"A Brilliant Mind": Margaret Egan and Social Epistemology

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ABSTRACT

Margaret Egan (1905–59) taught at the Graduate Library School of the University of Chicago (1946–55) and at the School of Library Science at Western Reserve University in Cleveland, Ohio (1955–59). With her colleague Jesse Shera, Egan wrote "Foundations of a Theory of Bibliography" for *Library Quarterly* in 1952; this article marked the first appearance of the term "social epistemology." After Egan's death, Shera has often been credited for the idea of social epistemology. However, there is ample evidence to show that it was Egan who originated the concept—one that is commonly viewed as fundamental to the theoretical foundations of library and information science.

1. INTRODUCTION

In the April 1952 issue of *Library Quarterly* (*LQ*), Margaret Egan and Jesse Shera of the University of Chicago's Graduate Library School copublished what came to be regarded as a seminal article in the history of library and information science (Egan & Shera, 1952). Seven years later Egan had died, and Shera was left to develop the arguments begun in 1952 (see, for example, Shera, 1960, 1968a, 1970a). Over the last half century, citations have occasionally been made to the original article; more often than not, however, the citations have been to Shera's sole-authored publications in which he refines the ideas presented in 1952. It is Shera's name that seems to have become associated in common consciousness with the ideas contained in the original article. Yet there are indications—deriving in part from Shera's own statements—that Egan deserves rather more credit than she has historically received. In this article, I examine the hypothesis that it

is time for the balance of credit to be redressed. I begin by summarizing the contributions made in the 1952 article; I will then outline the methods that may be used in determining the nature and extent of Egan's intellectual influence on Shera. I conclude with an evaluation of Egan's oeuvre.

2. "Foundations of a Theory of Bibliography"

Essentially, what Egan and Shera do in "Foundations of a Theory of Bibliography" is to identify a gap in the disciplinary landscape and fill it with the "new discipline" that they call "social epistemology" (Egan & Shera, 1952, p. 132). They situate social epistemology on the one hand in relation to economics and on the other in relation to sociology, psychology, and traditional epistemology (Egan & Shera, 1952, pp. 132–133). Just as economics emerged as a theoretical framework for the study of the production, distribution, and utilization of various kinds of *material* products, Egan and Shera propose social epistemology as a theoretical framework for the study of the production, distribution, and utilization of *intellectual* products (Egan & Shera, 1952, pp. 133–134). They also invoke Parsons's structural-functionalist analysis of individual action in terms of three "modes of orientation"—the cognitive, the goal-directed, and the affective—to conclude that, while sociologists study goal-directed and affective behavior at the social level, psychologists study goal-directed and affective behavior at the individual level, and traditional epistemologists study cognitive behavior at the individual level, in no existing field have scholars attempted to study cognitive behavior at the social level, despite the primary importance of the cognitive mode in determining the structure of society (see table 1) (Egan & Shera, 1952, pp. 130–132).

The object of study of the cognitive mode is the process by which the actor attempts to know (or, as Egan and Shera put it, to enter into a relationship of "knowing" with) the particular situation in which the action takes place. They thus define social epistemology as "the study of those processes by which society *as a whole* seeks to achieve a perceptive or understanding relation to the total environment" (Egan & Shera, 1952, p. 132, emphasis in the original).

It is specifically at this social level that what Egan and Shera distinguish as the instruments of graphic communication and the instruments of bib-

Table 1. The Relationship of Social Epistemology to Epistemology, Psychology, and Sociology.

Mode of orientation	Level of analysis	
	Individual	Social
Cognitive	Epistemology	Social epistemology
Goal-directed	Psychology	Sociology
Affective	Psychology	Sociology

liography play important roles (Egan & Shera, 1952, p. 128). By "graphic communication" Egan and Shera denote the means by which actors come to know situations that are beyond their immediate perceptual experience; by "bibliography" they denote the means by which the knowledge of individuals may be coordinated and integrated so that society as a whole may "know" in a transcendent way. Today we would refer to the instruments of graphic communication as documents; the instruments of bibliography are services such as libraries, indexes, and information retrieval systems. These are the intellectual products whose production, distribution, and utilization are the objects of analysis of the new discipline.

