Chapter 5
Method: procedures, techniques, instruments

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This is the last of three chapters dealing successively with metatheory, methodology and method. Our focus is now on method as such (considerations of procedures, techniques and instruments), as distinct from methodology. Generally, we can distinguish two levels of method in comparative studies: (1) General social sciences methods (data collection, sampling, data processing etc.). They are not discussed here, but are dealt with in the various standard texts for LIS, e.g. Connaway & Powell (2010), Pickard (2007), Wildemuth (2009) and of course other general social science methods texts. (2) Specific issues of comparative method. These will be the focus of this chapter, which will conclude with a section on criteria for the evaluation of comparative studies.

Concepts across boundaries

Can concepts travel?

International comparative studies imply the use of concepts that can ‘travel’ – concepts that can be used across national, cultural and linguistic boundaries. We cannot assume that the same word has the same meanings when used in different national and cultural contexts. Even less can we assume that words looked up in bilingual dictionaries have equivalent meanings for the purpose of our study. An illustrative example is found in the IFLA (2010) World report, an international survey of library conditions with emphasis on freedom and equity of access to information. Informants in the respective countries were asked the question, “Have any incidents occurred in your country in the last two years that adversely affect freedom of access to information or freedom of expression?” On cross-checking the responses with other international sources of data on human rights, freedom of access to information and freedom of expression, the compilers of the report found that a remarkable number of respondents reported that there had been no such incidents, while serious incidents of this nature had been reported by the third parties (IFLA 2010: 31-32). On perusing the individual country reports one also notices that respondents in some countries with a high degree of freedom of expression express more criticism and concern about the situation in their countries than respondents in other countries with known poor human rights records. This could be attributed to at least two causes: (a) respondents in the latter countries fear reprisals if they report anything that may be construed as criticism – and there have been some cases which appear to substantiate this – and (b) the way the respondents understand freedom of expression in different...
countries may be rather different. Thus it may be that the concepts of ‘freedom of access to information’ and ‘freedom of expression’ do not ‘travel’ well across national, cultural and linguistic boundaries.

In the literature we find different metatheoretical (ontological) positions regarding the question of whether concepts can ‘travel’ internationally:

- the universalist position: that it is essential for theoretical concepts to be able to ‘travel’ worldwide if they are to be used in scientific cross-national explanations of phenomena
- the relativist position: that “all meaning is locally determined” (Landman 2008:33), which severely limits the possibility of international comparisons; according to this position, “stretching” a concept “dilutes its meaning and precision” (Landman 2008:34)
- the middle position: acceptance that concepts do not have the same meanings in all countries, but seeking practical solutions, which might include modifying core concepts into to fit into the local cultural context.

The universalist position is inherently positivist. It makes the assumption that sameness or difference is “a property that can be numerically measured”. The relativist position is interpretivist in nature. It assumes that sameness or difference is “an indicator of the observer’s/interpreter’s system of concepts” (Raivola 1986:271). In terms of the anthropologists’ distinction between etic and emic perspectives the universalist position is etic. It assumes that concepts can be universal and culture-free, so that they can be understood in the same across boundaries. The danger is that researchers will assume that concepts from their own culture are universal and can be applied to other cultures. The emic perspective assumes that concepts are specific to cultures, natures or groups (Hantrais 2009:78-79). Taken to an extreme, such a position would make comparison virtually impossible. On the other hand the universalist position appears excessively naive. Most comparativists today tend to take the middle position. This implies coming to terms in practical ways with the context dependence of concepts. An important point of departure is to make a distinction between sameness and equivalence. A theoretical concept that is to be studied in more than one context may have to be ‘measured’ or observed using ‘indicators’ or operationalized concepts which are not identical but equivalent. This is depicted schematically in Figure 5-A.

Note the feedback loop depicted in Figure 5-A. It indicates that the theoretical concept which serves as the point of departure may have to be refined in the process of working out equivalent operationalized concepts. What do we mean by equivalence as distinct from identity (being identical)? Numerous varieties of equivalence have been distinguished (Hantrais 2009:76-77). The six varieties identified by Novak (1977:41-43) have been widely cited and expanded, e.g. by Raivola (1986:265-267). Here are four examples:

- Cultural equivalence, where the phenomena are perceived in the same way in different cultures, for example LIS schools, regardless of whether in different countries they are autonomous, affiliated to universities or
vocational colleges, or governed as subunits of larger university departments;

- Contextual equivalence, where objects or persons belong to higher level aggregates that have been classified as equivalent, e.g. school libraries and school media centers in high schools, French lycées or Dutch gymnasiums (but not German Hochschulen, which are universities);

- Structural equivalence, where objects or persons have the same relative positions in structural systems that have been judged to be similar, e.g. library directors in universities, regardless of whether they are called provosts, deans, directors, university librarians or heads, and of whether they professionally qualified librarians;

- Functional equivalence, where the objects or persons play the same role in systems being compared, for example French documentalists and American corporate librarians; another example is the US Library of Congress, which, although established primarily as a facility for Congress, is functionally equivalent to national libraries in other countries and would be included in an international survey of national libraries in spite of its dual nature.

Hantrais 2009:76-85) provides a more recent and detailed discussion of many kinds of equivalence, making a major distinction between linguistic (lexical and syntactic) equivalence and semantic and conceptual equivalence. She also addresses the complexities of translating survey instruments into other languages. Harkness (2007) discusses in some detail the procedures for translating the survey instruments of the European Social Survey into multiple languages. Tran (2009) discusses conceptual equivalence in measurement in cross-cultural social work research, and deals in detail with the procedures for designing cross-cultural measurement instruments in quantitative studies.

Spurious lexical equivalence

The example of high school and Hochschule cited above illustrates the problem of spurious lexical equivalence, where the same word can have different meanings in two countries, or similar-looking words can have different meanings in other languages. This is illustrated in Figure 5-B.

