The roots of library science in the internal and external discourse of Historia Literaria in Germany

The study aims at assessing the role of Historia Literaria’s internal discourse of librarianship and of the discourse of librarianship which is external but concurrent to Historia Literaria in genesis of German library science in the 18th and 19th centuries. An attempt is made to establish to which of these two traditions library science may best be attributed. First, the position of writing on librarianship, Re Bibliothecaria, within Historia Literaria is assessed. The doctrine of Historia Literaria and the position of Re Bibliothecaria therein is reconstructed. Further, writing on library matters outside of Historia Literaria is described and reconstructed. On the basis of a comparison of the reconstructed discourses the conclusion is made that the main root of German library science is in the soil of the discourse of librarianship external to Historia Literaria.

1 Introduction

The history of library and information science has been the subject of relatively little research. Its earliest stages, in particular, have received little attention. Generally its starting point has been taken to be Martin Schrettinger’s well-known work Bibliothek-Wissenschaft (1808-29) (1). This has usually been done by virtue of the name alone. The scientific nature of the work is, however, to say the least, debatable. It is a systematic treatise of the principles of librarianship. But in its time it had an epoch-making role in the German library world. In spite of the name of the work, it was the first really serious attempt to present these principles in an axiomatic way. Although Schrettinger’s work has been named as the genesis of German library science, there have been writers who propose to seek its roots from the old history of learning, Historia Literaria (2; 3). It was popular in Germany in the eighteenth century (4, p. 658). It was considered as a library discipline per definitionem to be mastered by every man responsible for a library (5, p. 171; 6, p. 64-65). It has also been shown by some writers that librarianship has been treated in the works of Historia Literaria, and that there are connections between Historia Literaria and librarianship (2; 7; 8; 9). Their specific relationship has, however, remained open. Open is also the question of the position of librarianship
in Historia Literaria. Neither is it clear what kind of a role did library discourse within and outside Historia Literaria have in the development of German library science. The development of librarianship as an independent profession and discipline corresponds to the scientific change in the eighteenth century when the polyhistorical scholar was required to give way to the specialist. Librarianship in theory and practice (writing and care) was at that time the duty of polyhistorical scholars. Its aim was to support their efforts towards broad scholarship and help them in taking care of libraries. Librarianship had its own role in Historia Literaria. It was a way of disseminating knowledge about books in order to help the scholars to keep up to date with the publications. The polyhistorical approach was at that time typical of all writings on libraries. The knowledge of books was seen as the basis for taking care of libraries. When the specialization of sciences broke the foundations of Historia Literaria, it opened the way for librarianship to develop into an independent profession and discipline. Library ideology based on book knowledge was changed to ideology emphasizing library techniques. The aim of the article is to elaborate our view of this change. When examining the history of library science, one has to bear in mind that the conception of science in the 18th century was not similar to our understanding of it today. One has to apply the criteria typical of the time under consideration. In this case we do not mean by science the systematic body of knowledge formed by the scientific method, consisting mainly of theories. This is a rough characterization of our way of understanding science today. In this study we use “science” to refer to the totality of knowledge, which consists of systematizations and principles about the phenomenon under consideration based on practical experience or a classifying method (cf. 10, p. 83; 11, p. 61). When applied to library science, it refers to efforts to form principles of librarianship and present them in a systematic way. Usually this undertaking was not based on the scientific method but on abstractions and generalizations based on practical experience. The aim was to create a theory of librarianship. Library science was understood as a systematic body of knowledge about librarianship. Those who wrote about taking care of libraries before Schrettinger, did not call their presentations library science. They wrote about librarianship or Re Bibliothecaria, library matters. The texts were more or less systematic attempts to handle different aspects relevant to libraries in the spirit of Historia Literaria. In this presentation that conception is usually referred to by terms “library matters” or “librarianship.” “Library science” is used to refer to the new conception of librarianship paradigmatically represented in Schrettinger’s work “Bibliothek-Wissenschaft.” This article is based on the author’s wider research project on the subject (12). What is presented here is a limited summary of the principle findings. The aim of the present study is to assess the role of both internal and external Historia Literaria discourse of librarianship in the genesis of German library science. An attempt is made to establish to which degree library science may best be attributed. First, the position of writing on librarianship, Re Bibliothecaria within Historia Literaria is assessed. Further, writing on library matters outside Historia Literaria is described. The sources used are the principle works of Historia Literaria. The separate discourse on librarianship is constructed by detailing its major works which appeared contemporaneously. By comparing these traditions a conclusion can be made about their relation to German library science. The examination is confined to Germany in the 1700’s and the beginning of the 1800’s. The choice of country is naturally dictated by the interest in the roots of German Bibliothekswissenschaft. Furthermore, Germany is the country in which the development of Historia Literaria was strongest. This was emphasized continually in many works on the subject (13, pp. 657-658; 14, pp. 333-335). The 1700’s were the Golden Age of Historia Literaria. It was a fashionable science which also established itself in the universities (4, p. 658). The first half of the 1800’s, however, was fatal for Historia Literaria leading to its atrophy. This was the time at which library science was making its first tentative attempts to create living space for itself as an independent science.