For Egan and Shera, the goal of engaging in social epistemology is to lay the foundation for intelligent social action, by making it possible for systems of bibliographic services to be planned and implemented at the national level, so that individual components are coordinated and integrated rather than separated among distinct groups of users (Egan & Shera, 1952, p. 134). Egan and Shera propose three areas of inquiry as contributing to the achievement of that goal (Egan & Shera, 1952, pp. 135–136). The first of these is what Egan and Shera call "situational analysis," what we might today call "information needs analysis," in which methodologies are to be developed for classifying situations on the basis of the information needs exhibited by the people who typically find themselves in those situations. The second area of inquiry is what Egan and Shera call "analysis of information unit," what we might today call "knowledge organization," in which methodologies are to be developed for classifying documents on the basis of their content. Egan and Shera recognize that the results of this kind of analysis are essential not only for the development of automated information retrieval systems but also for the compilation of statistics on the production, distribution, and utilization of documents. The latter—essentially a call for the application of methods of measurement, which we would now refer to as "bibliometrics"—forms the third area of inquiry making up the new discipline (Egan & Shera, 1952, p. 134).

In summary, then, we may identify the following major contributions made in this seminal paper:

1. The ultimate goal or end of library service—informed social action—is explicitly identified, and the extent to which bibliographic services contribute to this end is established as the primary criterion by which they may be evaluated.
2. A theoretical framework is sketched out for the study of information-seeking behavior, knowledge organization, and bibliometrics, setting the scene for the subsequent treatment of that framework as a theoretical foundation for library and information science.
3. The term "social epistemology" is used in the published literature for what appears to be the first time—a full thirty-five years before phi-

losophers such as Goldman and Fuller will reclaim the term from the librarians (see, for example, Goldman, 1987; Fuller, 1988).

3. The Question of Attribution

It is interesting to note, as we have already done, that Shera is often credited for the idea of social epistemology, to the extent that Egan is occasionally entirely written out of citations to the 1952 article. It sometimes seems as if Shera was himself only too conscious of this injustice. In particular, he is careful in his entry on Egan for the *Dictionary of American Library Biography* to credit Egan for the idea that underlay their jointly authored paper. "'Social epistemology'," he says, "both the term and the concept, were hers, but because I have given it wide currency, despite frequent disclaimers, it has generally been attributed to me" (Shera, 1978, p. 159).

We may well ask: What was the frequency and nature of the disclaimers to which Shera refers here, and how did they affect the form of citations by others to the original 1952 article and to Shera's later refinements of the concept of social epistemology? A quick look at the citation indexes can help us here.

Data on publications that cited "Foundations of a Theory of Bibliography" (FTB) during the years 1952 through 1955 is unavailable since the coverage of the Institute for Scientific Information's (ISI) *Social Sciences Citation Index* (*SSCI*) extends back only to 1956. But we can draw a fairly accurate picture of the extent to which FTB has been cited since 1956 by making combined use of the print and online versions of *SSCI*.

In its form as a journal article in *LQ*, FTB has been cited in the literature indexed by ISI on 17 occasions. In 13 of these instances, Egan was correctly cited as the primary author; on the remaining 4 occasions, Shera was incorrectly cited either as the primary author or indeed the sole author of FTB. These data, however, do not provide a complete picture, since FTB was reprinted in at least two collections. One of these—a relatively obscure collection edited by Brenni (1975)—need not concern us further since it appears that no one who has cited FTB has chosen to cite it in its Brenni incarnation (Egan & Shera, 1952/1975). The other collection, however, is much more widely cited than FTB itself; this is the collection of Shera's essays edited by D. J. Foskett (Shera, 1965) and published as *Libraries and the Organization of Knowledge* (*LOK*). In *LOK,* FTB is presented as a work of Shera's, with a footnote explaining to the reader that it was written "with Margaret E. Egan" (Egan & Shera, 1952/1965).

