CHAPTER 4
Preparing for research: metatheoretical considerations

> *"Go and be somethingological directly." – Mrs Gradgrind to her children, in Charles Dickens's Hard Times* (Dickens [1854] 1996, 56)

> *Paradigm issues are crucial; no inquirer, we maintain, ought to go about the business of inquiry without being clear about just what paradigm informs and guides his or her approach.* (Guba and Lincoln 1994, 116)

> *There is no denying that what follows is a Cook's tour of complicated philosophies that demand more detailed attention in their own right…* (Schwandt 2000, 190)

OUTLINE

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4.1 Introduction

Following on the historical and conceptual basis laid in Part I, Part II deals with method, broadly understood as including considerations of metatheory, methodology and methods. While Part II has grown out of reflection on method in comparative librarianship, most of what is covered here also applies to both research and practice in international librarianship. In Part II a tripartite division is followed, a chapter being devoted to each of metatheory, methodology and methods. Extensive use is made here of literature from other comparative fields, especially comparative education, which was a major early influence on comparative librarianship.

This chapter[1] starts by distinguishing between metatheory, methodology and method, before discussing metatheory in more detail.

4.2 Method, methodology and metatheory

Students of Ancient Greek will know that the preposition μετά (*meta*), which is embedded in each of these three terms, can express many relationships. *Meta* can mean, inter alia, 'in the midst of', 'among', 'after', and 'in pursuit of'.[2] Combined with ὁδός (*hodós*, "way, motion, journey") it gives 'method',[3] denoting a process or a way of doing something. With –ology'' added to express the notion of science or discipline, it gives 'methodology', denoting the study of method. In 'metatheory' the prefix *meta* means 'after', 'beyond', or 'transcending', hence in English, theory about or above theory.[4] In this book these three terms are used with distinct meanings and are conceived of in a hierarchical relationship.

Methods and methodology

Methods, in the plural, is used here to refer to procedures and techniques of research, the contents of the research 'toolkit', such as sampling, interviewing, surveying, observations, data analysis and their associated instruments, such as questionnaires, interview schedules and observation protocols. Typically, a large proportion of research method texts in LIS is devoted to methods, and in research reports the methods used will normally be described and a motivation will be provided for their selection. Collectively, methods and methodology may be referred to by the singular, *method* – which will be avoided here.

Methodology, originally 'the study of method', is now widely used to refer to a set of methods, a description of the methods used in a study, an elaborate method, or simply as a grand word for a method. In this book I use 'methodology' in a more specialized sense to refer to high-level decisions on research approaches, strategy and research design. These decisions are fundamental to the selection of the specific methods to be employed.

Metatheory

Of the three terms, *metatheory* is the least known and it is infrequently mentioned in research articles and reports. It refers to assumptions which underpin researchers' decisions on methodology and methods for specific projects, assumptions of which they may or may not be

[1] In this chapter I make extensive use of an article published in *Journal of documentation* (Lor 2014).
[2] Wiktionary, "μετά", https://en.wiktionary.org/wiki/%CE%BC%CE%B5%CF%84%CE%AC#Ancient_Greek, accessed 2016-11-23.
[3] Wiktionary, "method", https://en.wiktionary.org/wiki/method, accessed 2016-11-23.
[4] Wiktionary, "meta-", https://en.wiktionary.org/wiki/meta-#English, accessed 2016-11-23.

aware. Such assumptions do not apply only to research, but are also worth bringing to the surface in the context of international activities and relations in LIS. International initiatives that are undertaken without reflection on the assumptions held by the partners, risk unanticipated difficulties. This applies to such activities as library development aid, the education and training of librarians from other countries, and the introduction of new systems and technologies.

Dervin defined metatheory as

> ...presuppositions which provide general perspectives or ways of looking, based on assumptions about the nature of reality and human beings (ontology), the nature of knowing (epistemology), the purposes of theory and research (teleology); values and ethics (axiology); and the nature of power (ideology) (Dervin 2003, 136).

A complementary view of metatheory was provided by Hjørland:

> ...metatheories are broader and less specific than theories. They are more or less conscious or unconscious assumptions behind theoretical, empirical and practical work. Metatheoretical assumptions are connected to philosophical views, and are often part of interdisciplinary trends, which again can be connected to the Zeitgeist (Hjørland 1998, 607).

Various terms are used for these high-level theoretical points of departure for research. Here I use ‘metatheory’ as a collective noun, and ‘paradigm’ for the specific metatheoretical perspectives or worldviews, for example, positivist or constructivist paradigms. For our purposes a paradigm is a more or less coherent set of metatheoretical assumptions – a worldview – held by like-minded scholars across a number of disciplines.

4.3 Metatheory, methodology and methods: the Iceberg Model

There is general agreement that there is an order of precedence, or a hierarchical relationship, between methods, methodology and metatheory. As a general principle, researchers should first clarify their metatheoretical assumptions and then consider methodological decisions, before selecting and developing methods. In distinguishing between metatheory, methodology and method, Dervin (2003, 136–37) placed metatheory before methodology and method, where methodology serves as a bridge between the other two. Similarly, Pickard (2007, xv-xv11) proposed the following “research hierarchy”:

- Research paradigm (positivist, interpretivist) →
- Research methodology (qualitative or quantitative) →
- Research method (survey, case study, Delphi study, etc.) →
- Research technique (questionnaire, experiment, interview) →
- Research instrument (human, pencil & paper, etc.).

A somewhat similar scheme is found in Mouton (1996, 36–37), who identified “three levels of the methodological dimension”: research techniques, research methods and methodological paradigms, the latter being related to epistemological and ontological assumptions, whereas the methodological paradigms comprise quantitative, qualitative and participatory action paradigms.

Here I follow Dervin's tripartite division, relating it to Pickard's and Mouton's categories as set out in Table 4.1:

TABLE 4.1: Research hierarchy according to Dervin, Pickard and Mouton

Dervin (1999)	**Pickard (2007)**	**Mouton (1996)**
Metatheory	Research paradigm	Epistemological and ontological assumptions
Methodology	Research methodology Research method (or strategy)	Methodological paradigm Research method
Method	Research technique Research instrument	Research technique

A floating iceberg can serve as a metaphor for the relative visibility and significance of metatheory, methodology and methods. Because the specific gravity of ice is less than that of water, approximately 90% of an iceberg is below the water. In Figure 4.1 metatheory, methodology and methods are depicted at different levels of a floating iceberg.

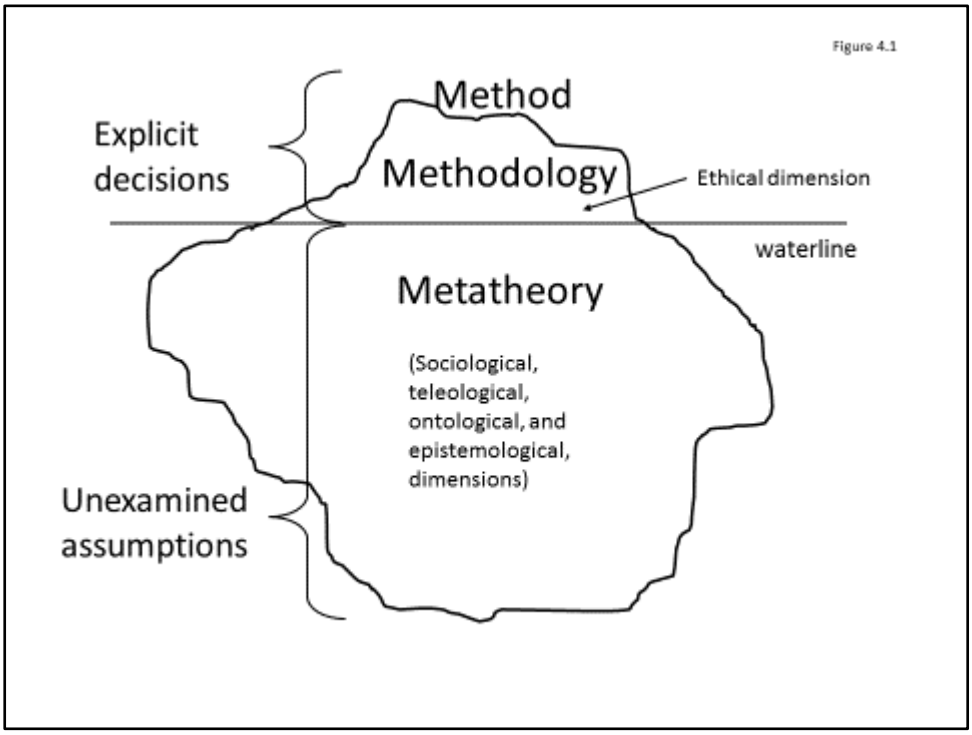

FIGURE 4.1: The "Iceberg Model" of research assumptions and decisions

Metatheory corresponds to the submerged part of the iceberg, and comprises the less visible dimensions of social science research, which are discussed in this chapter. They are pictured as below the surface since key assumptions concerning where we are coming from as researchers (the sociological dimension of research), what we want to achieve through our research (the teleological dimension), what is an appropriate object for study (the ontological dimension), and how we can come to knowledge of it (the epistemological dimension), are often left

unexamined and unchallenged, and they are not often discussed in reports of research. An exception to this generalization is the ethical dimension, which I classify under metatheory. Since the mid-20th Century, following the exposure of a number of serious ethical violations, it has become standard practice discuss ethical issues in research dealing with human beings explicitly, hence ethics appears above the "waterline" in this image.

In the much smaller part of the iceberg which is above the waterline, we find those research decisions which are more frequently discussed in reports of research *methodology* and *methods*. Methodology is dealt with in Chapter 5, where it is delimited as being concerned with decisions relating to research strategy (e.g. the choice of quantitative, qualitative or mixed methods approaches and, in comparative research, the strategy or logic of comparison). Decisions on methodology should be taken in light of metatheoretical considerations. Methodological decisions may or may not be dealt with explicitly in the 'methodology' sections of research reports. Inspection of the literature shows that in international and comparative librarianship not all methodological decisions are the subject of conscious reflection – or if they are, they are not explicitly reported.

At the very tip of the iceberg is *methods*. This refers to the specific procedures and techniques that can be applied in comparative studies, but that are not peculiar to them. They form part of the general 'toolkit' of LIS research, but for each project they should be selected in light of methodological decisions. In the 'methodology' sections of research reports, these decisions receive most attention. If any explicit rationale is provided, researchers generally give an account of the specific procedures and techniques they used. Students writing theses and dissertations spend much weighing their decisions on procedures and techniques, and in the resulting work a chapter is usually devoted to motivating their selection and to a detailed description of them.