2 Historia Literaria

Francis Bacon is generally held to be the founder of Historia Literaria (15, p. 106). In The Advancement of Learning (1605) (16) he describes its purpose, object and modus operandi. Bacon took the view (16, pp. 79-81) that the pursuit of knowledge promotes well-being. He therefore endeavours to find means of removing obstacles to the development of knowledge. The main obstacle was the lack of a survey of which areas had already been explored. A survey of learning would help to direct scholarship towards those unexplored areas with a view to making use of them for the benefit of humankind. Indeed, Bacon calls for effort to be directed towards the writing of an account of human knowledge. His aim was to use this to gain overall ascendency over the field of learning (17, p. 97).

Bacon named this history of learning Historia Literaria. The new science was to research and compile from records of the past, where and when there had been a flowering of art and science. It was to describe their birth, development, decline and rebirth. The description was to include in the case of every science the reason for its invention, its origin, the handing down of tradition and the course which studies had taken. There was to be an account of the most important writers, works, universities and learned societies. Thus there was to be a description of everything which bordered on the province of learning (16, p. 82).

In Germany there were many who were willing to realize Bacon’s ideas. However, although they swore by his name they did not adhere to his tenets (15, p. 111, pp. 211-212; 18, pp. 414-415). They did not write the history of science and scholarship as a development of theories, as Bacon would appear to have demanded, rather the German tradition in Historia Literaria took the form of information on book titles (19, pp. 59-60). It was called booktitle scholarship (20, p. 78). The Historie der Gelehrsamkeit, or Literargeschichte, as it was called, concentrated in its works, which might consist of numerous volumes, on the most notable scholars and their writings (7, p. 90; 9, p. 73). The literature referred to the best writings in the various branches of learning. Its approach was thus both biographical and bibliograph-
The works were principally lists of the writings of the most prominent scholars, accompanied by scant commentaries (9, p. 73; 19, pp. 67-68). They disseminated biographical and bibliographical information on various fields of learning, frequently presented in chronological order.

Although the writers of *Historia Literaria* structured the mass of separate biographical and bibliographical facts in different ways, among these by discipline or by nationality, the works continued to be a collection of separate facts (3, p. 72-73; 21, p. 60). They did not examine books as to content but as physical objects on the basis of their external features (9, p. 74; 19, pp. 59-60). *Historia Literaria* took little interest in the contents of the books it mentioned. It was constrained by the extent of the goal it had set itself (7, p. 117). This was to present the history of scholars and scholarship from the Fall until the contemporary age (19, pp. 70-71). The attempt to encompass the totality of knowledge caused the content to be reduced to the names of the works. This attempt at a survey of learning, or *Uebersichtlichkeit* as the Germans have frequently called it, led from conceptual mastery of knowledge to its bibliographical mastery. As the amount of knowledge began to exceed human capacity, knowledge of books as knowledge of titles became a justifiable form of knowledge (9, p. 74).

The way the works of *Historia Literaria* treated their subject presenting title knowledge, continued to the beginning of the nineteenth century, although in many treatments the writers expressed their hope to handle the subject in a substantial way. Many of them made a distinction between title knowledge, which they called historical, and a more content oriented approach named critical knowledge (cf. 7, p. 108). Although the intention was to create more substantial treatments of history of scholarship, the constant method was listing of books. This was due to the infeasible task to write the universal history of learning.

A reason for the popularity achieved by *Historia Literaria* was that it was in line with the needs of the learned. The scholarly ideal was polyhistory, i.e. the scholar was expected to be aware of the existence of knowledge in its entirety, but was not expected to know everything. The general requirement was that he should have mastery over subjects relating to his own field (*Fach*) and over other necessary knowledge (12, pp. 4; 13, pp. 10-11). Studies at the lower, artistic faculty were among the knowledge deemed necessary. A scholar possessing a wide knowledge of these required subjects was regarded as a polyhistorian (9, pp. 71-72). The increase in the amount of knowledge and publications was a continual treat and challenge to the ideal of broad learning. *Historia Literaria* was a means by which scholars could maintain their control of the flood of knowledge.

### 3 Knowledge of books in *Historia Literaria*

In addition to the history of scholarship and scholars, the third part of *Historia Literaria* was knowledge of books, *Notitia Librorum* or *Buecherkenntnis* (19, p. 59). It taught extensively knowledge of books, methods of acquiring book-learning, criteria for good books and also included knowledge of librarianship, *Re Bibliothecaria*. It included writings on library theory which are of interest from the point of view of the development of library science.

