High Education in Information Science: the Portuguese model

Eötvös Loránd University – Budapest (Hungary)
28 April 2015

Armando Malheiro da Silva
(armando.malheiro@gmail.com)

Fernanda Ribeiro
(fribeiro.flup@gmail.com)

Faculdade de Letras da Universidade do Porto
High Education in Information Science: the Portuguese model

1. The historical evolution of LIS education in Portugal: a brief overview

2. The paradigm shift in Information Science

3. A new education model in University of Porto
High Education in Information Science: the Portuguese model

1. The historical evolution of LIS education in Portugal: a brief overview

- Portugal is one of the few countries in the world where higher education in the area of information (archives and libraries) was established early on.

- **1887** – Creation of the High Programme for Librarian-Archivist, including subjects as National and Universal History, Philology, Latin and Greck Literature and Modern Literature (integrated in the High Course of Humanities) and courses of Diplomatics, Numismatics and Bibliology (that were hosted by the National Library and the National Archives of Torre do Tombo)

- This training model was designed from an integrated perspective, which included the training of librarians and archivists in the same programme.
When the University of Lisbon was created (1911), an important part of the Higher Course for Librarians and Archivists had been transferred to the university.

Total integration only occurred a few years later in 1918. From that time on, the LIS (and archive) education in Portugal offered was of university level.
High Education in Information Science: the Portuguese model

- In 1931, a new decree changed the programme and its curricular structure.

- The programme was reduced for 2 years (restricting the more generalized content) and was transferred to the administration of the Directorate of Libraries and Archives.

- It became an “exclusively vocational” programme, oriented to providing students with the technical preparation required to work as senior officers in public libraries and archives.
Admission requirements also changed. Now considered a postgraduate programme, graduates from any of the degrees offered by the Faculties of Arts and Humanities could apply.

Complementarity between the academic component and the practical one was already an important issue in those early years.
High Education in Information Science: the Portuguese model

- The perspective that combined a theoretical basis and a cultural background with a technical training prevailed and the Higher Course for Librarians and Archivists was once again offered at university level a few years later (1935).

- A Librarian-Archivist Programme was established at the University of Coimbra, whose main goal was the professional training of people who would ultimately work in state archives and libraries. It remained a postgraduate programme, with the duration of 2 years, followed by a six-month internship in a library or archive.
High Education in Information Science: the Portuguese model

- This educational model remained unchanged for about half a century and the University of Coimbra was the only academic institution where LIS training could be obtained.

- In 1969, however, a new type of programme, a Technical Training Post, was created under the supervision of the Directorate-General for Higher Education and Fine Arts, which was developed in libraries or archives designated by the Ministry of National Education.
In spite of the differences in design and content in relation to other European countries, Portugal made some efforts to follow the general trends in LIS education.

On the one hand, there was a custodial and cultural perspective, transmitted through the University of Coimbra.

On the other, there was a tendency to highlight technical issues and the use of technologies, which represented another perspective, closer to the American model, where the emergence of information science had become a reality.
However, there were substantial and structural differences from other countries with regards to the implementation and development of information services.

The country was severely underdeveloped and backward, public investment was practically nonexistent and, as a consequence, the social recognition of information professionals was practically of no significance.
High Education in Information Science: the Portuguese model

- In 1982, the old programme was extinguished and replaced by a new one, called *Curso de Especialização em Ciências Documentais* (CECD) (Specialization Course in Documentation Sciences) established at the Faculty of Arts and Humanities of the University of Coimbra.

- This programme appeared by force of a movement headed by information professionals who were keenly aware of the inadequacy to market needs and the obsolescence of the old Higher Course for Librarians and Archivists.
High Education in Information Science: the Portuguese model

- Besides a substantial change in the syllabus in relation to the old model, the CECD also introduced a structural change by separating the training of librarians/documentalists from that of archivists.

- Although designated a “specialization” conferring training at postgraduate level, in reality, it comprised basic training, as it did not require that applicants possess an undergraduate degree in the same field of knowledge or any practical experience.
High Education in Information Science: the Portuguese model

The growth of Postgraduations in Documentation Sciences between 1983 and 2006
La formation universitaire en Science de l’Information: le modèle portugais

The growth of Postgraduations in Documentation Sciences between 1983 and 2006
This educational model became object of criticism some time later, not only because its syllabus was already considered unsuited to market needs, but also because some critics claimed that more academic training was required, within the framework of the university.