Unsurprisingly, perhaps, given this slightly misleading mode of presentation, many of the authors who have chosen to cite FTB in its *LOK* form do not mention Egan's contribution in their citations. It is difficult to establish from ISI data alone whether a citation to *LOK* is simply a reference to the whole work, or to a portion of the work, or, if a citation is to a particular chapter, to determine which one. I have identified a total of 53

citations to *LOK* in the literature indexed by ISI between 1956 and 2003, including 9 items that specifically cite FTB in its *LOK* form. The authors of every one of these 9 items credit Shera as the primary, if not the sole, author of FTB. Brookes (1974), for example, in an article about Robert Fairthorne published in the *Journal of Documentation,* quotes a definition of social epistemology taken from FTB that he ascribes to Shera alone. Of a total of 26 citations to FTB, then, fully 50 percent—a remarkable percentage in the circumstances—do a disservice to Egan.

What of Shera's claims that he has always been careful to credit Egan for her origination of social epistemology? In hindsight, it seems that sometimes he was, and sometimes he was not. In his *Sociological Foundations of Librarianship,* the transcripts of the Ranganathan lectures that he sent to India in 1967, Shera says: "I have called this new discipline 'social epistemology,' a term which was, if I remember correctly, originally devised by my former associate Miss Margaret Egan." (Shera, 1970a, p. 85). More typically, however, Egan's name is nowhere to be found. In the bibliography of his article published in the *Journal of Documentation* in June 1974, for example, Shera says this: "A quarter of a century ago, a few of us in the profession were urging a *macrocosmic* approach to the philosophy of bibliography as opposed to the existing *microcosmic* view. . . . Macrocosmic bibliography . . . would view bibliography as one of the basic instruments of the total communication process throughout society" (Shera, 1974, emphasis in the original). The reference provided? "Foundations of a Theory of Bibliography," written by J. H. Shera.

In another paper collected in Foskett's compilation, "Social Epistemology, General Semantics, and Librarianship" (Shera, 1960), originally published in the *Yearbook of the Institute of General Semantics* in 1960, reprinted the following year in *Wilson Library Bulletin,* and often cited by those wishing to specify an authority for the use of the new term, Egan's name is similarly absent. And in his paper entitled "An Epistemological Foundation for Library Science" (Shera, 1968a), presented at a symposium at Syracuse University in 1965 and which repeats some of his earlier material on social epistemology, Shera again resists citing Egan; he says that the new discipline that is "here envisaged" is one that "for want of a better name, has been called *social epistemology*" (p. 8, emphasis in the original). In the revised version of this paper that was published as chapter 4 of his *The Foundations of Education for Librarianship,* Shera does take the opportunity to insert at this point the line "Margaret Egan originated the phrase," and he includes a footnote: "So far as the present writer knows, Miss Egan never used the phrase in any published writing, but she used it frequently in class lectures and in conversation" (1972, p. 112). As a footnote to this analysis, we should also observe that Egan herself, in both of her own articles in which she mentions the 1952 work (Egan & Henkle, 1956; Egan, 1956a), cites it using the self-effacing form "Shera and Egan."

Meanwhile, those authors in the philosophical community who are busy constructing their own version of social epistemology are usually satisfied, when it comes to establishing intellectual primacy, with a quick nod to Shera alone. For example, Steve Fuller, perhaps the most well-known philosopher with an interest in social epistemology, cites Shera and *LOK* in a review article entitled "Recent Work in Social Epistemology" (Fuller, 1996). Egan is nowhere to be seen.

It is clear, then, that despite Shera's best efforts Egan has, to a substantial extent, been written out of the history of the development of the idea of social epistemology. It is my perception, however, that Egan left us with a legacy that deserves rather better treatment, and in the rest of this article I wish to explain why.

4. Biographical Details

Margaret Elizabeth Egan was born on March 14, 1905, in Indianapolis, Indiana, to Frank L. and Mary Elizabeth Treat Egan (Shera, 1978). She was employed as readers' advisor at Cincinnati Public Library from 1933 to 1940 and obtained a B.A. from the University of Cincinnati in 1939 before going on to do graduate work in the Department of General Studies at Yale University (1940–41) and in the Graduate Library School (GLS) of the University of Chicago (1941–43). In 1943 Egan joined the Industrial Relations Center of the University of Chicago as librarian and began teaching part-time in the GLS. She was appointed by Ralph Beals as a full-time assistant professor in the GLS in the fall of 1946, and she served as an associate editor of *Library Quarterly* under the managing editorship of Leon Carnovsky from 1952 to 1955. Shera brought Egan to join him in the School of Library Science at Western Reserve University in Cleveland, Ohio, in 1955, initially as a research associate of the newly formed Center for Documentation and Communication Research (CDCR) and subsequently (from 1956) as an associate professor. Egan died of a heart attack on January 26, 1959, at the age of 53.