The role of *Notitia Librorum* springs from Bacon’s definition of the content of *Historia Literaria*. In addition to a survey of learning there should be compiled “an account of the principle authors, books, schools, succession, academies, societies, colleges, orders, in a word, everything which relates to the state of learning” (16, p. 82). This really has more to do with the institutionalized contexts of learning than with pure knowledge of books. It covers a much wider area than suggested by *Notitia Librorum*. For the most part, however, it was taken to consist of the narrower knowledge of books.

The study of scholarly writings presupposed a knowledge of books in the sense knowing about books, and this primarily bibliographical approach to literature was termed *Notitia Librorum* (19, p. 59). In practice the term was often used to refer to awareness of the authors and their works. It was undoubtedly a matter of knowledge of books and of disseminating information about related tools rather than information about what books contained and mastery of this (8, pp. 113-114). Knowledge of books was a means by which to obtain knowledge about sciences. The line of reasoning progressed very clearly. Knowledge of books was a step towards entry into the central literature on a subject and to secondary sources. Through these it was possible to assimilate knowledge from various sciences, through which in turn new truths could be established (8, p. 53; 23, pp. 23-24; 24, p. 239; 25, p. 6). Knowledge of *Historia Literaria* was placed in between knowledge of books and knowledge of the various fields of science. Knowledge of the history of science was seen to be an important part of the mastery of fields of science themselves.

The basic premise in the works of *Historia Literaria* was that all detailed study must be preceded by a general survey of knowledge in the field, and that this can best be achieved by an historical survey of the scholarly literature since its beginnings (19, p. 67). This conception was common during the nineteenth century especially in the humanities, although its influence diminished towards its end.

The nature of knowledge of books was usually divided into two, viz. historical and critical (7, pp. 108, 132; 23, pp. 23-24; 26, pp. 725-726; 27, pp. 181-183; 28, pp. 35-41). The former includes external qualities of the book, the name of the writer, the country of origin, profession and length of life, anonymous scholars and those using a pseudonym, the subject of the work and the assessment of scholars of the way in which it has been compiled and the way in which it is written. Critical knowledge of books makes it possible to establish whether the writer has chosen a worthy subject and whether he has treated it exhaustively, whether he has used the correct mode of writing and whether he has presented anything new or whether he has made mistakes.

Batts (19, pp. 12-13) proposes two main dimensions in the concept of bibliography. One has to do with the enumeration of works with the same characteristics, while the other examines particular characteristics of the books as physical objects. He refers to the former as enumerative bibliography. Here the works mentioned are required to have at least one common characteristic, the listings are perfect and in logical order. It is therefore a catalogue of books. The latter he differentiates as an
analytic bibliography meaning examination of individual volumes as physical objects in order to define precisely the requirements of their production and history. Historical knowledge of books deals principally with knowledge of books as physical objects. It is interested in its external qualities. It therefore takes its place in Batt's conception in the realm of analytical bibliography. Although historical knowledge of books would appear to embody certain elements of bibliographical description such as author and title, these do not here fall into the category of enumerative bibliography. They are rather connected to information on books as physical objects. It is the aim of historical knowledge of books to describe them as physical objects. Critical knowledge of books means a weighing up of their scientific or at least their content value. Knowledge of books may therefore be divided into knowledge of books as objects and knowledge of the value of their contents.

The works of Historia Literaria were derived, as was usual at that time, from lectures delivered (29, p. 47). They were praised by scholars like Leibniz and Goethe (30, pp. 33, 48), and seen as an aid to professors and students alike. If professors should fail to mention the literature of their own discipline, there was a need for works which gave a clear picture of the principle writings and writers (26, pp. 724-725). Considering the weakness of bibliographical aids this praise was hardly surprising. No systematic efforts had been made to produce either special or general bibliographies. Those which did exist were inadequate in both scope and cataloguing (26, pp. 733-735; 27, pp. 192-197). Library catalogues were also frequently in dubious condition (31, pp. 121-122). Because of the inadequacies of secondary sources scholars needed compiled information about general and specialized bibliographies and other catalogues. Notitia Librorum did not only provide help in gaining access to bibliographical information about books through secondary sources, but also guided scholars towards a concrete knowledge of the literature. Scholars were encouraged to visit libraries, bookshops and book auctions and to examine the catalogues. No work which came to hand was to be ignored (27, pp. 191-211; 32, pp. 449-450; 33, pp. 6035-6040; 34, pp. 3-12). It was seen as desirable that extensive learning should be accompanied by extensive knowledge of book titles. A scholar was required to be familiar with the titles at least of the canon of literature. Catalogues were no substitute for memorized information, although they might be referred to in cases of lapse of memory. Notitia Librorum lightened the scholar's load by supplying instructions for reading in order to achieve a wide knowledge of the literature. Notitia Librorum lightened the scholar's load by supplying instructions for reading in order to achieve a wide knowledge of the literature. Not all books were to be read cover to cover. Knowledge and assessment were also possible by reading only the preface, list of contents, the summary and the index (32, pp. 449-450; 33, pp. 7-9; 35, pp. 6-7). It was historical knowledge of books. In addition to skimming through, critical knowledge afforded by the former was seen to be an acceptable basis for knowledge.