![Figure 5-B: Example of spurious lexical equivalence](image)

As shown in Figure 5-B, the term ‘school’ which in the USA is applied to educational institutions at all levels, is used in South Africa (and most other countries using standard English) to refer only to what Americans call K-12. American institutions such as liberal arts colleges, community colleges, and junior colleges have no obvious equivalents in most other English-speaking countries. In Standard English a faculty is a university-level academic unit larger than a department, whereas in the USA it is a collective term for academic staff having a certain employment status, and is increasingly used to refer to individual faculty members. Such cases of spurious lexical equivalence could give rise to confusion and invalid results if the terms are used without explanations in survey questionnaires distributed internationally.
Concept intension and extension

The way in which concepts are formulated can have important implications for the internal and external validity of a comparative study. Concepts are used to classify, and as Sartori (1991) has pointed out, there is an inverse relationship between the number of classes for a phenomenon and the degree of variation within the classes. For example, if the class ‘libraries’ is divided into three classes (public, academic and special) the category of academic libraries would cover a huge range from the Bodleian Library of Oxford University to the library of Littletown Elementary School. There is also a relationship between the extension of concepts, and the number of cases denoted by them in a comparative study, as illustrated by Figure 4-VII, which is derived from Sartori’s (1991) “ladder of abstraction”.

Figure 5-C: Extension of concept and scope of study

Figure 5-D: Intension of concept and scope of study

If we superimpose Figure 5-D on Figure 5-C it is seen that there is an inverse relationship between the intension and extension of a concept. Therefore the decision on how to define key concepts is a very significant decision in comparative method.

‘public libraries’ in more countries. This process is known as ‘concept stretching’. However, at the same time, the intension of that concept will be reduced. That means that the agencies covered have fewer and fewer attributes in common and the term ‘public library’ will tell us very little about the characteristics of these agencies. This is illustrated by Figure 5-D.
Equivalence of methods and techniques

In addition to the equivalence of concepts, dealt with in the foregoing discussion, reliability of comparative research requires consideration of the equivalence of other techniques and procedures. This is particularly true in large-scale quantitative research. Here it is useful to consider the experience gained in the course of the European Social Survey (Jowell et al. 2007). In a coordinated survey conducted by in-country researchers based throughout the European Union, it proved impossible to implement exactly identical samples, interview schedules, response coding, etc. The reliability of this quantitative research depends not on identical procedures and instruments but on the ‘principle of equivalence’.

If samples are drawn in more than one country, it must be borne in mind that there may be different national styles of census-taking and statistical surveys. Thus different countries may use different sampling frames and different stratification or cluster designs for national censuses or polls. In these cases, it is critical to be aware of the differences, and to ensure that sampled units have an equivalent probability of inclusion. The response rate also needs to be at least roughly equivalent.

If surveys are conducted using oral interviews by in-country interviewers, it is necessary to take into account the methodological and procedural habits of researchers in different countries. There may be significant differences in respect of the training of field workers, interviewing styles, the use of visual aids, and the assessment of interviewees in terms of socio-economic classifications (e.g. ‘working class’, ‘middle class’). Coding schemes should be designed to minimize differences between countries. This also applies to the coding of responses to self-administered questionnaires.

At this point a word of caution is in order concerning web-based surveys, which have become a very popular data collection technique. Web-based software such as Surveymonkey or Qualtrics greatly facilitates the international distribution of self-administered questionnaires. However, the ease and speed of disseminating the survey instrument lends itself to unintentional abuse. If the questionnaire is not judiciously designed the researcher risks receiving misleading responses or annoying recipients. In a recent example an American MLS student used IFLA’s international listserv, IFLA-L, to distribute a web-based questionnaire aimed at the “identification of educational and training needs for paraprofessionals in small international libraries”. The term ‘small international library’ can be understood in many ways in different contexts. In American English ‘international’ means ‘foreign’, i.e. libraries in countries other than the USA, but this is not the case in Standard English. A librarian running a ‘small’ library (itself a nebulous concept) in France, Gabon or Cambodia may not recognize her library as being ‘international’.

In addition, the concept of ‘paraprofessional’ staff varies widely among countries and may be unknown in others. To collect valid data web-based surveys need to be designed with great care, preferably in consultation with knowledgeable colleagues in various countries (e.g. the members of the relevant IFLA standing committee), and should be pretested internationally before they are finalized and distributed.

Data sources

Data used in comparative and international librarianship can be classified in various ways. Manheim and Simon (1977:204-209) identified three main types of sociological data:

- **Human behavior and characteristics:** this comprises (a) responses to questions posed by the researcher, and (b) other “overt behavior and observable characteristics”, where data are collected through direct observation.

- **Products of human behavior and characteristics:** this comprises two categories. (c) Physical evidence (erosion measures, such as wear and tear and accretion measures, such as date stamps on circulation slips) is also referred to as indirect observation. (d) “Archives”, a term used by social scientists to refer to all forms of information-bearing records, published and unpublished.

- **Simulated data** (e) is derived from computer simulations, management games, etc. The ‘ideal types’ referred to earlier would probably fit into this category.
Issues relating to category (a), responses to questioning, have been touched on above. Category (b), direct observation, includes field work such as visits to libraries in other countries, where issues of cultural sensitivity and avoidance of cultural bias are relevant, and where attention must be paid to some practical, logistical matters that will be referred to later. Category (c), physical evidence (such as the accumulation of date stamps on circulation slips, or patterns of wear and tear on library floors and furniture) does not at first sight appear to be very relevant to us here, but when visiting libraries in other countries one can learn much from physical evidence which may, on occasion, contradict official statements or figures. Category (d), information-bearing records, is a major source of data for comparative librarianship.

Information-bearing records are frequently divided into primary and secondary sources (Collings 1971; Simsova & McKee 1975). Primary sources are documents providing first-hand evidence and include memoranda, agendas and minutes of meetings, annual reports, statistical reports, financial statements, legislation, government reports, grant proposals and reports to grant-making organizations, press reports, archived correspondence, and other similar documents. Generally they will have been generated close to the time of the events described and they are characterized by a degree of immediacy. Some authors (e.g. Collings) include questionnaire and interview responses among primary sources. The use of primary sources generally presupposes access to material that may be unpublished and possibly confidential. Freedom of access to official information cannot be taken for granted in all countries. Use of these sources also requires sufficient command of the language or languages used in the relevant countries (Sable 1987). Primary sources are particularly important in the in-depth, qualitative research that characterizes single-country studies and few-country comparisons.

Secondary documents include journal articles, books, conference papers, dissertations and other publications based on data obtained from primary sources and other secondary sources and in which events and institutions are described, discussed and evaluated with a degree of distance from the events and institutions. They include published reports on case studies and single-country studies. Secondary sources such as statistical yearbooks may provide data for quantitative many-country comparisons. Conceivably, statistical comparisons could be based largely on such sources. To the extent that comparative studies take historical and contemporary contextual factors into account, comparatists will also make heavy use of secondary sources for background and statistics on the economy, politics, social conditions, culture etc. of the countries that are studied.

