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STUDIES IN INFORMATION

# EUROPEAN ORIGINS OF LIBRARY AND INFORMATION SCIENCE

BY

**FIDELIA IBEKWE**

*School of Journalism & Communication, Aix-Marseille  
University, Marseille, France*

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INVESTOR IN PEOPLE

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# List of Abbreviations

<b>ASIST</b>	Association for Information Science and Technology
<b>JASIST</b>	Journal of the American Society for Information Science & Technology
<b>ASLIB</b>	Association for Special Libraries and Information Bureaux
<b>LIS</b>	Library and Information Science
<b>IS</b>	Information science
<b>IIB</b>	International Institute of Bibliography
<b>IID</b>	Institut International de Documentation
<b>IFLA</b>	International Federation of Library Associations
<b>STI</b>	Scientific and Technical Information
<b>ABF</b>	Association des Bibliothécaires Français
<b>ADBS</b>	Association des Documentalistes et des Bibliothécaires Spécialisés
<b>BNF</b>	Bibliothèque Nationale de France
<b>CNAM</b>	Conservatoire National des Arts et des Métiers
<b>CNRS</b>	Centre National de Recherche Scientifique
<b>ENSSIB</b>	Ecole Nationale Supérieure des Sciences de l'Information et des Bibliothèques
<b>FID</b>	Fédération Internationale de Documentation
<b>INTD</b>	Institut National des Techniques Documentaires
<b>UFOD</b>	Union Française des Organismes de Documentation
<b>CCL</b>	Central Chemical Library
<b>CSLDIS</b>	Center for the Study of Librarianship, Documentation and Information Sciences
<b>ISIP</b>	Internacionalna Stalna Izložba Publikacija (International Permanent Exhibition of Publications)
<b>RC</b>	Referral Centre
<b>RSL</b>	Royal School of Librarianship
<b>RSLIS</b>	Royal School of Library and Information Science
<b>SSLS</b>	Swedish State Library School
<b>SSLIS</b>	Swedish School of Library and Information Science
<b>SRC</b>	Swedish Research Council
<b>NORDINFO</b>	Nordic Council for Scientific Information
<b>NORSLIS</b>	Nordic Research School in Information Studies
<b>NSOL</b>	Norwegian School of Librarians

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<b>ESD</b>	Escuela Superior de Diplomática
<b>EB</b>	Escola de Bibliotecàries
<b>SEDIC</b>	Sociedad Española de Documentación e Información Científica
<b>ANABAD</b>	Asociación Nacional de Archiveros, Bibliotecarios, Museólogos y Documentalistas
<b>CSIC</b>	Consejo Superior de Investigaciones Científicas

## About the Author

**Fidelia Ibekwe** obtained a BA in Foreign Languages and Literatures from the University of Port-Harcourt in Nigeria (her native country). She then moved to France to pursue her post-graduate education, obtaining a MA in French Literature (*Lettres Modernes*) from Stendhal University in Grenoble. She then moved to Information and Communication Sciences where she obtained her PhD and her *Habilitation à Diriger des recherches*. She has previously been Associate Professor of Information and Communication Sciences at the University of Nancy 2 and at Jean Moulin University in Lyon. She is currently a Full Professor of Information and Communication Sciences at the School of Journalism and Communication, Aix-Marseille University in France. Her research interests span theoretical, historical and empirical topics. She has worked and published research articles on text mining, terminology extraction and modelling, automatic indexing and information retrieval using natural language processing, statistical and probabilistic models. She is currently researching various issues relating to the history and theoretical foundations of information science, the uses of information and communication technologies and the impact of open and big data on science and on society.

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# Scope and Aims of the Book

*'Study the past if you would define the future.'*

– Confucius

The term Library and Information Science (LIS) will be used loosely in this book to refer to the academic field of teaching and enquiry which includes documentation, information science, librarianship and archival studies. Information science (IS) will only be used when the library component is explicitly excluded and the focus is on information. Also, the word 'science' will be used here in the more broader continental European sense of the German '*Wissenschaft*' rather than in the more restrictive British English sense where 'science' denotes the natural and physical sciences.

From a wider historical perspective, the origins of what became known in the twentieth century as Library and Information Science (LIS) is a *continuum* traversing several millennia. Shera and Cleveland (1985, p. 249) recalled that as far back as two centuries before the Christian era, scholars-bibliographers of the Alexandrian libraries designed theories for organising books and for charting the human intellectual enterprise through indexes, lists of subjects, etc.

The monumental works of the sixteenth-century Swiss botanist and bibliographer Konrad von Gessner marked the beginning of modern bibliography. At the time of his demise in 1565, von Gesner had compiled a bibliography of existing documents in Greek, Latin and Hebrew.

