

Chapter 6

Method: procedures, techniques, instruments

...in international comparative research, ...concepts cannot be separated from contexts, not only in terms of national, societal or cultural embedding, but also with reference to research cultures and language communities.
(Hantrais 2009, 72)

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. (Barrett and Cason 1997, 1)

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6.1 Introduction

This is the last of three chapters dealing successively with metatheory, methodology and method. Our focus is now on methods as such, as distinct from methodology (see Chapter 4, Table 4.1). As explained in Chapter 5, section 5.2, I limited my discussion of methodology to decisions on the quantitative/qualitative approaches, and to comparative strategy and research design. In this chapter, under ‘methods’ I now include procedures, techniques and instruments. Combinations of these are used in the commonly recognized methods such as surveys, case studies, and the historical, ethnographic, experimental and action research methods, to which chapters are typically devoted to research methods texts in the social sciences. By ‘procedure’ I understand a series of actions undertaken in a certain order. I understand ‘techniques’ to be specific ways of carrying out such concrete activities as sampling, observing, interviewing, administering questionnaires, and performing statistical analyses. Under ‘instruments’ I classify such tools as self-administered questionnaires, interview schedules, and observation protocols.¹

The general procedures, techniques and instruments of social science research need not be discussed here, since they are dealt with in the various standard texts for LIS, e.g. Connaway & Powell (2010), Pickard (2013), Wildemuth (2009) and of course other general social science methods texts. Most of the procedures, techniques and instruments described in such texts can be applied within comparative studies as well as in international studies more generally. This chapter is concerned with specific issues arising from the application of these methods in research in international and comparative librarianship. To provide a broad framework, brief attention is first paid in Section 6.2 to data sources and the research procedures associated with them. Following this, Sections 6.3 to 6.9 are devoted to the challenges of conducting research across linguistic and cultural borders, such as in non-English speaking countries and developing countries. This requires that special attention be paid to concepts: can concepts ‘travel’? What happens when we try to use the same concepts in different cultural and linguistic settings? In comparing LIS phenomena in other countries, as in understanding LIS in other countries, societies and cultures, we must ensure that the techniques and instruments we use can yield equivalent answers to our questions. The rest of the chapter is concerned with the use of documentary sources.

6.2 Data sources

As a preliminary to the discussion of methods, it is useful to consider the general sources of research data and how they can be tapped. Data used in comparative and international librarianship can be classified in various ways. Borgman (2010, 3–6) cited four categories of scientific data (observational, computational, experimental, and records) distinguished by the US National Research Foundation, and provided a four-dimensional classification of data by purpose. This is a broad framework for scientific data generally. For our purposes the three main types of sociological data identified by Manheim and Simon (1977, 204–9) provide a useful point of departure:

¹ There is an unfortunate tendency to use the term ‘survey’ to refer to survey questionnaires. A survey is a method which entails particular design decisions, including decisions on sampling and questioning. In a survey, various techniques of questioning (e.g. interviews, questionnaires, focus groups) can be used. In these techniques, instruments such as self-administered questionnaires and interview schedules can be used. Using the name of an instrument to refer to a method causes confusion, as is often evident in student work.

- *Human behaviour and characteristics*: this comprises (a) responses to questions posed by the researcher, and (b) other “overt behaviour and observable characteristics”, where data are collected through direct observation.
- *Products of human behaviour 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). This 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, are dealt with in some detail in the sections that follow. Direct observation, category (b), 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 are referred to in [Section 6.21](#). All forms of questioning and overt direct observation raise the issue of reactivity: when aware of being studied, humans may adjust their responses in various ways which may affect the validity of findings. This may also occur, but to a lesser extent, in indirect observation (Mouton 1996, 142–43).

Category (c), physical evidence may 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 what informants say. For example, the physical condition of materials on the shelves can reveal a great deal about the collection, which may be large but mostly out-of-date. Signs of physical wear and tear can indicate which materials are heavily used, as distinct from simply being old. And a library in which all the books appear to be shelved with painstaking precision, without any signs of disorder, may tell a story about low usage. This is a form of ‘unobtrusive measurement’, introduced by Webb et al. (1966) in a seminal book describing a host of imaginative data collection techniques. A more recent discussion of ‘erosion measures’ and ‘accretion measures’ was presented by Lee (2000, chap. 2). A few examples from LIS are given by Wildemuth (2009, chap. 17).

Category (d), information-bearing records, is a major source of data for comparative librarianship, and is dealt with specifically in [Sections 6.10 to 16.20](#). Here we need to take into account what one might term anticipatory reactivity, as when the author of a first-person account produces a version of an event that put him/herself in a good light, or when the compilers of statistical data “work the system” to put a positive spin on the performance of their unit or organization. To date, category (e), simulated data, does not feature in international and comparative librarianship, but a simulation game, named Pamoja, deserves a mention: it has been used as a tool in teaching international and comparative librarianship (Schnuer 2007).

6.3 Concepts

In the social sciences words are not only tools, but they are also subject matter.² Words are carriers of concepts. Concepts are rooted in contexts. When we use words across contexts,

² The extensive theoretical literature on concepts has been surveyed, primarily from a philosophical perspective, by Margolis and Laurence (2011).

can we be sure that we are conveying the same concepts? In international, cross-societal and cross-cultural comparisons, the “definition and understanding of concepts and the relationship between concepts and context are of critical concern” (Hantrais 2009, 72). Mouton (1996, 181) defined concepts as

[t]he most elementary symbolic constructions by means of which people classify or categorise reality. Concept are, as it were, the ‘pigeon-holes’ into which we sort our unstructured empirical experiences; they are the primary analytical instruments by which we come to grips with reality.

The word “pigeon-holes” suggests that concepts are fitted within conceptual structures. There is some disagreement about what comes first: theories or concepts. Some argue that concepts are “theory-formed”: concepts derive meaning from their conceptual frameworks (Mouton 1996, 115). Others hold that concepts are “theory-forming”: they are more fundamental than theories; by providing categories organizing information, they make theories possible. The issue is briefly sketched by Hantrais (2009, 74).³ In the social sciences, a great deal of attention is paid to the clarification of concepts. Concepts may have different meanings in different disciplines, paradigms and periods. This can lead to confusion. Many important social science concepts are highly abstract and multidimensional and have to be understood in the context of a particular theoretical framework. These may be referred to as ‘theoretical concepts’ or *constructs*, because they are constructed on the basis of lower-level concepts. Some examples of constructs are ‘alienation’, ‘authoritarianism’, ‘democracy’, ‘information literacy’, ‘managerialism’, ‘nation state’, and ‘social justice’, to mention a few at random.

It is useful to make a distinction between two kinds of concept: class concepts and variables. Class concepts are umbrella concepts for similar entities, where I use the term ‘entity’ very broadly to refer to objects, persons, institutions, countries, products, processes, events, etc. Concepts such as ‘small developing island nation’, ‘library’, and ‘document’ are class concepts. Social research methodology texts pay little or no attention to this kind of concept. Instead, they are concerned almost exclusively with the second kind of concept, variables, concepts denoting properties, attributes or characteristics of entities, that can vary from entity to entity. While class concepts have members (or sub-classes), a variable is “a concept that can take on more than one value, state, category, score or condition” (Walizer and Wienir 1978, 28). In the case of libraries, examples of variables are: location, governance, collection size, number of staff, degree of centralization, conditions of access, number of items circulated, and policies on overdue books. Note that the same term can appear as a class concept and as a variable. In a given piece of research it is important to distinguish between these two roles. Failure to do this leads to frequent confusion in student work. For example, legal deposit legislation is a class of entities. Various legal deposit (LD) laws can be discussed in terms of variables such as “date when promulgated”, “coverage”, and “responsible agency”. But the presence (or absence) of LD legislation is something we can say about a national library. Most national libraries are entitled to receive LD copies, but some are not. In a comparison of national libraries, whether a national library receives LD material or not, can be considered a variable. Thus, in a data matrix constructed as in Chapter 5, Table 5.2, the libraries would be listed in the rows of the data matrix as cases, and “legal deposit legislation” (or preferably a label such as “presence/absence of LD legislation”)

³ The terms “theory-formed” and “theory-forming” are from Sartori’s Foreword to his influential book *Social science concepts: a systematic analysis* (Sartori 1984b, 9). The first part of the book consists of his “Guidelines for concept analysis”, while part 2 contains chapters in which concepts such as ‘development’, ‘ethnicity’, ‘integration’, and ‘power’ are analysed.

would be listed in one of the columns as a variable, under which “Yes” or “No” would be entered against each case. When naming variables, it is good practice to precede concrete nouns by abstract phrases such as “presence of”, “kind of”, “number of” or “degree of”. This helps to distinguish between cases and variables.

6.4 Defining concepts

Because of different possible understandings, in scholarly work definitions of key concepts from general dictionaries generally do not suffice, and concept definitions have to be formulated, if only for purposes of communication, to ensure that the reader understands what the author means: “a social contract proposed by an author with respect to the usage of concepts” (Pennings, Keman, and Kleinnijenhuis 2006, 60). In formulating definitions, a balance has to be found between excessive rigour and flexibility. A too rigid definition confines the concept to a narrow field and makes it likely that it will soon be overtaken by newer concepts.

There are two basic approaches to constructing definitions. An *extensional definition* specifies the extension of the concept, namely the entities which it includes. This can be done by enumeration: an enumerative definition lists all the entities which are included under the definition, e.g. “the Visegrad countries are Poland, Czechia, Slovakia and Hungary”. A contrastive definition also lists entities that are not included, e.g. “in this report ‘Southern Africa’ comprises the SADC countries excluding South Africa.” An *intensional* definition specifies the criteria an entity must satisfy for inclusion, e.g. “for the purposes of this survey, land-locked developing states are sovereign states, entirely enclosed by land, or whose only coastlines lie on closed seas, which had a per capita Gross National Income (GNI) of less than USD 4, 035 in July 2016.”⁴ This implies three criteria: sovereign, land-locked, and developing. These criteria constitute the intension of the concept (Pennings, Keman, and Kleinnijenhuis 2006, 62).⁵

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, 246–47) has pointed out, there is an inverse relationship between the number of classes for a phenomenon and the degree of variation within the classes. To use an example from LIS, if we divided all libraries into only three classes, educational, public, and special, then the kinds of libraries included under educational”, would be so varied as to make it difficult to make useful statements about this class. To use the terminology introduced in the previous section, we can say that there is a relationship between the extension of concepts, and the number of cases denoted by them in a comparative study, as illustrated by Figure 6.1, which is an adaptation of Sartori’s (1984a, 44–46) “ladder of abstraction”.⁶

⁴ Adapted from Wikipedia, “Landlocked country”, https://en.wikipedia.org/wiki/Landlocked_country, and “Developing country”, https://en.wikipedia.org/wiki/Developing_country, accessed 2017-04-11.

⁵ The terms ‘intension’ and ‘extension’ are also used in connection with the terms ‘connotation’ and ‘denotation’, respectively. These are two dimensions of the meaning of a term. The intension of a concept is also referred to as its connotation or connotative meaning and the extension of a concept as its denotation or denotative meaning (Mouton 1996, 181–82).

⁶ Hantrais (2009, 75–76) has a brief, lucid account of Sartori’s proposals on concepts.

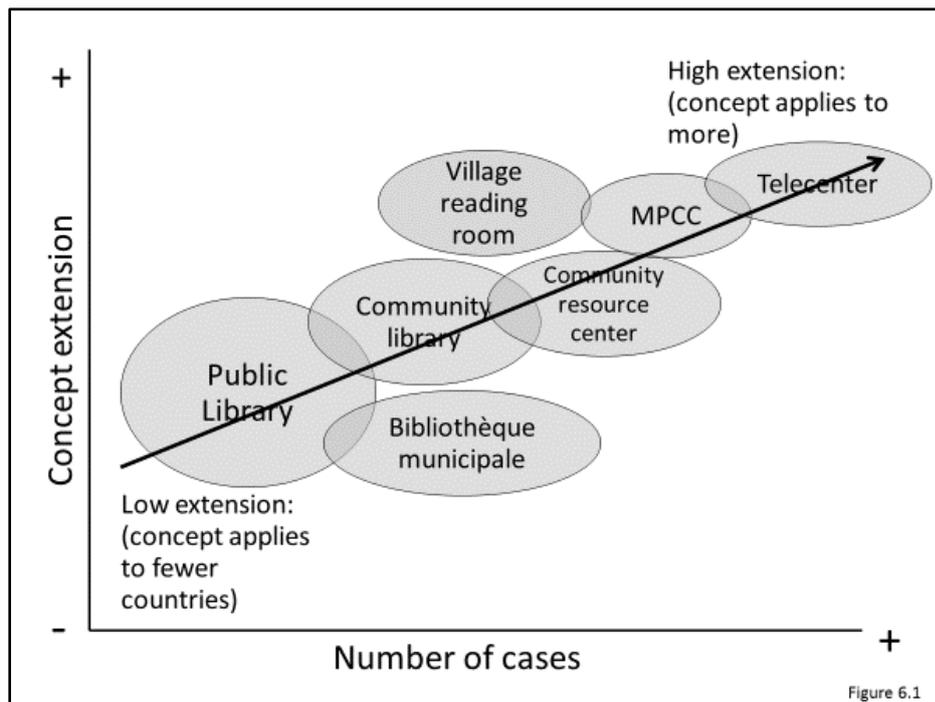


Figure 6.1: Extension of concept and scope of study

Figure 6.1 shows that as the extension of the concept public library is expanded to include a larger range of public library-like agencies, it will be possible to compare ‘public libraries’ in more countries. There will be more cases to be studied. 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. The term ‘public library’ will become almost meaningless. This is illustrated by Figure 6.2.

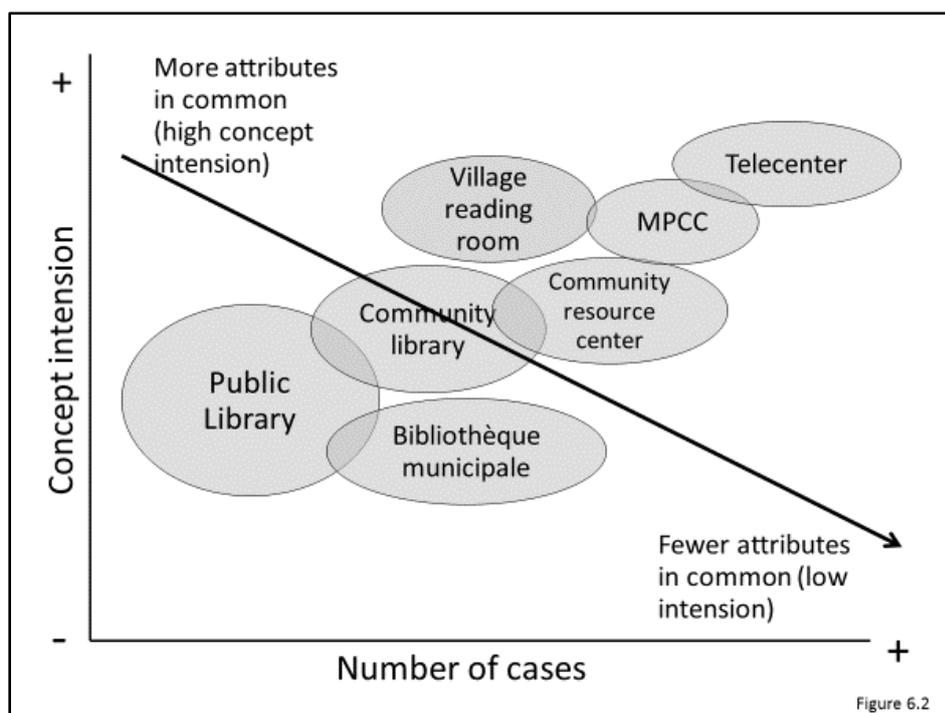


Figure 6.2: Intension of concept and scope of study

If we superimpose Figure 6.2 on Figure 6.1 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.