The classification of sources into primary and secondary sources is not always clear-cut and may depend on how the sources are used. For example, a textbook on library administration would appear to be a typical secondary source, but such a manual could also be used as evidence of attitudes to library management in the country at the time of its publication, in which case it serves as a primary source. Citations in the reference lists of articles serve as primary sources in bibliometric studies, although the articles in which they appear are generally secondary sources in their fields.

Some important categories of secondary sources

A wide range of published sources and grey literature can be consulted for comparative studies and for studies of individual countries. These can be grouped into the following broad categories:

- General background information about a country
- International comparative data – general
- International comparative data – LIS
- Material about LIS in the country or countries

In what follows, it is assumed that a single-country study is being undertaken and that the reader has access to an academic library with the usual range of print and online resources.
General background information about a country

To gain background on the country general reference sources, such as encyclopedias, can be useful. Online reference sources can usually be accessed via the online reference pages of the library website, where we expect to find lists of the available dictionaries and encyclopedias, atlases, almanacs and statistics. A well-known source of country information is the *Worldmark encyclopedia of nations*\(^1\). A free counterpart of the *Worldmark encyclopedia of nations* is the *Encyclopedia of the nations*\(^2\). It has to be used with circumspection as some of the information is rather dated. *Wikipedia* can provide many leads and is often more up to date than other encyclopedias. Its information has to be evaluated critically, but Wikipedia itself is quite good at flagging material that is unsatisfactory.

Many other sources are available online. For example the *CIA World Factbook*\(^3\), is a highly respected source (also valued by those who do not love the CIA), which provides country by country information as well as facilities for country comparisons.

The Bureau of Labor Statistics of the U.S. Department of Labor has a web page\(^4\) with links to the sites of the statistical agencies of almost all of the countries of the world. A similar page is maintained by the Jean and Alexander Heard Library of Vanderbilt University\(^5\).

A great deal of information can be found by simply using Google and other search engines, which will lead the user *inter alia* to official government websites where you are likely to find the country’s official handbook. For example, the South African government has an official site\(^6\) providing information about the country.

But there are also commercial sources such as (again, for South Africa) *SouthAfrica.info*\(^7\). All countries have sites of this kind. Usually they also have brief but mostly superficial sections on the country’s libraries. Bear in mind that the official sources and those of business and tourism development bodies tend to be promotional in nature. Particularly in countries with repressive regimes and a poor record of human rights and freedom of expression, what they say has to be taken with a good pinch of salt.

The *Country Studies* published online by the Federal Research Division of the U.S. Library of Congress\(^8\) are very thorough and useful for historical and political background, but of no use for current conditions as most are based on research conducted between ten and twenty years ago.

There are some sources of country information which are available in print in many public libraries. Here is some information about the most recent editions of these annual publications as in March 2011:

- *Statesman’s yearbook: the politics, cultures and economies of the world 2011*; ed. by Barry Turner. New York: Palgrave Macmillan, 2010. *(The year in the title is always the year after publication.) This has truly international coverage, with a useful section on the United Nations and other intergovernmental organizations and about 1450 pages devoted to quite comprehensive country descriptions, alphabetically by name of country.*

- *World almanac and book of facts 2010*. New York: World Almanac Books, 2010. *(In spite of its title, this is largely devoted to the US, but there are about 120 pages devoted to country descriptions, also alphabetically by name of country.)*

- *Whitakers almanac* (London: A&C Black Publishers) is the British equivalent of the *World almanac and book of facts*, and puts heavy emphasis on the UK. However, it does have more substantial coverage of other countries, over 300 pages in the latest edition (2010) which is released in

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  \item \hspace{1cm}http://www.gale.cengage.com/servlet/ItemDetailServlet?region=9&imprint=000&cf=e&titleCode=&type=4&id=226308
  \item \hspace{1cm}http://www.nationsencyclopedia.com/
  \item \hspace{1cm}http://www.cia.gov/library/publications/the-world-factbook/
  \item \hspace{1cm}http://www.bls.gov/bls/other.htm
  \item \hspace{1cm}http://www.library.vanderbilt.edu/romans/natlstats.html
  \item \hspace{1cm}http://www.info.gov.za/aboutsa/index.htm
  
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\hspace{2cm}http://www.southafrica.info/about/

\hspace{2cm}http://memory.loc.gov/frd/cs/
October.

- *The Europe world year book 2009*, 50th ed. London; New York: Routledge. It presents enhanced directory-type information on over 1,900 international and regional organizations, with more extensive coverage of the United Nations and its related agencies as well as detailed country surveys, including an introductory essay, a statistical survey, and a comprehensive directory section for each of over 250 countries.

**International comparative data – general**

A huge amount of international statistical data of a specialized or topical nature, which is useful for background information about contextual factors relevant to LIS at regional or national levels, is available on the WWW. Here are some examples:

The United Nations has an Inter-Agency and Expert Group on MDG Indicators which publishes reports on world-wide progress in achieving the Millennium Development Goals (MDGs). Its *2010 Millennium development goals report* reports on indicators for each of the goals, relating to poverty and hunger, universal primary education, gender equality, child mortality, maternal health, HIV/AIDs and malaria, environmental sustainability, and the global partnership for development (which includes access to the Internet). Data are presented for the nine developing and emerging regions devised for the purpose of this report. This provides a useful basis of comparison when studying countries in these regions. Individual countries also publish reports on their progress in achieving the MDGs. An example is the Millennium development report released by the South African government, which includes data on literacy and school enrolment rates in that country. Unfortunately libraries and information do not feature in the MDGs.

Internet World Stats provides free statistics of Internet usage by region and country, as well as a range of other ICT-related topics (paid access), and links to other sources of statistical data on the Internet.

The UNESCO Institute for Statistics (UIS) is the statistical office of UNESCO and is the UN depository for global statistics in the fields of education, science and technology, culture and communication. Statistics published by the UIS are frequently relevant to LIS. A list of publications can be found on its website. Most of the compilations are published online free of charge. An example is the *2010 Global Education Digest* (GED) which provides data on education at all levels on a region-by-region basis. Unlike the MDG report it includes Europe and North America. The last edition of the *UNESCO statistical yearbook* appears to have been published in 1999. Selected parts of the yearbook database can be interrogated online by theme and region. However, coverage of individual countries is spotty and often out of date.

Eurostat, the statistical office of the European Union, publishes a statistical yearbook under the title *Europe in figures: Eurostat yearbook 2010*, available. It presents a comprehensive range of statistical data on the member countries of the European Union (EU), along with selected statistical indicators from EU candidate countries, the USA, Japan and members of the European Free Trade Association (EFTA). More data are available on the Eurostat website, where statistical and thematic country profiles can be found.