4.4 Metatheoretical dimensions

In the preceding section, I mentioned five dimensions of metatheory: the sociological, teleological, ontological, epistemological, and ethical. These are dealt with in more detail in Sections 4.6 to 4.10 of this chapter. A further dimension, the axiological dimension, which is concerned with the theory of value, including values in ethics and aesthetics, will also be encountered in the literature (e.g. Heron and Reason 1997; Chilisa and Kawulich 2012, chap. 4).

The notion of dimensions of research and of research paradigms occurs frequently in the literature on social science research. These dimensions may also be referred to as characteristics, stances or positions. In a frequently cited chapter in the first edition of the *Handbook of qualitative research*, Guba and Lincoln (1994) used ontological, epistemological and methodological "positions" to characterize major paradigms, expanding these to refer also to paradigm positions on aims, values and ethics, the nature of knowledge generated and how it accumulates, and the 'voice' or overt role of scientists (1994, 112–16). This was expanded in a later edition (Guba and Lincoln 2005), giving greater prominence to axiology. In a discussion of domains of knowledge Hjørland and Hartel (2003) discussed the ontological, epistemological and sociological dimensions. Chilisa and Kawulich (2012) used the ontological, epistemological, axiological and methodological dimensions as a framework for characterizing a number of major groups of research paradigm in LIS.

The approach used in the sections that follow is derived and adapted from the five 'dimensions of social science research' distinguished by Mouton and Marais (1990, 7–20). They identified five dimensions: sociological, ontological, teleological, epistemological and methodological. In a later book, Mouton (1996, chaps 6–9) reduced the number of dimensions he dealt with to four: epistemological, methodological, sociological, and ontological. However, I have found the original five dimensions useful as a framework for discussing metatheoretical issues. I have adapted the sequence of the dimensions slightly and added a sixth, the ethical dimension, which Mouton and Marais (1990, 10) subsumed under the sociological dimension. I omit the methodological dimension here and cover it separately, in Chapter 5.

The five dimensions are used as a framework for the second half of the chapter (sections 4.6 to 4.10), where they are dealt with one by one. First, however, it is necessary to give a brief general overview of the major research paradigms in the social sciences.

4.5 Major research paradigms

Metatheory underpins methodological decisions. Researchers hold various metatheoretical positions, referred to most widely as paradigms. Guba and Lincoln (1994, 105) defined a paradigm as "a basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways". Paradigms are sets of basic beliefs that deal with first principles. A paradigm "… represents a *worldview* that defines, for its holder, the nature of the "world," the individual's place in it, and the range of possible relationships to that world and its parts, as, for example, cosmologies and theologies do." They are belief systems in the sense that their ultimate truthfulness cannot be established.

Authors in the field of LIS do not generally state their research paradigm, but often their paradigm can be inferred from their methodological decisions, their choice of methods, and from their rhetoric. For example, researchers working within the positivist paradigm will tend to adopt quantitative methodologies, use 'instruments' to collect data from research 'subjects', refer to their use of data collection instruments as 'measurement', present data using numerous tables and graphs, and test hypotheses using inferential statistics For more examples see Chilisa and Kawulich (2012, 59–60).

There are many research paradigms. New paradigms are continually evolving and the boundaries between the newer paradigms are fluid (Guba and Lincoln 2005, 191–92). This makes classifying them difficult. In a chapter of the *SAGE handbook of qualitative research* on the epistemological stances of three strands of qualitative metatheory, Schwandt (2000, 190) apologized for his cursory treatment of "complicated philosophies that demand more detailed attention in their own right", and for "leaving the philosophically-minded aghast at the incompleteness of the treatment". What follows is even more simplified. My aim is to alert and sensitize researchers in international and comparative LIS to the diversity of metatheoretical stances relevant to the field. In so doing I necessarily group together a diversity of metatheoretical positions in a manner which is bound to leave the philosophically-minded much more aghast than Schwandt's chapter.

Following the route of extreme simplification, we can make a binary distinction between positivism (possibly including post-positivism) and all the others. Positivism was long the default paradigm of social science research. Since the last quarter of the previous century, this has been changing. Most sermons on sin are preached by those against it. Similarly, most discussions of positivism that readers will encounter in the literature of research methodology,

have been written by those who reject it. In their overview of major research paradigms Guba and Lincoln (2005) distinguished between positivism, postpositivism, critical theory and related paradigms, constructivism, and participatory paradigms. Creswell (2009, 5–11), who used the term 'philosophical worldview' to refer to metatheory, described four successors or alternatives to positivism: postpositivism, constructivism, an advocacy/participatory worldview and a pragmatic worldview. Mertens (1998, 7–15) offered a threefold division into positivist/postpositivist, interpretive/constructivist and emancipatory paradigms. In a LIS research method text written from a developing country perspective, Chilisa and Kawulich (2012, chap. 4) grouped together the positivist and postpositivist paradigm, and the constructivist and interpretivist paradigm, and added a transformative/emancipatory paradigm and a postcolonial/indigenous research paradigm. In a research method text for information studies, Pickard (2013, 5–13) simplified the field by restricting her comparison to three paradigms: positivism, postpositivism, and interpretivism, the latter essentially combining those of critical theory and constructivism. In the brief characterizations that follow, I have adopted Pickard's analysis, using her work and Guba and Lincoln (2005) as my main sources. This mostly suffices for our purposes, but I refer briefly to some of the others as appropriate.

Positivism

Much as Monsieur Jourdain, the lead personage in Molière's play *Le bourgeois gentilhomme*, was surprised to learn that he was speaking in prose, so many librarian-researchers may be surprised to find that they are positivists. Positivism comprises diverse strands and may be used as a general label to refer to a cluster of related schools of thought and approaches such as empiricism, scientism, determinism and reductionism. Budd (2001:95-102) subsumes it under "deterministic scientism".

Positivist social science aims at the framing of general laws as in the natural sciences. Such laws are formulated within a ruling paradigm, and in positivist science only one paradigm is valid at any given time and place. Applied to social science, it is assumed that a single paradigm applies across cultures. If culture is not a relevant factor, there would be no inherent reason why, for example, a White Australian could not arrive at valid results when studying the social structure of an Aboriginal group. Scientific laws must explain the phenomenon investigated and make it possible to predict and control it. For example, the laws of optics explain the refraction of light, which makes it possible to predict how light will behave when it passes through different media, such as lenses with different curvatures and of different thicknesses. This makes it possible to exercise control, for example by constructing telescopes or manufacturing spectacles to correct short-sightedness or astigmatism. As suggested by the example from optics, it is believed that reality exists outside of the observer; hence the two are independent of each other: if the observation is set up correctly, it is thought that the behaviour of the light wave is not affected by the presence of an observer.

Applied to social research, this means that the roles of investigators and subjects are clearly demarcated. It is thought that it is possible for an investigator to be a 'neutral' observer. Thus, in a comparative study, it is not seen as a problem if a comparison of LIS in two countries is conducted by a researcher from one of them – an asymmetric comparison. In terms of research ethics, the implication is that the relationship between the researcher and the researched is seen to be governed by relatively straightforward ethical principles. In positivist science, experimentation is the methodology of choice, because in experiments the investigator controls the situation to determine the relationship between a limited number of variables, trying to eliminate or rule out factors (extraneous and confounding variables) which may affect the outcome of the experiment.

Characteristics of positivism that have been much criticized are reductionism and determinism. Reductionism implies that theories explaining highly complex human phenomena can ultimately be explained in terms of much more general laws such as those of physics. An extreme example of reductionism would be to explain Handel's *Messiah* in terms of electro-chemical reactions taking place in the composer's brain. (The reactions were of course necessary for the functioning of Handel's brain, but cannot explain the result.) Determinism implies that general laws can be formulated to apply to human behaviour and institutions and that, if the conditions specified in the laws are met, certain effects must follow. Such deterministic thinking is widespread in policy and strategizing in LIS. For example, it underlies a great deal of aid to developing countries and particularly the emphasis on access to information technology and to the Internet, in the belief that connectivity will automatically lead to benefits such as economic development or democracy. The notion that widespread use of social networking services such as Twitter will spell the end of dictatorships is an example of naive technological determinism (Economist 2011). Although many social scientists have distanced themselves from it, not everyone has followed suit. For example, in the most recent edition of his text on comparative politics, Landman (2008, xix) appeared to take an unabashed positivist stance:[5]

> …this book assumes that there are observable political events, actors, interests, structures, and outcomes about which political scientists can make reasoned, informed, and intelligent analytical statements…. This style of political science concentrates on observable political behaviour and events, and assumes that explanations of that behaviour are 'susceptible to empirical testing… It is thus grounded in the position that the ultimate objects of comparative politics exist for the most part independent of and prior to their investigation.

This statement embodies a number of assumptions typical of the positivist paradigm, for example, that social reality exists independently of the observer – an ontological stance labelled as 'naïve realism" – that observers can be neutral and that complex human behaviour can be explained with the help of experimental methods ('empirical testing') – all of which may look perfectly unobjectionable to most beginning LIS researchers until they have been exposed to critiques such as those summarised by Hjørland (2005, 143–44), Dick (1991a; 1999) or Gregor (2004). Indeed, positivism has been, as it were, the default paradigm of LIS. Dick (1999, 312) wrote that "[In] LIS, science primarily implies positivist epistemologies". Positivism continues to exert a considerable influence in LIS (cf. Dick 1991a), in part because it is so pervasive that we are not aware of it. Budd (2001) has critically traced the influence of positivism in LIS and has analysed illustrative examples. Hjørland (2005, 133) referred to positivism as "the invisible philosophy of science" and pointed to the empiricist and positivist undertones of the evidence-based practice movement in LIS (pp.142-143).

In international and comparative librarianship George Bereday's (1964) manual, *The comparative method in education*, which embodied the unselfconscious positivism of his time, exerted a strong influence. This is evident in the writings of early theorists in comparative librarianship such as Danton (1973), Simsova and Mackee (1970; 1975), Collings (1971), Krzys (1974a), Harvey (1973), and Krzys and Litton (1983). The systematic and prescriptive 'recipe-book' approach found in some of these works (particularly in Krzys and Simsova) is based on a conception of science which emphasizes the use of formal hypotheses and which has the ultimate aim of formulating scientific laws, as found in Bereday. The difficulties experienced by librarians attempting to conduct comparative library studies following the

[5] However, Landman (2008, 18) qualified this and placed his position "somewhere in between" the extreme positivist and interpretivist positions.

positivist paradigm are evident from the somewhat pessimistic and wistful tone of an essay by A.D. Burnett (1973), clearly written at a time when the empiricist mind-set of the natural sciences was taken for granted but was also seen as an impossible ideal. The sterile results of a formulaic positivist approach are also illustrated in comparative librarianship texts by Simsova and Mackee (1970; 1975) and Krzys and Litton (1983).