For a second example, let us imagine that we want to study the worldwide use of the *Dewey Decimal Classification* (DDC). Do we include only countries in which the DDC is used as published in the USA by its official publisher OCLC (high intension, low extension), or do we include translations and versions of the DDC with national adaptations, e.g. for local languages, area notations and historical periods, or even the Universal Decimal Classification (UDC), which was derived from the DDC (low intension, high extension)? At what stage do we consider a decimal classification scheme derived from Dewey no longer to qualify for the study?

Often researchers combine many subclasses in order to simplify data collection, analysis, and/or presentation. For example, school, college and university libraries might be grouped together as ‘educational libraries’ (a class of greater extension and lesser intension). This covers a huge range from the Bodleian Library of Oxford University to the library of Littletown Elementary School. Aggregating data relating to such as disparate collection of classes will not yield useful findings. It is in any case wise to collect data using smaller classes (classes of lesser extension and greater intension). It is much easier to combine classes after data collection than to try to split classes retrospectively.

The language used in relation to concepts can be confusing, because qualitative and quantitative researchers tend to deal with concepts differently. These differences have been lucidly set out by Goertz and Mahoney (2012). The differences, they add (p.214), are “not monolithic ...but capture major fault lines”. In the next two sections I adopt their distinction.

6.5 Concepts and defining attributes: the qualitative approach

In defining concepts used in their studies, *qualitative* researchers follow a semantic approach. As characterized by Goertz and Mahoney (2012, 206–11), these researchers are concerned with meaning, and try to identify “the intrinsic necessary defining attributes” (p.206) of a concept. They devote much attention to the process of defining concepts, and the resulting definitions may be long and complex. Cases may have “partial membership in conceptual sets”. For example, a telecentre is only partially a member of the class of public libraries. This is referred to as “fuzziness”, which Goertz and Mahoney (2012, 207) regard as an ontological concept, arguing that a statement about fuzzy-set membership is a statement about reality. The defining attributes of the concept are all essential requirements, but subtypes, which lack one or more of the requirements, may be identified. This implies that an ideal-type, “a pure and complete example of a given concept” (p.211) is used as a standard against which the cases are evaluated.

To illustrate, let us consider a study of how hospitably public libraries responded to the arrival of large numbers of refugees in Germany and other European countries in 2015 and 2016. Apart from the vexed issue of who is considered to be a refugee, we need to define what we mean by ‘hospitality’ in this context. On the basis of reports on library interactions with refugees and of general media and scholarly accounts of the ‘refugee crisis’, we might identify the following activities of a public libraries in relation to refugees:

- Permitting access
- Public display of welcome
- Providing physical shelter
- Assisting asylum seekers
- Providing assistance in library use
- Providing assistance in the use of government services
- Providing emotional support
- Promoting integration

A further analysis might place the activities on an active-passive continuum, consider the level of empathy displayed, the congruence of staff attitudes at management and “coal-face” levels, or consider the extent to which libraries follow bureaucratic procedures or “bend the rules” to accommodate the needs of refugees. Through such a process of analysis a construct of “library hospitality to refugees”, consisting of a number of dimensions may be developed. In a qualitative study using an ethnographic approach, such a construct would not be developed in one piece purely on paper at the beginning of the study, but iteratively as the researcher observes what is happening and interacts with staff, refugees and others through interviews and other data-rich procedures.

Interesting examples of qualitatively-oriented concept analysis and definition of constructs are found in a qualitative study by Dalbello (2008, 2009), who studied cultural dimensions of digital library development in five European national libraries. Dalbello devoted a large part of the first of two lengthy articles on this project to the analysis of relevant concepts. The analysis was informed by “theories of cultural production and institutionalization, organisational isomorphism, and the impact of national culture on organizational strategy formulation” (Dalbello 2009, 8). On this basis, she constructed a “national culture orientation framework” (p.8-9), specifying eight dichotomized (binary) variables and the behaviours and attitudes expected to be associated with them in the course of the interviews the researcher conducted with key informants. Clearly, in this study, an in-depth understanding of the culture dimension was critical. Dalbello summarized this as follows:

The cultural analysis considers the culture dimension to be an outcome of multiple and interacting systems of meaning, including national, organizational, and professional culture and the heterogeneous influences from the “cultural tool kit” (such as popular culture forms or internal protocols of innovating teams), resulting in the following culture formula:

Culture = National Culture + Organizational Culture + Professional Culture +
Heterogeneous Tool Kit Culture (p.8).

Each of the constructs mentioned here, was carefully analysed before she arrived at this formulation. This illustrates the observation of Goertz and Mahoney (2012), summarized earlier, that concept definitions in qualitative studies tend to be long, complex and fuzzy.

A further example is the use by Caidi (2004a, 27) of a scheme of four phases of policy debate to construct four statements on national information infrastructures for discussion with respondents in the Visegrad countries. Caidi (2003, 103–5) also constructed a typology of library cooperation based on four dimensions: individual versus collective goals, centralization versus decentralization tension, product versus process orientation, and global versus local considerations. This was used as a framework for her study of library

cooperation in the Visegrad countries. Also of interest, and more typical of LIS literature, are a less formal attempt to define school libraries (Marquardt 2008), and a suggested matrix for performance of service delivery academic libraries (McCarthy and Tarango Ortiz 2010, 508–9).

6.6 Variables and indicators: the quantitative approach

Quantitative researchers also need to define their concepts, but they pay more attention to data and measurement, and they tend to refer to variables rather than to concepts. To measure the variable of interest, which is a complex variable or construct that cannot be measured directly and is therefore called a *latent variable*, indicators are used. *Indicators* are variables, the variance in which is thought to be caused by the latent variable. For example: we wish to compare access to public libraries in a number of countries. We decide that access to public libraries is determined (“caused”) by factors such as the number of such libraries in relation to population, geographic distribution of the libraries, opening hours, cost of library use, and accessibility to persons with disabilities. For each of these factors we devise measurable indicators, for example:

- Number of library service points per 100,000 inhabitants
- Percentage of communities over 1000 inhabitants which have no library service point within 2,5 km
- Average distance of population from their nearest library service point
- Hours open per week
- Which of the library services on a checklist are available free of charge
- Percentage of public library service points that comply with national/European standards of access for mobility-impaired users.

The process of developing a set of measurable indicators is called *operationalization*. A quite rigorous quantitative study by Lindblom and Räsänen (2017) serves as an interesting example of this process. The authors examined differences in Internet access and its use for cultural purposes in Finland, the United Kingdom and Greece, focusing on class and status as the independent variables. Using data available from the European Commission’s Eurobarometer⁷ 72.9 database, they measured the first independent variable, social class as follows:

Social class is our first independent variable in the analysis. We operationalized occupational class as respondents’ socioeconomic status (SES), or occupational category. The categorization also takes into account the hierarchies of job positions, as well as level of autonomy or subordinate status. Hence, we have six categories for the SES variable: (1) manual workers, (2) managers, (3) other white-collar, (4) retired, (5) other inactive (e.g., student, homemakers, and unemployed), and (6) self-employed. Our primary interest lies in the distinctions between upper occupational positions (white-collar occupation categories and managerial positions) and working-class occupations (Lindblom and Räsänen 2017, 151).

⁷ Eurobarometer refers to a series of surveys conducted by the European Commission’s Public Opinion Analysis sector. See European Commission, “Public opinion”, <http://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm>, accessed 2017-04-12. Eurobarometer 79.2 is a survey module, carried out during April-May 2013, which covered i.a. “cultural activities”. See ICPSR, “Find and analyze data”, <http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/35505>, accessed 2017-04-12.

In this example, the researchers narrowed down ‘social class’ to ‘socioeconomic status’, and then further down to ‘occupational category’. The latter is not the only dimension of socioeconomic status, but the researchers argued that occupational category was chosen because, “[i]n contemporary societies, one’s occupational group is a reliable measure of one’s class in a conventional (economic) sense” (p.148). Furthermore, this particular measure was available from an existing European dataset. This is an example of how an operational definition “bridges the gap between the general definition of a concept ... and the available data” as expressed by Pennings, Keman, and Kleinnijenhuis (2006, 82). They use the image of a funnel with a series of filters. Concept definition is the first of these, this is followed by the operational definition, with measurement taking place at the narrow end of the funnel, when data values are added to the data matrix (cf. Chapter 5, Section 5.7).

An interesting example of the development of cross-national indicators is found in a study by Lau (1988, 1990, 1995), who studied information development in relation to social development in highly developed and less developed countries. In this quantitative study, Lau needed indicators for the socio-economic development of the countries (the independent variable). He used published data for five indicators: food consumption in calories, life expectancy at birth, infant mortality rate, adjusted enrolment rate in primary schools, and adult literacy rate. For his dependent variable, he identified three dimensions, information development: “storage centres for information, accumulation of recorded information, and recording of information activities”. For each of these, indicators were chosen. For example, he limited “information recording activities” to publishing, and as indicators for publishing he selected the number of book titles, the circulation of daily general interest newspapers, the circulation of non-daily newspapers, the number of titles of other periodicals, and the consumption of newsprint paper (Lau 1990, 318). There were no indicators of the quality or benefits of information, due to lack of appropriate data. Lau’s indicators provide a good illustration of the observations of Goertz and Mahoney (2012, 208) that, “unlike the attributes that constitute a concept, indicators are optional, substitutable and not necessarily definitional. Different indicators are *all* measures of the *same* conceptual entity”. A choice of indicators is made. Some may not be suitable for the chosen methodology, and are omitted. Indicators which are not directly implied by the definition may be included.

An earlier example is a study by Williamson (1976) on indicators of library development in Latin America. Catts and Lau (2008) reported on the process of developing indicators for the measurement of information literacy internationally. Audunson (1999) provided an example of the construction of a diagrammatic general model, and its operationalization, for a study of change processes in public libraries. More recently, in studies of the perceived outcomes of public libraries in a number of West European countries and developed countries, Vakkari and colleagues (Vakkari et al. 2014, 2016) provided examples of the selection of indicators for measuring the resources invested in public libraries and for measuring the perceived outcomes.

Because quantitative researchers rely heavily on statistical testing, they place much emphasis on eliminating measurement error. Goertz and Mahoney (2012, 210–13) considered error to be a matter of the quality of knowledge, and hence an epistemological concern. Criteria for evaluating the quality of operationalization and measurement, such as construct validity and reliability, and the development of measurement scales are a significant theme in the literature of quantitative studies. These quite technical topics are not dealt with here. For examples, see Pennings, Keman and Kleinnijenhuis (2006, 85–113). For a less technical treatment of scales, see Pickard (2013, 211–18).

6.7 Concepts across boundaries

Concepts and language

The idea that comparative researchers should have an “intimate knowledge of context and culture” (Hantrais 2009, 86) runs like a golden thread through much of the literature of comparative studies in the social sciences. Writing about comparative education, Philips and Schweisfurth (2008, 93) stated:

A problem faced by comparativists at every stage of an investigation is that of ethnocentricity. It is important to recognize that we come with many preconceptions based on long personal experience of a particular way of looking at things in education, and thus try to create a kind of neutrality in attempting to understand other systems of education and the issues that are of interest or concern there. Seeing things through an ethnocentric filter can have distorting effects as far as our understanding of educational phenomena in other countries is concerned.

In Chapter 3, section 3.8, there is a brief discussion of culture as a component of a conceptual framework for the study of international and comparative librarianship. There I also touch on the issue of cultural relativism. In Chapter 4, section 4.6, culture, ethnocentrism, and language are briefly discussed as part of the sociological dimension of research. In this section, the emphasis is on whether and how concepts can be conveyed across cultural and linguistic boundaries. The question, “can concepts travel?” occurs quite frequently in comparative literature, but a caveat is necessary. The question suggests that a concept from one country and/or language can somehow be transported to another country and/or language, as if it were a language-independent and/or culture-free package. There is another way to look at concepts across boundaries: to see them as embedded in their languages and cultures so that it is not possible to uproot one and plant it in the other language/culture; only rough equivalences can be sought. In her comparison of American and French public libraries, Bertrand (2010, 18–19) commented on the difficulties of translating terms such as ‘public library’, ‘community’, and ‘intellectual freedom’ into French. Commenting on writing an article in English for the journal *Library trends*, French sociologist Denis Merklen (2016, 144–45) pointed out that the French *démocratie* and *république* are not exact equivalents of English ‘democracy’ and ‘republic’ respectively. Referring to libraries, he commented that, because these institutions exist in different ‘political worlds’, a *bibliothèque* is not only a ‘library’. Difficulties in translating such terms also offer an opportunity for reflection on the concepts: “I will attempt ... to use the difficulties of expressing in English the reality of French libraries as a different way of thinking about these institutions”. In an article asking “what is Library and Information Science (LIS) in Latin American library schools”, Martínez-Arellano (2013) showed how the translation of this term depends on the way it has been conceptualized in that region.

Language and culture are inextricably interwoven, and in international research and practice we soon discover that the relationship between culture, languages and nations is a complex and – in many parts of the world – a conflict-ridden one. In a theoretical exploration of the sociology of nations, Pickel (2013) conceptualized ‘nations’ as ‘national cultures’, which are rooted in, and interwoven with, ‘natural languages’.⁸ The boundaries of political, cultural and

⁸ Pickel (2013, 430) distinguished between natural languages (unwritten, culture-specific, and transmitted in childhood) and ‘artefactual languages’ (encompassing written natural languages and a great variety of symbolic

linguistic groups coincide only to a limited extent. There are far more languages than nation states. How many languages there are in the world today depends on how one defines a language, but the 18th (2015) edition of the *Ethnologue*, a web-based catalogue of the world's languages, compiled by the Summer Institute of Linguistics (SIL), listed 7102 living languages.⁹ Not only are different national or official languages spoken in different countries, but in many countries multiple languages are spoken by substantial minorities. The US Census Bureau reported in 2015 that in the New York metropolitan area alone at least 192 languages are spoken at home, and that 38% of the population aged 5 and over speak a language other than English at home.¹⁰ Iyengar (1983, 173–74) cited figures indicating that 44% of all nation states can be considered linguistically heterogeneous, in that less than 75% of their populations speak the dominant language. Many countries have more than one official language. For example, South Africa recognizes eleven official languages, in addition to which many more languages are spoken in that country. English, regarded there as the *lingua franca* in government and commerce, ranks fifth as the most spoken home language.¹¹ Thus in South Africa, using only English means that the majority of the people a researcher is interviewing or questioning are responding in a language other than their mother tongue, in which they may well have limited competence. The South African situation is neither unique nor extreme. There are at least ten countries in which more than 200 languages are spoken.¹²

At the other end of the spectrum, a small number of languages are spoken by many native and non-native speakers worldwide. On the Internet users are grouped in “nations” according to their mother tongues, not on the basis of where they live. Thus on the Internet the “Spanish nation” includes users located in Spain, Latin America, the USA and many other countries (UNESCO 2003, 27). Using Pickel's terminology, the Spanish used on the Internet is an ‘artefactual’ language. However, regional, national and local variants of a major ‘natural’ language such as Arabic, Spanish, French or English may differ so much that speakers from different parts of the world find it difficult to understand one another.

Can concepts “travel”?

In the literature, we find different metatheoretical (ontological) positions regarding the question of whether concepts can ‘travel’ internationally. Hantrais (2009, 85–94) devoted a conceptually rich section to the contextualization of concepts, identifying a “progressive shift away from context-free research designs to context-boundedness” (p.85). Landman (2008, 33) identified three positions:

The universalist position holds 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. Hantrais (2009, 78-80; 90-94) described this as a positivist and quantitative stance, where concepts are thought to be valid across cultures and concepts are “transportable”. Here emphasis is placed on the lexical and syntactic equivalence of questions posed to respondents

systems.