Some caveats concerning the use of international and foreign statistical sources are found on the website of William C. Robinson, University of Tennessee and are

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reproduced in Exhibit 5-I.

**International comparative data – LIS**

In the past the *Unesco statistical yearbook*, referred to above, was the most important single source of statistical data on libraries, the book industries and the media. However, this is no longer the case. LIS data are still available on the website mentioned above, but like the other data they tend to be very incomplete and out of date. In collaboration with IFLA’s Section of Statistics and Evaluation and the International Organization for Standardization (ISO) Committee TC46/SC8 (Information and documentation: Quality: statistics and performance measurement), the UIS is currently reviewing its system for collecting library statistics. A new questionnaire was piloted in Latin America and the Caribbean in 2007. Once the system has been fully implemented, it should serve as an invaluable resource for comparative LIS. Information on this project can be found on IFLA’s website and on that of the UIS.

Libecon (European Library Economics for International Benchmarking, also written LIBECON and LibEco) was a project funded during 2001-2004 by the Directorate General for the Information Society of the European Commission. It used internet communications to develop a continuously updated database of statistics about library activities and associated costs in the context of their national economies. An internet site was established to collect and make available library statistics primarily from European countries. The database also contained data from a number of other countries, including Japan and the USA. The project appears to have ended in 2004, at which stage it contained data up to the year 2001. A report summarizing the data, *International library statistics: trends and commentary based on the Libecon data*, was released in 2004. Libecon also published a series of newsletters containing reports, analyses and country reports.

Since 2001 the IFLA Committee on Free Access to Information and Freedom of Expression (FAIFE) has published a *World report* series, initially alternating between a theme report and a country survey report summarizing responses to questions relating to various aspects of intellectual freedom. The surveys also included some general information about libraries. All the reports can be accessed online. Since 2010 the World report has been published as a web application that can be accessed through a country-oriented map interface (for individual country reports and country comparisons) and a question-oriented interface, for comparisons of all responses to specific questions by all participating countries. Although the emphasis is on various aspects of freedom of expression and access to information, more general descriptive information about LIS is increasingly being added to the database.

**Library and information services in a country**

A good place to start is the *Encyclopedia of library and information science (ELIS)*, which has many country entries, but, unfortunately, not for all countries. The third edition has recently been published both online and in print.

For most countries of any significance at least one book has been published describing their libraries and information services. An example is *Libraries for the future: progress and development of South African libraries* (Bothma et al. 2007). This book was published to coincide with the 2007 IFLA World Library and Information Congress in Durban, South Africa, in August 2007. Whenever an IFLA Congress is held, articles about LIS in the host country are likely to be published in *IFLA journal* and in one or more journals published in that country, often in English. An example is a special English-language issue of the Italian journal *Biblioteche oggi*, published in 2009 to coincide with the IFLA Congress in Milan. The various sections of IFLA usually try to include in their congress sessions papers dealing with LIS in the host country and in the wider region in which the

[p.9]
host country is located. Most of the papers presented at IFLA congresses are published on IFLA’s website, where they can be accessed via the ‘Programme and proceedings’ page of the relevant congress\(^{24}\). The best of these papers are likely to be published in *IFLA journal* or other journals.

These articles and much other published literature can of course be found using the major bibliographic and full-text databases for LIS: *Library and information science abstracts* (LISA), *Library literature and information science full text* (a Wilson database) and *Library, information science and technology abstracts* (an EBSCO database). The *ERIC* database (produced by the US Education Resources Information Center) is also useful for LIS. Of these LISA generally offers the best international coverage.

Much information can also be found by browsing the web. Websites of the national library association, the national library, and the relevant government department or ministry (often Education or Culture) can provide information and leads. Regional surveys may be helpful too, and here mention should be made of *Global library and information science; a textbook for students and educator* (Abdullahi 2009). This book is organized by regions (continents); within each region there are chapters on the various kinds of libraries. Although the information for the individual countries in the region is not presented separately, good leads can be found here and it is useful to see the regional context of the country being studied.

**Challenges in using sources**

Secondary sources are more likely than primary sources to be available in English. This sets up a temptation for monolingual English-speakers who may be lulled into a false sense of security by the availability of English-language sources. Sable (1987:10-11) warns students that the lack of a working knowledge of the language or languages of the country or countries they plan to study is a serious disadvantage. When studying non-English-speaking countries they are likely to find insufficient material for a viable study. The alternatives are to select a country where English is used as an official language, to have material in other languages translated into English (which is likely to be prohibitively expensive), to take a crash course in the relevant language, or, where available, to take a course in the foreign language for librarians (e.g. ‘Spanish for librarians’), covering basic grammar, a limited practical vocabulary, and library terminology.

I should add that, quite apart from the potential problem of insufficient sources mentioned by Sable, the researcher who is unfamiliar with the language of the country studied will undoubtedly miss out on the subtlety and nuances of library conditions in that country and will find it difficult to understand the conceptual framework of the colleagues in that country. She will also find it difficult to gauge the extent to which authors of English-language secondary sources she consults may themselves have misunderstood or misrepresented conditions in the country.

In using sources of all kinds the comparativist should be aware of potential pitfalls. (See Exhibit 5-I.) Raivola (1986: 268) points out that while data sources such as the UNESCO *Statistical yearbook* provide useful information for education planners and administrators, researchers have to regard the *Statistical yearbook* with caution, since it is not compiled for research purposes. This is also true of the library-related information which it contains.

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All sources, primary and secondary, should be subjected to what Van Dalen (1973:168) has called “cross-examining …silent witnesses”. The examination of sources may not require the same degree of technical expertise or rigor, but it should follow the basic procedures of the external and internal criticism of sources as it is conducted by historians. External criticism is concerned with the authenticity (‘genuineness’) and textual integrity of sources, asking questions such as the following to determine the date and place where it was produced, its authorship, etc.:

- When was the source produced? (Dating)
- Where was it produced? (Localization)
- Who produced it? (Authorship)
- What are the antecedents of this source? Is it original or derived from earlier sources? (Analysis)
- Has the source been transmitted intact, in its original form? (Integrity)

It will be appreciated that electronic documents add new challenges to external criticism.