That is, progressive instruction and training should be provided, starting with an undergraduate programme, followed by a Master’s and finally a PhD, and that there should be teaching staff particularly dedicated to an academic career, developing research and pedagogical investment.
2. The paradigm shift in Information Science

- Let’s analyse the paradigms that enable to think the evolution and the maturation of the scientific domain of Documentation / Information

- These two terms are used in a generic way in order to designate a domain of scientific studies that, according to the epistemological point of view adopted, may joint several disciplines or only one

- “Cumulative or fragmentary" perspective
- “Evolutionary“ perspective

High Education in Information Science: the Portuguese model

José Maria Izquierdo Arroyo:

- librarianship paradigm or the pre-documentary paradigm (LP);
- the current paradigm or Normal Science of Documentation (DP);
- semiotic-documentary or interdocumentary paradigm (SP).
Rafael Capurro:

Information Science appears in the middle of the 20th century, with
- a physical paradigm
- a cognitive paradigm
- a pragmatic and social paradigm
High Education in Information Science: the Portuguese model

Silva and Ribeiro:

- We start from the following operational definition of paradigm:
  - "it is a way to see, to think and to act, familiar to the vast majority of scientists (in their specific subject area) of different nationalities and languages, spread over more than a generation"

- In IS:
  - Historicist, custodial, patrimonial and technicist paradigm
  - Post-custodial, scientific and informational paradigm
High Education in Information Science: the Portuguese model

- The historicist, custodial, patrimonial and technicist paradigm
- Professional statement in the field of documentation / information, supported by specific training began in the mid-19th century:
  - Training inside institutions (national libraries and archives), in accordance to its mission and the activities they develop
  - The diffusion of the French model, established with the creation of the École Nationale des Chartes in 1821
  - Rare examples of university education
  - The training was provided by professional associations (especially since the beginning of the 20th century)
  - Framework of historical and scientific training, focusing on issues of custody, and development of research tools to support the work of historians
High Education in Information Science: the Portuguese model

- The French model of custody, historic and heritage-positivist gained new expression at the end of the 19th century

- We find a deepening of technical aspects and empowerment of Archivistics and Librarianship in relation to History, asserting as disciplines with their own identity
Research – in the custodial and technicist paradigm there is a lack of research as one of its main features

Emilio Delgado Lopez-Cózar says that “in the development of Librarianship and Documentation the theory followed the practice, didn’t guided or directed it. Research has ist roots in librarianship practice” (López-Cózar, 2002)
High Education in Information Science: the Portuguese model

- Being absent a theoretical and methodological foundation able to support the research work (even if it is understood as applied research) it is not possible to assign to the practical and professional activity a status of research activity
High Education in Information Science: the Portuguese model

- **Professional activity** - professional practice dominates activities

- The work of librarians, archivists and documentalists is essentially based on a set of guidelines and technical regulations

- There is a lack of interpretative theories and methods of qualitative / quantitative research, which are characteristic of Social and Human Sciences
High Education in Information Science: the Portuguese model

Characteristics of the historicist, custodial, patrimonial and technicist paradigm

- overvaluation of the custody or guardianship, preservation and restoration of the object, as the basic purpose of the professional activity of archivists and librarians;

- identification of the custodial and public service/mission of Archives and Libraries, with the preservation of the “classical” culture;

- emphasis on memory as the legitimating source of the State-Nation and culture, as an identity issue of the same state and its people, under a nationalist ideology;
High Education in Information Science: the Portuguese model

Characteristics of the historicist, custodial, patrimonial and technicist paradigm

- the growing importance of **access** to “content”, through finding aids (guides, inventories, catalogues and indexes) and the classification and index models (important technicist and normative legacy of the Belgian Paul Otlet and Henri La Fontaine) with an impact on the field of scientific and technical documentation, allowing for the multiplication of **documentation / information services**;

- prevalence of the **professional separation** of the archives and libraries, inducing a corporative spirit that fosters confusion between science and profession (there is a persistent misconception that the professions of archivist, librarian and documentalist naturally generate independent scientific disciplines such as Archives, Librarianship or Documentation)
High Education in Information Science: the Portuguese model

The post-custodial, scientific and informational paradigm

- University higher education (starting with graduation and increasing with masters and PhD) must follow a curriculum design that aims to cancel artificial separations that occur in traditional training "branches" of Archives and Library/Documentation.