⁹ Ethnologue, “About the Ethnologue”, <http://www.ethnologue.com/about>, accessed 2017-05-11.

¹⁰ United States Census Bureau, “Census Bureau reports at least 350 languages spoken in U.S. homes”, <https://www.census.gov/newsroom/press-releases/2015/cb15-185.html>, accessed 2017-04-05.

¹¹ Brand South Africa, “The languages of South Africa”, https://www.brandsouthafrica.com/people-culture/people/language#.VgfLe_mqpBc, accessed 2017-05-11.

¹² Vistawide, “Top 20 countries by number of languages”, http://www.vistawide.com/languages/20_countries_most_languages.htm, accessed 2017-05-11.

in different countries. The danger is that researchers will assume that concepts from their own culture are universal and can be applied to other cultures. Thus, in international surveys investigators try to ask the same questions by producing “formally identical” questionnaire items. In the universalist position, quantitative researchers adopt an etic approach, focussing a “narrow conceptual lens” on the phenomenon in that they look at a narrow spectrum of variables (p.88).

The relativist position holds 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 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). Hantrais (2009, 78-80; 90-94) also described this as an interpretivist and qualitative stance, where concepts are thought to be culture-bound. Here emphasis is placed on conceptual and semantic equivalence of questions, which requires a “close scrutiny of the context within which language is used and develops” (p.80; 94): This emic perspective assumes that concepts are specific to cultures, nations or groups. Qualitative researchers tend to look at the phenomenon through a “wide conceptual lens” in that they are interested in an unspecified, wide set of concepts (p.88).

Taken to an extreme, the relativist 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. Landman’s middle position accepts that concepts do not have the same meanings in all countries. Here researchers seek practical solutions to come to terms with the context dependence of concepts. An important point of departure is to make a distinction between identity (sameness) and equivalence.

Equivalence

What do we mean by equivalence as distinct from identity? Simply stated equivalence of a concept means that although the words, questionnaire items or indicators used to refer to it may be different in different languages and for different sociocultural groups, its meaning will be understood roughly – sufficiently for the researchers’ purpose – in the same way by the groups concerned. Numerous varieties of equivalence have been distinguished (e.g. Mitchell 1983, 231–32; Vitiello 1996a, 26–27; Kennett and Yeates 2001, 44). The six varieties identified by Nowak (1977, 41–43) have been widely cited and expanded, e.g. by Raivola (1986, 265–67). The reason for the confusing proliferation of types of equivalence is that the concept of equivalence is used in many disciplines and has to be understood in the context of different philosophical and metatheoretical traditions. Much of the discussion emphasizes quantification and measurement.

Hantrais (2009, 76–85) provided a more recent and detailed discussion of many kinds of equivalence, making a major distinction between linguistic equivalence on the one hand, and semantic and conceptual equivalence on the other. Broadly speaking, *linguistic equivalence* is concerned with the words and syntax of the languages used (lexical and syntactic equivalence), and *conceptual equivalence*, with the equivalence of concepts across linguistic and cultural contexts, in spite of the fact that concepts are formed and understood within these contexts and never overlap exactly across languages and cultures:

Problems of conceptual equivalence are especially troublesome to the comparative researcher, since he will often find that the concept he is working with is not found in the local culture. Researchers have discovered this difficulty with regard to concepts of time, of the future, of distance or height with regard to visual scaling devices, and of a number of concepts which have clear evaluative overtones, such as ‘table manners’.

...
Considerable knowledge of the local culture and language is needed in order to gain conceptual equivalence... (Mitchell 1983, 231)

Under conceptual equivalence I subsume the following varieties identified by Nowak (1977, 41–43) and Raivola (1986, 265–67), adding illustrative LIS-related examples:

- Cultural equivalence: Here 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: Here objects or persons belong to higher level aggregates that have been classified as equivalent, e.g. school libraries and school media centres in high schools, French *lycées* or Dutch *gymnasiums* (but not in German *Hochschulen*, which are universities);
- Structural equivalence: Here 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 are professionally qualified librarians;
- Functional equivalence: Here 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.

In the next section, some of the challenges in achieving equivalence in questioning procedures are addressed.

6.8 Framing questions across cultures

English-speaking scholars have a great advantage in that they speak a world language. Many scholars from non-anglophone countries publish in English in order to reach a larger audience. Many international conferences are held mainly in English and for many international organizations English is the main working language. This gives English speakers access to a great deal of the world’s literature and allows them to play leadership roles internationally. However, because English-speakers are less motivated to learn other languages, they cut themselves off from scholarly literature in languages other than English, and they risk assuming that the English terms they use are universal (Hantrais 2009, 89). This can lead to misunderstandings when respondents who speak English as a second or third language answer questions framed in English. In the case of a self-administered questionnaire, it is salutary for an English-speaking researcher to imagine her foreign respondent reaching for an English-Italian, English-Russian, or English-Zulu dictionary while trying to respond. When respondents rely on dictionaries to make sense of questions, their

responses may reflect a too literal interpretation of a question, leading to apparently irrelevant answers. It goes without saying that figurative speech and colourful idioms such “a needle in a haystack”, or “let sleeping dogs lie”, should be avoided

Varieties of English

This also applies to the various varieties of English spoken across the globe. Asking a twenty-year old South African student what school she is attending may elicit an indignant reaction, “I finished school two years ago!” This 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 or even in regional variants of the same language. An example is given in Figure 6.3.

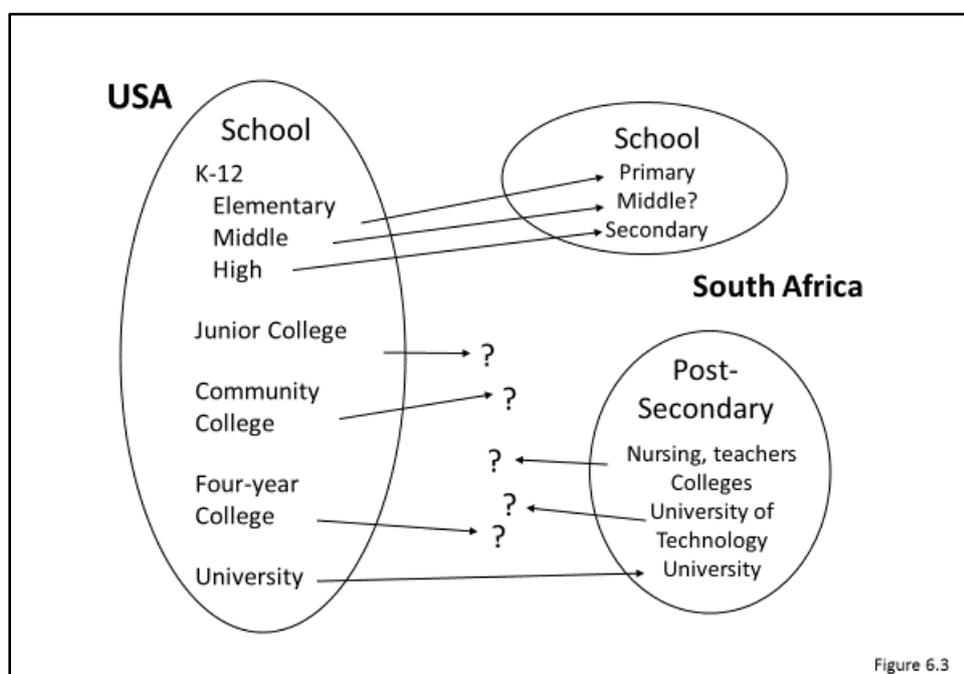


Figure 6.3: Example of spurious lexical equivalence

As shown in Figure 6.3, the concept ‘school’ which in the USA includes educational institutions at all levels, is used in South Africa (and most other countries using Standard English) only in relation to what Americans call K-12.¹³ Furthermore, 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 it is increasingly used to refer to individual faculty members (“Smith is a faculty of...”). In these cases, the same words are used to refer to different concepts. This can give rise to confusion and invalid results if the terms are used without explanations in survey questionnaires distributed internationally, even if only in English-speaking countries. Pilot testing of the questionnaires

¹³ Americans blithely use this expression everywhere without realizing that it may be unknown among non-specialists in other English-speaking countries.

is advisable, as in a study conducted by Walton, Burke and Oldroyd (2009) in the UK and Australia.¹⁴

Translating questions

The researcher's interaction with research participants is severely inhibited if she does not speak their language. Problems relating to the mutual intelligibility of, for example, British, American and South Asian versions of English pale into insignificance when more than one language is involved, especially across language families. A wider range of responses can be elicited and, arguably, better quality data can be gathered if survey instruments can be translated into the languages of the intended participants. This applies to the translation of self-administered questionnaires as well as to the translation of interview schedules and the employment of local interviewers who speak the relevant languages. Any attempt to translate or interpret carries a risk of distortion. Translators and interpreters are gatekeepers who can influence the communication process in various ways (Liamputtong 2010, 144). In international practice, for example at UNESCO and IFLA, a distinction is made between translation, which is concerned with rendering written text into another language, and interpreting, which is concerned with conveying into another language the meaning of spoken communication, mostly while the communication is taking place.¹⁵ There is some difference of opinion as to whether it is better to employ professional translators and interpreters or bilingual persons from the field who are thoroughly conversant with the subject matter (Liamputtong 2010, 149–51).

In the years following WW2 it was not always appreciated that concepts are developed in particular cultural contexts and are expressed using the words of particular languages. It was then common practice for surveys to be conducted in Europe by American scholars and institutions. The survey instruments and technical instructions were designed in the USA, and then translated into the various European languages before being administered to the European respondents by local staff. European scholars in the target countries were not necessarily consulted (Hantrais 2009, 15; 144). This asymmetric research practice, referred to as “canned questionnaires” (Mitchell 1983, 231), was also applied in developing countries, where it was sometimes labelled the “safari approach” (Hantrais 2009, 144). Apart from the political and ideological issues raised by these projects, doubts grew about the reliability of the data and the validity of the results. As indicated earlier, lexical equivalence (where correctly translated words are used) does not necessarily ensure conceptual equivalence.

The complexities of translating survey instruments into other languages have been widely discussed, with attention being paid especially to survey research in developing countries (e.g. Bulmer and Warwick 1983; Flay, Bull, and Tamahori 1983; Iyengar 1983) and in qualitative cross-cultural social research (e.g. Liamputtong 2010, chap. 6). Harkness (2007) discussed in some detail the procedures for translating the survey instruments of the European Social Survey into multiple languages. In an attempt to ensure that the various

¹⁴ I use the term “pilot testing” for the testing of the instrument (usually with a small group of respondents) before it is applied in a full-scale survey, whereas a “pilot study” is an exploratory study, usually on a small scale, undertaken to gain insights into the research problem, formulate hypotheses, etc. as preliminary to a larger project. The term “pre-test” refers to an instrument administered to a group of subjects in an experimental study, to measure their knowledge, attitudes, opinions, etc. before the experimental intervention takes place (cf. Chapter 5, Section 5.5).

¹⁵ Cf. Language Scientific, “The difference between translation and interpreting”, <http://www.languagescientific.com/the-difference-between-translation-and-interpreting/>, accessed 2017-04-24.

language versions of questionnaire or interview schedule are equivalent, formal procedures of forward and back translation may be followed. The instrument is first translated from the original (source) language into the other (target) language. It is then translated back from the target language by translators who were not involved in the forward translation and who, ideally have not seen the source. The back-translated version is then compared with the source, after which the differences between the two texts are discussed in order to eliminate discrepancies. Standard procedures have been described for the translation of standardized questionnaires in cross-cultural clinical settings (e.g. Beaton et al. 2000; Su and Parham 2002; World Health Organization 2017). The forward and back translation process is time-consuming and expensive, and some doubts have been expressed about its efficacy (Hantrais 2009, 80–81). In all cases, it is very beneficial to involve persons who are native speakers of all the relevant languages in the development of the instrument as local informants, research assistants, and, preferably, co-researchers. Researchers who conducted a survey of students' career decisions in library schools in Canada, China, Hong Kong, and Japan, were drawn from all four countries. They developed the questionnaire in English as a team effort. It was then translated into Chinese and Japanese (Lo et al. 2015, 199). While no mention is made of back-translation, the involvement of the Chinese and Japanese team members in developing the English originals would presumably have helped them when translating it.

Measurement equivalence

In quantitative studies 'measurement equivalence' is an important criterion. This is a quite technical topic (cf. Hantrais 2009, 81–85). As mentioned in Section 6.6, constructs (complex theoretical concepts) may be measured using variables referred to as indicators. In multi-lingual and multi-cultural situations, it may be necessary to use indicators which are not identical but equivalent. Before instruments are used, a process of calibrating the instrument must be carried out to ensure that differences in measured values are the result of real differences between the objects of analysis, and not the result of non-equivalent indicators. This is depicted schematically in Figure 6.4.

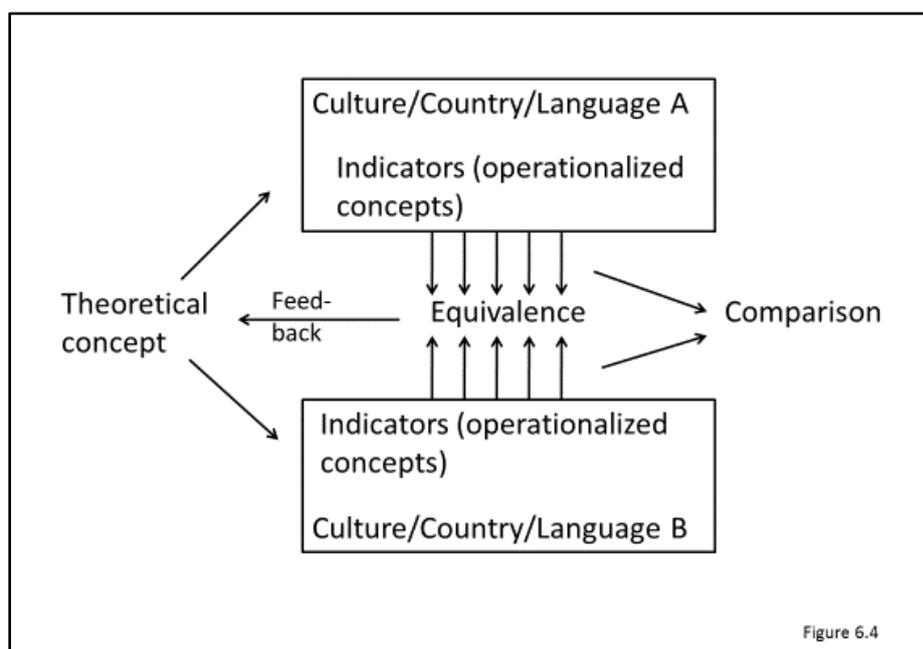


Figure 6.4: Theoretical concepts and cross-contextual equivalence

Note the feedback loop depicted in Figure 6.4. 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. Tran (2009) discussed conceptual equivalence in measurement in cross-cultural social work research, and dealt in detail with the procedures for designing cross-cultural measurement instruments in quantitative studies. When using instruments such as Likert scales (cf. Pickard 2013, 213–14), researchers have noted fascinating national differences in responses. For example, in cross-national research it has been found that English-language questionnaires elicit responses from non-native speakers that cluster more to the middle of the scale, while those in respondents' native languages elicit more responses at the upper and lower ends of the scale (Harzing 2006; Harzing et al. 2012).