It is instructive to compare Egan's career trajectory with that of her friend and colleague. Shera graduated from Yale University with a master's degree in English language and literature in 1927 before returning to his home town of Oxford, Ohio, initially as assistant cataloger in Miami University Library (Winger, 1978; Kaltenbach, 1993). He then worked for ten years as bibliographer and research assistant in Miami's Scripps Foundation for Research in Population Problems. Shera attended Chicago's GLS as a doctoral student between 1938 and 1940, graduating with a Ph.D. in 1944 after serving in Washington, D.C., as chief of the Library of Congress's Census Library Project and subsequently in the federal Office of Strategic Services. Returning to Chicago, Shera was appointed by Ralph Beals, a friend from student days and now librarian of the University of Chicago, as the university's associate director of libraries. Egan had already begun

to teach on a part-time basis in the GLS, and Shera was to do the same beginning in 1944 and becoming full-time in 1947. I have not found any evidence to indicate that their two paths crossed before that time, despite their geographical proximity and similarity of professional interests between the years of 1930 and 1938.

In 1952 Shera was appointed dean of the School of Library Science at Western Reserve, where he established the CDCR in 1955. Egan was apparently instrumental in his deciding to leave Chicago for Cleveland. In a 1968 interview, Shera recalled:

> I went back to my office—at that time [the spring of 1952], Margaret Egan and I shared an office because of the shortage of space—and I was talking to her about it and she was sort of encouraging me to apply, and I said, "I don't know." And finally, after two or three days of talking . . . , she just pushed the typewriter over and said, "Here, write, go ahead and write. Apply." And I said, "Okay, I'll go ahead and apply." (Shera 1968b)

Within a few years, Shera had brought Egan to join him in Cleveland; it was at that point that, as he remembered later in a 1970 interview, "we really thought we were going to get down to things" (Shera 1970b). The shock of Egan's death in 1959 affected Shera greatly: "I felt as just half of me had gone. How do I go on without this gal?" (Shera, 1968b). Shera retired as dean in 1970. He died on March 8, 1982, at the age of 78.

5. RESEARCH METHODS

In attempting to determine the nature and extent of Egan's intellectual influence on Shera, we can treat the idea of social epistemology as a kind of case study. But there are several difficulties inherent in conducting intellectual history of this kind. Suppose that we wished to gather evidence that would allow us either to press or to comfortably ignore the claim that it is Egan rather than Shera whom we should thank for originating the concept of social epistemology. On the one hand, we have Shera himself graciously deflecting the credit in Egan's direction. We also have what we may simply infer from the order of names in the statement of authorship attached to the *LQ* article. Shera and Egan coauthored eleven publications (see the appendix) and took care in three cases to specify Egan as the first (and, by implication, primary) author. On the other hand, we have the fact that it was Shera, not Egan, who revisited and developed the themes of the *LQ* article on multiple subsequent occasions. What methods do we have at our disposal that might provide further clues as to the nature and relative extent of the debt that library and information science (LIS) owes to Egan for her contribution to the discipline's theoretical foundations? I shall briefly discuss a few options that ultimately proved unproductive for the current study before moving on to describe a more fruitful approach.

5.1 Quantitative Analysis

One possibility would be to take a quantitative approach. Such an approach might involve, for instance, a citation analysis in which the citation "identity" (White, 2001) formed by the set of authors cited in publications authored by "Egan & Shera" is compared with the identities formed by the sets of authors cited in publications authored by "Shera & Egan," by Egan alone, and by Shera alone. If the "Egan & Shera" set were found to be most similar to the "Egan only" set, we might be led to conclude that the order of names in the statement of authorship accurately reflects the actual weight of contribution of the two individual authors to coauthored publications, or even (depending on the strength of similarity) that "Egan & Shera" articles should be treated more as "Egan only" articles than as truly jointly authored.