4 The position of Re Bibliothecaria in Historia and Notitia Literaria

Those who wrote the history of learning did not directly express their views on the role of Re Bibliothecaria within the knowledge of books. Its inclusion may be motivated in a few sentences but it is not defined. Its position in the structure of Notitia Librorum may be analyzed through the way in which the works are divided, and also from the lists of contents. The representatives of Historia Literaria do not either define directly the content of matters pertaining to libraries. This content must be reconstructed from the matters relating to libraries dealt with by the historians of learning. Taken together with the rare motivating references this leads towards an understanding of why Re Bibliothecaria has been annexed to Notitia Librorum. The inclusion of matters pertaining to librarianship in Notitia Librorum and thus also in Historia Literaria indubitably results from the fact that books were seen to be the most important tools for scholars (4, p. 650; 6, p. 59). Libraries were the most important place for storing them, be it the scholar's private library or an academic library. They afforded a central means of obtaining literature and acquiring knowledge of books by facilitating the skimming of works and examination of catalogues. Fabricius (26, p. 812) makes indirect reference to this line of thought by stating that since knowledge of books constitutes a great part of Historia Literaria, it is as well to present the most essential and useful information on libraries. Likewise Reimmann (27, pp. 89-90) states that Historia Bibliothecaria is relevant to Historia Literaria. By Historia Bibliothecaria he (27, pp. 214-216) means matters and writings pertaining to the history and care of libraries in general. He mentions (27, p. 176) that knowledge of libraries (Historie der Bibliotheken) is of assistance in seeking and finding the best and rarest works. The historians of learning accounted for the connection by simply stating that Historia Bibliothecaria was of use to Re Literaria (33, p. 520). The connection was presented as self-evident. The works of Historia Literaria contain little on library work. Mention is generally confined to the bare essentials, although in some places enthusiasm for a more comprehensive discussion of knowledge of libraries may be evinced. General and superficial treatment is common to all. The writers most commonly include within the sphere of Re Bibliothecaria definition of the term "library," thereafter equally frequently organization and catalogues of libraries, their history, a list of distinguished libraries, the duties of librarians, and to some extent less frequently the formation of collections, the use of libraries and the presentation of writings about libraries (24, pp. 261-277; 26, pp. 811-821, 846-848, 880-884; 33, pp. 520-550; 35, pp. 59-65; 36, pp. 399-403).

The scientific position of Re Bibliothecaria depends on the nature of Historia Literaria. Because Historia Literaria was at the time ranked as a science, the same status may be accorded to its contributory element, Re Bibliothecaria. Historia Literaria was lectured on at the universities as a propaedeutic subject (29, p. 47). It is therefore equated with other subjects of the philosophical faculty, whose status was not as high as that of the three upper faculties (37, pp. 41-43). The subjects of the
philosophical faculty were, however, considered to be sciences. It may therefore be assumed that library science, by virtue of the parent discipline, enjoyed scientific status, although possibly not quite as high as that of the parent discipline.

When embarking upon an account of the field of *Re Bibliothecaria* the two meanings of the term *bibliotheca* present an obstacle. It is used to refer to both collection and catalogue (8, p. 58). Writers make usually a distinction between catalogues and library matters (cf. 7, p. 90). Special bibliographies, *bibliothecae* are presented in connection with both subjects. General catalogues, like general bibliographies and catalogues of libraries are commonly treated among the general aids of *Historia Literaria* (24, pp. 289-290; 26, pp. 660-665; 36, pp. 399-403). The solution underlines the role of book lists as general aids for scholars. Although matters pertaining to libraries do merit a section of their own, they are primarily tools serving knowledge of books and learning. Their function is to facilitate the arrangements for obtaining books. They do not have an intrinsic value.

*Re Bibliothecaria* was often divided into two parts, the organization of libraries and their history. Denis (36, pp. 399-401) refers to them as theoretical and historical respectively. They might also be termed librarianship (*Bibliothekslehre*) and library history. The theoretical part included definition of the term "library," organization of libraries and catalogues, lists of best libraries, characteristics and duties of the librarian and, less frequently, formation of the collection and use of the library. Library history presented a very limited account of the history of libraries (24, pp. 261-277; 26, pp. 811-821, 846-848, 880-884; 33, pp. 520-550; 35, pp. 59-65; 36, pp. 399-403). On occasion this might include information about the collections and catalogues (22, pp. 18-21; 35, p. 63).