6.9 Survey design and execution

In addition to the equivalence of concepts, dealt with in the foregoing discussion, reliability of comparative research requires consideration of the equivalence of other procedures and techniques. 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 project depended not on identical procedures and instruments but on the 'principle of equivalence'. Lynn, Japac and Lyberg (2006) also provided an insightful overview of what is "special" about cross-national surveys.

Context is an important factor in designing surveys, as may be illustrated by a hypothetical comparative study of Internet use by public library users in Cape Town, South Africa and a city of comparable size in a developed country. While certain parts of Cape Town have pleasant and affluent residential suburbs with shopping malls and other amenities similar to those in "first world" cities, much of Cape Town is very different. Like many African cities, Cape Town is experiencing rapid urbanization, as large numbers of poorly educated, unemployed people move in from the rural areas in search of better opportunities, and construct shacks in sprawling informal settlements. Access to these for research purposes would have to be negotiated after relationships have been established with local politicians. Even with their approval, the security of field staff would be a concern here. Given the constantly shifting human geography and in the absence of an obvious source of population data, sampling households will be challenging. In developing survey questionnaires or interview schedules, the research team will need to consider the multilingual and multicultural character of these communities, and extreme differences to be expected there in socio-economic status, literacy, educational status and prior experience of libraries and information technology. The survey would need to be conducted using at least three major languages. This would be an extreme case, but problems of this nature can be expected in any cross-national or cross-cultural comparison.

Sampling

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. Different countries may have (or not have) various forms of population registration. In Germany and the Netherlands, for example, there are detailed and comprehensive population registers; in the USA, on the other hand, there is no national population register and researchers have to rely mainly on a major census carried out every ten years. Survey researchers have to rely on the national systems for their sampling frames. Hence there is no single sampling design that will yield a representative sample in every country. However, from a statistical point of view it is not necessary to use identical sampling procedure in different countries. The requirement is that the sampling procedures should yield samples that are representative of the sampled populations in their respective countries, and that approach the criterion of equal probability of inclusion. Therefore in a comparative study different sampling frames and different stratification or cluster designs may be used for the countries included in the study (Scheuch 1968, 190–97). In developing countries, the infrastructure and expertise needed for censusing may be limited (Gil and Omaboe 1983). Mitchell (1983, 220–26) discussed sampling errors that may arise here. In all cases, it is critical to be aware of the differences, and to ensure that, despite the use of different sampling designs, sampled units have an equivalent probability of inclusion. The response rate also needs to be at least roughly equivalent. In a study of perceptions of public libraries in six countries in Sub-Saharan Africa, various groups of respondents were interviewed. The researchers encountered a variety of problems in drawing samples of these groups, including difficulties in obtaining lists to be used as sampling frames, and inaccuracies these lists. The problems differed from country to country (“Perceptions of Public Libraries in Africa” 2011). Vakkari et al. (2014, 2016) described the different sampling procedures they used in comparative studies of public library usage in three and five countries respectively, and the expedients they used to acquire comparable data.

In comparative studies in LIS, sampling often involves selecting countries, then institutions or systems within them – these mostly being selected as purposive or convenience samples. Within the selected institutions or systems, respondents, transactions or other objects of analysis may then be selected using equal probability samples. Typically, procedures other than simple random samples are used for this purpose, e.g. systematic, stratified or cluster sampling¹⁶ and it may be necessary to use somewhat different procedures in the different countries (e.g. Shachaf and Rubenstein 2007). Non-probability procedures such as the snowball method (e.g. Tanackovic, Lacovic, and Stanarevic 2012), convenience samples (e.g. Shachaf, Meho, and Hara 2006), and self-selection of respondents (e.g. Walton, Burke, and Oldroyd 2009) may also be used.

Increasingly, survey questionnaires are distributed using e-mail mailing lists (listservs). These may be very general, open lists such as IFLA’s IFLA-L, or specialized, closed lists, of which IFLA also manages almost one hundred.¹⁷ Mailing lists can be a source of bias, The Internet is unevenly distributed, so that respondents are seldom representative of all parts of the world. Neither are they representative of persons within those countries. For example, in developing countries, IFLA-L subscribers are more likely to be persons who are competent in English or one of IFLA’s other official languages.¹⁸ They are likely to be located in larger urban centres and to be employed in more senior positions in larger, relatively well-funded

¹⁶ For a brief overview of sampling procedures in LIS, see Connaway and Powell (2010, 117–28).

¹⁷ At time of writing IFLA-L had over 5200 subscribers. For a list of IFLA’s mailing lists, see <https://www.ifla.org/mailing-lists>, accessed 2017-04-25. Not all of the approximately 95 listed on that day are active.

¹⁸ Arabic, Chinese, English, French, German, Russian and Spanish.

institutions, especially those which have the resources to participate in IFLA activities. And obviously, one should not use IFLA-L to disseminate an instrument seeking to measure the international awareness of librarians, since internationally aware librarians are highly overrepresented on such a list. Using a large mailing list is a shotgun approach, with a response inevitably biased by self-selection of respondents. Respondents may or may not be competent to answer the questions. For example, if a survey instrument inquiring into matters of national import such as national information policy, LIS education, or legal deposit is sent to all the subscribers to IFLA-L, how do the researchers determine which respondents, if any, are in a position to have an overview of the situation in their country and are able to report authoritatively on the matter, and which are simply giving personal impressions or opinions?

Care in sampling has to be taken in citation studies, where the source documents (mostly journals) have to be selected, and a sample of citations drawn from them. Citation studies using LIS journals have been used to gauge the development the field in developing regions, e.g. in Africa (e.g. Onyancha 2009) and Eastern Europe (e.g. Uzun 2002). In such cases researchers often select all the accessible core journals. Al-Aufi and Lor (2012) selected all the accessible core LIS journals in Arabic, then, in order to trace the development of professional LIS over a period of time, took a sample of all the articles published in 1997, 2001, 2005 and 2009.¹⁹ Studies using content analysis also require sampling decisions. In a study comparing newspaper coverage of Internet access in libraries in Canada and Singapore, Luyt (2006) compensated for the disparity in the sizes of the two countries and the numbers of newspapers published there by limiting the Canadian newspapers to two major newspapers published in Toronto, a city of similar size to Singapore, which has only two major newspapers.

Self-administered questionnaires

The traditional delivery of self-administered questionnaires through the post has always been problematic in countries with unreliable postal services, especially if deadlines have to be met. Bulmer and Warwick (1983, 147) pointed out that postal surveys are only feasible in highly literate populations, where everybody has a recognizable address, and where potential respondents are familiar with the notion of completing and returning questionnaires. In developing countries these conditions are rarely met. Even in developed countries this cannot be taken for granted. The postal survey has now largely been superseded by the use of the Internet to deliver the questionnaires. Furthermore, the delivery of discrete questionnaires as e-mail attachments (e.g. Willingham, Carder, and Millson-Martula 2006) is generally making way for web-based survey instruments such as SurveyMonkey (e.g. Baich and Weltin 2012) and Qualtrix (e.g. Huang and Lor 2011). Of course, this assumes that the target population has access to the Internet.

The ease of distributing survey questionnaires world-wide using web-based software may lead the unwary LIS researcher astray. 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 or meaningless responses – and annoying recipients. A few years ago, I received a request to complete a web-based questionnaire, which was being distributed by an American MLS student using IFLA's international listserv, IFLA-L.

¹⁹ This is an example of the systematic sampling procedure, where 'systematic' means that the sample is arrived at by taking every nth case in the sampling frame.

The survey 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. ‘Small’ can have different meanings depending on the level of economic development of the countries where the recipients are located. ‘International’ can also be understood differently. In American English ‘international’ means ‘foreign’, i.e. libraries in countries other than the USA, but this is not the case in Standard English, where this might be interpreted to mean the library of an international organization. A librarian running a ‘small’ library in Namibia, South Africa, France or Cambodia may not recognize his library as being ‘international’. In addition, the concept of ‘paraprofessional’ staff varies widely among countries and may be unknown in others. As a result, the equivalence of the concepts used by respondents in different countries in answering the questions is in doubt. Bulmer and Warwick (1983, 149–51) provided useful guidelines for questionnaire design for use in developing countries before the Internet; their basic principles remain relevant.

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. in this case the members of the relevant IFLA standing committee), and they should be pilot tested internationally before they are finalized and distributed. A survey of the international activities of national libraries, conducted by Huang and Lor (2011) in collaboration with the Conference of Directors of National Libraries (CDNL), used a web-based (Qualtrix) questionnaire in English which was finalized after it had been pilot tested through completion by staff of twelve national libraries of different sizes located in different regions of the world. In spite of pilot testing, problems resulting from misunderstandings occurred.

Interviewing

Bulmer and Warwick (1983, 146–48) provided an overview of strategic decisions in the design of social surveys in developing countries. Much of what they have to say is equally relevant in international and comparative research in developed countries. The basic choice at that time was between telephone and personal (face-to-face) interviews. The feasibility of telephone interviewing depends on how many people have access to telephones. Teledensity was generally low in developing countries before the advent of mobile phones, but this has changed. Mobile phone penetration in Africa was reported as reaching 67% in 2015,²⁰ while India passed the milestone of one billion mobile phone subscribers in early 2016 (Rai 2016). The new factor is the rapid spread of smartphones, which offer web-based questioning procedures.

Interviews are said to be structured when an interview schedule (or interview guide) is used to guide the questioning, and unstructured when they are conducted without an interview schedule. In a structured interview, the same questions are put in the same order to all the interviewees. The interview may include open-ended questions, to which interviewees respond in their own words, closed-ended questions, in which interviewees are offered a choice between a limited number of predetermined answers, or a combination of both. The more structured an interview is, the more reliance can be placed on the consistency of the interviewing. This is an important consideration in large surveys employing field staff,

²⁰ The Guardian, “Africa’s mobile phone penetration now 67%”, <https://guardian.ng/technology/africas-mobile-phone-penetration-now-67/>, accessed 2017-04-27. This constitute a massive increase – but still leaves 33% of the population unreachable by mobile phone.

particularly in multilingual and multicultural settings. Bulmer and Warwick (1983, 147) observed that the open-ended question format "...is also the most risky and difficult to control unless field personnel are skilled at interviewing and are thoroughly familiar with the purpose of each open question". But by sticking rigidly to predetermined questions, interviewers are constrained and unable to follow up interesting and unanticipated ideas. Valuable insights may be lost. In unstructured interviews, these opportunities can be seized. The interview proceeds more informally, as a "purposeful conversation", but the interviewer needs to steer it adroitly to avoid drifting off topic, and this calls for considerable skill (cf. Pickard 2013, 201).

In qualitative research a format referred to as 'semi-structured' or 'moderately scheduled' is commonly used. Harrell and Bradley (2009, 26–27) place semi-structured interviews on an "interview continuum" depending on the amount of control exercised by the interviewer. The interviewer has an interview guide listing questions to be asked and "probes" prompting the interviewee for clarification or further detail. The interview is conducted informally and the interviewer has some freedom to deviate from the sequence (Mathers, Fox, and Hunn 2002). Semi-structured interviews are widely used in qualitative studies in international and comparative librarianship (e.g. Caidi 2004a; Al-Harrasi and Al-Aufi 2012; Boamah 2013), often in combination with questionnaires and the analysis of documents (e.g. Audunson 1999; Tbaishat 2010) or web pages (e.g. Chang, Huang, and Hopkinson 2011), or site visits (e.g. Önal 2009). In-depth interviewing including ethnographic procedures (e.g. Emmelhainz 2017) such as story-telling (e.g. Dalbello 2008) have also been applied in our field. Mention should also be made here of focus group interviews (e.g. Neuman, Khan, and Dondolo 2008; Underwood 2009).

When it is not feasible to conduct face-to-face interviews with some of the interviewees, the questions may be sent to them by e-mail (e.g. Mamtora, Yang, and Singh 2015), e-mail frequently being used for follow-up questions. Interviews may also be conducted by telephone (e.g. Chanetsa and Ngulube 2017), or using Voice over Internet Protocol (VoIP) technologies such as Skype and similar facilities which offer both voice and video communication.²¹ These do of course presuppose a certain minimum level of Internet connectivity. Face-to-face interviews remain the ideal interviewing format, since they allow the assessment of body language, gestures, and facial expressions, which may tell a different story from the verbal narrative.²²

Cultural factors are perhaps more obviously relevant in interviewing than in the use of self-administered interviews. Conducting interviews in other countries calls for cultural sensitivity, the ability to "tune in" to the way people interact, patience in observing customary courtesies, and an ability to hear what is not spoken (Liamputtong 2010, chap. 4). The well-observed interviewing technique of Mma Precious Ramotswa, gently drawn in Alexander McCall Smith's *The No. 1 Ladies' Detective Agency* (Smith 2004) and sequels, could serve as a model for interviewers in Botswana and Southern Africa, if not elsewhere. In some settings, for example, rural villages, gaining access to participants requires considerable diplomatic skill (Hershfield et al. 1983; Liamputtong 2010, chap. 3). Cultural norms have significant influence on the interviewing process, affecting, for example, whether male interviewers may

²¹ For assessments of the use of Skype in conducting qualitative research, see for example Sullivan (2012) and Lo Iacono, Symonds and Brown (2016).

²² Body language is not always easy to read. I had the experience of interviewing a young African woman who appeared rigid and uncommunicative. I eventually realized that she found being interviewed by a high-status male stranger, frightening; she was literally "scared stiff".

interview female interviewees – if such interactions are at all possible – and vice versa. In many countries – and not only developing countries – interviews are rarely conducted in private. Interviewees are usually accompanied by third parties, referred to in the literature as “clinical witnesses”. For example, if a woman is being interviewed, cultural norms may oblige her husband to be present. The presence of such “clinical witnesses” may well introduce bias (Mitchell 1983, 233–35).

Rules of courtesy will determine not only what sorts of questions may be addressed to whom, and how the questions should be formulated, but may also introduce “courtesy bias” which may bias responses. In many cultures, questions should be directed to persons of high status in the community and posing questions to a person of lower status, for example when speaking to a group of librarians, can cause embarrassment. Sometimes it is considered discourteous directly to contradict a person. Hence the librarian visiting in rural Southern Africa is advised not to ask questions which appear to imply a desired answer. For example, instead of asking, “Is the library open every day?” it is better to ask, “On which days is the library open?” Discussing courtesy bias in surveys conducted in South-East Asia, Jones (1983, 254) listed nine of the ingredients of courteous conduct:

- 1) The atmosphere between people must be kept pleasant and agreeable, free from anger or contradiction.
- 2) No one may disagree openly with a person of higher status.
- 3) Nothing should be said which wounds, or affronts, or causes hurt to another.
- 4) If possible, what is said should please and compliment.
- 5) Nothing should be said which another would not like to hear.
- 6) Courtesy in conversation demands that the main subject be delayed.
- 7) To ask personal questions is well within the bounds of courteous behaviour.
- 8) The most basic of courtesies – hospitality – is extended to the stranger in the form of food shared or shelter offered from rain or sun. [...]
- 9) Detailed attention to the needs of others is an integral part of the pattern of social behaviour. [...]

When the interviewer finds that a respondent is not answering questions directly or immediately, the interviewee is most probably not trying to mislead or evade, but to avoid causing embarrassment. In cross-cultural research, the foreign researcher may find it very helpful to work in partnership with local researchers who speak the language and understand the culture of the interviewees (e.g., in Mongolia, C. A. Johnson and Yadamsuren 2010).

In quantitative studies using relatively large numbers of more structured interviews, where equivalence of questions is important, local interviewers are often employed. If oral interviews are to be conducted 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’) (Jowell et al. 2007). Examples of the effects of “interviewer – respondent status congruency” are given by Mitchell (1983, 236–236). Among other aspects of the organization of field surveys, the selection of interviewers is a critical factor (Bulmer 1983b).