Egan and Shera might appreciate the thinking behind this approach given the support for bibliometric studies that they expressed in their 1952 article (Egan & Shera, 1952, p. 134). The potential reliability of such an approach is undermined, however, by the lack of data for comparison. Egan and Shera were writing at a time when the typical contribution to scholarship in LIS was not supported by a multiplicity of footnotes. In fact, in all of Egan's sole-authored publications (including conference papers), the only name that recurs among the citations is John Dewey's. While it would certainly be interesting to determine whether the origins of Shera's own interest in certain writers, such as Dewey, Parsons, and Boulding, can be traced to Egan's introduction of their work to him, the meagerness of the citation data prevents one from confidently drawing any conclusions about the authorship of source articles beyond those that we would normally make.

A separate quantitative approach of a related kind would involve similarly the analysis of couplings of publications—not couplings determined by representing documents as sets of citations, but couplings determined by representing documents as sets of words, phrases, or stylistic attributes (see, for example, Holmes, 1997). The potential attractiveness of such a method is offset by considerations relating to the desirability of articles' texts being made available in digitized form; none of them is currently available in electronic format, and the cost of re-keying the texts for this particular purpose would be prohibitive.

5.2 Qualitative Analysis

It would be most productive to conduct interviews with people who knew Egan and Shera and who could personally comment on the dynamics of their intellectual relationship. Since Egan died almost forty-five years ago, however, it is not getting any easier to identify contemporaries willing to speak on the subject. Nevertheless, given the limitations of the quantitative strategies described above, it would still seem that approaches of a more qualitative nature are more promising.

5.2.1 The Archival Record In the first place, we may consult the existing archival record, in the form of the collections of personal papers, correspondence, and institutional records that are stored in the archives associated with Egan's places of work. Two of the richest sources of data are oral interviews conducted with Shera toward the end of his deanship at Case Western Reserve University (CWRU). The tapes of these interviews, together with written transcripts (full in one case, in summary form only in the other), are available in the university archives at CWRU; H. Curtis Wright (1988) is among those who have analyzed and published extracts from these transcripts.

First, in an interview with Shera conducted in 1968 by Mrs. Gerald H. Ruderman, then a student in the library school at Kent State University, Shera identifies the three people who were, as he puts it, "unquestionably, the ones who have done the most" to stimulate his thinking (Shera, 1968b): the demographer Warren Thompson, who was Shera's boss at the Scripps Foundation; the librarian Ralph Beals, whom Shera knew first as a student in the Graduate Library School at Chicago and subsequently as the director of the University of Chicago's libraries and who brought Shera back to Chicago as an employee in 1944; and Margaret Egan.

The importance of Egan's influence even among this exalted group is confirmed in a second interview with Shera conducted on June 1, 1970, by Ruth Helmuth, the university archivist at Case Western and former employee of the CDCR (Shera, 1970b). Shera says to Helmuth: "a lot of my thinking even today is colored by Margaret's thinking. Brilliant gal really, almost a genius in some ways. And I owe her a tremendous debt, because . . . her influence on my thinking is probably greater than any other. Certainly it's greater than any other about library problems; sure, there's no question about that." At the time he made these comments, Shera was sixty-seven and Egan had been dead for eleven years. We can readily assume that Shera knew personally most if not all of the finest minds that had emerged in library and information science in the midcentury period. His singling out of Egan from this pantheon remains a striking tribute.

Shera went on to write the entry on Egan that appeared in the *Dictionary of American Library Biography* of 1978. Here he states: "Even today, on those rare occasions of contemplating what I have published, I am amazed to find how much of it is her speaking through my own halting prose" (Shera, 1978, p. 159). He also quotes from a letter he received from Ralph R. Shaw at the time of Egan's death: "Hers was one of the truly great minds of American librarianship" (Shera, 1978, p. 159). Winifred Ver Nooy, writing to Shera at the same time, concurs: "She was such a grand person, with such a brilliant mind" (unpublished letter from W. Ver Nooy to J. H. Shera, February 1, 1959. Papers of Jesse Hauk Shera [1903–1982], series 27DD5, box 1. CWRU Archives, Cleveland, OH).