The paternity of the term 'library science' (*Bibliothekswissenschaft*) is generally attributed to the German librarian Martin Schrettinger in the late nineteenth century. Buckland (2017a, p. 50) recalled the context in which Schrettinger coined the term:

Around the end of the seventeenth century many monasteries in Europe were closed and their libraries confiscated. In Bavaria 200 monastic libraries were sent to Munich to be added to the royal library. The librarians were unable to cope with this flood of material until librarian Martin Schrettinger (1772–1851) understood that technical systems were needed to enable readers (as well as librarians) to

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find what they needed by themselves quickly and easily. It was for the technical guidelines that he coined the phrase *Bibliothek-Wissenschaft* (library science) in his textbook. (Schrettinger, 1808, p. 11)

Schrettinger devised a classification system for organising books on shelves according to topics and authors and provided shelf lists and a subject catalogue. Also the first journal in the field seems to be German: *Journal of Library Science, Manuscript Information and Older Literature* [*Serapeum: Zeitschrift für Bibliothekswissenschaft, Handschriftenkunde und ältere Litteratur*] was published in Leipzig by T.O. Weigel in the period 1840–1870 (Hjørland, 2017).

The late nineteenth century marked the emergence of systematic efforts to record published works and organise them in a systematic manner in libraries. In 1876, Melvil Dewey published the Decimal Classification (DC) in the United States enabling libraries to index and organise books. In Europe, Paul Otlet and Henri Lafontaine embarked on a monumental task to make the DC more powerful; this resulted in the Universal Decimal Classification (UDC) published in 1905. Schrettinger died two decades before Melvil Dewey published his DC in the United States and more than half a century before Paul Otlet and Henri Lafontaine published its European counterpart, the Universal Decimal Classification in Belgium in 1905.

Otlet's efforts to devise a bibliographic classification system was driven primarily by a positivist assumption that it was possible to extract knowledge from documents much in the same manner that one can extract peas from their pods. Otlet was obsessed by the desire to shed human knowledge of the messiness of the human subjective minds as reflected in books:

Otlet's primary concern was not the document or the text or the author. It was also not the user of the system and his or her needs or purposes. Otlet's concern was for the objective knowledge that was both contained in and hidden by documents. His view of knowledge was authoritarian, reductionist, positivist, simplistic - and optimistic! Documents are repetitious, confusingly expressed and filled with error as well as with what is factually true and, therefore, of use. But he betrays no doubt that what is factually true and likely to be useful can easily be identified. It is merely a question of institutionalizing certain processes for analyzing and organizing the content of documents. For him that aspect of the content of documents with which we must be concerned is facts. He speaks almost everywhere of facts. (Rayward, 1994, p. 77)

Rayward (1997) observed that although Otlet and his colleagues did not use the term information science (IS), the “key concepts for information science as we now understand this field of study and research – and the technical systems and professional activities in which it is anchored – were implicit in and operationalized by what was created within the International Institute of Bibliography in 1895 and the decades that followed”. Indeed, Otlet used ‘documentation’ and ‘document’ in a broader sense than the narrow one in which it was used by the profession of ‘documentalists’ in the post-Otlet period (Rayward, 1997, p. 290).

Otlet and La Fontaine’s numerous international institutions – the *Institut International de Bibliographie* (IIB) in 1895 which became the *Institut International de Documentation* in 1931 and later the *Fédération Internationale de Documentation* (FID) in 1937, and his 1934 ‘*Treatise on documentation*’ [*Traité de documentation*] – laid the theoretical and empirical foundations of what would become the field of IS as we now know it.

However, information and information science have remained fuzzy concepts with no clear meanings or boundaries as decades of debates have shown (Bawden & Robinson, 2012; Buckland, 1991; Capurro & Hjørland, 2003; Ibekwe-SanJuan, 2012d):

One of the most serious problems confronting the historian of information science is knowing what it is that he or she is studying. Is information a process or a product? Is it text or document, the content of verbal communication, an expression of meaning, a statistical phenomenon of signal transmission, the processes of symbol representation and manipulation by electronic machines, biophysical activity of the brain, a matter of genetic or biochemical structures and processes? (Rayward, 1996, p. 3)

For the purposes of this book, we simply assume a practical definition of IS as that field of scholarly enquiry and teaching concerned with how people produce, organise, manage, record, use, disseminate and search for information for various uses. This rather pragmatic and processual definition purposely ignores the epistemological underpinnings of IS which we will not delve into here, more so as many publications have been devoted to these philosophical debates (Bates, 1999; Buckland, 2012; Cornelius, 2002; Furner, 2010; Hjørland, 1998; Machlup & Mansfield, 1983).

Several monographs and articles have also given historic accounts of how LIS emerged in different parts of the world, in particular in the United States (USA) and in the United Kingdom (UK) (Bawden & Robinson, 2012; Buckland & Liu, 1998; Rayward, 1983; Shera & Cleveland, 1985). Although some histories have been written about the emergence of LIS in non-anglophone European countries, they were published in languages

other than English which make them difficult to access for an international audience.