While Lin (1998) argued for combining positivist and interpretivist research, many are convinced that positivism in the social sciences is obsolete or overtaken (Gregor 2004). Whether this is true or not, a huge and confusing variety of alternative and partly-overlapping paradigms is on offer in the place of positivism. Often, they are referred to as epistemologies, although their scope may well extend to ontology and other dimensions.

Postpositivism

Postpositivism is variously regarded as a reaction to positivism, an adaptation of it, an alternative to it, or an umbrella term for all the alternatives. Here postpositivism is seen as an adaptation of positivism. It is helpful to consider postpositivism against the background of the major paradigmatic shifts that occurred in the natural sciences (the model that positivists in the social sciences were trying to emulate) in the first half of the 20th century. In physics Einstein's theory of relativity, Planck's quantum theory and Heisenberg's uncertainty principle all contributed to a realization that a mechanistic and deterministic approach to understanding the universe was no longer appropriate. Given the complexity of dealing with human beings and human society, this was *a fortiori* true of the social sciences.

Postpositivism shares with positivism the aim of explanation, prediction and control, adherence to a single paradigm, and the assumption that a single reality exists that is external to the observer. However, it is much more nuanced in its truth claims: simplistically stated, in the social sciences truth is not absolute but probabilistic and provisional; observers are fallible, they can misinterpret and be influenced by what they observe, a position known as 'critical realism'. This implies that the scientist can never prove a hypothesized relationship with absolute certainty, but can only disprove hypotheses, *dis*proving the null hypothesis ("there is *no* relationship between A and B") rather than proving the substantive hypothesis ("there is a relationship between A and B'), a principle known as 'falsification'. The implication for methodology is that it is important to counter potential error and bias by rigorous and standardized research techniques as well as by triangulation, the use of more than one research technique in a study to ensure that the phenomenon is looked at from more than one angle (Guba and Lincoln 1994, 110; Pickard 2007, 9–11). While there remains a reliance on experimentation and hypothesis testing, and emphasis on quantitative methodology, postpositivism accepts qualitative approaches to some extent.

Interpretivism

What is the alternative to positivism? In the social sciences, we often find *interpretivism* used as an umbrella term for a variety of alternative paradigms put forward in opposition to positivism. Interpretivism underpins much of qualitative research, and differences between interpretivism and positivism are highlighted in some social science research methodology texts when qualitative and quantitative methods are compared (e.g. Mouton and Marais 1990, 159–71; Guba and Lincoln 1994; Mason 1996). The choice between quantitative and qualitative research strategies is essentially a matter of methodology is dealt with in Chapter 5.

R. Weber (2004), citing unpublished lecture notes by Jörgen Sandberg, has contrasted the sets of metatheoretical assumptions held by adherents of positivism and interpretivism. For example, while positivists see the researcher and what is being researched as separate, interpretivists see them as inseparable – what we observe is bound up with our life experience. For positivists, objective reality exists outside the human mind, whereas for interpretivists knowledge of the world is the result of an intentional process, on the part of the researcher, of making sense of the world. Thus, in a comparison of LIS in two countries, it would be thought preferable for the study to be designed, carried out and reported jointly by researchers from those two countries.

A fundamental difference between interpretivism on the one hand and positivism and postpositivism on the other is to be found in interpretivist ontology: in the social sciences, interpretivists do not see single universal reality, but many realities that are created by their social contexts. Thus, the reality as experienced by a particular group in society, for example, unemployed young people in poor neighbourhoods who have been involved in burning down community libraries, is not to be dismissed as naïve or misguided, as the work of 'agitators', as a manifestation of class struggle – all explanations that 'explain away 'what has happened. Instead the researcher should seek to understand such events from the point of view of that group – recognizing their reality, of course without necessarily approving of their actions. The recognition of multiple co-existing realities reflects a basic ontological stance of relativism. This opens the door for the role of values in social research – research is not value-free; neutrality is not achievable or even desirable. Researchers may be motivated, not by a need to understand or explain, but by a desire to effect change in society – a point of view anathema to the positivist scholar who adheres to a tenet of strict neutrality.

Recognition of multiple realities implies that research methodology will require, not just "being on the outside looking in", but getting much more deeply involved with the people in the situation. Researchers need to negotiate their understanding of a social phenomenon in interaction with the group or groups involved, using ethnographic methods, hermeneutics, phenomenology, etc. *Understanding* is a key concept in the various interpretivist paradigms, even though they may differ somewhat on what they mean by it. The emphasis on understanding (in German *Verstehen*) goes back to the late 19thCentury German sociologists, who rejected the positivist point of departure that research in all the sciences was to be conducted following the same methodologies with the aim of arriving at causal explanations. The German sociologists such as Wilhelm Dilthey put forward the notion of human sciences (*Geisteswissenschaften*) which were fundamentally different from the natural sciences, and aimed to *understand* human action. This further implies that *meaning* is a central concept in interpretivist social science:

> From an interpretivist point of view, what distinguishes human (social) action from the movement of physical objects is that the former is inherently meaningful. Thus, to understand a particular social action (e.g., friendship, voting, marrying, teaching), the inquirer must grasp the meanings that constitute that action (Schwandt 2000, 191).

Methods such as in-depth interviewing and participant observation involve intensive interaction, so that that the relationship of the researcher to the participants (not 'subjects') becomes more complex, involving self-questioning by the researcher of her own beliefs and values. The interaction also poses more complex ethical issues, such as possible complicity in morally questionable, subversive, or criminal activities by the group being studied.

Other current paradigms

As noted earlier, some authors regard interpretivism as a generic term for the whole range of non-positivist paradigms. Others regard interpretivism as just one of many non-positivist paradigms. A host of paradigms have received attention in the literature of LIS, for example hermeneutics (Hansson 2005), critical realism (Wikgren 2005), phenomenology (Budd 2005), critical realist phenomenology (Budd, Hill, and Shannon 2010), constructivism, collectivism and constructionism (Talja, Tuominen, and Savolainen 2005), and critical theory, including feminist theory, queer theory, and various 'post-isms' such as post-modernism and post-colonial theory (Leckie and Buschman 2010). Sweeting (2005, 30–31) provided brief, acerbic characterizations of Marxism/critical theory, dependency theory/world systems analysis, post-structuralism, postmodernism, postcolonialism, feminism, and neoliberalism as applied to the history of education. For useful discussions of "postfoundational" approaches (postmodernisms, postructuralisms and postcolonialisms) in comparative education, see also Ninnes and Mehta (2004) and Ninnes and Burnett (2004). Rust (1991) offers an accessible introduction to postmodernism and related concepts in the context of comparative education. In their comparison of social research paradigms, Guba and Lincoln (2005, 194–97) grouped the non-positivist paradigms under critical theory and related paradigms, constructivism, and (prompted by the critique of Heron and Reason 1997) participatory paradigms.

Rejecting the label of "critical theory" proposed by Guba and Lincoln, Mertens (1998, 15–23) put forward the "emancipatory paradigm" as a third paradigm, to cover a range of groups that argue that the interpretivist paradigm does not go far enough in dealing with political issues in research and going beyond redressing the balance between the "relatively small group of powerful experts" and the "larger number of relatively powerless research subjects". This implies relinquishing control of the research to the marginalized groups. Researchers engaged in this paradigm include critical theorists, participatory action researchers, Marxists, feminists, ethnic minorities, and persons with disabilities (p.15). In a similar vein, in a chapter in a globally oriented book on social research, Chilisa and Kawulich (2012, 54) distinguished a "transformative/emancipatory paradigm", and "post-colonial/indigenous research paradigm". They stated the aim of the transformative/emancipatory paradigm as being to "destroy myths and empower people to change society radically", and that of the "postcolonial/indigenous research paradigm" as to "challenge deficit thinking and pathological descriptions of the former colonised and reconstruct a body of knowledge that carries hope and promotes transformation and social change among the historically oppressed". This takes us quite far from the presumed neutral stance of the positivist researcher – a shift to the left, towards engagement and taking sides with those seen as historically oppressed and marginalized. Their brief characterization (p.58) of the postcolonial indigenous research paradigm provides some useful references to writings on indigenous ontology, epistemology and axiology (values).[6]

Table 4.2, derived mainly from Pickard (2013, 7), summarizes the characterization of the three major paradigms.

[6] For more background on post-colonial objections to the dominance of Western science and to Western dismissal of indigenous ways of knowing, see Chilisa (2005)

Table 4.2: Characteristics of major research paradigms (adapted from Pickard (2007, 7)

	Paradigms		
Dimensions	Positivism	Postpositivism	Interpretivism
Sociological	*Single paradigm* *Risk of cultural bias* *Asymmetrical multinational projects*		*Multiple paradigms* *Cultural relativism* *Symmetrical multinational projects*
Teleological (Purpose)	Prediction/control/ explanation Framing of general laws.	Prediction/control/ explanation Generalizations.	Understanding/ reconstruction Transfer of findings.
Ontological	'Realism' Belief in a tangible social reality, existing independently of those 'creating' the reality. A social reality can exist just as a natural reality exists.	'Critical realism' Belief in a social reality but acceptance that knowing this reality will always be inhibited by imperfections as a result of human fallibility.	Belief in multiple constructed realities that cannot exist outside the social contexts that create them. Realities are time and context bound.
Epistemological	Objectivist/dualist Investigator and investigated are independent of each other.	Modified dualist/objectivist Acceptance that independence is not possible but objectivity is seen as the goal and demonstrated by external verification.	Transactional/subjectivist The results of the investigation are a product of interaction between the subject and the investigator. What can be known is the result of the interaction.
Ethical	*Sharp distinction between investigator and subjects* *General ethical principles*	*Intermediate position, with emphasis on general ethical principles.*	*Immersion of investigator in the life-world of subjects can present ethical challenges.* *Ethics more situational and culturally determined.*
Methodological	Experimental/ Manipulative Hypothesis testing, variables identified before the investigation. Empirical testing is conducted in order to establish the 'truth' of a proposition. Predominantly quantitative. Analysis by variables.	Modified experimental/ Manipulative Hypothesis testing but more emphasis placed on context. Quantitative and qualitative. Analysis by variables.	Empathetic interaction Investigator interacts with the object of the investigation. Each construction of reality is investigated in its own right and is interpreted by the investigator. Qualitative, including hermeneutics and dialectic interchanges. Analysis by case.