The information provided on librarianship was general because it was intended as support for students and scholars in their acquisition of knowledge of books (28, pp. 40-41). One has to remember that *Historia Literaria* had a propagandistic role in the university teaching (29, p. 47). There was apparently no attempt to enhance the reader's skills in librarianship. Not much was said about the principles of selecting books or about their arrangement on the shelves. Even less space was devoted to classification systems and cataloguing, although some few writers mentioned different types of catalogues. The information given was of a very general nature supposed to be of use to scholars. In the presentation of the various subsections reference was made, as is typical for *Historia Literaria*, to the major works of the areas under discussion. Those desiring more precise information were at liberty to seek it through references. It was not apparently intended for the instruction of librarians, as more thorough works on this such as Naudé's *Avis* (38) and Lipsius' *De Bibliothecis* (39) were published continually. The volumes of *Historia Literaria* acknowledged these.

The conception of Ludwig Wachler, the last pastmaster of the history of learning, about the knowledge of books is also valid for librarianship (28, pp. 40-41). Knowledge of the external characteristics and destinies of books is for the scholar a means to an end. For the librarian, bookshop owner and bibliophile it is an end in itself. Likewise *Re Bibliothecaria* for the scholar is a means of pursuing new knowledge, for the librarian it is a tool in librarianship. It therefore enjoys a more elevated position with those responsible for libraries. This was not among the aims of *Historia Literaria*.

Although *Historia Literaria* offered scholars a superficial picture of libraries it was in its time accepted as a library discipline per se (6, pp. 64-65). Scholars might well function as part-time librarians in addition to their main employment, frequently as professors. It had been believed that *Historia Literaria*, because of the knowledge of books it offered, was an excellent companion for the librarian. The overview it afforded was of help in the selection of books, in their classification and in seeking books from collections (24, pp. 264-272; 26, p. 883), if the maintenance of the catalogues was neglected as was frequently the case (31, pp. 126-132). Knowing about books in general was thus felt to be more important than knowing about organizing libraries.

Denis' work *Einleitung in die Bücherkunde* is an exception to this superficial treatment of librarianship. The first volume *Bibliographie* (24) deals with library matters extensively. Practical advice is offered on librarianship including the shelf classification and on the coordination of catalogues. Denis himself states in the preface that he began by differentiating knowledge of books as a subject in its own right. Contemporary writers also acknowledged his solution (14, p. 901). Denis was already leading the history of learning and the knowledge of books with *Re Bibliothecaria* along different paths.

In the course of time the attention paid to and the degree of systematic treatment of libraries clearly decreased. Whereas in the middle of the 1700's writers (26; 33; 35) still devoted many pages to matters pertaining to libraries, after the turn of the new century they were scarcely mentioned (28; 40; 41; 42). Libraries received passing mention as one source of books and learning. Librarian-ship reached its peak as a part of *Historia Literaria* in Denis' volume *Bibliographie* (24). This course of events was also affected by the burgeoning of works on the history of learning along with the marked increase in knowledge and book production in the middle of the 1700's (6). It became necessary to omit parts of more peripheral branches of learning such as librarianship. The other side of the coin is seen in the strength gained by librarianship independent of *Historia Literaria* as a branch of learning in its own right.

The same general lines of development which caused the atrophy of *Historia Literaria* and its treatment of libraries also caused writing on library scholarship as a discipline in its own right to flourish. The marked increase and differentiation of knowledge at the end of the 1700's caused the polyhistorical ideal to decline and the prospects of *Historia Literaria* to fade (43, p. 134). Ever-increasing specialization in the sciences made it necessary to restrict the knowledge of practitioners to those specialized areas (6, pp. 54-55). For instance Friedrich Ebert refers to that in his famous book "Über öffentliche Bibliotheken" (1811) (44, pp. 17-18). The polyhistorian was gradually transformed into a specialist. The scholar was to concentrate henceforth on his own field. When the research ethos and research role of university teachers established itself (37, pp. 122-126), they were no longer able to nor did they need to expend energy on matters outside their own discipline such as caring for a library. This left the field open for the professionalization of librarianship.
5 The discourse of librarianship

Simultaneously with the "Re Bibliothecaria of Historia Literaria" separate works devoted exclusively to libraries had been published continually. These presented the history of libraries and contemplated their systems of organization. Although not always profound, they did produce new ideas for "Historia Literaria", too, and served it as sources. They were also sources for other writing on libraries. It may be stated that alongside "Historia Literaria" there existed a separate tradition in writing on libraries (45, p. 15). Whereas the discourse on libraries within "Historia Literaria" was intended for scholars, the separate discourse was intended more for those interested in matters pertaining to libraries and also for those responsible for libraries. However, the separate works on libraries shared many of the ideas developed by "Historia Literaria".