Also, to the best of our knowledge, previous books on the history and foundations of LIS have focused on single countries. Cross-national studies of LIS are rare, especially concerning non-anglophone countries. Buckland and Liu (1998) noted this lack of cross-national intellectual histories of LIS.

The current book is an attempt to remedy this lack by providing the first of a series in cross-national histories of the emergence of LIS in non-anglophone European countries. It aims to highlight the characteristic features of LIS development despite apparent linguistic and terminological differences and the network of influences amongst European pioneers of LIS.

Our historical ambition is quite modest in that we are concerned only with the emergence of LIS as a higher education field of learning and enquiry, thus from the first quarter of the nineteenth century till the last quarter of the twentieth century. It is hoped that this tentative exploration into a comparative history of LIS in some non-anglophone European countries will inspire others to undertake more profound and complete histories of LIS in countries not dealt with here.

### **1.1. A Word on the Data Gathering Methodology**

The choice of the European countries covered in this book was guided by pragmatic concerns, namely the availability of LIS scholars to interview, of funds to travel to these countries in order to conduct the ground research and, finally, of documentary materials in English or French, the two languages the author understands.

This resulted in seven countries that fall roughly into two geographic and cultural zones (apart for Yugoslavia which is Slavic):

- (1) Latin Europe (France, Portugal and Spain) and
- (2) Northern Europe (Denmark, Norway and Sweden).

This dependency on the availability of materials in English or French entailed an uneven treatment of these countries. France is treated in more depth since the author of this book resides and works in that country. She has also published a prior book in French (Ibekwe-SanJuan, 2012d) on the historical and theoretical foundations of IS in France in comparison with anglophone countries, mainly the US and the UK.

Thirteen people participated substantially in providing interviews for this research. Two people were interviewed separately in Zagreb for the Yugoslavian LIS, an emeritus LIS Professor and an administrative assistant

who worked with the Croatian pioneer Božo Težak. The interview in Denmark involved an emeritus Professor of LIS whose extensive knowledge of the Nordic LIS landscape enabled him to cover the two other Nordic countries, Norway and Sweden. Three group interviews were carried out in Spain: four LIS scholars were interviewed at the University of Barcelona, another four were interviewed at Complutense University in Madrid, and two scholars were interviewed at Carlos III University in Madrid. A short biography of the interviewees is given in Annex I.

Oral histories are one of the established methods for reconstructing the history of disciplines:

Oral history can be used in the historiography of science as an ‘elite interview.’ (...) ‘Elite interviews can be very useful in eliciting otherwise unrecorded information and new perspectives (de Chadarevian, 1997, p. 53).’ [...] To put it simply, oral history collects personal memories and personal commentaries of historical significance through recorded interviews. (Ritchie, 2003, cited in Hauk & Stock, 2012, p. 152)

To qualify as oral history, it is necessary to record the interviews such that the recordings can be archived and accessed for future historical research (Ritchie, 2003 cited in Hauk & Stock, 2012, 154). While recorded oral histories are more appropriate in the case of a historiography or archival project where the exact phrasing and expressions of the interviewee need to be preserved to serve as primary source material for other historical research, they were not appropriate in a book project where the exactitude of factual information and of ideas supersedes the need to record the exact utterances of the interviewee. Since our interviews of European pioneers and scholars were not recorded, it will be more appropriate to qualify our data gathering approach as a mixed qualitative approach combining semi-structured interviews with written documentary sources.

Questions were sent to all the interviewees in advance in order to give them time to recollect facts and gather materials for the interviews. This was a precautionary measure because of the transient aspect of human memory. Indeed, during the interviews, certain interviewees could not recollect exact dates nor the precise names of institutions and of pioneering figures and resorted to a Google search to verify some of the facts. Also sending our questions some weeks ahead of the interviews placed less tension on the interviewees who did not have to worry overly much about the conciseness and precision of their utterances, having been assured that all their utterances will be verified against published sources. Interviewees were thus placed in a more relaxed atmosphere and could focus more on narrating what they knew of events, people and places. Also, as language was a barrier for interviewees who were not proficient in the English language

(this applied mainly to the interviews in Spain), sending the questions some weeks ahead of the interview enabled them to prepare their answers in English.

The duration of the interviews was not constrained but on the average they lasted between two to three hours, except for Denmark where the interview was spread over two days. Notes were taken during the interviews, edited and then sent back to the interviewees a few days later for correction and approval.

