, the Rapid Selector searched each frame and compared dots on the microfilm with the holes in the card until the correct frame was found. The matched dots tripped a flash lamp and camera shutter, making a copy of the text frame.<sup>8</sup>

Nothing ever came of the Rapid

Selector. But I was intensely interested in it for many reasons. In the early fifties Jacques Samain developed a system called Filmorex which, I felt, solved some of the basic problems of the Rapid Selector. Had it not been for the inventor's lackadaisical attitude about marketing his invention, I might today be a Filmorex salesman. Filmorex was a combination of punched-card technology and microfilm—a hybrid of the punched-card and Ralph's Rapid Selector.

As an eminent educator, Ralph was extremely controversial and frequently dogmatic, to both the delight and chagrin of his colleagues and students. In his work with doctoral candidates, for example, Ralph gave far more guidance than some members of the faculty liked. He would map out a field to be studied and assign various parts of it to the students in order to expand the body of knowledge in that area. These studies have been credited, however, with creating new insights into information science.

Ralph was also a curriculum innovator. At Rutgers, during his tenure as Dean of the School of Library Services from 1959 to 1964, he began the first regular class in scientific management in a library school.<sup>9</sup>

While he was still in Washington, Ralph put on his publisher's hat and founded the Scarecrow Press in 1950. Scarecrow was a specialized

low-overhead publication house, begun in the basement of his Georgetown home and expanded to a multi-million dollar enterprise.<sup>3</sup> The books published by Scarecrow in those days were offset from typewritten pages, a method that did not make them aesthetically pleasing. Ralph vociferously defended this method, however, and several observers have noted that Scarecrow made available many reference works that otherwise might have gone unpublished. Ralph relinquished all interest in Scarecrow in 1968. It is now a subsidiary of Grolier Educational Corporation.

A prolific writer, Ralph published at least eight books plus a twenty-two-volume *American Bibliography, 1801-1819*, and many articles. For his last work, he translated and edited Richard Muther's *German Book Illustration of the Gothic Period and the Early Renaissance (1460-1530)*. So prolific a writer was he that a complete bibliography of his works has yet to be compiled. Linda Leff, Ralph's grandniece and candidate for a master's in library science at the University of Hawaii, is in the process of doing just that. A selected bibliography which she prepared accompanies this essay.

A man of many facets, Ralph enthusiastically threw himself into the work of the American Library Association from the beginning of his career. He even became the organization's president in 1956-

## APHORISMS OF RALPH SHAW

Every time we don't think a job through and do it right,  
we think up a new name for it.

Our basic task, regardless of the kinds of libraries in which  
we work, deals with books for people.

The shortest distance between two points is around all  
the angles.

Why do efficiently something that doesn't need to be done  
at all?

Each person under you should be smarter and abler than  
you about what he does.

Parkinson's Law is what happens in the absence of good  
personnel administration.

We often substitute cooperation for thinking through the  
whole problem.

Anything beyond the copyright notice itself is bullying.

There is no way for a person to commune with a computer  
tape to find things he is not looking for. Giving a person  
profiles of stuff he knows he's looking for is only about  
50 percent of the job.

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1957, despite his dislike of the  
association's bureaucracy.

Ralph's unique combination of  
interests as an inventor, librarian,  
and publisher brought him face to  
face with copyright issues, and so  
he became an expert in the field.  
His doctoral thesis, submitted to

the University of Chicago in 1950,  
was entitled *Literary Property and  
the Scholar*. In his last year Ralph  
published a brilliant analysis of the  
celebrated Williams & Wilkins  
copyright case in *American  
Libraries*.<sup>10</sup>

People were often hard pressed

to understand Ralph's attitude towards computers in the library. Although he adapted and invented machines to do library work, he frequently and vociferously denounced library applications of the computer. When he went to the University of Hawaii as head of its new library school and of its university library, Ralph unceremoniously threw out a brand-new IBM circulation record system and replaced it with an efficient manual system he designed.<sup>11</sup> But he was not against computers *per se*. He was anxious to be shown improvements that would result only from their installation. He liked to tell a story about a library that analyzed its operations in order to put in a computer. The analysis resulted in such a massive clean-up of bad procedures that the computer was found to be unnecessary.<sup>3</sup>

A pioneer, a courageous advocate of controversial causes, a

distinguished professor, internationally known librarian, inventor, information scientist, copyright law expert—all these and more was Ralph Shaw. Ralph was dedicated to keeping librarianship a service occupation. All of his inventions were service-oriented ideas to make the library system work better for patrons. He was fond of asking, "Why do we have a dichotomy between what's good for people and what's good for the library?"

His concern for people carried over into his personal life. Though we were not close personal friends, Ralph visited my son in a hospital in Hawaii after he was wounded in Vietnam. Ralph not only cheered Stefan up but, in his typical take-over fashion, made certain that he was getting the best care possible. Ralph was a person who enriched the lives of those who knew him, and I am happy to have had this opportunity to pay homage to him.

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Courtesy of Linda Leff