To obtain a more precise idea of the relationship between the two traditions in writing about libraries, closer examination of the discussion outside "Historia Literaria" is in order. On this basis reconstruction can be made of the scope, structure and content of matters related to libraries. Finally, comparison is made with the conception afforded by "Historia Literaria" of matters of librarianship.

The earliest works to treat library matters separately do not differ essentially from the treatment given in "Historia Literaria". Although these works concentrate exclusively on libraries, the approach and selection of topics are strongly reminiscent of the conception of "Historia Literaria". The general idea is that of librarianship as an activity based on extensive learning and knowledge of books. The scholar and also the librarian must possess skills in keeping with the idea of polyhistory (9, p. 82; 43, p. 133). This was also reflected in the contents of works devoted to libraries. The earliest of these, such as Lomeier's (46) and Lipsius' (39) deal with the history of libraries, their collections and to some extent also their systems of classification. No actual advice is given. Questions of cataloguing, organizing collections, classification and arrangement on shelves are passed over without mention. They were works for scholars in keeping with contemporary historical writing on the history of libraries (47, pp. 9-10), and also offered the opportunity to learn about the collections and perhaps catalogues. They were primarily means of obtaining knowledge to facilitate scholarly work.

Gabriel Naudé's "Aviä*" (38) is considered the first actual guide to librarianship (48, p. 8). However, it, too, like its contemporaries, dwells on the choice and acquisition of literature (38, pp. 14-58). The decoration of the library and contemplation of its purpose also receive attention (38, pp. 59-62, 70-80). The actual discussion on the organization of libraries is restricted to only a few pages (38, pp. 63-69). The organization of the collection, cataloguing, classification, arrangement on shelves and preparation of the catalogues are rapidly disposed of with the statement that there is need in the library for an alphabetical and systematic catalogue. More space is devoted to the matter of arranging the shelves (38, pp. 64-68). Naudé, concentrating as he does on the value of the books, their selection and acquisition, produced a work on librarianship leaning more heavily on the knowledge of books of "Historia Literaria" than a work in the discourse of organizing collections. It was a pioneering work in its time, but not as radical as might be supposed.

Naudé, who before embarking on his book had acquired library experience, was familiar with the problems of cataloguing and organization of books (49), but he did not deal with these very significantly in the work. This may be because this was seen as an unimportant technical detail best learned through experience. It is also apparent that the preferred solutions were those which incurred the least expense. Naudé himself did not like unclassified collections which necessitated a catalogue of both authors and subjects (49). Like many other scholars, he wanted the collection to be under control through a systematic ordering on the shelves, an extensive knowledge of books and a good local memory. The relatively undeveloped state of cataloguing codes may well have counted for something here. Inconsistency in the system caused occasional difficulties in finding the desired book in the catalogue (50, pp. 249, 269). The underlying image, however, was that of a scholar who by virtue of his memory had a command of the literature and did not need the help of complicated systems in order to locate books in a collection (34, pp. 264-267). This idea was most certainly a welcome one in view of the modest resources of the libraries, which served to maintain them in indifferent condition with incomplete catalogues, unordered collections and restricted opening hours (31, pp. 131-132). All in all Naudé's work may be ranked among those of the general polyhistorical tradition, which emphasizes knowledge of books and extensive learning as the basis for skills in librarianship.

Discourse on librarianship based on the knowledge of books as expounded in the history of learning continued until the end of the 1700's (2, pp. 72-73, 76-77). The first writer to address librarianship as an independent profession was Schelhorn in his work "Anleitung für Bibliothekare und Archivare" (1788) (51). He emphasizes the independence of the profession and its social institutionalization. Despite this he also places great emphasis on the importance to the librarian of knowledge of books and wide erudition (51, pp. 13, 313-314). According to Schelhorn, the librarian should be versed in "Historia Literaria" down to the very details. The selection of books, classification and the making of catalogues rest on a comprehensive knowledge of books. The actual skills of librarianship, preparation of catalogues and organization of the collection receive only summary attention in his works. Schelhorn's book is a work in the tradition of "Historia Literaria". The cry for social institutionalization did not have the effect of leading the basis of the field towards a new cognitive articulation.