**Internal criticism** is concerned with the credibility or evidential value of the content of the source, asking questions such as:

- Was the author a competent witness (positioned where the action happened, physically able to observe, of sound mind, etc.)?
- Was the author a truthful witness? (Did the author have motives for distorting the truth: vanity, envy, revenge, partisanship, or idealism? Did the author have a tendency to exaggerate? Was the author naive or gullible? Was the text censored?)

Generally librarianship is a relatively uncontroversial profession. Nevertheless violent disagreements do occur. For example, one has only to look at the literature on libraries in Cuba, on the destruction many centuries ago, of the great Library of Alexandria, or the more recent looting of the Iraqi National Library and Archives in Baghdad, to see that we are not without emotionally charged topics. But literature on apparently uncontroversial topics also needs to be read critically.

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**EXHIBIT 5-I:** Caveats, from website of William C. Robinson, University of Tennessee, http://web.utk.edu/~wrobinso/534_lec_intl.html, accessed 2010-03-26:

Often, we use international government documents and publications to locate statistical information. Remember that not all such information is reliable or valid. Countries differ notably in their ability to gather, analyze, and report statistical information. Even the United States cannot accurately count its population. Some countries may not be able to provide current information or may use "guessimates" to make the country or the ruling class look good. Political manipulation of data to make things look good is a problem for statistical agencies in both developed and developing countries. Typically, the newest international or foreign statistics are several years old.

Be careful when users need to compare data from country A with that for country B. Data collection methods and definitions often differ and make comparisons difficult or even impossible. Without operational definitions and agreement on those definitions [without comparability], data for the same measure might be quite different. For example, international trade data is weakened by the fact that different countries use different cargo valuation equations. Not all data will be recent, produced on a regular basis, or reported in a timely manner. The more that you know about the mission, goals and objectives of an international organization, the better you will know what sort of information it is likely to gather. Too, the more known about the country, the better to judge data quality. Ideally, the user would find and compare different indicators for the same variables to validate statistics.

Be familiar with organization membership. For example, OECD statistics focus on members. European Union statistics focus on the European Union. The Europa Yearbooks do a good job of listing members of many international organizations.

Understanding definitions is essential in using international statistical sources. Users need to be familiar with definitions if they are to understand and use statistics successfully. Not all definitions are intuitive. For example, some statistical sources are organized by level of economic development so it can be helpful to know if Iceland, for example, is an industrial country. Different sources may classify the same country differently.

Peter Lor International and comparative librarianship, Chapter 5, draft 2011-04-21
To illustrate that these concerns are not exaggerated, here are passages describing the British Council, from two encyclopedias, as cited by Buckland and Gathegi (1991:65):

From the *Encyclopedia of library and information science (ELIS)*, 1970:

The aim of the British Council has always been the long-term one of promoting cultural exchange and understanding between Britain and other nations. It has deliberately stayed out of the political arena... as a result, over the years, the Council has been able to establish its reputation as a reliable, politically disinterested, cultural organization.

From the *Lexikon des Bibliothekswesens* (1974):

In practice the libraries of the British Council serve the imperialistic foreign policy of Great Britain by spreading the point of view of the ruling circles of monopolistic capitalism, through the ideological fight against Marxist-Leninism and against the national liberation movements as well as by influencing some classes of the newly independent countries into the bourgeois, capitalist path of development. (Translation by Buckland)

It does not require great perspicacity to infer that the *Lexikon des Bibliothekswesens* was published in (then communist) East Germany. The author of the entry in *ELIS* was Norman Horrocks, a highly respected, internationally-minded librarian of British extraction. His somewhat uncritical evaluation of the British Council appears fair and credible – to those on the western side of the ideological divide.

Contributions about organizations published in encyclopedias, multi-authored books and reference works are commonly written by their members or employees, and their inclination is to put the organization in a favorable light. The same applies to the web pages of those organizations. Press releases issued by organizations are often placed in newspapers and newsletters without critical editing. Web sites and publications of governments may be good sources of information about libraries in their countries, but these media usually put a positive spin on conditions there. Encyclopedia entries and chapters about LIS in other countries are also often contributed by citizens of those countries. Depending on how repressive the regime is, there may be a great deal of pressure on those authors to put their library conditions in their countries in the best possible light.

**Other challenges**

In addition to the problems of cultural bias, spurious lexical equivalence, language issues and reliability of sources that have already been referred to, a number of other challenges are faced by comparativists and, in fact, by any social science researchers engaged in research in other countries. These are described in a very useful book by Barrett and Cason (1997), who start off by saying:

Every year a great number of enthusiastic, well-trained social scientists set out on their first overseas research project and, with an awesome display of energy and creativity, reinvent the flat tire. (p.1)

Their book contains much practical advice and many fascinating anecdotes. The following are among the aspects they cover:

- Identifying a study site: which countries, towns or institutions to choose as study sites; which factors come into play. They recommend if possible selecting a site which excites the researcher’s research passion. An exploratory research trip (preceding the final selection of the site) can be very useful.
- Language training: They mention that there is now some debate about the necessity of having language skills, which were previously considered indispensable for foreign field work (cf. Dickson 1979).
- Identifying a source of funding
- Pre-departure preparations: money, health, housing, packing, family matters
- Dress: the researcher should not dress too casually as this may be perceived as a lack of respect.
• Academic preparations: making contacts with researchers in the country, establish contact with local research institution or university
• Familiarizing oneself with the new environment
• Dealing with bureaucracy: there may well be legal requirements of which foreign researchers need to be aware, particularly in countries with undemocratic regimes. In these countries researchers may need formal licensing or accreditation, which may take some time to obtain. There may be restrictions on travel or access to informants.
• Issues of gender, race, class and age (e.g. advantages and disadvantages that women researchers experience in the field)
• Logistics of fieldwork: research equipment, parts and supplies, adapters, keeping equipment safe, transportation
• Research assistants: relationships can be complicated since researcher may be very dependent on local assistants and may have to spend a lot of time in their company, sometimes in difficult circumstances
• Informants: choosing informants, establishing relationships, cross-checking data
• Dealing with sensitive subjects (sometimes surprising things turn out to be sensitive)
• Knowing when to go home, settling down at home, writing up the results
• Post-fieldwork obligations: providing feedback to the institution, community or country studied in return for their hospitality and assistance; taking care not to reveal the identity of sources.

To this list Buckland and Gathegi (1991:66-67) add distance (the necessity of travel, with its attendant inconvenience and cost), the cultural barrier (already referred to), politics (a project can be affected by a diplomatic row affecting relations between the researcher’s country and the host country, or by internal unrest there), poor bibliographic control in the host country, and inadequate library resources there. Schick (1977) refers to difficulties of obtaining funding and to delays experienced when planning research involving parties in multiple countries. For a much more recent perspective, see a paper by Fox et al. (2006) on international virtual research collaboration, where members of the research team are geographically dispersed and use Internet-based technology to collaborate.