This is also relevant in qualitative studies. Liamputtong (2010, chap. 6) has discussed in some detail the role of what she prefers to call “bicultural or bilingual researchers”, in qualitative cross-cultural research. They are able to bring an insider perspective not only in terms of

language (interpreting) but also in filtering meanings and ensuring sensitive and respectful interaction with participants. In the process, they exercise power and carry a significant, responsibility. There are also potential disadvantages, as they may be intrusive, biased, and in some cases culturally distant from the community being surveyed because of their higher status or other factors. Thorough training is essential, since they need to understand the aims and methodology of the research. Good supervision is essential to ensure data quality. If using local interviewers, the survey leader is well advised to interview them at the end of each day on their experiences in the field; this helps to identify problems early on (Bulmer and Warwick 1983, 149–51).

Observation

As mentioned in Section 6.2 above, observation can be direct and indirect. In international and comparative librarianship, direct observation often takes the form of visiting libraries in other countries. This can be very informative, and as recounted in Chapter 2, Sections 2.4 and 2.5, reports on such visits form part of the early literature of our field. In the early stages of LIS development work in developing countries, library visits by experts from developed countries, such as those commissioned by the Carnegie Corporation of New York, were a frequently used method of data collection. Before the Second World War, such visits could last several months. After that war, the number and kinds of visits increased (cf. Ludington 1954; Asheim 1966; Brewster 1976; Richards 1991). For the purpose of their book on library development in eight Asian countries (Kaser, Stone, and Byrd 1969) all the countries were visited by at least one of the authors, for “extensive personal observations and interviews” (p.iii), the visits being sponsored by the US Agency for International Development (AID). More recent examples are a visits by a Ghanaian librarian to village reading rooms Botswana (Alemna 2001), a visit to observe a rural library in Kenya (Dent and Yannotta 2007), a visit by a delegation from the Smithsonian institution to assess the damage caused to libraries by the Haitian earthquake of 2010 (Wegener 2010), and a six-months visit to assess academic libraries in Bhutan (Ransom 2011). These are mostly examples of non-participant direct observation. Visits to other libraries frequently form part of library twinning or partnership arrangements. In the case of staff exchanges, participation in work activities by visiting librarians can be regarded as a form of participant observation (e.g. Chu 2007; Steiner, Shin, and Park 2008; Nurminen et al. 2012; Somerville et al. 2015). Whilst often insightful, this literature generally reports informal and unstructured instances of observation. Indirect observation, in the form of noting physical evidence (cf. Section 6.2), usually constitutes an incidental accompaniment of direct observation during visits to foreign libraries. Systematic and focussed observation of physical evidence does so far not feature in the literature of our field.

Coding & data processing

Coding is necessary when interviewers allocate verbal answers to prescribed categories for purposes of data processing. It is also necessary when they record overt characteristics of interviewees as distinct from answers to questions, and in studies involving structured observation. For this purpose, a data coding scheme is needed, and in international and cross-cultural surveys such schemes should be designed to minimize differences between countries (Jowell et al. 2007, 6): “Coding schemas must be devised to ensure that it is the codes rather than the coders that account for differences in the distribution of answers.” Coding instructions must be comprehensive and unambiguous. This also applies to the coding of

responses to open-ended questions in self-administered questionnaires, if this takes place in more than one country. An account by Vakkari et al. (2014) of a survey of public library outcomes undertaken in Finland, Norway and the Netherlands, where sampling procedures and response categories were not quite identical, illustrates some of the challenges of coding and processing such data.

6.10 Documentary sources

In discussing documents as sources, it is useful to take as a point of departure the traditional distinction made in historiography between primary and secondary sources. This distinction is also made when the historical method is described in LIS research method texts (e.g. Connaway and Powell 2010, 248–49; Pickard 2013, 171).²³ Here I use the distinction to cover documentary sources generally. For our purposes, *primary sources* are documents providing first-hand evidence. These may be published (e.g. first-hand media reports), or unpublished, often referred to as archival materials. They are typically created in the course of the management and operation of an institution or organization, or as by-products of the lives of families and individuals. As such, they are normally intended for internal use, not for wider distribution. They 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.

The use of primary sources generally presupposes access to material that may be unpublished and possibly confidential. Many that are of interest to researchers are held in archives of various kinds, and use may be restricted or embargoed, as determined by the depositors and the holders of the material. This also applies to government archives. In many countries, there is legislation on freedom of access to government information, but even there access to official information cannot be taken for granted. Use of these sources also requires sufficient command of the language or languages used in the relevant countries (Sable 1987), as well as an understanding of the legal and administrative system. Primary sources are particularly important in the in-depth, qualitative research that characterizes single-country studies and few-country comparisons.

Secondary sources, simply stated, comprise “everything not viewed as primary” (Connaway and Powell 2010, 248). They are sources, based on primary sources, which are at one remove, or more, from what is recorded in them. They provide background, description, statistical data, commentary, and discussion. They are dealt with in **Sections 6.11 to 6.20** below.

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

²³ The distinction is still widely presented in libguides (guides to subject literature compiled by librarians) and in introductory handouts for history students (e.g. Faculty of History, University of Cambridge, “How to use historical sources”, <http://www.hist.cam.ac.uk/prospective-undergrads/virtual-classroom/historical-sources-how>, accessed 2017-04-28). However, some contemporary historians avoid the terms ‘primary source’ and ‘secondary source’ (e.g. Howell and Prevenier 2001) and others point out that the distinction is not clear-cut: “some sources are more ‘primary’ than others” (Tosh 2010, 92).

which case it serves as a primary source in a content analysis. For example, in a study of the development of international librarianship during the period 1850—1945 (Lor 2017), Edward Edwards' ([1869] 1869) massive compilation on *Free town libraries*, and the influential *Manual of library economy* by James Duff Brown (1903) were among the primary sources used to gain insight into the preoccupations of librarians during that period. For that study, they served as first-hand witnesses to professional preoccupations of their period, and not as sources of information about their subject matter.

6.11 Documents as primary sources

Archival research is frequently conducted as part of in-depth comparative studies in which the diachronic dimension (referred to in Chapter 5, Section 5.13) is present. Here the historical method is applied in an analytical and discursive discourse involving interpretation and creative synthesis. An example is Ian Johnson's (2016) exhaustive study of education for librarianship and information management in Iraq, in which a wide range of sources was used. Examples of studies using archival materials on a smaller scale than that of Johnson are a study by Luyt (2008) of the role of the Raffles Library and Museum in Singapore during the colonial period, a study by Lim (2008) of school library development in colonial Malaya, and Saby (1989) on the role of IFLA during the Second World War.

Analysis of official and organizational documents

As a form of triangulation, in international and comparative LIS, management, policy and planning documents – often contemporary rather than historical – are commonly analysed alongside other data collection procedures such as interviews, self-administered questionnaires, and observation. Examples are found in a wide range of studies. In a study of change processes in public libraries, Audunson (1999) used planning documents of the libraries together with qualitative interviews and questionnaires information and communication policies. In a comparative study of ICT policy in Malta and Jamaica, Xuereb (2006) used a case-study approach involving the collection of policy documents and semi-structured interviews with key policy-makers in each island. Other examples are document analysis in a business process modelling study of library acquisitions (Tbaishat 2010), a review of management curricula for information professionals (Grandbois 2013), and a review of published and proprietary documents along with interviews and observation in a study of Chinese university library consortia (Perushek and Douglas 2014). In a study of public library management in Japan and the USA, Koizumi (2014) made extensive use of a variety of management documents, including strategic documents, organization charts and position descriptions, annual reports, internal telephone directories and library manuals in addition to interviews. Use of such sources as the sole data collection method is much less frequent. Usually they concern international comparisons of policy documents, legislation and related documents. Examples are a study by Whitworth (2011), who analysed a sample of policy national documents on information literacy, and several studies on ethical codes (Koehler 2006; Foster and McMenemy 2012; Zaïane 2011), and LIS legislation (Lajeunesse and Sène 2004).

Today, documents such as those mentioned above are routinely posted on the Web. Websites are a popular source of information in international and comparative librarianship. They are sometimes visited as an alternative to physical visits, as in a study of the impact of the

IFLA/UNESCO School Library manifesto (Önal 2009). In a study of the digital library services of Informational World Cities, Mainka et al. (2013) analysed the websites of the relevant cities. In a comparative study of library positions on copyright compliance in China and Japan, Wang and Yang (2015) analysed copyright information on the websites of these libraries. Kawooya (2016) analysed curricula and course descriptions found on the web to determine the extent to which African LIS curricula covered intellectual property relating to digital content. Structured thematic analysis of websites is discussed in Section 6.12.

Evaluating documents

All sources, primary and secondary, should be subjected to what Van Dalen (1973, 168) has called “cross-examining ...silent witnesses”. The examination of all categories 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 distinguished by historians (e.g. Garraghan 1974, 168). *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?)

Librarianship is a relatively uncontroversial profession. However, various forms of distortion and embellishment do occur. As a new national library director visiting other national libraries, I was not infrequently struck by the gap between what had been described in the literature and the reality on the ground. Participating in a time-consuming workshop at the offices of the Pan-African Development Information System (PADIS) in Addis Ababa in 1995, I heard much talk about regional and national “focal points” but it appeared that nothing much was happening on the ground. I subsequently discovered that some sub-regional units that were supposed to feed bibliographical information into the system, and that had been confidently described in the literature, existed only on paper, as also observed by Sturges and Neil (1998, 100–102). The portrayal of aspiration as reality may be motivated by a desire to impress or to please superiors. It may also simply be the result of a naïve and enthusiastic acceptance of second-hand reports; in my estimation, deliberate attempts to mislead are not common.

Other inaccuracies may arise from self-censorship or institutional interference. In annual reports of institutions, their directors tend to emphasize the positive developments. Personnel of aid agencies prefer to report on successes achieved in aid projects, as do the government aid agencies, which are often under criticism from political parties that criticize development aid. Aid grantees are understandably tempted to put “their best foot forward”, when reporting to the aid agency which funded their project. Intergovernmental organizations are known to exert pressure on experts commissioned by them, to avoid making expensive or politically unwelcome recommendations. For example, a first discussion draft of an evaluation report on UNESCO’s Information for All (IFAP) programme made quite drastic recommendations on its future, These were toned down considerably in the final version of their report (Gurstein and Taylor 2007). It is not unknown for such reports to disappear altogether. Most experienced consultants will have similar stories to tell. Parker (1988, 221–27), a highly experienced international library consultant, mentioned some examples and placed these in the context of the complex relationship between international consultant and their clients, where he distinguished between the “end-client” (the beneficiary of the project) and the “quasi-client” (the body funding the project, and paying the consultant). Johnson (2016, 410) commented that his use of archival material shed light inter alia on “the ‘realpolitik’ of international development assistance in the LIS field”.

To the two questions mentioned above under internal criticism posed, I would add: was the author competent in the language of the document? In international and comparative librarianship, we may have to deal with texts written in an author’s second or third language, and with translations produced by amateur translators or by skilled translators unfamiliar with the subject matter. Misinformation may result. Johnson (2016, 418–20), commented on the challenges of using texts written in English by Arabic-speakers, texts translated from Arabic and texts written by native English speakers who relied on interpreters.

6.12 Content analysis

Whilst the scholarly analysis of texts has a long history, more systematic procedures for examining texts have become popular in LIS research, and have also been applied in our field. Content analysis is an umbrella term for a variety of qualitative and quantitative methodologies, including discourse analysis, rhetorical analysis, and conversation analysis, that are applied in a wide variety of disciplines (Krippendorff 2004, chap. 1). .” It entails “...a systematic reading of a body of texts, images, and symbolic matter, not necessary [sic] from an author’s or user’s perspective” (Krippendorff 2004, 3). Quantitative methods, including the use of specialized software, may be used to analyse the data.

Quantitative newspaper analysis has a long history (Krippendorff 2004, 5). An example from our field is a comparative analysis of newspaper coverage of Internet access in libraries in Singapore and Canada (Luyt 2006). In a comparative study of the presence of library issues in the European press reports, Galuzzi (2014), included a quite detailed discussion of methodological issues such as the selection of the newspapers, identification of relevant articles, and her decision to use manual rather than computer-assisted analysis of the articles. Following a more qualitative approach, Svensson (2012) undertook a critical discourse analysis of the discussion of self-service libraries in the daily press in Sweden and Denmark.

Examples of quantitative content analysis procedures in comparative librarianship include a

series of comparative content analyses of the literature of library and information science by Järvelin and colleagues (Järvelin and Vakkari 1990, 1992, 1993; Aarek et al. 1992; Rochester and Vakkari 2003). They classified each article according to classification schemes they devised for article topics as well as research strategies. This allowed for the presentation of cross-tabulated data. More recently, Foster & McMenemy (2012) subjected 36 ethical codes from national professional organizations to both quantitative and qualitative content analysis. In the quantitative analysis the authors determined which of the eight core values proposed by Michael Gorman (2000) were present in the codes. In the qualitative analysis, they examined how the values were expressed.

Websites were referred to earlier. Websites themselves have been the primary object of interest in a number of comparative studies (e.g. Sroka 2002; Onyancha 2012; Vargas-Quesada et al. 2013). The presence of libraries on social media pages such as Facebook and their use of other social networking media is widespread and growing. It can be expected that libraries' use of social media pages will also be used as data sources in international and comparative librarianship. The use of Facebook and Twitter by the international library network of the Goethe-Institut, Germany's cultural diplomacy agency, has been described by Boyer (2012).

6.13 Bibliometric and related analyses

Bibliometrics, very broadly defined as “the statistical analysis of books, articles, or other publications”,²⁴ encompasses techniques such as collecting data on the numbers and characteristics of publications, and the analysis of references and citations found in bibliographic databases and scholarly publications. An early example of bibliometric analysis in our field is the dissertation by Bliss (Bliss 1991) referred to in Chapter 1. Bliss analysed references found in *Library literature*, an indexing service, to examine the growth and characteristics of the literature of international librarianship. Citation analysis is widely used in studies of scholarly communication and in research evaluation. In spite of known shortcomings, which centre around assumptions on when, how, and why authors cite one another, the technique is widely used in LIS. It can be seen as specialized form of content analysis, which focuses on what can be learned from the citations and references in articles and other scholarly publications. In particular, it can be used to examine relations of influence (e.g. who is citing whom) and impact (e.g. which authors and journals, from which countries, are cited most). The latter question – from which countries – is particularly relevant to international librarianship and the international political economy of information.

The following are some examples of citation studies that are relevant to international and comparative librarianship: In Africa, Onyancha and collaborators have undertaken a number of citation studies looking inter alia at the development of LIS journals in Sub-Saharan Africa (Onyancha 2009) and at patterns of collaboration in knowledge production among Africa countries (Onyancha and Ocholla 2008; Onyancha and Maluleka 2011). Such patterns have implications for international information flow within and from Africa. In Eastern Europe, Teodorescu and Andrei (2011) undertook a bibliometric analysis of journal articles to monitor the growth of international collaboration in their region since 1989, particularly with countries in the western half of the European Union. On a broader international scale, Glänzel

²⁴ Organization for Economic Cooperation and Development (OECD), “Glossary of statistical terms: Bibliometrics”, <http://stats.oecd.org/glossary/detail.asp?ID=198>, accessed 2017-04-28.