Note: In order to bring this table into line with the five dimensions that are discussed in this chapter, I have changed the order of rows and added rows for the sociological and ethical dimensions, which should be considered conjectural. I replaced the word 'stance' with 'dimension' and renamed Pickard's 'purpose' the 'teleological' dimension. My changes and additions are in *italics*.

More details on the stances of these paradigms regarding the five metatheoretical dimensions are provided in Sections 4.6 to 4.10 below, where their implications for international and comparative librarianship are pointed out. The use of these dimensions as a framework for the discussion of metatheoretical issues implies is admittedly somewhat simplistic. Many issues cut

across more than one dimension. In particular, ontological and epistemological questions are interrelated.

4.6 The sociological dimension

The essence of this dimension has been summarized as follows by Mouton (1996, 41):

> Social research is a social practice. This means that social scientists belong to various organisations or groups and institutions that both constrain and enable their behaviour in various ways.

Note that this dimension is primarily concerned with the context of the *researcher or research team*, rather than with the context of the study or the phenomenon being studied. Here I use the term 'sociological' very broadly to encompass not only social but also economic, political, cultural and linguistic factors that influence the conduct of research. A useful way to summarize the various contexts, or systems within which social scientists are situated, is found in a conceptual framework proposed by Paisley (1968) for the study of information needs and uses. Paisley depicted these systems by a set of roughly concentric circles. The inner circle, "the scientist within his own head", is concerned with the scientist's individual motivational, personality and cognitive factors. From this, moving outwards, the systems are successively referred to the scientist within a work team, a formal organization, an invisible college, a reference group, a membership group, a political system, his culture, a legal/economic system, and a formal information system (Paisley 1968, 3–6). Ignoring the inner circle (the "scientist" within his own head", and the potential influence of the researcher's origins, interests, backgrounds) and the "formal information system", which is not so relevant here, I propose to consider the influence of the researcher's work situation (as an employee working with others or as a student enrolled in an academic programme), in a discipline and paradigm, and in political-economic and cultural contexts. How are these relevant to research in international and comparative librarianship?[7]

The work team

Referring to "the scientist within a work" team, Paisley (1968, 6) described this as a system that is rich in informal sources of information. With some notable exceptions, such as the now defunct International Library Information Center at the University of Pittsburgh (Krzys 1974b), international and comparative LIS research has generally been a solitary endeavour. Academics teaching courses in this field are sparsely distributed and find it difficult to recruit enough PhD students to form an international and comparative research group. Something approaching this occurred at the University of Wisconsin (Madison) in the 1970s, under Professor William Williamson, who edited two conference proceedings which included work done by his students (Williamson 1971; Williamson 1976). Multinational teams are dealt with separately below.

[7] Mouton (1996, chap. 10), presenting an "integrated model of social science", depicted the context in which social science is conducted as five concentric circles, labelled from the centre outwards: Research project, Discipline, Institution/Organisation, National system, and Global system. The latter refers to the globalization of knowledge and various aspects of the global community of scientists.

The formal organization

The system to which Paisley (1968, 6) refers as "the scientist within a formal organisation", provides an enabling structure, and its policies determine channels of information that are opened or blocked. Most research in the field is produced by individuals employed in academic and research organizations, including university libraries as well as academic departments, in government agencies such as aid agencies, and in non-governmental and intergovernmental organizations. Each institution has its own research culture, policy and traditions. Mouton (1996, 42) drew attention to the "large-scale institutionalisation of the empirical social sciences" that started in the mid-19th Century and gathered momentum after the Second World War. The organizations employing researchers provide resources (remuneration, infrastructure, access to information, opportunities to travel, etc.) but also impose constraints, especially on those individuals not specifically employed to teach and undertake research. The priorities of their jobs may leave them limited time and resources for research. Constraints may also arise from the missions and policies of their organizations, which may discourage or censor research on unsuccessful projects or politically sensitive themes, or suppress costly recommendations.[8] When employed in academic positions in which research is encouraged and intellectual freedom is respected, constraints may be subtler. Disciplinary paradigms that are regarded as acceptable in the researcher's work environment, the academic reward system (e.g. pressure to publish and to win substantial research grants), and the availability of funding all exert influence (cf. Budd 2001, 138–39). Someone has to pay for research; there are no "free lunches".

For PhD students, sources of funding, the strengths and traditions of the graduate school, the influence of professors and mentors, and the possibilities of publishing the research in a respected journal may well influence methodological decisions. Pressures to produce a report or complete a PhD project, or sometimes sheer convenience, may determine the choice of a research problem or of the countries being compared. In the USA it is not uncommon for PhD students from other countries to undertake studies in which they compare some or other aspect of librarianship or information work in their own countries with conditions in the USA. It would seem that this is often done without regard to the theoretical value of such a comparison.

Disciplinary and paradigmatic influences

Social scientists work within a research community which has shared goals and values, exercises control, and recognizes contributions. The community operates within economic, political and ideological frameworks. Writing about the rise of qualitative inquiry, Schwandt (2000, 190) drew attention to the "considerable academic and professional politics" that this movement entailed, such as "…struggles over departmental organization, interdisciplinary alliances, what constitutes 'legitimate' research, who controls the editorship of key journals", etc. Paisley's model recognized three systems that are relevant here. One is "the scientist within a membership group", referring to the professional membership group such as a professional society, for example in our field, the ALA, which provides and controls information channels, lays down ethical codes, and conveys recognition. The second is "the scientist within a reference group", which is composed of scholars who have similar specializations and training, but who do not necessarily belong to the same membership group.

[8] An interesting recent example, albeit not from our field, is the suppression of all mentions of Australia (where there is great concern about the effects of global warming on the Great Barrier Reef) from the final version of a UN report on climate change. The Guardian. "Australia scrubbed from UN climate change report after government intervention", https://www.theguardian.com/environment/2016/may/27/australia-scrubbed-from-un-climate-change-report-after-government-intervention, accessed 2016-12-08.

The third, which is a subsystem of the preceding, is "the scientist within an invisible college", a somewhat elitist group of scholars who "know each other and share information directly" even though they may be widely scattered geographically (Paisley 1968, 3–4). A research community regulates a reward system in which original contributions are recognized by fellow researchers.

Mouton (1996, 41–43) has drawn attention to the social control that is imposed on individual researchers by these scientific communities through review systems, rules for recognizing contributions, rules on membership of scientific organizations, including codes of conduct, and rules recognizing prior contributions. He pointed out that those in positions of authority wield immense power. The organized scientific community may adhere to dominant paradigms, which lays down the parameters for discourse. Paradigms are both enabling and limiting. They are enabling in so far as they incorporate shared assumptions which obviate the need for lengthy preliminary explanations. They are also limiting in that they delimit what is a proper object of study and in that they incorporate biases, which may blind the adherent to error. This has been called 'disciplinary ethnocentrism' (Warwick 1983a, 294) and 'epistemological ethnocentrism' (Reagan 2005, 5). The latter is not concerned with individual biases, but with the assumptions and biases of an entire field of study, as in Kuhn's (1970) paradigms. In the case of education, according to Reagan, this is manifested by an almost exclusive focus on a single educational tradition, so that educationists ignore traditional, indigenous educational practices and leave these to anthropologists. This is because western scholars have tended to equate education with schooling and literacy, in the absence of which educational practices of indigenous peoples are not seen as relevant. Transposing this example from education to LIS, we can see that Western notions of librarianship have tended to limit our understanding of libraries to formal institutions collecting printed or otherwise recorded materials for use by literate people, and have induced us to regard the provision of information services beyond library walls to non-literate communities as a curiosity.[9]

Except possibly for a brief period in the 1970s and 1980s and then only to a limited extent, the field of international and comparative librarianship has not had a research community of its own to provide impetus and facilitate communication on the one hand, or to exercise quality control on the other.

Applying the theory of the intellectual and social organization of scientific fields of Richard Whitley (2000), Nolin and Åström (2010) have characterized LIS as a 'fragmented adhocracy', a field characterized by multiple paradigms, which is dependent on other disciplines for theory and methodology, and within which there are multiple sources of authority. The implication is that LIS researchers have a relatively free hand as to what to study and how, but at the risk of undertaking idiosyncratic work, the results of which are of little use to other researchers. This helps to explain the failure of workers in comparative librarianship to develop a coherent body of theory, as mentioned in Section 2.5 and Section 3.2.

The political system

Writing about "the scientist within a political system", Paisley (1968, 3–4) referred to contemporary political factors then affecting scientists in the USA, such as scientific nationalism and the dominance of federal and defence-related funding. Here I extend it to the wider national and international political and political-economic context within which the researcher is situated. This includes national policies on science, technology and innovation, national socio-economic and development priorities, the country's geopolitical location

[9] It may also help to explain why literacy education holds such a marginal place in libraries in many countries.

(Mouton 1996, 55) and historical, linguistic and cultural relations In Chapter 2 I referred to the impetus given to international and comparative librarianship after the Second World War by such factors as Cold War competition. Kelly, Altbach and Arnove (1982, 506) observed that "comparative education has often been tied to foreign assistance programs and the intellectual and ideological orientations of the aid-giving agencies". They also provided an interesting description of the 'clientele' of comparative education research (pp.524-526). In the context of British grant funding for comparative research in education, Cowen (2006, 562–63) wrote scathingly about government ministries' requirements for research that is "robust and relevant", implying that what is required is research that will support governmental policy agendas and not raise too many awkward theoretical questions. Cowen placed this in the context of government policy on university research and what politicians regard as "good academic production". The discussion by Rubin & Babbie (1993, 77–86) of the political aspects of social work research, from a US perspective and a decade earlier, remains of interest, while Punch (1994) dealt quite comprehensively with the 'political' aspects of qualitative social research.

Culture

Under this heading I extend the scope of Paisley's "the scientist within his culture" to refer not only to the tradition and spirit that determines the scientist's community – for example the importance of priority of discovery, the role of philanthropic foundations, and the support of universities (Paisley 1968, 3) – but also to national research styles and traditions, more general cultural influences, ethnocentricity, and issues of language.

In the humanities and social sciences particular research approaches, which affect the selection of research topics and methodological decisions, are often associated with circles of scholars located in or centred on particular countries or cities during a particular period, for example, the Prague school of linguistics, the Chicago school of sociology, or the Austrian school of economics.[10] Since the formation of the European Union, issues of national research styles and traditions have come to the fore in large-scale cross-national social surveys undertaken in Europe. Writing about what was learned in the course of the European Social Survey (ESS), Jowell, Kaase, Fitzgerald and Eva (2007, 1, 7) pointed out that cross-national comparative studies have to deal with "competing cultural norms and national methodological preferences that single-nation studies do not begin to face". They identified challenges such as "country-specific differences in methodological and procedural habits" (p.7). These include modes of interviewing, preferences for sampling models and procedures, training of interviewers and coders, socio-demographic classifications, and "conceptualisations of cleavages" such as left–right, and liberal–conservative, which are interpreted differently in different countries.