Mechanics of comparison

Early authors in comparative librarianship (e.g. Krzys 1971, Danton 1973, Simsova & McKee 1975, Simsova 1982, Krzys & Litton 1983) were at pains to emphasize the need for true comparison, arguing that simply studying two or more cases is not enough. For true comparative research we need to go beyond parallel studies and the juxtaposition of results. The researcher has to proceed to the identification and analysis of observed similarities and differences, and thence to their explanation in terms of contextual factors and relevant theory. Only if this stage is reached can the study hope to contribute to the development of theory. Here we can discern the influence of such authorities as George Z.F. Bereday (1964), whose book, Comparative method in education, was frequently cited by comparativists in LIS. In his book Bereday set out a four-step method for a comparative study: (I) Description, II Interpretation, III Juxtaposition, and IV Comparison. Bereday’s explanation was accompanied by a diagram which was adapted for comparative librarianship by Krzys and Litton (1983:38). It is reproduced in Figure 5-E.

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25 Krzys and Litton captioned it “The methodology of comparative library education”, which seems to have been an error.
The four phases can be summarized as follows:

I. Description: Presentation in narrative form, using a “preliminary topical outline”, preferably devised by the researcher him/herself in preference to using a ready-made scheme. The description is done separately for each country that is to be compared.

II. Interpretation: An “analysis in tabular form in terms of the social sciences”, taking into account the full range of factors that may influence the development of LIS in the relevant countries (cf. Chapter 2). The discussion of contextual factors is “interwoven” with the description of the library phenomena. This too is done separately for each country.

III. Juxtaposition: The “interwoven” reports on the chosen countries are now placed side by side in order to discover similarities and differences in the data compared, and to formulate a hypothesis (relating, it seems, to the contextual factors) that will explain the phenomenon. To arrive at the hypothesis an introductory statement is made to serve as the “criterion of comparability”, the data being compared are restated in terms of this criterion, and a hypothesis is formulated.

IV. Comparison: The final step is a report on the conclusions of the study. It is the only phase that is reflected publicly, the others being only for the use of the researcher. In this phase various hypotheses and conclusions relating to different aspects of the compared phenomena will be set out, with a view to formulating “theories or laws of librarianship” (Krzys & Litton 1983:37-41).

The worked example provided by Krzys and Litton closely follows that of Bereday (1974:29-51), who provided a comparison of school reform in France and Turkey. Krzys and Litton illustrate a systematic process which seems excessively mechanistic and repetitive. Particular problems arise in Phase III. It is not clear what is meant by the ‘criterion of comparison’. It appears to correspond to Bereday’s (1964:22) “unifying concept” or “guiding idea” which is distilled by the researcher from the large amount of data that has been collected. This then gives rise to the hypothesis. Some of the uncertainty may be related to the way in which Bereday deals with the hypothesis in Phase III, deriving it from the earlier phases. This has been criticized by Raivola (1986:270), who objects that “theory and hypotheses are what form the comparative dimension in comparative research, not the raw material itself, as Bereday, for example, claims.” Since similarity and difference depend on the relationship between the observer and the data, we cannot expect that some “comparison dimensions will emerge from [the data] automatically.” In essence, Raivola’s criticism is a criticism of a positivist assump-
tion that similarities and differences exist ‘out there’, waiting to be observed.

More recently, Phillips (2006:289-291) has updated Bereday’s model of comparative inquiry, emphasizing the role of context and historical background. His schema of comparative inquiry is reproduced in Figure 5-F.

Figure 5-F: Phillips’s (2006) Structure for comparative inquiry

The schema starts with the conceptualization of the issues to be addressed, but not in a specific context. The issues are then analyzed in depth in their respective contexts (historical, political, economic and social), as in Bereday. This is done for the cases in parallel. Differences and the variables that might account for them can then be identified. This is followed by an attempt to explain the differences against the background of their contexts, and hypotheses are developed. The original issues are then reconceptualized and an attempt is made to determine whether the analysis has yielded any features that are of more general applicability.

In Phillips’ schema the conceptualization that precedes the juxtaposition of data goes some way towards addressing Raivola’s objections. The emphasis placed on historical context is also noteworthy. There are many ways to schematize the comparative process. The key points are that the phenomena or issues of interest (in our case, library phenomena) need to be considered in their own contexts and that these contextualized phenomena are subjected to systematic comparative analysis in order to identify similarities and differences for which the comparativist attempts to provide explanations.

**Contributing to theory**

The box labeled “Application: Generalizability of findings” in Figure 5-F should not be overlooked. In the definition of comparative librarianship cited in Chapter 2, Danton (173:52) stated that the “ultimate aim” of comparative librarianship is “trying to arrive at valid generalizations and principles”. This could involve:

(a) Applying existing LIS theory to explain the findings of the comparison, and testing and refining such theory
(b) Borrowing theory from other disciplines and applying it to the findings
(c) Developing new theory to explain the findings

While one is hard pressed to find convincing examples of (a), various comparative studies have attempted to determine the factors favoring the development of libraries. In his seminal study of 19th century public library development in France,
the USA and Great Britain, Hassenforder (1967) explored multiple reasons that might explain the divergent development of public libraries in France on the one hand and the USA and Great Britain on the other. He considered an array of factors, including differences among the countries in respect of the degree of urbanization, the length of the working day, conceptions of democracy, the degree of bureaucratic centralization, the relative strength of civil society, the religious factor (Catholicism, Protestantism and anticlericalism), the presence or absence of a tradition of philanthropy, the educational system and many other factors. Eliminating economic conditions as a major factor, he attributed the divergence broadly to “certain characteristics of the societies in question, a set of habits and attitudes that can be grouped under the term mentality and which cannot be captured by means of quantitative analysis”\textsuperscript{\textregistered}. Although his analysis is suggestive, he did not develop a formal explanatory theory. At a quite different level, Gardner (1971), commissioned by UNESCO to produce a model public library law, undertook a comparative study of existing library legislation in 14 countries and arrived at a set of 22 principles for such a law: a normative rather than an explanatory result.