6 The conceptual differentiation of library science from "Historia Literaria"

The actual new conceptual line of approach in the discourse on librarianship came with Albrecht Kayser's small work "Über die Manipulation bey der Einrichtung einer Bibliothek" (1790) (52). Kayser renounces the concept of librarianship based on the knowledge of books as in the history of learning. He maintains that mere knowledge of books is not sufficient for librarianship (52,
written rules. Kayser’s work was a gust of novel ration-
ality which blew the dust of erudition off librarianship. The abandonment of
classical text in librarianship which should be read by every
reader, it was hoped, would make it possible to salvage
knowledge contained in books. The belief persisted that
knowledge of books became the substitute for knowl-
edge of the contents of books. Knowledge of the substi-
tute, it was hoped, would make it possible to salvage
comprehensive learning (53, pp. 290-291). This was also
the basis for caring for library without developing
any finer techniques for structuring and describing the
knowledge contained in books. The belief persisted that
the power of the human memory was more efficient than
a system for shaping the totality of knowledge. Kayser
was the first to evince doubts about the adequacy of the
polyhistorical knowledge of book titles to enjoy mastery
over the totality of knowledge in the form of books or a
collection. In the place of human knowledge he pro-
posed as an alternative the development of the library
system in such a way that it would make it possible to
have a grasp of the knowledge in its entirety. The best
way was to make catalogues and to improve the index-
ing of literature. What came out of it was the period of
developing librarianship and library science.
Kayser’s work cast the first doubts on librarianship shaped by Historia Literaria. On losing faith in the possi-
bility of mastering the knowledge contained in books, Historia Literaria reduced that knowledge to mere titles. Knowledge of books became the substitute for knowl-
edge of the contents of books. Knowledge of the substi-
tute, it was hoped, would make it possible to salvage
comprehensive learning (53, pp. 290-291). This was also
the basis for caring for library without developing
any finer techniques for structuring and describing the
knowledge contained in books. The belief persisted that
the power of the human memory was more efficient than
a system for shaping the totality of knowledge. Kayser
was the first to evince doubts about the adequacy of the
polyhistorical knowledge of book titles to enjoy mastery
over the totality of knowledge in the form of books or a
collection. In the place of human knowledge he pro-
posed as an alternative the development of the library
system in such a way that it would make it possible to
have a grasp of the knowledge in its entirety. The best
way was to make catalogues and to improve the index-
ing of literature. What came out of it was the period of
developing librarianship and library science.
Kayser’s work signified above all a new cognitive shap-
ing of librarianship. Friedrich Ebert praises it as a class-
cal text in librarianship which should be read by every
librarian (44, p. 7). According to Zoller (48, p. 12) the
work gave new life to librarianship. The abandonment of
polyhistorical knowledge of books alone and the prin-
ciple of swift and sure access to books was followed by
a new conceptual structuring of the knowledge base of
librarianship. The advancement and codification of
knowledge concerning organization, classification, cata-
loguing and ordering of shelves came to the fore (54).
This required that librarianship be guaranteed continuity and consistency. This, in turn, was impossible without written rules. Kayser’s work was a gust of novel ration-
ality which blew the dust of erudition off librarianship.

7 Kayser’s successors: Schrettinger and Ebert
The line Kayser had taken was continued directly by Martin Schrettinger and Friedrich Ebert. Although they differed on many questions, they shared many of Kay-
ser’s main principles for the development of a basic
canon of library science. They therefore codified to a
considerable extent the thinking on library theory at the
beginning of the 1800’s in Germany (45, pp. 16-17).
They both share the idea evinced by Kayser that librar-
ianship is a field which requires specific studies of its
own. They both take for granted that extensive learning is
a prerequisite for the librarian (1, p. V; 55, pp. 11-12).
They analyse the skills learning provides as a function of
librarianship. Learning is clearly connected as an aid
in the various aspects of librarianship. Like Kayser, Schrettinger and Ebert believe that this alone is not a
sufficient base for librarianship. They demand studies
expressly for librarianship (1, Vol. 2, pp. 4-5; 44, pp. 59-
60). Both further the development of a theory of libri-
arianship, library science. They arrive at their own solutions through practical work. Although Ebert plays down the
principle of swift access as the basis of library work (55,
p. 8), both his and especially Schrettinger’s conception
may be said to rest on it. Both are much concerned with
the organization of the library systems, cataloguing,
classification, ordering of shelves and the making of
catalogues. In addition to the doctrine of organization of
documents, Ebert (56, p. 69) emphasizes library admin-
istration as the second part of library science. Both
writers thus endeavour to generalize and abstract the
main skills required in library work into some kind of
discipline (57, pp. 390-391).
Although both base their doctrine on practical library
work (58, p. 133), the ways in which it takes shape are
radically different. Schrettinger presents his doctrinal
structure in strict formal mode. The subtitle of the work is
exposing: Anleitung zur vollkommenen Geschäftsfüh-
rung eines Bibliothekars in wissenschaftlicher Form
abgefasst. His theory of librarianship is an axiomatic
system in which the main concepts are strictly defined
and explicated, and whose corollaries constitute library
science. Ebert’s writings are methodologically less
demanding, although he, too, attempts to offer general-
ized guidance for librarianship.
Schrettinger and Ebert thus continue to develop within
the knowledge base of librarianship the tradition initiated
by Kayser. Each of them articulates it in his own way. In
contrast to Kayser they also strive towards a social
institutionalization of librarianship. Each makes it his aim
to formalize the training of librarians. Schrettinger pro-
posed the establishing of library schools, whereas Ebert
favoured training within the libraries (58, pp. 133-134).
Ebert also proposed the establishing of a qualification in
librarianship to serve as a criterion of competence. Both
are therefore working towards the professionalization of
librarianship, founded on the development of a knowl-
edge base.