(2001) studied national characteristics in international co-authorship of scientific publications, asking, among other questions, to what extent such international collaboration reflects global political and economic changes.²⁵ On an even more global scale, Mazloumian et al. (2013) analysed some 80 million citations between 13 million papers during the period 2000-2009, using their technique of network-based citation analysis in an attempt to develop a picture of the ecosystem of science (the “scientific food web”), mapping knowledge production and consumption between six major geographic regions, and identifying knowledge “sources” and “sinks”, the latter being regions which “consume” far more knowledge than they produce. Studies such as these are made possible by the availability of digital content and computing resources unimaginable in Bliss’ day.²⁶

This section would be incomplete without a brief reference to altmetrics (a contraction of ‘alternative metrics’, formed by analogy with ‘bibliometrics’) which tracks the use of social media to yield metrics analogous to those obtained through citation analysis. Increasingly scholars discuss and tag research literature, using a wide variety of social media, including blogs, Facebook, Twitter, and web-based reference management and academic social networking tools such as Mendeley and CiteULike. Like citations, this activity can be analysed to determine article impacts and other measures of scholarly activity (Priem, Piwowar, and Hemminger 2012). This clearly has potential in our field. Moving beyond scholarly communications, the analysis of the ‘big data’ produced by the tremendous numbers of interactions on social networks such as Twitter is a major growth area in social, management and technology research. It is giving rise to topics such sentiment analysis and opinion mining (Liu 2012) in applications ranging from predictions of stock markets movements and consumer behaviour to studies of happiness, referred to as ‘hedonomics’ (Dodds et al. 2011). It should be possible to apply these procedures to our field.

6.14 Secondary sources

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, comparativists 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.

In this section, an overview is given of secondary sources, including a wide range of sources published in print and on-line, that can be consulted for comparative studies and for studies of individual countries. These can be grouped into the following broad categories:

- General country information (Section 6.15)

²⁵ As the 2020s approach, it would be interesting to see whether patterns of co-citation will reflect changes in scholarly collaboration in Europe after the UK leaves the EU, and the impact on scholarly collaboration of the policies pursued by the Trump administration in the USA.

²⁶ The possibilities are illustrated by an analysis of the place of publication field in over 300 million MARC records in the OCLC WorldCat database to tabulate book production by country of publication (Tennant 2013).

- International comparative data – general (Section 6.16)
- International comparative data – LIS (Section 6.17)
- LIS in specific countries (Section 6.18)
- International organizations (Section 6.19)

All links to online sources were checked and live at the end of April 2017.

6.15 General country information

To gain background on the country, general reference sources, such as encyclopaedias, 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 encyclopaedias, atlases, almanacs and statistics. A well-known source of basic country information (stated by the publisher as being pitched at ninth grade reading level) is the five-volume *Worldmark encyclopedia of nations* (Riggs 2017). It is mostly packaged together with other Gale/Cengage online products, and best accessed online via library OPACs. *World geography and culture online*²⁷ is published by Infobase and appears to be aimed at school and public libraries. A free online counterpart of the *Worldmark encyclopedia of nations* is the *Encyclopedia of the nations*²⁸. It has to be used with circumspection as some of the information is very dated.²⁹ Although professors warn students against using it, far more up-to-date and detailed country information can be found in *Wikipedia* than in most other encyclopaedias. It is extremely useful in providing leads to other recent sources, but its information has to be evaluated critically. Although *Wikipedia* itself is quite good at flagging material that is unsatisfactory, particular caution must be exercised when evaluating material on controversial topics such as human rights and freedom of expression, or recent political events.

Many other sources are available online. For example, the *CIA World Factbook*³⁰, 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 page³¹ with links to the sites of the statistical agencies of almost all of the countries of the world. *Wikipedia*'s "List of national and international statistical services"³² lists the central statistical organisations of the countries of the world and intergovernmental organizations, with links to their websites. The Dag Hammarskjöld Library of the United Nations and other UN libraries and libraries of some associated intergovernmental organizations issue library guides. These include a number of country guides, mainly about countries of concern to these bodies. A consolidated list of these is published online on the website of the UN Regional Information

²⁷ Infobase, "World geography and culture online," <http://www.infobasepublishing.com/OnlineProductDetail.aspx?ISBN=0816043795>, accessed 2017-04-30.

²⁸ Nations Encyclopedia, "Encyclopedia of the nations", <http://www.nationsencyclopedia.com/>, accessed 2017-04-29.

²⁹ In the entry for South Africa, the section on "Political parties" provides no election results after 1999.

³⁰ US Central Intelligence Agency, "The World Factbook", <https://www.cia.gov/library/publications/the-world-factbook/>, accessed 2017-04-29.

³¹ US Bureau of Labour Statistics, "Statistical sites on the World Wide Web", <https://www.bls.gov/bls/other.htm>, accessed 2017-04-29.

³² *Wikipedia*, "List of national and international statistical services", https://en.wikipedia.org/wiki/List_of_national_and_international_statistical_services, accessed 2017-04-29.

Centre for Western Europe.³³ Most university libraries today maintain web pages to direct users to information sources, both in-house and external (web-based). These are generally known as ‘libguides’. Many maintain libguides for users needing international data, especially in politics and economics. A search engine such as Google can quickly call up dozens of them. A good example is Columbia University Library’s research guide on “General statistical sources: international statistics”³⁴ The University of Auckland (New Zealand) Library maintains an online database called OFFSTATS³⁵ which provides links to online statistical databases of most countries of the world. The more comprehensive they are, the more time-consuming it is to keep these sites updated. Therefore the quality of these sites fluctuates depending on whether and how well they are maintained.

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 one is likely to find the country’s official handbook. For example, the South African government publishes an official annual publication, *South African yearbook*, available online,³⁶ to offer “authoritative” information on the country, and the national statistical bureau, Stats SA, also has an official site, STATS SA.³⁷ Many countries additionally have commercial or semi-commercial organizations sites which aim at promoting business and tourism. Usually these sites 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. Generally, government statistical offices in developing countries face enormous challenges, and the official statistics they publish may be unreliable (Bulmer 1983a, 4–5). Kennett and Yeates (2001, 55–60) discussed problems in collecting and interpreting international data, using as an example the conceptual and definitional problems of measuring the workforce. They focussed in particular on data generated by the EU.

The Country Studies published online by the Federal Research Division of the U.S. Library of Congress³⁸ are very thorough and useful for historical and political background, but of no use for current conditions as they are digitized versions of books based on research conducted between ten and twenty years ago. For example, the latest edition of the country study for South Africa was published in 1997. As a general rule, when evaluating sources of country information, readers should look up the information given for a country with which they are familiar.

There are some venerable single-volume sources of country information, which are available in print and can be found even in quite small public libraries, and which are now also available online. The *Statesman’s yearbook* (1863-)³⁹ has truly international coverage, with a

³³ UNRIC, UN Regional Information Centre for Western Europe, “UN research guides”, <http://www.unric.org/en/unric-library/29743>, accessed 2017-05-04.

³⁴ Columbia University Libraries, “Research guides: general statistical sources: international statistics”, <http://library.columbia.edu/subject-guides/social-sciences/stats/int.html>, accessed 2017-05-04.

³⁵ University of Auckland Library, “OFFSTATS”, <http://www.offstats.auckland.ac.nz/about/>, accessed 2017-04-29.

³⁶ South Africa, Government Communication and Information System, “South Africa Yearbook”, <http://www.gcis.gov.za/content/resourcecentre/sa-info/yearbook>, accessed 2016-04-29.

³⁷ “Statistics South Africa, “Stats SA”, <http://www.statssa.gov.za/>, accessed 2017-04-29.

³⁸ US Library of Congress, “collection: country studies”. <https://www.loc.gov/collections/country-studies/>, accessed 2017-04-29.

³⁹ The Statesman’s yearbook, <https://www.palgrave.com/br/book/9781137440082>, accessed 2017-05-01.

useful section on the United Nations and other intergovernmental organizations and quite comprehensive country descriptions. Another British publication, *Whitaker's almanac* (1868-),⁴⁰ now published under the title *Whitaker's*, puts heavy emphasis on the UK, but does have substantial coverage of other countries. In spite of its title, its American counterpart, the *World almanac and book of facts*, 1868- (*The World Almanac and Book of Facts* 2016), is largely devoted to the US, with limited information about other countries. It is not available online. The *Europe world year book*⁴¹ is available online and in three large printed volumes. Its 58th edition, published in 2017, presented enhanced directory-type information on over 2000 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. The online version forms part of Europa World Plus,⁴² which includes the World Year Book as well as a set of regional surveys of the world.

6.16 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 Web. To give an indication of the range of material, a few major sources are mentioned here. Their names, contents and formats are likely to change. In particular, a shift is taking place from paper to online publication, and from the online publication of discrete compilations, to interactive web-based databases that can be interrogated by users. Given these changes, the URLs given below do not have a long life expectancy.

The United Nations has a Statistics Division, which compiles statistics from international sources, publishing a *Statistical yearbook*, which can be downloaded from the Division's website⁴³ and various more specialized tools. Its Internet-based data service, UNdata, which provides a single entry point for a large number of UN statistical databases,⁴⁴ includes a huge range of statistical data. From 2005 to 2105 the United Nations published an annual *Millennium development goals report*.⁴⁵ These reported 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 were presented for the nine developing and emerging regions distinguished for the purpose of this report. This provides a useful basis of comparison when studying countries in these regions. Brief progress reports for individual countries and regions are also accessible on the web.⁴⁶

⁴⁰ Whitaker's almanac, <http://www.whitakersalmanack.com/>, accessed 2017-5-01.

⁴¹ Europa world yearbook, <https://www.routledge.com/The-Europa-World-Year-Book-2017/Publications/p/book/9781857438888>.

⁴² Europa World Plus, <http://www.europaworld.com/pub/>, accessed 2017-05-01

⁴³ United Nations Statistics Division, "Statistical yearbook", <https://unstats.un.org/unsd/publications/statistical-yearbook/>, accessed 2017-05-02.

⁴⁴ UNdata, <http://data.un.org/>, accessed 2017-05-02.

⁴⁵ Links to the MDG reports for 2005 to 2015, and to a wide range of specialized and thematic global reports on such topics as malaria, tuberculosis, maternal mortality, children, the state of the least developed countries, food insecurity, and climate, as well as regional MDG reports, can be found at the site "Millennium Development Goals and beyond 2015", <https://www.un.org/millenniumgoals/reports.shtml>, accessed 2017-05-01.

⁴⁶ See "Millennium Development Indicators: Country and Regional Progress Snapshots", <https://mdgs.un.org/unsd/mdg/Host.aspx?Content=Data/snapshots.htm>, accessed 2017-05-01.

Individual countries also published more comprehensive progress reports in achieving the MDGs. An example is the Millennium development report released by the Bangladesh Planning Commission in 2015,⁴⁷ which in its chapter on achieving universal primary education provides data on literacy and school enrolment rates in that country. Unfortunately, libraries and information did not feature in the MDGs. However, a wealth of background data relevant to international and comparative librarianship can be found in these reports. In September 2015, the UN adopted “Agenda 2030”, comprising a new set of 17 Sustainable Development Goals (SDGs) for the year 2030. The pursuit of these goals will no doubt generate a similar output of reports. Several of the SDGs are at least potentially relevant to libraries; IFLA and other LIS bodies are working to ensure that libraries are seen to be contributing to their achievement (cf. Bradley 2016; IFLA 2016). The SDGs are summarized in the first *Sustainable Development Goals report*.⁴⁸ It is worth noting that, whereas the MDGs concentrated on developing countries, the SDGs are universal and intended to be applied in developed countries as well. This should make country coverage of reports on SDGs more comprehensive.

Almost all of the many agencies within the UN “family” of intergovernmental organizations compile and publish international statistical data in their respective fields of operation. For example, the Food and Agricultural Organization publishes several yearbooks and makes available an online statistical database, FAOSTAT, which provides free access to food and agricultural data for over 245 countries and territories,⁴⁹ while the International Labour Organization publishes *Key indicators of the labour market (KILM)*, which can be downloaded from the ILO’s website but also forms part of a larger online database, called ILOSTAT.⁵⁰ The United Nations Development Programme (UNDP) publishes an annual *Human development report*. Each edition covers a development theme and includes a statistical annex in which the UNDP’s Human Development Index (HDI), its Inequality-adjusted Human Development Index (IHDI) and its various components, such as development indices for gender development, gender inequality, and poverty, are tabulated by country. It is not limited to developing countries. For data relating to the developing regions of the world, the websites of the UN’s five regional economic commissions⁵¹ can be useful. For example, the website of the United Nations Economic Commission for Latin America and the Caribbean (ECLAC) Africa (UNECA) offers access to a statistical database, CEPALSTAT,⁵² which includes economic, social and environmental data. The International Telecommunications Union is relevant to LIS, as it is the UN agency responsible for ICTs and the official source of global ICT statistics. Together with UNESCO, the ITU was the official sponsor of the World Summit on the Information Society. Since 2009 the ITU has

⁴⁷ Bangladesh Planning Commission, “Millennium Development Goals: Bangladesh progress report 2015”, http://www.plancomm.gov.bd/wp-content/uploads/2015/09/MDGs-Bangladesh-Progress-Report_-_PDF_Final_September-2015.pdf, accessed 2017-05-01.

⁴⁸ United Nations, Statistics Division, “The Sustainable Development Goals report 2016”, <https://unstats.un.org/sdgs/report/2016/>, accessed 2017-05-01.

⁴⁹ Food and Agriculture Organization of the United Nations, “FAOSTAT”, <http://www.fao.org/faostat/en/#home>, accessed 2017-05-02.

⁵⁰ International Labour Organization, “Key indicators of the labour market (KILM)”, <http://www.ilo.org/global/statistics-and-databases/research-and-databases/kilm/lang--en/index.htm>, accessed 2017-05-02.

⁵¹ For Africa (ECA, also referred to as UNECA), Latin America and the Caribbean (ECLAC), Asia and the Pacific (ESCAP), Western Asia (Economic and Social Commission for Western Asia, ESCWA), and Europe (UNECE).

⁵² UN Economic Commission for Latin America and the Caribbean, “CEPALSTAT Databases and statistical publications”, http://estadisticas.cepal.org/cepalstat/WEB_CEPALSTAT/Portada.asp?idioma=i, accessed 2017-05-02.

published the *Measuring the Information Society report*, which provides comparative data on the ICT industries and the state of ICTs in the regions and countries of the world. It includes the ICT Development Index (IDI), which measures the level of ICT development of over 150 countries.⁵³

Of all the IGOs associated with the UN, UNESCO is the most relevant to LIS. 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 website⁵⁴. On the web page of Knoema,⁵⁵ online access is provided to a large dataset produced by the UIS, called UIS.Stat. It contains over 1,000 types of indicators and raw data on education, literacy, science and technology, culture and communication for more than 200 countries and territories, from which users can extract and manipulate data themselves. These include the wealthy developed countries of Europe and North America⁵⁶. The last edition of the *UNESCO statistical yearbook* appears to have been published in 1999. Until recently selected parts of the yearbook database could be interrogated online by theme and region, although coverage of individual countries was spotty and often out of date. It appears that this facility has been superseded by UIS.Stat.

The World Bank and International Monetary Fund are also important sources of international statistical data. For our purposes the World Bank is the more relevant. It makes available an online tool, the “DataBank”, which contains collections of time series data that can be interrogated by users to create tables, charts, and maps. The World Bank’s publications are by no means limited to purely economic data. Among many other publications, it is worth mentioning its annual thematic *World development report*, every edition of which deals with a different theme, presented with the aid of numerous tables, diagrams and maps. The 2016 report, subtitled *Digital dividends*, dealt with “Strengthening the analog foundation of the digital revolution”; the 2017 report is subtitled *Governance and the law*, that for 2018, *Realizing the promise of education for development*.⁵⁷ As part of the Agenda 2030 process, the World Bank has created a database, the World Development Indicators (WDI), which brings together development data from multiple sources. The WDI can be downloaded as a PDF document, or accessed online,⁵⁸ and data are also presented visually in an annual *Atlas of sustainable development goals*.⁵⁹

For a wide range of statistics relating to members of the European Union, Eurostat, the statistical office of the European Commission, is a key resource. Here too, an online statistical database is provided, with a range of navigational possibilities.⁶⁰ Users can interrogate the database online and also download datasets. Eurostat is a partner of the

⁵³ International Telecommunications Union, “Measuring the Information Society Report”, <http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2016.aspx>, accessed 2017-05-02.