In relation to (b), borrowing theory from other disciplines, many examples can be cited. Maack (1985) used theory from the sociology of feminization and professionalization in her comparison of the feminization of librarianship in the United States and France.\textsuperscript{77} Whitley’s (2000) typology of research fields has been used as a conceptual framework for regional and comparative studies of the institutional and intellectual patterns in the development of library and information science research internationally (Rochester & Vakkari 2003) and in the Nordic countries (Aarek et al. 1992; Åström 2008).

The borderline between (b) borrowing of theory from other disciplines and (c) the use of such theory to construct theory for LIS is somewhat artificial. Abdullahi et al. (2007) used theory on internationalization of higher education for their study of internationalization of LIS education in Europe and North America. Dalbello (2008) used theories of culture and organizational rationality, social-choice systems and strategies of organizational behavior to construct an impressive analytical framework for her comparative study of cultures of innovation in European national libraries. In developing a theory encompassing three models of school librarianship (American, British and combined) Knuth (1999) appears to have sought inspiration from sociological theory on the tendency of national educational systems to converge on common structures. This led her to develop a theory in which the three models become part of an “overarching” and convergent pattern of development.

Criteria for the evaluation of comparative studies

This chapter concludes with a proposed set of criteria for the evaluation of comparative studies. For a systematic analysis and evaluation of articles, reports and books reporting comparative studies in librarianship and information work, it is helpful to consider five levels of analysis, which correspond to five levels of decision-making, relating respectively to:

(a) Metatheoretical assumptions
(b) Research ethics
(c) Comparative methodology
(d) Comparative method
(e) General method

Decisions relating to metatheoretical assumptions

Here we consider the researcher’s decisions relating to metatheoretical assumptions in the sociological, teleological, ontological and epistemological dimensions discussed in Chapter 3. Table 5.1 sets out these four dimensions with accompanying questions. The ethical dimensions are dealt with in Table 5.2.

\textsuperscript{26}“certaines caractéristiques des sociétés en présence, à un ensemble d’habitudes et d’attitudes que l’on peut regrouper sous le terme de mentalité et qui échappe à une analyse quantitative” (Hassenforder 1967:195).

\textsuperscript{77}Maack’s study is also noteworthy for her reflective use of comparative methodology.
Table 5.1: Decisions relating to general metatheoretical assumptions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociological</td>
<td>Who is/are the author(s)? From which countries? (From countries on/in which research was conducted or from a third country?) What is their institutional setting? (E.g. academic or practice? Are they part of a research group, employed in a library, working for an aid agency?) What is their status? (E.g. graduate student, PhD candidate, postdoctoral fellow, volunteer, expatriate, professional.) Who funded the research? (E.g. If a research grant, from which organization? Is it an organization with a particular perspective (such as the US Department of Defense compared to the Bill and Melinda Gates Foundation or UNESCO)? In which journal or venue was the contribution published? Is there a possibility that the author(s) could have been affected by bias? If so, was it addressed? Do they explicitly deal with the challenges of inter-cultural understanding and cultural relativism? Was the study, with its instruments and techniques, designed in both/all of the countries being compared (symmetrical), or in one of the countries (asymmetrical)? If authors from more than one country collaborated, do they discuss the collaborative process and how they dealt with cultural differences and differences in their intellectual styles?</td>
</tr>
<tr>
<td>Teleological</td>
<td>What is the overarching purpose of the research: basic and theoretical, aiming at explanation or understanding, or is the overarching purpose more practical, aimed at applying findings to evaluate, change or improve institutions, systems, processes or products through comparative rankings, benchmarking, advocacy, adaptation, innovation, etc.?</td>
</tr>
<tr>
<td>Epistemological</td>
<td>How does the author see him/herself in relation to the phenomenon that was studied: completely detached and independent from it (positivism), imperfectly detached from it but striving for objectivity (postpositivism), or in a continuous interaction with it (interpretivism)? Did the author adopt a nomothetic goal of explanation, prediction and control, striving to arrive at valid generalizations, or an idiographic goal of deeper, more comprehensive understanding of the phenomenon in its uniqueness and complexity? Did the author seek to empirically test hypotheses or to generate hypotheses?</td>
</tr>
<tr>
<td>Ontological</td>
<td>What is the nature of the phenomenon that was studied? Is it something that exists ‘out there’ in external reality and can be observed (realism)? Is it something that exists in external reality but of which the relations are more difficult to pin down (critical realism)? Is it a virtual reality (an apparent but possibly constraining and misleading reality) which is the result of processes that take place over time (historical realism), or is the assumption that there are multiple realities that are humanly constructed (relativism)? What phenomenon was studied? (E.g. human characteristics, attitudes, perceptions, behavior, cognitive activity, institutions, processes, products of human activities.) Is the phenomenon studied in context? Is there an explicit or implicit systems approach?</td>
</tr>
<tr>
<td>General metatheoretical</td>
<td>Does the author work within an explicitly identified paradigm, e.g. cognitive, constructivist, Marxist, feminist, post-colonial, etc.? If not, having considered the questions above, especially those relating to ontology and epistemology, can you identify the author’s general metatheoretical stance (positivist, postpositivist, interpretivist)?</td>
</tr>
</tbody>
</table>

In practice the answers to these questions are only rarely provided in the report. But in the case of each of these dimensions, there are two key criteria for evaluation:

(a) Did the author(s) explicitly answer (some of) the above questions?
(b) Did they show an awareness of the impact of their decisions?

When we look at the methodological decisions (to be considered below), we will need to consider whether these were taken in alignment with the above decisions.
Decisions relating to research ethics

Table 5.2 sets out the ethical issues specifically related to comparative research and research in multicultural environments.

Table 5.2: Decisions relating to research ethics

<table>
<thead>
<tr>
<th>Area of concern</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dealing with human subjects</td>
<td>Do the authors demonstrate an awareness of potential national and cultural differences in the understanding of concepts such as beneficence, privacy, confidentiality, informed consent, the right to withdraw from the study, and the re-use of data? In cases where research was conducted in developing countries, did the authors demonstrate care for the autonomy and dignity of research participants who may have been disadvantaged in terms of language, literacy, poverty, etc.? Did the researchers take into account communal versus individual rights and responsibilities?</td>
</tr>
<tr>
<td>Research process</td>
<td>Do the authors demonstrate an awareness of potential national and cultural differences in the understanding of roles and responsibilities of members of the research team, management and communication styles? In cases where research was conducted in developing countries, did the authors deal appropriately with potential asymmetries in respect of power relations and information flows among team members? Were team members in all participating countries treated with respect and involved in decision making?</td>
</tr>
<tr>
<td>Social responsibility</td>
<td>Was provision made for debriefing or feedback to groups in the countries that were compared, to ensure dissemination of information to enhance understanding and promote development?</td>
</tr>
</tbody>
</table>

The range of issues in research ethics that are potentially to be addressed in any research project in LIS is of course much greater. See, for example, those cited by Connaway & Powell (2010:87-93. In Table 5.2 only those issues that are most likely to be relevant to the evaluation of an article reporting comparative research have been mentioned.