Shera's personal papers are also kept by the university archives at Case

Western. Sifting through multiple series of boxes in Cleveland, one may see firsthand how Shera built his reputation as a correspondent of remarkable wit, honesty, and energy. Yet one may also be confounded by how few references to Egan appear in these papers. When Shera does make reference to Egan—for instance, in the oral interviews of 1968 and 1970—he invariably introduces her as "my old friend and former associate" (Shera, 1968b, 1970b). But among thousands of letters sent to and received from Shera's associates, covering all periods of his professional life, not a single one is addressed to or signed by Egan. One might expect to have encountered at least a few dating from the period 1952–55, when Egan was in Chicago and Shera in Cleveland; but if, indeed, any ever existed, they were not deposited in the archives. I have not been able, as yet, to find out where, if anywhere, Egan's own papers have been kept.

5.2.2 Content Analysis   A qualitative approach of a second kind is potentially the most productive approach of all, and it is that which involves close reading and content analysis of the texts of Egan's works. A review of Egan's first-authored publications, twenty-one in total with five full-length journal articles (Egan, 1937; Egan & Shera, 1949; Egan, 1951a; Egan & Shera, 1952; Egan, 1956b) and seven substantial conference papers (Egan, Butler, et al., 1947; Egan, 1951b; Egan, 1953b; Egan, 1953c; Egan, Focke, et al., 1956; Egan & Henkle, 1956; Egan, 1956a), reveals Egan as a central player in the popularization amongst North American library scientists of the motives, concerns, and research results of the European documentation movement. The late 1940s and early 1950s, of course, were the time of the publication of Bradford's collection of papers (Bradford, 1948) simply called *Documentation,* which Egan reviewed favorably (Egan, 1950) and together with Shera wrote an introduction that was reprinted in later editions (Shera & Egan, 1953); the revitalization of the American Documentation Institute, later to be renamed the American Society for Information Science (ASIS); and the launch of the journal *American Documentation.*

The question posed by the many, including Egan, who recognized the value to society of specialized information in technical fields in science, industry, and commerce was whether the library profession could refine traditional bibliographic tools and techniques for application to the new specialized requirements and in support of scientific research and managerial decision making as well as cultural enrichment. Were the problems faced by special libraries the same as those addressed in general librarianship, or must a new profession emerge (Egan, 1953a)? Egan believed firmly in the unity of the profession; that the library, in its role as a social agency, must surely change as the needs of society change but that its general functions of information provision and bibliographic control are the same whatever the content, structure, or purpose of that information (Egan, 1956b).

Trained as a political scientist at Yale and with a lifelong interest in sociology, Egan was an expert on the history of the development of the be-

havioral sciences. The references in her writings to Parsons, von Neumann, Simon, and so on are no idle name drops. The pervasive influence of the pragmatist philosophers and Parsons's structural-functionalism on Shera's work is no doubt mediated by Egan's interpretation of those writers. Central to the pragmatist ideal are two related claims associated with John Dewey: first, that ideas are valuable only in terms of their instrumentality to an active reorganization of the context; and second, that different groups of people classify ideas differently depending on what they want to do with them. Dewey concludes from these: "Things have to be sorted out and arranged so that their grouping will promote successful action for ends" (1948; cited in Egan, 1953b). From this simple theoretical framework and her interpretation of European documentation, Egan derived the following:

- an assumption that no communication has social value unless it stimulates behavior that has a social impact (Egan, 1951b; Egan & Shera, 1952; Egan, 1953b; Egan, 1956b); and consequently
- a deep appreciation of the significance of the social value of graphic communication (contrasted to direct communication) and receptor-initiated communication (contrasted to mass communication) (Egan & Shera, 1952; Egan, 1956b);
- the view of the library as a social agency, and more specifically of bibliographic service as instrumental in support of the general process of graphic communication, and ultimately in support of the smooth functioning and continued progress of society through its promotion (and, ideally, maximization) of the effective utilization of society's graphic records (Egan & Shera, 1949; Egan & Shera, 1950; Egan, 1951b; Egan & Shera, 1952; Egan, 1956b);
- an understanding that the means by which we can maximize the effective utilization of graphic records is by making them accessible (Egan, 1951b; Egan, 1951a);
- a macrocosmic view of the development of bibliography, such that individual bibliographic tools are integrated and coordinated both in a coherent pyramid that may easily be accessed at any level of generality and in a network that allows movement between subject fields as well as within them (Egan & Shera, 1949; Egan, 1951b; Egan, 1951a; Egan & Shera, 1952; Egan, 1953b; Egan, 1956b);
- a recognition that different types of bibliography serve different purposes for different groups, suggesting the need for studies of what kinds of bibliography there are and what kinds of readers there are (Egan, 1951b; Egan, 1951a; Egan & Shera, 1952);
- a recognition of the need for special librarianship to focus on the distinctive needs of the social sciences as well as on those of the physical sciences, and on the needs of decision-makers in business and industry as well as on those of scholars and researchers (Egan, 1951a; Egan, 1953a; Egan, 1953c; Egan & Henkle, 1956);