8 The two discourses as the roots of
library science
A summarizing examination is now undertaken of the
position of Historia Literaria and the discourse on librar-
ianship outside of it as a forerunner of library science.
In its structure, Historia Literaria presents librarianship as
a means to general learning. Libraries received re-
stricted, superficial treatment as a means of gaining
knowledge of books. Only few attempts was made to
enhance the reader’s skills in librarianship. Little was said about the principles guiding the choice of books, nor yet about ordering of shelves. Even less space was devoted to systems of classification or cataloging of books, although one or two writers presented types of catalogues. In most cases writing on libraries in the history of learning had concentrated its discussion on the value of the literature and the problems of selection and acquisition. The books conveyed general information about libraries, which, it was supposed, were of relevance to scholars. The actual writing on librarianship was initially obviously coloured by the history of learning. It emphasized librarianship skills founded on wide learning. It gave preference to a comprehensive knowledge of the literature over organization of the library as a basis for library work. At the end of the 1700’s the situation changed, when, led by Kayser, writers in the field suggested that learning alone was not sufficient as a basis for library work. Library-specific studies were needed. The underlying principle of the discipline became the appreciation of the library’s function to ensure rapid and reliable access to books. The transition occurred from a concept of mastery of the collection through knowledge of the literature to mastery of the literature through systems. Knowledge of organizing libraries came to be the central knowledge in the art of librarianship. That is to say, knowledge to how to organize collections, for swift access through catalogues, registers of locations, and ordering of shelves. In the initial stages there was less discussion of questions regarding selection and administration, and Ebert comments on this. It was Ebert who established the differentiation between organization and administration in library science. The former was termed also library technics and the latter library economy. This differentiation continued as the conceptual basis for German library science until beginning of the 20th century (45, pp. 11-12).

Library discourse did not totally abandon the concept of wide learning afforded by the history of learning, but rather took it on board as a prerequisite. It was an essential, but not sufficient condition for librarianship. Study of the librarian’s own field, library science was the necessary condition. The difference in the way history of learning and library science conceived of knowledge of books and matters pertaining to libraries hinged on their respective conceptions of the function of librarianship. To the former it was a means to a scholastic end, to the latter it was recognizable as a discipline in its own right. It is apparent that library science did not differentiate from Historia Literaria to become an independent discipline. Both addressed the same subjects, only with a different emphasis. They constituted two parallel traditions in the discussion of libraries. The direction of assimilation was from independent discourse of librarianship to Historia Literaria. Historia Literaria characteristically enumerated the central works on librarianship and presented them. The information it yielded on libraries was distinctly cursory. The tendency was towards a brief description rather than towards innovation. The real development in library theory took place in the circles of library scholarship. At the same time as the writing within Historia Literaria on librarianship decreased, the conception of the science of librarianship as a discipline in its own right gained strength. To this belonged the idea of librarianship primarily as organization of the library for ease of access to the literature through further development of library systems. The decline of Re Bibliothecaria was largely due to the demise of Historia Literaria, choked by its own unfeasibility amid the increase in the amount of literature resulting from growth and differentiation of sciences.

Although the presentation of librarianship in connection with Historia Literaria did achieve scientific status, it was still largely a matter of a tool for the use of scholars. The representation was obviously not science in its modern sense. Its contemporary scientific status is difficult to assess. It does, however, seem justifiable to conclude that Re Bibliothecaria was seen as belonging on the level of subjects studied in the philosophical faculty. These were auxiliary sciences on transferring to the three higher faculties. The specialization of sciences and the shift in the research approach from the compiling to the analytic dealt the death blow to the conception of works on library science as scientific works. Although Schrettinger’s Bibliothek-Wissenschaft could be accepted because of its mode of presentation cloaked in scientific method, as a work of science in its time, his successors Ebert (55-56), Zoller (48), or Klette (59) cannot be deemed to fulfill the criteria of a science rapidly developing at that time. Like Schrettinger’s and Kayser’s, these were works of librarianship, general directives on principles of systematizing library work. They were professional literature, not science. The development of library science as a science in the strictest sense was under way in Graesel’s description in Bibliotheks-kunde (1902) (45), where the writer understood the research on the history, statistics and types of libraries.

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Adress of the author:
Pertti Vakkari, Ph.D. Department of Information Studies University of Tampere P.O. Box 607 SF-33101 Tampere