At a more general level we need to consider the influence of the researcher's own cultural background. If one takes the example of an American PhD student intending to study some aspect of LIS in a developing country, one has to ask how well equipped the student is to carry out meaningful research on such a country, and whether the members of the dissertation committee have the necessary background (cf. Buckland and Gathegi 1991, 67–68). Furthermore, how well equipped are the American, British or other European faculty members who supervise foreign students undertaking comparative research to look at the research problem from a perspective other than that of their North American or European environment?

[10] National research traditions are not limited to the social sciences. In a fascinating study of the reception in four countries of Einstein's Theory of Special Relativity, Goldberg (1970) showed how the British physics establishment, wedded to the concept of ether and dominated by Cambridge University and luminaries such as Lord Kelvin, rejected Einstein's theory far longer than their overseas colleagues.

This raises the issue of ethnocentricity. In a text on research method in comparative education, Phillips and Schweisfurth (2008, 93) wrote:

> 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 to them. Seeing things through an ethnocentric filter can have distorting effects as far as our understanding of educational phenomena in other countries is concerned.

We can substitute 'LIS' for 'education' and 'educational' without loss of meaning. No researcher comes to international or comparative studies in LIS with a blank slate. For example, a trained LIS professional from the USA will have been socialized into a profession with particular ideals and values. In addition to having absorbed from childhood some pervasive notions of patriotism and American exceptionalism, this American librarian may have internalized laudable values and assumptions about freedom of expression, the role of the public library in promoting democracy, universal access to education, free and equal access to information, etc. These assumptions give rise to expectations as to what she will find when visiting or studying libraries in other countries. Thus, she may be dismayed by the low rank afforded that iconic value of American librarianship, freedom of expression, in countries where more utilitarian or existential concerns (such as putting food on the table) are more pressing. In other countries, the hierarchy of values may be different. For example, in many cultures loyalty to kinsfolk, clan, cohort or tribe may give rise to situations which westerners would see as nepotism. Visiting national libraries in some similar middle-ranking developing countries, I was surprised to find staff establishments numbering into the thousands, many times more than I had at my disposal in South Africa. In one case, the library had a bank of six elevators. In each of them sat a staff member, employed full-time to press the buttons. It is easy, but wrong to attribute such observations to lack of a "work ethic". Various other factors may play a part. For example, in some countries government-run bodies may be seen as job creation establishments and as instruments of political patronage. When the expectations of the visiting scholar or consultant are not met, 'culture shock' may result (Asheim 1966, 2).

Particular challenges arise when a Western researcher studies indigenous communities that have survived colonialism as distinct groups with their languages and belief systems still alive (Smith 2005). But cultural challenges are not limited to interactions between persons from developed and developed countries. Hopkinson (2014, 60) recounted a workshop held to "help British committee members to better understand other cultures in order to conduct themselves better at meetings". Here

> …it was explained that, for the British, having a meeting with Germans is harder than one would imagine. Germans think that the British do not say what they mean. The British say 'Not bad' when they mean it is neither good nor bad. They are not straightforward when they make criticisms as they regard it as rude to be too direct in those circumstances. What about the French? Apparently they prefer to use meetings to gain information rather than to make decisions and would rather have the delegate return to report to colleagues to discuss the issues with them and then report back. If the British have such difficulties with the Germans and apparently the French who are closely related and relatively near and equivalent in their wealth, how much more difficulties must there surely be with countries further away in distance and in level of development.

Observations of this nature have been the subject of studies by Geert Hofstede, a Dutch social psychologist, who developed a theory of cultural dimensions which has been widely used in studies of organizational culture in multi-national organizations (Hofstede 1980; Hofstede 1980; Hofstede, Hofstede, and Minkov 2010). A considerable literature has developed around multi-cultural management issues.

Ethnocentrism

No less than the managers of multicultural organizations, social scientists need to be sensitive to ethnocentrism, defined as "a belief that the norms, values, ideology, customs, and traditions of one's own culture or subculture are superior to those characterizing other cultural settings" (Brown 2007, 1478). Brown suggested that ethnocentrism may be considered as falling on a continuum. At the one end is extreme ethnocentrism, characterized by stereotyping of other groups, intolerance, and even violence. At the other end is weak ethnocentrism, which is characterized by cultural and moral relativism. Cultural relativism, touched on in Chapter 3, is essential to social research, but does not preclude the application of moral criteria when examining other cultures:

> Cultural relativism … does not mean that the sociologist cannot apply any moral criteria to the examination of cultures. It only means that one should not blindly apply the values and standards of one culture to another. Practices within a culture should be analyzed within their own cultural context and moral judgment held in abeyance until their meaning is identified (Brown 2007, 1479).

Reagan (2005, 4–7) distinguished two forms of ethnocentrism: cultural ethnocentrism and epistemological ethnocentrism. *Cultural ethnocentrism* can arise from the individual researcher's socio-cultural context and take the form of unconscious bias such as racism, sexism and linguicism, which may influence the choice of research topics, questions, hypotheses, etc. *Epistemological ethnocentrism* was referred to earlier. refers to the assumptions and biases common to a field of study, as typically found in a research paradigm. Here the *ethnos* is the scientific culture. This has been dealt with under the sociological dimension (Section 4.6)

A high degree of ethnocentrism would obviously be inimical to valid comparative studies. To counteract blind ethnocentrism, in the words of Phillips and Schweisfurth (2008, 94), we need to be "aware of ourselves looking at" phenomena in other countries, and we have to "neutralize as far as possible the preconceptions our individual backgrounds have formed in us". Landman (2008, 45), a political scientist, discussed ethnocentrism under the rubric of "value bias", where the researcher's "particular cultural, political and philosophical predispositions" put the validity of comparisons at risk. He advised that while this cannot be ruled out completely, the researcher should be "as public as possible" about the judgments that have been made.

Intercultural comparative studies should not be undertaken lightly or naively, as described by Hofstede, Hofstede and Minkov (2010, 48):

> A common approach is for a master's or doctoral student to take an instrument (mostly a paper-and-pencil questionnaire) developed in one country, usually in the United States by a U.S. scholar who tested it on U.S. respondents, and to have it administered to respondents in one or more other countries. Unfortunately, such instruments cover only issues considered relevant in the society in which they were developed, and they exclude questions unrecognized by the designer because they do not occur in his or her society. Such questions are precisely the ones most interesting from a cultural point of view. The hidden ethnocentrism in this type of research leads to trivial results.

Referring to research in international and comparative librarianship, Danton (1973, 145–46) discussed the avoidance of bias, while Stueart (1997, 130–31) pointed out that "the cultural barrier is the most serious obstacle to meaningful research, with the real complexities of cultural differences being below the surface and not readily visible at first inspection."

In the USA there has been a growing awareness of the need for librarians to be competent in dealing with users from many different cultural backgrounds, including members of minorities, immigrants, and foreign visitors. This has led to interest in "cultural competence", defined in 1989 as "a set of congruent behaviors, attitudes, and policies that come together in a system, agency or among professionals and enable that system, agency or those professions to work effectively in cross-cultural situations" (Cross et al. 1989; cited in National Center for Cultural Competence 2016). Initially developed in education, social services, and health environments, the concept has spread to LIS (e.g. Overall 2009) and should also be relevant to LIS scholars working in multi-cultural and foreign settings. UNESCO prefers the term "intercultural competences" and provided a useful "conceptual vocabulary" of key concepts relevant to the development of such competences (UNESCO 2013, 10–21).

Multinational research

In light of the above, questions arise about who can do research about other nations, societies and cultures, and who can compare LIS phenomena in them. Can a valid comparative study of two countries be undertaken by a researcher from one of the countries being compared? A French scholar, Émilie Bettega, compared public libraries in relation to cultural policy in France, Italy and Spain, and noted: "Every comparative approach (*démarche*) implies a point of view, that of its author, who is embedded (*ancré*) in an historical and national discourse. The result is necessarily the creation of a deforming mirror, in that (in this case) the Italian and Spanish libraries are looked at through binoculars while the French libraries have been the object of analysis through a microscope[11] (Bettega 2008, 137).

Would it therefore be better for a study of this nature to be undertaken by a researcher from a third country? (Such a modus operandi would reflect a positivist assumption that the appropriate place of the researcher is outside or separate from the object of study.) Or should it be done by a team of researchers from all the countries being studied?

Hantrais (2009, 15) distinguished between asymmetrical and symmetrical social science research. In asymmetrical studies, the research program was typically developed by a team of researchers in one country (often the United States), using "established concepts and technical procedures that it dispatched to other participating countries with a view to collecting, analysing and interpreting data, without necessarily seeking the cooperation of researchers in the countries concerned". Such studies were vulnerable to cultural bias and critics labelled them as 'imperialist' or 'colonialist'. On the other hand, *symmetrical* studies are conducted by teams from both or all of the countries being compared, using collaboratively designed instruments and techniques.

[11] "…toute démarche comparatiste … implique un point de vue, celui de son auteur, ancré dans un discours historique et national. Par conséquent, cette mise en perspective ne peut empêcher de créer un effet de "miroir déformant", dans la mesure où les bibliothèques italiennes et espagnoles sons regardées *de facto* "à la jumelle" tandis que les bibliothèques françaises ont pu faire l'objet d'une analyse "au microscope".

Under the influence of the European Centre for the Coordination of Research and Documentation in the Social Sciences set up in Vienna in 1963 by UNESCO, a more 'symmetrical' model was adopted, in which "all national groups were expected to be equally represented and involved throughout the research process" (Hantrais 2009, 15) Very difficult problems were encountered in comparative studies involving countries in Eastern Europe (then still part of the Soviet bloc) and Western Europe, including "ideological and cultural differences in research practices, understandings of concepts and interpretations of findings" (p.15). International comparative research relies on teamwork, requiring collaboration by individuals with different ideologies and interests, or coming from more or less subtly differing research paradigms, or more fundamentally, from national 'intellectual styles' (Galtung 1982, 24–29). The Eastward expansion of the European Union following the collapse of the Soviet Union stimulated international comparative social studies research within Europe, and concomitant methodological reflection. An example is the European Social Survey, where a combination of multinational collaborative planning, centralized coordination, and decentralized execution by national agencies achieved considerable success (Jowell, Roberts, et al. 2007). Hantrais (2009, 144–54) discussed various issues that arise in the management of multi-national research teams, including differing intellectual styles and contrasting national research cultures.