⁵⁴ UNESCO Institute for Statistics, “Data to transform lives”, <http://uis.unesco.org/>, accessed 2017-05-01.

⁵⁵ Knoema, “UNESCO Institute for Statistics Data”, <https://knoema.com/UNESCOISD2016Oct/unesco-institute-for-statistics-data>, accessed 2017-05-01.

⁵⁶ UNESCO Institute for Statistics, “Welcome to UIS.Stat”, <http://data.uis.unesco.org/>, accessed 2017-05-01.

⁵⁷ A list of World Development reports, the first of which was published in 1978, is available at <http://www.worldbank.org/en/publication/wdr/wdr-archive>, accessed 2017-05-01.

⁵⁸ World Bank, “World Development Indicators”, <http://wdi.worldbank.org/tables>, accessed 2017-05-04.

⁵⁹ World Bank, “Atlas of sustainable development goals”, <http://datatopics.worldbank.org/sdgoalatlas/>, accessed 2017-05-04.

⁶⁰ Eurostat, <http://ec.europa.eu/eurostat/data/database>, accessed 2017-05-01.

European Statistical System (ESS),⁶¹ which aims to provide statistics comparable to those of the EU for European countries which are not EU members. Whilst I was unable to locate information on libraries and information (other than ICTs) in Eurostat, it provides a wealth of contextual information. The EC publishes an online statistical yearbook under the title *Eurostat yearbook*⁶². It is no longer an annual publication but is updated on a rolling basis as the underlying datasets are refreshed. 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 and potential candidate countries, members of the European Free Trade Association (EFTA), and certain other major economies (China, Japan and the USA) when comparable data are available.

Regional statistical sources exist for other regions of the world, although they are not all equally highly developed. For example, the African Union Commission has a Statistics Division which collects statistics from the national statistical offices or central banks of the member countries. In partnership with Eurostat, this Division from time to time produces a comparative statistical survey, *The European Union and the African Union: a statistical portrait* (Eurostat 2015). This publication mentions other important pan-African statistical bodies, namely the African Centre for Statistics (ACS) of the United Nations Economic Commission for Africa (UNECA) and the Statistics Department of the African Development Bank (AfDB).

A large and growing variety of international non-governmental organisations and advocacy groups is involved in collecting and disseminating data relevant to their concerns. For researchers in international and comparative librarianship organizations concerned with the Information Society, Internet connectivity, access to information, intellectual property, and freedom of expression are especially relevant. A few examples follow.

Global Information Society Watch (GISWatch) monitors “the implementation of international (and national) commitments made by governments towards the creation of an inclusive information society”, with a special focus on following up the action agenda of the World Summit on the Information Society (WSIS) and other similar international and national agreements.⁶³ The organization publishes an annual theme report, *GISWatch* on topics such as “economic, social and cultural rights” (2016), “sexual rights and the internet” (2015), and “the internet and corruption” (2012). Each of these includes around fifty country reports and a dozen or so thematic reports. The annual reports can be downloaded online from the GISWatch website, where a search function allows users to find individual reports by country and theme.⁶⁴

Article 19 is an international non-government organization taking its name from Article 19 of the Universal Declaration of Human Rights, which affirms “the right to freedom of opinion and expression” and “to seek, receive and impart information and ideas through any media and regardless of frontiers”.⁶⁵ Through its regional offices and with national partners, Article 19, actively campaigns throughout the world for this right. As part of its various campaigning and advocacy activities, which are reported on its website, it monitors and does research on

⁶¹ ESS: about ESS, <http://ec.europa.eu/eurostat/web/ess/about-us>, accessed 2017-05-01.

⁶² Eurostat, “Eurostat yearbook”, http://ec.europa.eu/eurostat/statistics-explained/index.php/Eurostat_yearbook, accessed 2017-05-01.

⁶³ Global Information Society Watch, <https://www.giswatch.org/about>, accessed 2017-05-02.

⁶⁴ Global Information Society Watch, “GISWatch”, https://www.giswatch.org/all_reports, accessed 2017-05-02.

⁶⁵ Article 19, “What we do”, <https://www.article19.org/pages/en/what-we-do.html>, accessed 2017-05-02.

freedom of expression issues. Its reports can be found using a “Resources search” page on which users can conduct online searches by country, region, theme and date.⁶⁶ Other international NGOs working in this field include Reporters sans frontières (Reporters Without Borders), which publishes an annual World Press Freedom Index⁶⁷, IFEX (formerly the International Freedom of Expression Exchange,⁶⁸ Amnesty International,⁶⁹ and PEN International.⁷⁰

Intellectual Property Watch is an international non-profit news service covering all aspects of intellectual property, including legislation, litigation, and proceedings at the World Intellectual Property Organization and other forums. Its website presents a steady stream of news reports and a search function allows users to search these by country and topic.⁷¹

Internet World Stats is a commercial site which offers free statistics of Internet penetration (number of users as a percentage of population) and usage by region and country and by major languages, along with other ICT-related data of interest to market researchers (paid access), and links to other sources of statistical data on the Internet.⁷²

6.17 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 since publication of the printed yearbook ceased with the 1999 edition. The website of the UNESCO Institute for Statistics⁷³ continues to provide access to statistics, but UNESCO stopped collecting library data in 1999/2000 due to difficulties arising from the poor response from member countries (Lisée 2009). Not only are the UNESCO LIS data very incomplete and out of date, but the data elements collected by UNESCO were based on recommendations dating back to 1970 and they no longer reflected current library conditions and services (Heaney 2009). Between 2006 and 2008 the UIS reviewed its system for collecting library statistics 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) (Ellis et al. 2009). A new questionnaire was piloted in Latin America and the Caribbean in 2007 (Akpabie 2009; Poll 2009). Information on this project, including the resulting data model, which comprises a “Global statistics questionnaire” and a set of data definitions, can be accessed through the web page of the above-mentioned IFLA section.⁷⁴ These two documents are themselves of interest to LIS comparativists, but in spite of all the committee work, the results of the project are not evident in the database that is made accessible on the UIS website, where only very limited datasets for 1996-2000 have been posted under

⁶⁶ Article 19, “Resources search”, <https://www.article19.org/resources.php?lang=en>, accessed 2017-05-02.

⁶⁷ Reporters Without Borders, “2017 World Press Freedom Index”, <https://rsf.org/en/ranking>, accessed 2017-05-02.

⁶⁸ IFEX, <https://www.ifex.org/>, accessed 2017-05-02.

⁶⁹ Amnesty International, <https://www.amnesty.org/en/>, accessed 2017-05-02.

⁷⁰ PEN International, <http://www.pen-international.org/>, accessed 2017-05-02.

⁷¹ Intellectual Property Watch, <https://www.ip-watch.org/>, accessed 2017-05-02.

⁷² Internet World Stats, <http://www.internetworldstats.com/>, accessed 2017-05-02.

⁷³ UNESCO Institute for Statistics, “UIS.Stat”, http://data.uis.unesco.org/?CS_referer=&CS_ChosenLang=en, accessed 2017-05-03.

⁷⁴ IFLA, “Global statistics for the 21st century”, <https://www.ifla.org/statistics-and-evaluation/global-statistics>, accessed 2017-05-02.

“Communication and Information”.⁷⁵

The IFLA section for Metropolitan Libraries compiles an annual statistical survey of large public libraries, the data being published on the Section’s web page.⁷⁶ The report, initially compiled by the Hannover Public Library, has since 2004 been compiled by the Toronto Public Library. The most recent report is for 2012. It provided quite comprehensive data for 84 libraries.

The Libecon (European Library Economics for International Benchmarking, also written LIBECON and LibEcon) project was mentioned in Chapter 5, Section 5.9. The project, funded during 2001-2004 by the Directorate General for the Information Society of the European Commission, used internet communications to develop a continuously updated database of statistics about library activities and associated costs in the context of their national economies (Ramsdale, Fuegi, and Sumsion 2001). 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. Unfortunately, it is no longer accessible. 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, and a series of newsletters containing reports, analyses and country reports appeared online, but links to these resources are broken. Vitiello (1996b, 123–36) wrote a critique of European statistical surveys and problems with statistical data. Since then, the European Bureau of Library, Information and Documentation Associations (EBLIDA), has set up a “Knowledge and Information Centre” (KIC), to help libraries in the EU in advocacy efforts.⁷⁷ From the KIC web page, access is possible to some basic statistical data on public and academic libraries, presented in the form of interactive maps using StatPlanet mapping software. A glance at the map for academic libraries, 2013-2015, shows that, the sophisticated format notwithstanding, problems of terminology persist in spite of the definitions produced by the UNESCO/IFLA/ISO project mentioned earlier.⁷⁸

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 in each of the responding countries. All the reports can be accessed online⁷⁹. From 2010 onwards, the World report has been published as a web application⁸⁰ 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

⁷⁵ UNESCO Institute for Statistics, “Welcome to UIS Stat”, <http://data.uis.unesco.org/>, accessed 2017-05-02.

⁷⁶ IFLA, “Metropolitan Libraries: Annual Statistical Survey”, <https://www.ifla.org/node/8106>, accessed 2017-05-02.

⁷⁷ EBLIDA, “Knowledge and Information Centre”, <http://www.eblida.org/activities/kic/>, accessed 2017-05-02.

⁷⁸ For example, the map of academic libraries in Europe, at <http://www.eblida.org/Activities/KIC/maps/academic-libraries-map/academic.html>, shows that Luxemburg has 85 academic libraries, Norway 314, Poland 1121, Spain 52, and the Netherlands 14. Clearly, different definitions of academic libraries were being used. Furthermore, no data were provided for Belgium, Italy, and Portugal, among other countries.

⁷⁹ IFLA, “IFLA World Report”, <http://db.ifla-world-report.org/home/index>, accessed 2017-05-02.

⁸⁰ <http://www.ifla-world-report.org/>

LIS is increasingly being added to the database. However, at time of writing (April 2017) inspection of the database indicated that data had not been updated since 2009-2010.

The most comprehensive current source of world library statistics is the online Global Library Statistics database of OCLC.⁸¹ This allows users to search by country. For the five main types of libraries (academic, national, public, school, and special) five data values are provided (expenditures and numbers of librarians, libraries, users, and volumes). For each data value, the date of data and data source are provided. Some 85 data sources are listed. Considerable effort appears to have been spent on selecting and trying to harmonize the data. In an observation which epitomizes the challenge of compiling and using library statistics, the compilers reported that:

For many countries, data were either not available (indicated in the charts as NA) or sporadic. Also, for many countries of the world, the data were not as current as the compilers would have liked. Printed sources were several years old and many websites were suspect. It was felt, however, that a fairly recent figure was better than none at all... The compilers had to determine which of the sometimes several possible sources was the most reliable in terms of accuracy and currency. Seldom did the data from two or more different sources coincide for the same year.⁸²

6.18 Information on LIS in specific countries

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 was published both online and in print (Bates and Maack 2010). It is worthwhile checking the first and second editions for information on countries not included in the latest edition, as well as for historical background on countries that are covered.⁸³ One of the editors of ELIS, Maack (2008) wrote a thoughtful analysis of the spatial and geographical dimension in LIS encyclopaedias. Two smaller encyclopaedias provide brief country information: the *Encyclopedia of library history* (Wiegand and Davis 1994) and the *ALA world encyclopedia of library and information services* (Wedgeworth 1993). The *International Dictionary of Library Histories* (Stam 2001) mainly contains brief histories of major libraries. Directory-type information can be found in the *World guide to libraries*, published annually by De Gruyter-Saur; the 2015-6 edition (Janson and Opitz 2015) covered approximately 42,500 libraries in more than 200 countries.

For most countries of any significance at least one book has been published describing its libraries and information services. An example is *Libraries for the future: progress and development of South African libraries* (Bothma, Underwood, and Ngulube 2007). This book was published to coincide with the 2007 IFLA World Library and Information Congress in

⁸¹ OCLC, "Global Library Statistics", <https://www.oclc.org/en/global-library-statistics.html>, accessed 2017-05-02.

⁸² OCLC, "Global Library Statistics: Data sources", <https://www.oclc.org/en/global-library-statistics/sources.html>, accessed 2017-05-02.

⁸³ *ELIS* has a complicated publication history and would present a daunting assignment for a practical cataloguing exam. The first edition was published under various editors in 35 volumes between 1968 and 1983. It was followed by a series of supplements numbered 36 to 73, the last of which appeared in 2003. The second edition was published in four volumes in 2003, with a supplement in 2005. In the title of the third edition an "s" was added to "science". It was published from 2009 to 2011 both in print and online. A fourth print edition was announced for publication in 2017.

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 host country is located. Most of the papers presented at IFLA congresses are published on IFLA's website. Papers presented at earlier congresses/conferences can be accessed via the 'Programme and proceedings' page of the relevant congress; however, since 2013 IFLA has been of transferring conference papers to its institutional repository, the "IFLA Library".⁸⁴ The simplest way to find relevant papers is to use a search engine. The better 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 four, LISA generally offers the best international coverage. The coverage of Google Scholar is increasing steadily, but since international comparative LIS research frequently has a historical dimension, it is unwise to rely entirely on web-based resources.

Needless to say, 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. Here mention may 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.⁸⁵

6.19 Information on international organizations

Many international organizations have been mentioned above as compilers and publishers of information relevant to international and comparative librarianship. Various specialized sources are available about these organizations themselves. One long-standing source is the multi-volume *Yearbook of international associations*,⁸⁶ published by the Union of International Associations. The 2015-2016 edition presented quite detailed information on more than 37,000 active and 32,000 dormant international organizations from 300 countries and territories. It includes both intergovernmental and international non-governmental organizations. The online version is more comprehensive, especially in respect of dormant organizations. A free version of the online source, the Open Yearbook,⁸⁷ provides limited

⁸⁴ IFLA, "IFLA Library", <http://library.ifla.org/>, accessed 2017-05-03.

⁸⁵ Its predecessor, the *International handbook of contemporary developments in librarianship* (Jackson 1981) included 34 country chapters. Now very dated it remains a source of historical information.

⁸⁶ Union of International Associations, "The Yearbook of International Organizations", https://www.uia.org/yearbook?qt-yb_intl_orgs=1#qt-yb_intl_orgs, accessed 2017-05-03.

⁸⁷ Union of International Associations, "Open yearbook", <https://www.uia.org/ybio/>, accessed 2017-05-03.

information about the organizations. An exhaustive list of intergovernmental organizations, grouped by category, can be found in Wikipedia.⁸⁸ It has links to Wikipedia articles for further information about each one. The University of Michigan Library maintains a research guide for non-governmental organizations⁸⁹. The University Library of the University of Illinois at Urbana-Champaign offers several information guides on the UN and other international organizations.⁹⁰

6.20 Challenges in using secondary sources

While arcane historiographic techniques to determine the authenticity and textual integrity of sources may not be applicable here, the basic principles of external and internal criticism mentioned in Section 6.11 are also relevant to the evaluation of published, secondary sources. Questions similar to those asked in internal and external criticism also arise. Basically, these relate to:

- Origin (date, place of publication and authorship)
- Derivation or antecedents of the information
- Reliability and comparability of the information
- Potential bias

Origin and derivation

I first deal with the first three issues, which are interwoven. Clearly, when we use statistical and other data, some agencies inspire more confidence than others. Data published on websites are generally (but not always) more up-to-date than those published in print. When extracting data from websites, however, one should try, as far as possible to use data from reputable agencies. These could be intergovernmental organizations, national agencies, international NGOs, trade associations, corporations, individuals' blogs, etc. There is no simple formula to determine which should be preferred, for it depends on the topic and on the credibility of the source. It is instructive to consider where statistical data comes from. A demographic example follows, but the principles apply to statistical and other data on many topics.