Decisions relating to comparative methodology

Here we deal with methodological decisions which are specific to comparative studies. Table 5.3 sets out some areas of decision-making with accompanying questions.

Table 5.3: Decisions relating to comparative methodology

<table>
<thead>
<tr>
<th>Decision</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rationale</td>
<td>Do the authors explain why a comparison was thought necessary or useful?</td>
</tr>
<tr>
<td>Methodological sources</td>
<td>Do the authors cite any methodological texts or articles that they used to develop their comparative method (as distinct from general research methodology)? Are these: Sources on research method in social sciences? Sources on research method in LIS?</td>
</tr>
<tr>
<td>Quantitative vs. qualitative approach</td>
<td>Did the authors adopt a predominantly quantitative or qualitative approach? Or a mixed methods approach? In that case, does one of the approaches predominate?</td>
</tr>
<tr>
<td>Number of cases and variables</td>
<td>Is this a study of a single country? If so does it qualify as a comparative study? How many countries are compared? How many variables are studied? To what extent are relations among variables explored within countries? Given the aims of their study, did the authors choose a good balance between number of cases and number of variables?</td>
</tr>
</tbody>
</table>

28 Most of these decisions are also relevant to international research which is not strictly comparative.
Selection of cases (countries)
Which countries were compared? Do the authors provide an explanation of why they chose the countries they compared? Did they choose a most similar systems design (MSSD) or most different systems design (MDSD)? Given the aims of their study, was this an appropriate strategy?

Units of analysis
Are the units of analysis about which data was collected appropriate to the level of analysis? Do they use the same units of analysis in all the countries studied? Are the conclusions to which they arrive based on data at the appropriate level of analysis?

Levels of analysis
Have the authors clearly identified the level(s) of analysis? Is analysis at the macro level (e.g. groups, systems, structures) or at the micro level (e.g. individual employees or patrons; searches; citations, journal titles)? Do they use the same levels of analysis in all the countries studied?

Equivalence vs. identity
If samples were taken, do the researchers explain what they did to ensure that study subjects in different countries had an equivalent probability of being included in the study? What procedural steps did they take to ensure that the completion of questionnaires or the interviewing of subjects in different countries yielded equivalent data? If coding of responses took place in different countries, did they take steps to ensure the equivalence of coded data? Do the authors provide sufficient information about these aspects of their methodology?

Extent of comparison
How far do the authors go towards a true comparison? (a) A separate description of each (country A followed by country B) (b) Parallel accounts of the countries (country A followed by country B, using the same headings or rubrics for each) (c) Juxtaposition (both/all countries described under a series of headings: Heading 1: country A, country B; Heading 2: country A, country B; Heading 3: country A, country B; etc.) (d) Explicit identification of differences and similarities among the countries (e) Analysis and discussion of the differences and similarities (f) Explanation of the differences and similarities in terms of contextual factors, such as climate, demography, history, culture, economics) (g) Adaptation of theory from other disciplines and/or development of more general LIS theory to explain the differences and similarities Did the authors adapt theory from other disciplines and/or develop more general LIS theory to explain the differences and similarities?

Decisions relating to comparative method

Here we deal with method in the strict sense, as distinct from methodology, and limited to the procedural and technical issues that are peculiar to, or require specific attention in, comparative studies.

Table 5.4: Decisions relating to comparative method

<table>
<thead>
<tr>
<th>Decision</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptualization and operationalization</td>
<td>Do the authors report on how they defined key concepts in their study so as to ensure that they would be applicable across all the countries being studied? Does this conceptualization appear to be valid? Do the authors report on how they defined these concepts for purposes of measurement (e.g. for asking questions), to ensure that they would yield comparable data (e.g. that questions would be understood in the same way) in all the countries being studied? Does this operationalization appear to be valid?</td>
</tr>
</tbody>
</table>

In many cases the authors of comparative studies do not address the questions listed in Table 5.3 and 5.4. As stated earlier, for each decision there are two key criteria for evaluation:

(a) Did the author(s) explicitly answer (some of) the above questions?
(b) Did they show an awareness of the impact of their decisions?
Decisions relating to general method

Here we deal with methodological decisions that are not peculiar to comparative and international studies but which apply to any LIS research. Most research method texts provide a list of criteria, for example Connaway & Powell (2010:314-317). It is superfluous to repeat these here, but the major aspects are listed in Table 5.5.

Table 5.5: Decisions relating to general method

<table>
<thead>
<tr>
<th>Research aim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem statement and delimitation of the study</td>
</tr>
<tr>
<td>Review of literature</td>
</tr>
<tr>
<td>Conceptual framework for the study: concepts, definitions, variables, relationships among variables</td>
</tr>
<tr>
<td>Hypotheses or research questions</td>
</tr>
<tr>
<td>Research approach (quantitative, qualitative or mixed methods; hypothesis testing vs. hypothesis generating – will depend on decisions set out in Table 1)</td>
</tr>
<tr>
<td>Research design (essentially, if the comparative method is used, the research design will depend on the decisions set out in Table 2)</td>
</tr>
<tr>
<td>Population and sampling</td>
</tr>
<tr>
<td>Sources of data, data collection methods and instruments</td>
</tr>
<tr>
<td>Data treatment and analysis</td>
</tr>
<tr>
<td>Presentation of data</td>
</tr>
<tr>
<td>Discussion</td>
</tr>
<tr>
<td>Conclusion</td>
</tr>
<tr>
<td>Recommendations</td>
</tr>
</tbody>
</table>

Conclusion

Research involves decisions, which determine the validity and usefulness of the results. In practice, however, many decisions are taken by default, without reflection. In this chapter and the two which preceded it, I have tried to raise awareness of the decisions that are needed in comparative LIS research and of their implications, in the hope that this will promote more conscious decision making and more informed evaluation and utilization of findings.

References


Abdullahi, Ismail (Ed.) (2009) Global library and information science: a textbook for students and educators; with contributions from Africa, Asia, Australia, New Zealand, Europe, Latin America and the Caribbean, the Middle East and North America; Munich: K.G. Saur.


Library Association.