In comparative studies in which authors from more than one country have collaborated, they should describe the collaborative process and how they dealt with cultural differences and differences in their intellectual styles. In comparative studies in LIS it is unusual for authors to deal explicitly with the challenges of inter-cultural understanding, cultural bias and cultural relativism, but there are exceptions. Henri, Hay and Oberg (2002) studied the role of school principals in developing school library programmes in seven countries. The three authors were from different countries and enlisted an 'International Research Reference Group' representing each of the seven countries to provide input and advice on survey instruments and to plan and administer the research procedures, from data collection and analysis to reporting. A study of Aarek, Järvelin, Kajberg *et al*. (1992) of LIS research in Nordic countries provided brief but insightful comments on the "multicultural research team" consisting of researchers from four Nordic countries, which undertook their research, also reported by Järvelin and Vakkari (1990; 1992; 1993). They commented that their project yielded knowledge concerning "the international comparative research process itself" (Aarek et al. 1992, 42). Studies by Vakkari and colleagues of the perceived benefits of public libraries in Finland, Norway, the Netherland, South Korea and the USA took a Finnish survey instrument as their point of departure, but local investigators were added and the survey design was adapted as the study was replicated in other countries, all the investigators being recognized as co-authors of the resulting publications (Vakkari et al. 2014; Vakkari et al. 2016).[12]

In an article about a collaborative research project on information literacy undertaken by Canadian and Ethiopian researchers, Asselin (2011, 19) emphasized the need for developing countries to "develop their own praxis-focused endogenous research culture". The agendas and traditions of western scholars should not be imposed on them. Chilisa (2005) wrote an angry critique of collaborative research involving teams made up of researchers from developed and developing countries, in which Third World researchers are invariably given subordinate roles reminiscent of their status in colonial times (p.676).

Such deeply-rooted mind-sets are not lightly overcome. At the very least, Western scholars venturing into non-western environments need to invest enough time in building relationships

[12] Some counter-examples of asymmetric comparisons are comparisons of Sweden and other Nordic public libraries (Torstensson 1993), scholarly journal use in Taiwan and the USA (Wang 2010), and electronic legal deposit in France and other European countries (Stirling et al. 2012).

and acquiring understanding of the cultural context. They need to design research that is "respectful of cultural and research traditions" of the local collaborators (Asselin 2011, 20) and employ strategies to build local research capacity. Asselin described how this was done in the collaborative research project in which she was involved. Liu (2008) described a set of research techniques developed to facilitate communication and collaboration among a group consisting of Chinese and Chinese-American researchers based in China and the USA respectively, emphasizing that researchers in such a group need to participate on an equal footing. Such reflection is not common in our field, however.

Language

Language and culture are inextricably intertwined. A potent part of our background is the language(s) we speak. Language can constitute a formidable, but often underestimated, barrier to international and comparative research. English-speaking librarians visiting Paris discover that a *librairie* is a bookshop, not a library, and that a *libraire* is not a colleague but a bookseller. A high school and a German *Hochschule* are quite different institutions. Such *faux amis* ('false friends') and other instances of spurious lexical equivalence hold pitfalls for unwary researchers conducting survey research in more than one country. Unsuspected terminological differences also impede communication between speakers of the same language spoken in different countries, as in US, British, Australian, South African, or Indian English. American researchers naively assume that all English-speakers will understand what is meant by K-12, while Indian librarians will blithely tell visitors how many *lahks* (hundreds of thousands) of volumes their libraries hold, without realizing that the use of *lahk* and *crore* (tens of millions) is restricted to the Indian subcontinent.

At a more fundamental level, in comparative studies we have to be aware of the role of language in shaping the way we think, so that people speaking different languages may not only delimit concepts differently, but also have different ways of thinking of space, time, number, etc. The Sapir-Whorf hypothesis (also known as the linguistic relativity theory) states that language influences perception and thought, so that speakers of different languages do not build identical images of the world:

> Linguistic patterns themselves determine what the individual perceives and how he thinks about it. Because these patterns vary widely, the ways of thinking and perceiving in groups using different linguistic systems will produce basically different world views. In short, according to Whorf, language shapes our ideas rather than merely expressing them (Currie 1970, 404).

Although this appears to make intuitive sense to those of us who have had the privilege of interacting with individuals from widely diverse language groups, or have had to edit journal articles contributed by scholars speaking different languages (cf. Stilwell, Bats, and Lor 2016, 104), the hypothesis of language "shaping" ideas has been widely criticized and rejected by leading scholars (cf. Pinker 2007, 124–51). However, it has not gone away altogether and a 'neo-Whorfianist' school has emerged which follows a modified version of the hypothesis (Kenneally 2008). Today the 'strong hypothesis", that the structure of our language causally determines how we think (*linguistic determinism*) is generally rejected. However, a weaker hypothesis, known as *linguistic relativism*, which posits that language does influence (but does not determine) how we think, has been supported by research in cognitive psychology conducted since the 1990s. The debate continues.[13] Regardless of the outcome, language is a

[13] A helpful general account of the *status quaestionis* can be found in Wikipedia, https://en.wikipedia.org/wiki/Linguistic_relativity, accessed 2016-12-10.

significant factor in comparative research. Hantrais (2009, 87–90) provided a useful discussion of the linguistic context of concepts and pointed to the positivist nature of the notion that concepts are transportable across national boundaries. More attention is paid to the practical implications of language issues in Chapter 6.

4.7 The teleological dimension

"Teleology is the study of purposes, goals, ends and function" (Woodfield 2005, 1012). Mouton and Marais (1990, 8) included the teleological dimension as one of their five dimensions, since research is "intentional and goal-directed". In his later work, Mouton (1996) omitted this dimension. In Pickard (2013, 6–13) it features as "purpose"; in Guba and Lincoln (2005, 194–98) as "inquiry aim" and to some extent under "axiology". By whatever name we refer to it, researchers' metatheoretical orientations influence their purposes and the goals they set for their research. Here I follow the threefold division as summarized in Table 4.2.

Positivism and postpositivism

The scientific goals of explanation, prediction and control were emphasized in traditional *positivist* educational research methodology texts (e.g. Van Dalen 1973, 26–30). Explanation of phenomena by means of empirically determined regularities and relations of cause and effect ('scientific laws') allows us, it was thought, to make reliable predictions and enables us to exercise a degree of control over our environment (e.g. nuclear power generation) or at least prepare for what we cannot control (e.g. tropical cyclones). The *postpositivist* aim of generalization is somewhat more modest than that of formulating general laws.

Early advocates for comparative librarianship argued that comparisons of library conditions between countries, studying these within their social, political and cultural contexts, would enable librarians to gain a deeper understanding of professional problems, the functions of libraries and their role in society (e.g. Dane 1954; Shores 1966; Shores 1970; Collings 1971). Thus Dane (1954, 141) suggested that one of the benefits of comparative librarianship would be to enable librarians to re-evaluate their "philosophy" and "sharpen their thinking about some of the fundamental problems of their profession". A more 'scientific' aim gradually emerged: to enable us to build theories to explain the conditions under which libraries evolve the way they do, where 'scientific' generally referred to what was seen as the norm in the natural sciences. This aim was stated by J. Periam Danton in the definition of comparative librarianship cited in Chapter 3, where the ultimate aim is stated as "trying to arrive at valid generalizations and principles" (Danton 1973, 52). This can be taken to imply that the social researcher adopts the stance of a neutral, disinterested observer whose only aim is to add to the 'building blocks' of knowledge, without exercising value judgments or wanting to intervene in the situation. Thus, in a comparative study of innovations such as institutional repositories or research commons in a number of countries, the aim might be to develop general principles describing the variables and mechanisms that account for their development or failure to develop. The study could contribute to a model or theory which could predict under which circumstances institutional repositories or research commons would function successfully. Such knowledge would be useful in providing guidance for their management.

Interpretivism

Turning now to the interpretivist paradigms, a very different aim characterizes critical theory and related paradigms. Here the aim of inquiry is the critique and transformation of the social, political, cultural, economic, ethnic, and gender structures that constrain and exploit

humankind, by engagement in confrontation, even conflict (Guba and Lincoln 1994, 113). An example from comparative education is the position taken by Hickling-Hudson (2006) on using a post-colonial perspective in researching Eurocentric education and its effects.

The advocacy and activism implied here contrast strongly with the neutral, uninvolved observer role envisaged in the positivist and postpositivist paradigms. Describing the "advocacy and participatory worldview" (which largely corresponds to Guba and Lincoln's critical theory), Creswell (2009, 9–10) points to its concern with marginalized individuals, social justice, participation and emancipation. Leckie and Buschman (2010, x–xi) describe critical theory as having both a scholarly purpose (questioning accepted beliefs, situating "human action and structures within culture and history") and a normative purpose (uncovering unjust, unreasonable and irrational societal contradictions that make wars, poverty and servitude possible). They further suggested that critical theory should "encourage sophisticated adaptation and enable articulate responses to current issues facing the field", for example responding to managerialism and neoliberal market beliefs (2010, xi). They observe that "LIS is very interested in the betterment of society", citing such endeavours as national information policies, equitable access to information, and the inclusion of marginalized communities, where critical theory can provide useful approaches (2010, xiii).

In the context of international and comparative librarianship this would translate, for example, to a post-colonialist perspective on such issues as the development of public libraries, book aid, digitization of cultural heritage, and the impact of international intellectual property regimes in developing countries, where the researcher would not be limited to an uninvolved, neutral stance, describing what exists, but would contribute to a process aimed at a more just and equitable outcome. Such an approach is illustrated by the African Copyright and Access to Knowledge (ACA2K) project, which studied the impact of copyright legislation in eight African countries:

> The project's objectives demonstrate that the intention was not to conduct abstract or theoretical research into copyright. The ACA2K project was, from the outset, geared towards practical, applied research. All project activities were conducted with a specific purpose in mind: to provide empirical evidence that could contribute positively towards copyright reform processes throughout the continent and internationally. The focus on capacity-building recognizes that this project is merely the beginning of a long-term engagement (Armstrong et al. 2010, 8).

The language used here ("reform", "capacity-building", "engagement") implies that the research was also intended as an intervention in the situation being studied.[14] The reference to "practical, applied research" deserves further attention and I return to it below.