## **1.2. Caveats**

Anyone who has attempted to write a history of ideas, of events and of anything would have felt the veracity of the following observation:

History provides us with a way to think about the present and the future. Because we can never know it directly, it is actually constituted and reconstituted by what we bring to it from our ever-changing presents. It also offers the opportunity from the ever-changing perspective of the present to go back to reassess what seems to have happened, what seems to have been the case in the past and how it has influenced the present. It is this dialectical process that keeps history as a discipline always unfinished and alive. (Rayward, 2004, p. 671)

Also, as we have pointed out above, language proved to be an insurmountable barrier in the case of the Spanish LIS history where a significant amount of published works in Spanish could not be translated into English due to practical constraints. Hence, the account of the Spanish origins of LIS was based mostly on the information gathered during the interviews. Although we sought to cross check this information against published works, some aspects of the history will remain unverifiable because they are based on the subjective perceptions of the interviewees who knew some of the LIS pioneers and institutions in Spain. For the same reasons of language barrier, we are only able to offer a cursory history of Portuguese LIS based on a summary of pioneers made available to us in English. Again, these lines from Buckland (1999a, p. 9) cited in Hauk and Stock (2012, p. 152) serve as a timely reminder of the fallibility of oral histories:

The whole process is accidental: who survived, what they knew, what they recalled, what they imagined, what they chose to relate, how they choose to express it and of course whether anybody bothered to record them.

### **I.3. Perimeter**

Our history of the emergence of LIS in the seven European countries led us to constantly navigate between four types of entities situated at different levels:

- (1) places where recorded artefacts of information and knowledge are conserved (documentation centres, archives, libraries and more rarely museums);
- (2) educational and professional institutions (schools and universities) and associations (both professional and governmental) in charge of organising and regulating LIS education, profession and industries in these countries;
- (3) influential figures (pioneers of LIS, administrators, political figures, etc.); and
- (4) concepts (terminology) used to designate ideas, places and institutions that shaped the LIS in the countries studied.

These four entities were continuously interacting and changing over time in the seven countries. This can convey the impression of fundamental differences, but a deeper scrutiny tended to show that while the concepts, the terminology and the professional institutions varied from country to country, the four basic entities involved shared similar features across the seven countries studied. Hence, our challenge was threefold:

- (1) to map out the particular characteristics of LIS development in each country;
- (2) to identify common and distinctive features despite the apparent differences in terminology; and
- (3) to highlight the network of external influences brought to bear on European pioneers which in turn determined the conception of LIS in a given country.

The ‘histories’ we have reconstituted in the following pages are neither complete nor irrefutable. However, we have reasons to believe that the common and distinctive features we uncovered on how LIS emerged in the seven countries are indicative of the trends in the other European countries between the early nineteenth and the last quarter of the twentieth century.

One of the commonalities that came to light is the observation that the ideas, perspectives and paradigms underlying the first LIS education programmes in many European countries at the beginning of the nineteenth century were influenced by the French perspective which itself was rooted in the French Revolution of 1789. The French model of separation between vocational schools outside of academia, in charge of training archivists,

librarians and documentalists, of which a typical example is the *École Nationale des Chartes* established in Paris in 1821, was adopted in several European countries (Ribeiro, 2007, p. 115). We observed in all the countries we studied that two educational systems for LIS co-existed in many European countries well into the first half of the twentieth century. Special vocational schools trained professionals in areas perceived as crafts or vocations such as nurses and teachers. Universities were considered as the academic seats of learning and were in charge of training doctors, scientists and scholars. The management of libraries was considered to be a vocational occupation; therefore, the first training programmes were handled by special schools outside of universities.

Figure I.1 gives an overview of the earliest formal education in librarianship which was outside of universities in the seven countries we studied.

Around the 1970s, these vocational library schools began collaborating with universities. The move towards universities as the seat of education in LIS was accompanied by a broadening of focus from purely material and technical aspects of library management to more theoretical and interdisciplinary content as well as an alignment with university degrees:

By the 1970s schools of librarianship worldwide were gradually broadening their interests and redefining their scope to include librarian-like activities outside of libraries as well as inside. There were several reasons: there was a surplus of librarians and a shortage of information professionals adequately equipped for similar work in other contexts; research universities preferred graduate programs to address a type of expertise rather than a type of institution; to the extent that problems in other contexts were similar, theories and technical solutions could be extended, challenged, and made more robust; and so on. Yet it was not only a change in scope, there was also a strong desire to evolve a new and different way to view and understand the field itself. (Buckland & Lund, 2013, p. 303)

The background of teachers was also broadened to include scholars from science and engineering who embraced the emerging information technology as a way to solve problems of indexing and document retrieval. As a result, the field slowly acquired scientific status and gained recognition as an academic discipline. As separate library schools began to lose their monopoly on library training, they were either absorbed into universities or relied on the latter for delivering LIS diplomas after accreditation by the designated regulating bodies. Figure I.2 provides an overview of this evolution towards universities.

In the following chapters, unless stated otherwise, translations of original texts from other languages into English are provided by the author.