Consider the population of the Netherlands in 2017. Using Google, the first source found was the frequently cited Worldometers⁹¹, which on that day offered a figure of 17,024,605 “as of Friday, May 5, 2017, based on the latest United Nations estimates.” A footnote here led to a report of the UN Population Division, *World Population Prospects: The 2015 Revision, Key Findings and Advance Tables*,⁹² where an explanation is given of the method of projection

⁸⁸ Wikipedia, “List of intergovernmental organizations”, https://en.wikipedia.org/wiki/List_of_intergovernmental_organizations, accessed 2017-05-04.

⁸⁹ University of Michigan Library, “Research guides: Non-governmental organizations”, <http://guides.lib.umich.edu/c.php?g=282816&p=1884489>, accessed 2017-05-04.

⁹⁰ University Library, University of Illinois at Urbana-Champaign, “United Nations and other International Organizations”, <http://www.library.illinois.edu/doc/collections/international.html>, accessed 2017-05-04.

⁹¹ Worldometers, “Netherlands population (live)”, <http://www.worldometers.info/world-population/netherlands-population/>, accessed 2017-05-05.

⁹² United Nations, “World population prospects: key findings & advance tables, 2015 revision”, https://esa.un.org/unpd/wpp/Publications/Files/Key_Findings_WPP_2015.pdf, accessed 2017-05-05.

used by the Division. It turned out that it did not give an estimate for 2017, but estimates for 2015 and 2030. Further exploration of the Worldometers website yielded an explanation that the population figures it gives are “continuously updated” estimates using an “advanced algorithm” which incorporates “exponential formulas”. Google turned up other sites offering population counters with somewhat different figures. A Wikipedia article, “Demographics of the Netherlands”⁹³, flagged as needing additional citations, gave a round figure of 17,000,000. The Wikipedia article “Netherlands”⁹⁴ gave a “2017 estimate” of 17,100,475, citing as its source the Centraal Bureau voor de Statistiek (CBS), the official statistics agency of the Netherlands. The CBS has a population counter⁹⁵ giving a figure of 17, 111, 859 “registered inhabitants” for 5 May 2017. The term, “registered inhabitants” is of interest. The Netherlands has a very comprehensive (and intrusive) national population register, maintained by the municipalities, by means of which demographic events and address changes are updated electronically on a day-to-day basis (Prins 2016). Registration is a legal requirement; failure to register and keep one’s address up to date leads complications in all aspects of daily life. Consequently, the Dutch comply, and the figure given by the CBS is likely to be the most reliable. It is up-to-date, but includes only “registered inhabitants”. The other sources cluster around the same figure. However, the precision of the figure given by Worldometers and similar sites is misleading. They are all estimates. When using sources such as these, it is important to look at whatever methodological explanations can be found, at data definitions, and at notes accompanying the tables to determine where the figures come from and what they represent.

Reliability and comparability

Because it is based on a reliable population register, the Dutch system is probably one of the most up-to-date and accurate systems in the world. However, many countries, including developed countries, do not have central population registers and have to rely on periodic censuses. These are mostly conducted at intervals of ten years. In between, estimates have to be used. International statistical sources are generally based on data contributed by the national governments, but these are not necessarily reliable:

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 "guesstimates" 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 (William C. Robinson)⁹⁶

Scholars wanting to use of statistical sources published by international bodies must bear in mind that these have not necessarily been created for research purposes. Writing about comparative education, Raivola (1986, 268) pointed out that while data sources such as the

⁹³ Wikipedia, “Demographics of the Netherlands”, https://en.wikipedia.org/wiki/Demographics_of_the_Netherlands, accessed 2017-05-05.

⁹⁴ Wikipedia, “Netherlands”, <https://en.wikipedia.org/wiki/Netherlands>, accessed 2017-05-05.

⁹⁵ Centraal Bureau voor de Statistiek, “Population counter”, <https://www.cbs.nl/en-gb/visualisaties/population-counter>, accessed 2017-05-05.

⁹⁶Quotation from the now defunct website of William C. Robinson, University of Tennessee, http://web.utk.edu/~wrobinso/534_lec_intl.html, accessed 2010-03-26.

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. In common with those of many other international compilations, its statistical tables are infested with notes indicating that some data values are for an earlier year than the year of the compilation, for a year other than the calendar year, or for part of the year, that some data values may not be in accordance with the data definitions or may be based on estimates rather than counts. All this makes it more difficult to use the data for comparative purposes. As a general rule (Lor's Law of Statistical Tables?), the comparability of data in statistical tables is inversely proportional to the number of notes qualifying the data.

The use of data from developing countries poses special challenges. Statistical data may be unavailable, out of date, or unreliable (Bulmer 1983a, 4–5). The difficulties that developing countries experience in conducting censuses and sampling their populations are instructive (Gil and Omaboe 1983; Badiee et al. 2004). The World Bank (2013, n.p.) has stated:

Developing countries face a number of problems in providing statistics [...] They often find themselves caught in a vicious cycle—under-investment in national statistical systems constrains activities and results in data of poor quality, which policymakers are unwilling to rely on. This lack of demand for the data leads to fewer resources being made available for their production and quality control.

These problems also apply to LIS data from developing countries, as is illustrated by a South African project to develop an inventory of public libraries linked to a geographic information system (Lor, Van Helden, and Bothma 2005). Unintentional ambiguity in the survey questionnaire, widely differing practices and terminology and lack of interest on the part of library directors preoccupied by political and administrative problems, contributed to a disappointing response.⁹⁷

Potential bias

Earlier I commented that LIS is a relatively uncontroversial field. Nevertheless, in international librarianship quite strong disagreements do occur. For examples 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. To illustrate that these concerns are not exaggerated, here are passages describing the British Council, from two encyclopaedias, 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

⁹⁷ The problem of a lack of comparable data is not limited to developing countries. Lauer (1984) commented on difficulties experienced in measuring some of the independent variables he had identified in an international comparative study of public library use in Western Europe and North America. Good quality, comparable data were not available for some variables in some of the countries.

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. Many readers will want to dismiss this as unsubtle propaganda from the Cold War era, using typical terms of disparagement such as “imperialistic”, “monopolistic capitalism” and “bourgeois”. 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 appeared fair and credible – to those on the western side of the ideological divide. However, the British Council is not without its critics today (e.g. Phillipson 2012). After all, why would the British Government fund the British Council if not to promote British political, cultural and economic influence abroad. Does it not willy-nilly promote a “capitalist path of development”? We should not automatically dismiss all statements emanating from a regime we dislike.

Contributions about organizations published in encyclopaedias, multi-authored books and reference works are commonly written by their members or employees, and their inclination is to put the organization in a favourable light, for example the *ELIS* article on OCLC by Jay Jordan (2010) or an article on IFLA by myself, when I was secretary-general of that organization (Lor 2006). 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. Encyclopaedia 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.

A note on language and the use of secondary 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) warned 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 there. 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.

6.21 Researching in other countries

Comparativists, according to Bereday (1964, 143–44), need to spend time in the countries about which they write: “To meet a culture in daily contact and in a thousand unforeseen situations is to acquire the feel for the tenor of life that is hard to match otherwise.” They must acquire “a deft touch, to sense the spirit of the culture”, and gain “intimacy with the fabric of society”. He states firmly, “It is seldom possible to acquire this high degree of rapport with a culture without expatriate experience”. Bereday was writing about comparative education, and there is half a century between these rather idealistic expectations and our own, more rushed and results-driven time. Nevertheless, in international and comparative librarianship too, immersion in the relevant culture still has many benefits. Bereday (1964, chap. 8) described a methodological experiment he carried out, when, already a respected educational comparativist, he paid a one-week visit to Colombia after first reading about the country and its educational system. He found a “significant disparity between the value of a quick *reading* about a country and *seeing* it”, the result of

...the misrepresentations by the native authors and the misconceptions read into them by the foreign reader, the particular combination which, without redeeming force of travel, often blights comparative research (Bereday 1964, 146).

Some problems of cultural bias, spurious lexical equivalence, language and intercultural issues and reliability of sources that have already been referred to. Here I outline a number of other challenges of a practical nature, which may confront scholars and practitioners engaged in international and comparative librarianship. These in fact may confront any social science researchers engaged in research, collaborative projects or development work in countries other than their own. In a very useful book intended for such scholars, Barrett and Cason

(1997), provide much practical advice and many fascinating anecdotes. In what follows, I make use of their work, some other sources, and personal experience.

Time spent on preparation is well spent. The researcher needs to know which questions are to be addressed. This requires a thorough literature study to clarify the aims of the study and to construct at least a preliminary conceptual framework for it. Although as Bereday indicated, desk research is not sufficient, literature research on the country or countries to be studied is essential, to make sure that the researcher is selecting appropriate countries, to gain awareness of what may be expected there, and for the development of a research proposal. The next step is to identify a study site: which countries, towns or institutions to choose as study sites. Barrett and Cason (1997, 6–12) recommended 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 (pp.12-18).

If the researcher is not familiar with the language spoken in the selected country, language training may form part of the preparatory phase. Bereday (1964, chap. 7) argued eloquently, with amusing examples, that such familiarity is essential. Barrett and Cason (1997, 18–19) mentioned that the necessity of having language skills, which were previously considered indispensable for foreign field work, is no longer unquestioned. Learning a foreign language represents a considerable investment. There are many countries in which several languages are spoken. One cannot reasonably expect a British or Australian researcher intending to travel to Johannesburg, to learn all of the half-a-dozen or so languages commonly spoken there. On the other hand, a PhD student planning to work on the history of library development in Central America would be severely handicapped without a good working knowledge of Spanish.⁹⁸

Pre-departure preparations include dealing with issues of money, health, housing, packing, and family matters (Barrett and Cason 1997, chap. 3). This includes such basic matters as choosing clothing appropriate for the climate and local cultural norms – the latter consideration being particularly important if the researcher intends conducting interviews. Barrett and Cason (1997, 56–57) also provided useful hints for researchers who plan to take family members with them.

Academic preparations should not be overlooked. These include making contacts with researchers in the country, and establishing contact with a local research institution or university, or in our case, contact with relevant librarians and libraries. This needs to be done before departure. Attempts to make contact with appropriate individuals after arrival may be unsuccessful if time is limited. Enough time should be allowed for the researcher to familiarize herself with the new environment, but this is not always possible. It is therefore important to identify beforehand informants who can provide the researcher with balanced background information about LIS in the country. Researchers “parachuting in” without adequate preparation may rely excessively on readily available individuals who do not have a thorough background on the situation being researched, or who may have an axe to grind. In many countries, there are differences about policies, and rivalries between institutions. The researcher must avoid getting an incomplete or one-sided view by relying on only one of the parties. This can be tricky.⁹⁹ Cross-checking of information provided by informants is

⁹⁸ For a discussion of the value of foreign languages in professional LIS practice, see Dickson (1979).

⁹⁹ In the third of an otherwise excellent series of articles on the development of national union catalogues in Post-Soviet Central and Eastern Europe, Caidi (2003, 2004a, 2004b), added an account of the development of union catalogues in South Africa which contained serious factual errors. This happened presumably because,

important.

The foreign researcher must be prepared for dealing with the host country's 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 a great deal of time and effort to arrange. The visiting scholar should obtain up-to-date information on the security situation in the country. There may be restrictions on travel or access to informants (Barrett and Cason 1997, 54–55). Political developments in the country may affect relationships with informants and research participants (Buckland and Gathegi 1991, 66–67). In extreme cases, a diplomatic row may cause an interruption or termination of the project. Sometimes LIS scholars and development aid workers go into a country and set to work without making contact with national and regional LIS bodies. This is often seen as a breach of etiquette and may cause resentment. Also, by taking this approach, the researcher may deprive himself of valuable insights and assistance.

Other practical matters dealt with by Barrett and Cason (1997) include issues of gender, race, class and age (e.g. advantages and disadvantages that women researchers experience in the field, pp.57-58)), logistics of fieldwork (research equipment, parts and supplies, current adapters for electrical equipment, keeping equipment safe, and transportation, Ch. 5), and relations with research assistants (pp.81-89. These relationships can be complicated since researchers may be very dependent on local assistants and may have to spend a lot of time in their company, sometimes in difficult circumstances. Barrett and Cason (1997) also devoted some attention to the end of the stay (knowing when to go home, Ch. 7), and post-fieldwork obligations (Ch. 9).

To this list Buckland and Gathegi (1991, 66–67) added problems of access to sources, citing the possibility of poor bibliographic control in the host country, and inadequate library resources there. However, the advent of the Web has mitigated these problems somewhat, in that it enables expatriate researchers to access many of the resources of their home libraries. The Internet also mitigates the sense of isolation the researcher may experience in a strange country, enabling contact with friends and family back home, and facilitating collaboration with distant colleagues.

6.22 Checklist: decisions on methods

By way of a summary, this section lists a set of questions relating to decisions on methods. These questions may serve to characterize and evaluate a given piece of research in international and comparative librarianship. It does not deal to any extent with issues of methods that apply to any LIS generally. Many research method texts provide a list of criteria, for example Connaway & Powell (2010, 314–17).

Language competence

- Did the author have an adequate command of the language or language of the country or culture on which the study was situated?

judging by the bibliography, Caidi had not used relevant literature published in English in South Africa, and because she relied on a number of younger informants who had no intention to mislead, but simply did not have the necessary background.

- If not, what measures were taken to compensate for this?

Conceptualization and operationalization

- Which approach did the author take to defining concepts – qualitative or quantitative?
- Did the author demonstrate an awareness of the challenges of “transporting” concepts from one context to another?
- What measures did the author take to address these challenges and achieve equivalence of concepts across contexts?
- If questioning procedures (e.g. self-administered questionnaires or interviews) were applied, were the different linguistic and/or cultural contexts taken into account?
- How were instruments such as questionnaires translated?
- Were instruments pilot tested?

Survey design and execution

- Did the author demonstrate an awareness of challenges posed by conducting a survey in different contexts?
- What measures were taken to ensure that equivalent samples were drawn?
- Were the form and mode of delivery of survey instruments appropriate in the context of the study?
- Is there evidence that interviews were conducted with cultural sensitivity?
- If local staff were employed, was sufficient attention paid to selection, training and supervision?
- Were local staff treated as partners?
- If coding of responses took place in different countries, did the author take steps to ensure the equivalence of coded data?

Documentary sources

- Were documents used as the main or supplementary sources of data?
- Were primary and/or secondary sources used?
- Were primary source documents adequately evaluated to determine their authenticity, integrity and credibility?
- In the case of content analysis or bibliometric studies, was an adequate account given of the rationale and method?
- Were secondary sources appropriately chosen and adequately assessed?

Practical challenges

- Did the author spend an appropriate amount of time in the country studied?
- Does the author demonstrate an awareness of the challenges of working in a foreign context?
- Were the challenges overcome?

6.23 Conclusion

Research involves decisions, which ultimately 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 international and 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.

This concludes Part 2, in which three sets of evaluative questions have been proposed. When these have been considered, we are left with a final, fundamental question, that of the contribution of a given piece of research to international and comparative librarianship. In Chapter 5, Section 5.6, attention was paid to what constitutes “true comparison” in comparative research. Essentially a piece of comparative research must go beyond tabulating and juxtaposing to the identification of similarities and differences, to their explanation in terms of contextual factors, and, importantly, in terms of theory. The most important evaluative question, therefore, is what contribution the research – whether comparative or not – makes to the development of theory in our field.

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