Applied research

Earlier, reference was made to 'practical, applied research'. Mouton and Marais (1990, 13) referred to the duality of striving for knowledge for its own sake and striving for knowledge as

[14] This is stated more explicitly on the ACA2K website: "...the ACA2K research project, based in Africa and being conducted by African researchers, does not pretend to be neutral or objective in its view of the international/global IPR context. The ACA2K project, and the ACA2K network of researchers, come from a developing country perspective and, because the project's focus within the broad IPR context is specifically on learning materials access in relation to copyright frameworks, the project also comes from a human rights-based perspective, i.e., the right of access to knowledge (A2K). http://www.aca2k.org/index.php?option=com_content&view=article&id=46&Itemid=55&lang=en, accessed 2016-12-10.

a source of power which opens up possibilities for change. Thus, they distinguished between theoretical and practical research aims. These should not be seen as a dichotomy, but as points on a continuum. Given the nature of our field, it is safe to say that much of our scholarly research is not far removed from its application in professional practice. We tend to import much of our theory from other disciplines. Moreover, since some metatheoretical perspectives integrate research and action, the distinction made by Mouton and Marais between theoretical and practical research now comes across as a bit dated.

Among comparative studies a distinction can be made between empirical and normative studies. Empirical studies explore, describe and explain phenomena, while normative studies are concerned with what should be and how things can and should be improved through reform, emancipation or more rational public policy. In practical or applied research, the aim may be to improve systems, promote efficiency, enhance the quality of life of library clients or potential clients, solve management or technical problems, develop plans and policies, evaluate or advocate.

In recent decades, international cooperation has become an important motivator for international research. Writing in the context of European comparative social research, Hantrais (2009, 11) pointed to the increasing use of international comparisons of policy as a means of informing policy, identifying common policy objectives, evaluating proposed solutions, drawing lessons about best practice, and assessing the transferability of policies between societies. The expansion of the European Union has created a significant demand for comparative studies for purposes of measuring demographic, economic and social trends and for coordinating national policies on a European level (Hantrais 2009, 16–18). This is not limited to the EU. Policy transfer (also referred to as policy borrowing and policy learning) is discussed in some detail in Chapter 7. Studies on Europeanization of LIS education are referred to in Chapter 2.

Ameliorative studies

Arnove, Kelly and Altbach (1982, 4) referred to the "ameliorative strain" in comparative education, the desire to improve practice in one's own country, as distinct from the "theoretical-scientific" strain. In Section 2.5, Chapter 2, mention was made of early comparative studies which were overtly aimed at prompting remedial action by generating awareness of their country's relative backwardness or deficiencies in respect of LIS in comparison with other countries (e.g. Pellisson 1906; Morel 1908; Hassenforder 1967). Morel in particular adopted a polemical tone which was by his own admission, aggressive (Morel 1908, 14). In South Africa Overduin (1966) compared school librarianship in a number of European countries with a view to improving services in the Transvaal province. In Israel, Sever (1990) surveyed the acquisitions expenditure of university libraries in Israel, the US and Great Britain, with a view to convincing the Israeli Grants Committee of the poor situation of acquisitions funding for libraries, vis-a-vis that of libraries in other countries – a phenomenon which the author saw as a threat to Israeli research capability. A study by Mortezaie and Naghshineh (2002) compared LIS education in the UK, the USA, India and Iran, with a heavy emphasis on identifying deficiencies that needed to be addressed in Iran. Kigongo-Bukenya (2003) compared data from LIS schools in Wales, Botswana and South Africa in order to make recommendations for improving curricula and other aspects of LIS education at the East African School of Library and Information Science.[15]

[15] Many more examples can be cited, e.g. from China (Pong and Cheung 2006), France (Desbuquois 2002), Italy (Lobina 2006), Japan (Nakamura 2008) and Poland (Sapa 2005).

Students from developing countries often want to compare the situation in their own country with that in the country in which they are studying (e.g. the USA or UK). Such a study might compare very unequal entities and yield little theoretical insight, but may be motivated by the desire to put forward proposals for improving matters back home. Nowak (1977, 5–6) called this the "diagnostic-therapeutical" approach. Indeed, comparative studies are often used for advocacy. By demonstrating that the resources allocated for certain library services in one's own country are greatly inferior to those allocated for analogous services in other countries, one may hope to persuade politicians and government officials to be more generous. (On the other hand, if one's own country stood out as a shining example, one might be less likely to bring this to their attention.) Since politicians and officials are unlikely to respond to comparisons of countries with widely differing conditions and resources, the choice of countries to be compared is important in such cases. An example of the "diagnostic-therapeutic" approach is a study by Van Zijl, Gericke and Machet (2006) in which a sadly under-resourced South African university of technology was compared with a New Zealand counterpart. This seems to have been aimed at jolting South African decision makers into rectifying the situation.

International comparisons sometimes have a political sub-text. For example, a comparison of the national libraries of UK and Italy (Vitiello 1994) provided ammunition in support of an argument against the continued existence of two national libraries in Italy.

Conceivably, authors may have consciously propagandistic or unconsciously patriotic motives for a comparative study: the desire to demonstrate that the system of one's own country is superior. Nowak (1977, 5–6) called this the "cosmetical" orientation, where the researcher may tend to select certain variables and operationalize them in such a way as to achieve the most 'satisfactory' result. This is a temptation in comparisons of all sorts, across the Atlantic, or between developed and developing countries. However, in LIS studies in which the author undertakes a comparative study to demonstrate the superiority of LIS in his or her own country are rare today – certainly, if done at all, it is not done explicitly. An article by Saur (1993), a German publisher, entitled "The best book trade organization in the world?", in which he compared the German and British book trade organizations, is the best example I could find of this genre. It is not strictly from our profession, where modesty, whether genuine or false, is expected. This was different during the Cold War. An article by a Czech academic comparing rural library services in a number of Western, Central and Eastern European countries (Irmler 1970) makes interesting reading when the Cold War context is taken into account and one bears in mind that the author would have had to tread a careful balance between toeing the party line and presenting an acceptable account for publication in an American journal. (Irmler singled out England and the Soviet Union as being most successful in extending rural library services, but his article tended to highlight the superiority of rural library policies in Central and Eastern Europe.)

Benchmarking studies

A quite common genre of comparative studies aimed at improving practice is that of benchmarking, defined as a "measurement of the quality of an organization's policies, products, programs, strategies, etc., and their comparison with standard measurements, or similar measurements of its peers."[16] In the LIS literature we find many examples of benchmarking studies that are international in the sense that they concern libraries in more than one country. From Finland we have several examples, which include comparisons between a vocational college in Finland and two libraries in Iceland (Widenius 2001), quality management in university libraries

[16] "Benchmarking", Business dictionary, http://www.businessdictionary.com/definition/benchmarking.html, accessed 2016-12-13.

in Finland and Spain (Balagué and Saarti 2009), and knowledge management in university libraries in Finland, Germany and Spain (Balagué, Düren, and Saarti 2016). Other examples come from the Barcelona Public Library (Oller and Creus 2009), the Graz University Library in Austria (Reichmann 2006), and various institutions in Australia (Hiller and Jilovsky 2005; MacKnight 2008; Jilovsky 2011). In these studies, the emphasis is on performance and quality assessment: what can be improved, how other libraries do things better, and what can be learned from them. Since the focus tends to be on practical matters in specific institutions, most studies of this type are of limited value as international comparisons.

"League tables"

Related to benchmarking studies are studies generating international comparative tables in which countries or individual libraries are ranked according to one or more criteria. In a time of globalization many international intergovernmental and non-governmental organizations are involved in compiling comparative data. Many studies produce rankings of countries in terms of ease of doing business, corruption, educational achievement, teledensity, Internet access, etc. There is considerable scope for misuse or at least misinterpretation of comparative studies (Pennings, Keman, and Kleinnijenhuis 2006, 3–4). Rankings inevitably embody a degree of over-simplification. International comparative tables contain decontextualized data; often many footnotes are needed to place the figures in perspective and allow sensible comparisons. As a general rule, the comparability of tabulated data is inversely proportional to the number of footnotes. Not only are there serious pitfalls in making such comparisons, but the findings are liable to be misunderstood and misinterpreted in the media and used by politicians to score points and argue for policy changes, especially in education (Crossley 2002, 83; Steiner-Khamsi 2010, 328–29), where 'league tables' of student performance in subjects such as mathematics not infrequently hit the headlines. This can have negative consequences, as exemplified by controversy over the PISA tests.[17,18]

Librarians also like to compare the resources and performance of their libraries with those of their colleagues. The LIBECON 2000 project, which was initially funded by Directorate General 13 (DG13) of the European Commission within the Telematics Applications Programme, from 1998 to 2004 under the Fifth Framework Programme, collected standardized aggregated data for 29 European countries using a questionnaire based on the ISO standards for library statistics (ISO 2789) and library performance indicators (ISO 11620). A *LIBECON 2000 Millennium report* was produced, after which the project was continued until 2004. A large database of library data was built up, to which data from countries outside Europe, including the USA and Japan, were also added (Ramsdale and Fuegi 1999; Fuegi 2000; Fuegi and Jennings 2004). The database was made available online,[19] and lent itself to comparisons between countries and the establishment of ranking tables, as exemplified by an article entitled "Does Finland have the best public libraries? Can we identify the top ten countries?" published

[17] PISA, the Programme for International Student Assessment, is a programme of the Organisation for Economic Cooperation and Development (OECD), which measures academic achievements of 15-year old students in over 60 countries. For concerns raised by leading educationists, see "OECD and Pisa tests are damaging education worldwide – academics", https://www.theguardian.com/education/2014/may/06/oecd-pisa-tests-damaging-education-academics, accessed 2016-12-13.

[18] In December 2010 reports that 15-year old students in Shanghai had outperformed those of all other participating countries on the PISA test caused consternation in the US, where President Obama compared the poor showing of the American students to a "Sputnik moment", reminiscent of the shock experienced when the USSR successfully launched the first earth satellite ahead of the USA. (New York Times, December 7, 2010, available http://www.nytimes.com/2010/12/07/education/07education.html?pagewanted=all).

[19] The website, at www.libecon.org, is no longer accessible.

in the LIBECON newsletter.[20] The IFLA Metropolitan Library Section annually collects a large quantity of data on larger urban and regional public library services throughout the world. These annual statistical surveys are reported on the Section's website.[21] The statistical survey for 2010 contained a number of comparative graphs and some 25 ranking tables. Rankings of journals using bibliometric indices are widely used in the evaluation of research outputs. An example in our field is a citation study by Onyancha (2009) comparing the impact of 13 sub-Saharan LIS journals.

To conclude this section I, note that an enormous amount of literature is generated by the need to publish, especially in the USA, where competition for tenured faculty positions is keen, and where academic librarians also aspire to faculty status. This may influence decisions on subject matter and methodology, for example a tendency to conduct minute quantitative investigations of topics of limited theoretical interest.