- This **unitary perspective** seeks also to do a synthesis with the field of (technological) Information Systems with fieldwork and professional organizations in general.
High Education in Information Science: the Portuguese model

- **Research** cannot be disconnected from the theory (preferably systemic theory), or the methodological approach (quadripolar method)

- The development of research and postgraduate training (Masters and PhD) are fundamental
High Education in Information Science: the Portuguese model

- **Professional practice** with new forms of intervention
- Examples:
  - Value of information production’s context
  - Analysis of the flows and the use of information
  - Study of informational behaviour, focusing on the psychological and cognitive issues
  - Consider the standardized technical procedures, such as methodological operations in a theoretical framework and not as an end in themselves
High Education in Information Science: the Portuguese model

Characteristics of the post-custodial, informational and scientific paradigm

- the value of information as a human and social phenomenon, materialised in any type of support;

- the observation of the information dynamism, as opposed to documental “immobility;

- maximum priority is given to access to information for all, in well-defined and transparent terms, because public access justifies and legitimates custody and preservation;

- the need to understand, explain and know social information, through theoretical-methodological approaches, instead of the empirical practice formed by a uniform and uncritical set of rules and procedures only apparently “aseptic” or neutral of creation, classification and retrieval;
High Education in Information Science: the Portuguese model

Characteristics of the post-custodial, informational and scientific paradigm

- the change of the current theoretical-functional framework of the professional activity into a different approach, in relation with the dynamic universe of the Social Sciences with obvious implications in the training models of the future information professionals; and

- replacement of the instrumental rationale, as reflected in the expressions “document management” and “information management”, by the scientific-comprehensive rationale of information in management, i.e., social information is implied in the management process of organisations, and, therefore, informational practices derive from and are articulated with the conceptions and practices of managers and actors, and with organizational structure and culture; the information scientist, instead of or before establishing operative rules, must understand the meaning of such practices and present, within certain theoretical models, the more adequate (retro or) prospective solutions
High Education in Information Science: the Portuguese model

3. A new education model in University of Porto

- the Bachelor was created in 2001
- it was the first undergraduated programme in the Portuguese universities
- it appeared as an answer to the obsolescence of the previous model and has been proceeded by a deep reflection on Information Science domain, its theoretical and epistemological foundations

High Education in Information Science: the Portuguese model

- The Bachelor in Information Science has been a result of efforts of two faculties in the University of Porto, which had previous experience in such field:
  - the Faculty of Arts and Humanities – where existed since 1985 a post-graduation in Documentary Sciences
  - the Faculty of Engineering – where existed a Master in Information Management since 1997
The Bachelor in Information Science is based in an unitary perspective that:

- aims to avoid the artificial separation between some technical questions, traditionally identified with archives or libraries;

- aims to make a synthesis with the Information Systems (technological systems devoted to the storage and retrieval of information), that are increasingly being implemented inside organisations.
High Education in Information Science: the Portuguese model

The curriculum aggregates the following scientific fields:

- **Main scientific field:** Information Science
- **Complementary scientific fields:**
  - Computer Science
  - Social Sciences
  - History
  - Language Sciences
  - Philosophy
# High Education in Information Science: the Portuguese model

<table>
<thead>
<tr>
<th>1(^{st}) year - 1(^{st}) semester</th>
<th>1(^{st}) year – 2(^{nd}) semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Informatics (FEUP)</td>
<td>Communication and Computer Systems (FEUP)</td>
</tr>
<tr>
<td>Logics (FLUP)</td>
<td>Methodology of research (FLUP)</td>
</tr>
<tr>
<td>History of Culture (FLUP)</td>
<td>Technical English (FLUP)</td>
</tr>
<tr>
<td>Communication Techniques (FLUP)</td>
<td>Linguistics (FLUP)</td>
</tr>
<tr>
<td>Management grounds (FEUP)</td>
<td>Sociology of Organizations (FEUP)</td>
</tr>
</tbody>
</table>
# High Education in Information Science: the Portuguese model