- a recognition of the need for the application of subject analysis to the bibliographic control of units smaller than books (Egan & Shera, 1949; Egan, 1950; Egan, 1951b);
- a preference for classification schemes rather than alphabetical lists of subject headings and for faceted schemes rather than enumerative schemes as potential solutions to the old problem of constructing a single standard scheme of universal applicability (Egan, 1950; Egan, 1951b; Egan, 1953b);
- (in a pair of remarkable conference papers published in 1956 that are still highly relevant today) an appreciation of the importance of library schools in educating the future producers and managers of bibliographic services in the methods of dealing with social change. Here, Egan develops a model of the profession of librarianship as art not science, as one that crucially involves the use of judgment in the application of its body of principles (Egan, Focke, et al., 1956; Egan, 1956a);
- finally, a recognition of the importance, since there is no basic science underlying LIS as biology underlies medicine, of creating a theoretical framework for it rather than borrowing one or several from other fields (Egan, 1956a)

Those readers who are familiar with Shera's later work will notice that each of these ideas is a conspicuous element of the intellectual legacy that is more usually attributed to Shera than to Egan.

6. Conclusion

Shera (n.d.) wrote that it was in her position as librarian of the Industrial Relations Center in Chicago that Egan "began seriously to develop her philosophy of special librarianship and documentation." "Philosophy" is a word that is often used to describe the mode of Egan's thought. Whether it is considered appropriate or not to evaluate her conception of social epistemology as a philosophical theory, we can surely conclude that despite the small number of formal citations to Egan's work, the influence that her ideas had on the development of LIS as a discipline, largely through Shera's mediation, was great in both quantitative and qualitative terms. The life and work of this pioneering woman of information science warrants further attention.

Appendix: Bibliography of Egan's Published Works

The references in this bibliography are arranged in chronological order. Where two dates of publication are given, the first is the date of original publication, for which a separate reference is also provided in the bibliography. The forty items listed here include nine reprints not counted in Table 2, which tabulates the distribution across publication type of the works that Egan authored or coauthored.

Table 2. Frequency of Publications Authored by Egan

	Books	Book chapters	Journal articles	Conf. papers	Magazine articles	Book reviews	Reports	Edited works	Editorial matter	Letters	Total
Egan only			3	4	1	4		1	1		14
Egan & Shera			2			1					3
Shera & Egan	1	1	1			1	2	1	1	1	9
Egan & others				3			1				4
Others & Egan	1										1
Total Egan first author			5	7	1	5	1	1	1		21
Total Egan	2	1	6	7	1	6	3	2	2	1	31

Egan, M. E. (1937). An experiment in advisory service and graded reading in the C.C.C. camps. *Library Quarterly, 7*(4), 471–491.

Fihe, P. J., Egan, M. E., MacLean, H. H., & Chancellor, J. M. (Eds.). (1939). *Books for adult beginners; Compiled by the staff of the Readers' Bureau of the Cincinnati Public Library.* Chicago: American Library Association.

Egan, M. E., Butler, P., Davies, D. W., Keck, L. L., & Whitmarsh, A. (1947). Special materials: A symposium. In H. H. Fussler (Ed.), *Library buildings for library service: Papers presented before the Library Institute at the University of Chicago, August 5–10, 1946* (pp. 71–75). Chicago: American Library Association.

Egan, M. E. (1948). [Review of the book *How to take, keep and use notes,* by J. Edwin Holmstrom]. *Library Quarterly, 18*(4), 298.

Egan, M. E., Wheeler, J. L., Bennett, W., & Shera, J. H. (1948). *Survey of the Saginaw Library System: Final report.* Saginaw, MI: Hoyt Memorial Library.

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