



ORIGIN, GROWTH AND DEVELOPMENT OF LIS

LIS 111

Introduction

Library and Information Science (LIS) is a discipline rooted in humanity's enduring quest to record, preserve, organise, and transmit knowledge. From prehistoric memory aids to contemporary digital information systems powered by artificial intelligence, LIS has evolved alongside civilisation itself. Its history reflects major social, technological, intellectual, and institutional transformations that have shaped how knowledge is created and accessed.

Introduction



This essay traces the origin, growth, and development of Library and Information Science, highlighting significant events, institutions, and personalities that have defined the discipline from the beginning of humanity to the present age.

Origins: Knowledge Preservation in Early Human Societies

The origins of Library and Information Science predate formal libraries and even writing itself. In early human societies, knowledge was preserved orally through storytelling, myths, rituals, and apprenticeship. Elders, priests, and sages served as custodians of communal memory, performing functions similar to those of modern information professionals.

The invention of writing around 3000 BCE marked a turning point. In ancient Mesopotamia, the Sumerians developed cuneiform writing on clay tablets to record economic transactions, laws, and religious texts. These tablets were stored in temple and palace archives, such as those found in Uruk and Nippur. Similarly, ancient Egypt used papyrus scrolls to document administrative, medical, and religious knowledge, kept in temple libraries and state repositories.

One of the earliest known organised libraries was the **Library of Ashurbanipal** (7th century BCE) in Nineveh, which contained thousands of clay tablets systematically arranged by subject. This collection demonstrated early principles of classification, cataloguing, and controlled preservation—core concerns of modern LIS.

Foundations of Scholarly Libraries

The classical civilisations of Greece and Rome significantly advanced the development of libraries. The most iconic institution of this era was the **Library of Alexandria** (3rd century BCE), established in Egypt under the Ptolemaic dynasty. Designed as a universal library, it sought to collect all known works of the world. Scholars such as **Callimachus**, who compiled the *Pinakes* (often regarded as the first library catalogue), introduced systematic bibliographic control and subject organisation.

In ancient Greece, philosophers like **Aristotle** emphasised the classification of knowledge, influencing later systems of organising information. Roman libraries, such as those established by **Julius Caesar** and **Augustus**, promoted public access to knowledge, reinforcing the idea of libraries as civic institutions.

These developments laid intellectual foundations for librarianship: collection development, classification, cataloguing, and user access.

The Medieval Period: Preservation and Transmission of Knowledge

During the medieval period, libraries played a crucial role in preserving knowledge amid political instability and social change. In Europe, **monastic libraries** became centres of learning, where monks copied manuscripts by hand in scriptoria. Institutions such as the libraries of Monte Cassino and Cluny safeguarded classical Greek and Roman texts.

Simultaneously, the Islamic world experienced a golden age of scholarship. Institutions like the **House of Wisdom (Bayt al-Hikma)** in Baghdad (9th century) served as libraries, translation centres, and research institutes. Scholars such as **Al-Kindi**, **Al-Farabi**, **Ibn Sina (Avicenna)**, and **Al-Ghazali** contributed to philosophy, medicine, science, and the organisation of knowledge. Libraries in Cordoba, Cairo, and Timbuktu housed vast collections and promoted bibliographic practices, catalogues, and lending services.

The emergence of **university libraries** in medieval Europe (e.g., Bologna, Paris, Oxford) further expanded scholarly information services, linking libraries directly to teaching and research.

The Printing Revolution and Early Modern Libraries

The invention of the **printing press** by **Johannes Gutenberg** in the mid-15th century transformed the storage and dissemination of information. Books became cheaper, more abundant, and more standardised, leading to exponential growth in collections and the need for better organisation.

National and institutional libraries emerged, including the **Bodleian Library** (Oxford, 1602), the **Bibliothèque nationale de France**, and later the **British Museum Library** (now the British Library). These libraries developed acquisition policies, catalogues, and rules that anticipated modern librarianship.

Bibliographic control advanced through the work of scholars such as **Conrad Gesner**, whose *Bibliotheca Universalis* (1545) attempted to list all known books in Latin, Greek, and Hebrew—an early universal bibliography.

The Nineteenth Century: Birth of Modern Library Science

The nineteenth century marks the formal emergence of Library Science as a profession and academic discipline. Rapid industrialisation, mass education, and democratic ideals created demand for **public libraries** and trained librarians.

A central figure of this era was **Melvil Dewey**, who revolutionised library organisation by introducing the **Dewey Decimal Classification (DDC)** in 1876. Dewey also founded the **American Library Association (ALA)** in 1876 and established the first library school at Columbia University (later Albany), formalising professional education.

Other notable contributors include:

- **Charles Ammi Cutter**, developer of the Expansive Classification and author of *Rules for a Dictionary Catalogue*.
- **S.R. Ranganathan** of India, whose **Five Laws of Library Science** (1931) provided a philosophical foundation for librarianship and whose **Colon Classification** introduced faceted classification.

⊠ This period also saw the rise of library standards, professional ethics, and

The Twentieth Century: From Library Science to Information Science

The twentieth century witnessed dramatic expansion and transformation of the field. The explosion of scientific literature, especially after World War II, exposed the limitations of traditional library methods. This led to the emergence of **Information Science**, focusing on information retrieval, indexing, documentation, and user behaviour.

Pioneers such as **Paul Otlet** and **Henri La Fontaine** envisioned universal bibliographic control through the **Mundaneum** and the **Universal Decimal Classification (UDC)**. **Vannevar Bush**, in his influential essay *“As We May Think”* (1945), anticipated hypertext and digital information systems through the concept of the *Memex*.

The Twentieth Century: From Library Science to Information Science

Professional and research institutions such as:

- ASIS&T (Association for Information Science and Technology),
- IFLA (International Federation of Library Associations and Institutions),
and
- UNESCO played key roles in promoting global information access, standards, and cooperation.

Library education expanded worldwide, including in Africa, Asia, and Latin America, integrating information science, documentation, and later computer science into curricula.

The Digital Age: Contemporary Library and Information Science

The late twentieth and early twenty-first centuries ushered LIS into the digital age. The advent of computers, the internet, databases, and mobile technologies transformed libraries from physical repositories into hybrid and virtual information environments.

Key developments include:

- Online Public Access Catalogues (OPACs),
- Digital libraries and institutional repositories,
- Metadata standards such as MARC, Dublin Core, and RDA,
- Open access publishing and research data management.

The Digital Age: Contemporary Library and Information Science

Modern LIS now encompasses areas such as knowledge management, information architecture, data science, digital preservation, artificial intelligence, and information ethics. Libraries increasingly serve as community hubs, learning commons, and agents of social inclusion.

Conclusion

The origin, growth, and development of Library and Information Science reflect humanity's continuous engagement with knowledge across time and space. From oral traditions and clay tablets to digital networks and artificial intelligence, LIS has evolved in response to changing societal needs and technological possibilities. Major personalities—such as Callimachus, Dewey, Ranganathan, Otlet, and Bush—and institutions such as the Library of Alexandria, the House of Wisdom, national libraries, and international professional bodies have shaped the discipline's identity.

Today, Library and Information Science stands as a dynamic, interdisciplinary field committed to the organisation, preservation, and equitable dissemination of information, reaffirming its enduring relevance in human civilisation and its future in the global knowledge society.