<table>
<thead>
<tr>
<th>2nd year - 1st semester</th>
<th>2nd year – 2nd semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory and Methodology of Information Science (FLUP)</td>
<td>Informational Behaviour (FLUP)</td>
</tr>
<tr>
<td>Information Organization and Representation I (FLUP)</td>
<td>Information Organization and Representation II (FLUP)</td>
</tr>
<tr>
<td>Archives and Libraries Systems (FLUP)</td>
<td>Information Sources and Reference Services (FEUP)</td>
</tr>
<tr>
<td>History of Public Administration (FLUP)</td>
<td>Information Systems Analysis I (FEUP)</td>
</tr>
<tr>
<td>Information for the Internet (FEUP)</td>
<td>Administrative Law (FLUP)</td>
</tr>
</tbody>
</table>
### High Education in Information Science: the Portuguese model

<table>
<thead>
<tr>
<th>3rd year – 1st semester</th>
<th>3rd year – 2nd semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Management</td>
<td>Databases</td>
</tr>
<tr>
<td>Information Storage and Retrieval I</td>
<td>Information Services Management</td>
</tr>
<tr>
<td>Information Systems Analysis II</td>
<td>Information Storage and Retrieval II</td>
</tr>
<tr>
<td>Preservation and Conservation</td>
<td>Support Decision Systems</td>
</tr>
<tr>
<td>Option</td>
<td>Option</td>
</tr>
</tbody>
</table>
High Education in Information Science: the Portuguese model

- Recommended options:
  - Accounting
  - Cataloguing of Ancient Books
  - Information for Enterprises
  - Multimedia Technology
  - Palaeography and Diplomastics
  - Public Libraries
High Education in Information Science: the Portuguese model

- Since its beginning, the Information Science Bachelor recorded a large number of applications, what, at the moment, is not much usual in the Faculty of Arts and Humanities. In fact, the technological component, given in the Faculty of Engineering, is a factor that justifies such numbers (last year there were 362 applications for 40 places).
High Education in Information Science: the Portuguese model

- The bachelor in Information Science in the University of Porto is a programme with a strong technological component and very much directed to information management problems in every organizational contexts.

- The manifestation of interest from several entities, either public or private, in receiving students for the “internship” also constitutes an indicator about the potential interest of the work’s market in this kind of professionals with new profiles and new competences.
# High Education in Information Science: the Portuguese model

## Curriculum of the Master in Information Science, that began in 2008

<table>
<thead>
<tr>
<th></th>
<th>1st year – 1st semester</th>
<th>1st year – 2nd semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Representation</td>
<td></td>
<td>Content Analysis and Subject Indexing</td>
</tr>
<tr>
<td>Society of Information</td>
<td></td>
<td>Digital Archives and Libraries</td>
</tr>
<tr>
<td>Strategic Planning of Information Systems</td>
<td></td>
<td>Information Law</td>
</tr>
<tr>
<td>Option</td>
<td></td>
<td>Option</td>
</tr>
<tr>
<td>Option</td>
<td></td>
<td>Option</td>
</tr>
</tbody>
</table>
High Education in Information Science: the Portuguese model

Recommended options:

- Codicology
- Cognitive Psychology
- Communication of Information
- Data Analysis
- Information Audits
- Information Security
- Marketing of Information Services
- Scientifique and Technique Information
## High Education in Information Science: the Portuguese model

Curriculum of the Master in Information Science, that began in 2008

<table>
<thead>
<tr>
<th>2nd year – 1st semester</th>
<th>2nd year – 2nd semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminar I</td>
<td>Seminar II</td>
</tr>
<tr>
<td>Project (professional specialization) or Dissertation (research)</td>
<td></td>
</tr>
</tbody>
</table>
High Education in Information Science: the Portuguese model

Thank you