4.8 The ontological dimension

Ontology is the philosophical study of being (or existence) or reality. There are broadly speaking two kinds of ontological investigation: those that are concerned with the nature of being or existence ("what it is for something to exist?"), and those that are concerned with what exists ("what general sorts of things are there?") (Craig 2005, 756). The latter area of investigation has given rise to the current, better-known use of the term 'ontology' in the context of computer science, artificial intelligence and knowledge organization, to refer to formal representations of knowledge. This section deals primarily with ontology as a dimension of research paradigms.

Ontology as the theory of being has implications for our conception of reality, and this has implications for our research decisions (Wikgren 2005, 11). In the social sciences questions about the nature of existence concern the nature of social reality, which forms the research domain of the social sciences. Associated with a social science research domain are domain assumptions: beliefs about the nature, structure and status of social phenomena. Much of the discussion in sections 3.5 and 3.6 of Chapter 3 is essentially ontological; each of figures 3.8, 3.9, 3.11, and 3.14 embodies ontological assumptions which influence what investigators expect to find and will tend to look for.

Social scientists study "humankind in all its diversity" (Mouton and Marais 1990, 11), a diversity which makes possible many different perspectives. Because of the diversity there are different schools of thought as to what are appropriate phenomena to study. For example, in comparative studies this implies that we need to reflect on the nature of the phenomenon being studied and on what can legitimately be compared. This is not common in comparative studies in LIS, but an exception is found in a comparative study of digital library development Dalbello (2008, 376), who stated a number of such assumptions about national libraries.

Ontological stances

Considering the first, more philosophical, of Craig's two questions – what it is for something to exist – in the social sciences, a fundamental question is to what extent the natural and social

[20] Published online in *LIBECON Newsletter* no. 6, pp.1-3, 2004, but no longer accessible. The answer to both questions, in short, is "yes".
[21] "Annual statistical survey", http://www.ifla.org/node/8106, accessed 2016-12-13. The latest annual survey is dated 2012 and does not include ranking tables.

worlds are similar or comparable. This is a question which has long been debated, and which is answered differently in different paradigms (Mouton 1996, 46–47).

Positivist ontology (also characterized as 'naive realism') assumes that there is an "apprehendable reality" (Guba and Lincoln 1994, 109). Thus, it is believed that there exists an objective, stable and singular reality 'out there' which is independent of human perception and thinking. Such an ontology is 'thin', in the sense that the historical development, the cultural context, and the meanings that people ascribe to their behaviour, are not of interest to the investigator. The assumption that reality can be fully apprehended and is not dependent on the human observer, implies that it is invariant, allowing for the determination of cause and effect and the formulation of scientific 'laws'. In the social sciences, this implies that a tangible social reality exists. Taking to extremes the notion that reality can only be discovered through observation (using the senses) means that things that cannot be observed, do not exist (Trochim 2006). This may appear to be appropriate in sciences dealing with physical phenomena (it is not), but is particularly problematic in the social sciences, including LIS. For example, in a bibliometric analysis which investigates the use of documents on the basis of citations, the reasons why an author cited each document, how much of a cited document was used (if at all) and how it was used (what it contributed to the author's understanding and thinking) would typically not be taken into account. This simplifies the investigation in that much less interpretation is required, but it severely reduces what we can know about complex human phenomena.

Postpositivist ontology is known as critical realism, because it is thought that "claims about reality must be subjected to the widest possible critical examination to facilitate apprehending reality as closely as possible" (Guba and Lincoln 1994, 110). (This ontology should not be confused with the paradigm known as critical *theory*.) As in positivist ontology, it is assumed that a reality external to human beings does exist independently, but there is less certainty about cause and effect relationships. We can determine relationships to be true with a high degree of probability, but human and technical limitations mean that our knowledge of such relationships is provisional and subject to revision. In the social sciences, such an ontological stance is obviously more appropriate than that of earlier positivism, since human behaviour is highly complex and there is much more uncertainty. Thus, extensive critical examination is needed to apprehend reality as closely as possible. Much if not most current research in LIS appears to be implicitly based on this assumption. Postpositivist ontology is relevant to comparative research because it implies that multiple studies conducted in different countries can be helpful in establishing and confirming observed relationships.

Pickard (2013, 12) characterized the ontology of *interpretivism* as relativist. Central to interpretivism is the concept of 'meaning':

> From an interpretivist point of view, what distinguishes human (social) action from the movement of physical objects is that the former is inherently meaningful. Thus, to understand a particular social action (e.g., friendship, voting, marrying, teaching), the inquirer must grasp the meanings that constitute that action (Schwandt 2000, 191).

Thus, human actions are intentional. The same action may have different meanings depending on the actor's intentions, which have to be interpreted in relation to a historically and culturally embedded system of meanings. Such an ontology is 'thick, in contrast with the 'thin' ontology of positivism.

Under the interpretivist umbrella we need to consider the ontological stance of critical theory and its related paradigms, and that of constructivism, as delineated by Guba and Lincoln (1994, 107–11).

In *critical theory* and related metatheories (historical realism) it is assumed that the reality that can be apprehended at a given point in time is the result of a range of historical factors (social, political, economic, cultural, ethnic and gender) that give rise to structures that constitute a virtual reality. The term 'virtual reality' is used here not in the modern technical sense of an apparent reality mediated by information technology, but as referring to an illusory reality which limits and constrains our thinking, and needs to be challenged. Social phenomena are the results of processes that take place over time, creating structures that shape human experience at the same time that human action continuously changes those structures:

> Society and culture are the products of human activity, and are constantly elaborated or reinforced by human activity. However, at any given time these social and cultural structures are pre-existent, which gives them their autonomy as possible objects of investigation (Wikgren 2005, 15).

Since libraries are complex social and cultural institutions (itself an ontological assumption!) it makes sense for LIS to study them in their multiple contexts and not as isolated phenomena. This implies a historical perspective and not merely cross-sectional surveys of conditions existing at one point in time. It also implies a greater depth of analysis. Thus, from the perspective of critical theory a study of libraries in West Africa would need to place the institutions studied in the context of a range of factors, including the impact of colonialism (and how colonial policies and racism framed policies about what was appropriate for subject peoples), racism, literacy and orality, concepts of development aid, and north-south power relations as expressed, for example in international intellectual property treaties and agreements. The ACA2K report (Armstrong et al. 2010), which was referred to earlier, serves as an example of looking at the contextual reality – it added value by not merely analysing the copyright legislation, but looking at the total context of education, publishing, economic factors etc. which influence enforcement and compliance. Also of interest are the dissertation of Bouri (1993), who analysed the failure of public library development in Egypt in the context of modernization theory and shifting international development discourse, and Maack's (2001) study of books and libraries of cultural diplomacy in West Africa during the Cold War.

Constructivist ontology (relativism) assumes multiple realities or meanings that are constructed by humans individually and in their social contexts. It has both psychological and social dimensions. Individual minds create knowledge structures through experience and observation, the mental process being "significantly informed by influences received from societal conventions, history and interaction with significant others" (Talja, Tuominen, and Savolainen 2005, 81). The realities thus created are not universal, as posited by positivism, but embedded in local and specific contexts, and they evolve over time. An extreme relativist position appears to be problematic. If all our concepts mean different things to different people, how can we make valid statements about anything? However, this stance implies that when studying a social or cultural phenomenon, we should allow the participants in the study to interpret their situation in their own ways using their own concepts, rather than, or in interaction with, those imposed by the investigator. This allows a richer texture of meanings to emerge from the study. It has obvious implications for comparative studies; especially those conducted in developing countries, where researchers must suppress their tendency to impose their own conceptual structures on the 'other' being studied, and be prepared to negotiate meaning interactively. At another level, a constructivist approach opens up new ways to think of such projects as 'access to knowledge' (A2K), seeing this as a dynamic process in which the intended beneficiaries are

not passive recipients of knowledge 'packages', but as active participants in constructing knowledge individually and within their communities (Lor and Britz 2010).

The ontological stances of the "transformative/emancipatory paradigm" and the "post-colonial indigenous paradigm" have been briefly outlined by Chilisa and Kawulich (2012, 57–58). Regarding the latter, LIS scholars, practitioners and project managers need to be aware of how indigenous peoples see themselves in relation to their communities, their ancestors, and their animate and inanimate environment.

Some ontological assumptions

Since international comparisons tend to deal with countries, it is necessary to be aware of ontological assumptions about them. The issue of the nation state, the validity of which as the normal setting for comparative studies in the social sciences has been questioned, was dealt with in Section 2.9. The ontological question of when a country is a country, is reflected in some uncertainty encountered when one studies national libraries. The British Library is clearly a national library. What about the National Library of Scotland? Or the National Library of Quebec, Kosovo or Chechnya? Our answers will be determined in part by what, for the purposes of the comparison, we consider to constitute a 'country'. And this is simple compared to similar questions about what we might consider to be a 'society', 'culture', or 'nation'.

In LIS, when we consider library development we also need to be aware of our assumptions about development itself as well as our assumptions about westernization and modernization. The latter is the assumption that all societies follow the same path to development, positing that:

> ...societies constantly strive for economic and social rationality which maximizes productive resources. Social change is unidirectional and consists of the movement from simple to increasingly complex social organization; from functionally diffuse to functionally specific institutions; from lesser to greater divisions of labor; from social systems of stratification based on ascription to those based on individual achievement; from belief and legal systems that are particularistic and fatalistic to those that are universalistic and subject to human control (Kelly, Altbach, and Arnove 1982, 516).

An implication is that all societies are on the same developmental trajectory and that countries at different 'stages' or 'levels' of development are simply at different points along that trajectory (Arnove, Kelly, and Altbach 1982, 5). In comparative education modernization theory was very influential but was overtaken by other approaches several decades ago. However, one may still discern traces of these assumptions in LIS, and similar notions are embedded in notions such as ICT-enabled 'leapfrogging', where developing countries are assumed to be able skip certain developmental steps such as infrastructure development (Alaoui 2014; Economist 2016).

Every philosophical school or paradigm proclaims its own ontology and epistemology. The systems approach and systemism discussed in Chapter 3 embody obvious ontological implications: here the very nature of being is seen as constituted by systems of systems. Such an ontology is of potential interest in international and comparative librarianship. Reihlen, Klaas-Wissing and Ringberg (2007, 56), writing about metatheories in management studies, summarized the ontology of systemism as formulated by Mario Bunge (1996) as follows:

1. Society is a system of changing subsystems.

> 2. Being a system, society has systemic, or global properties. While some of these are resultant (or reducible), others are emergent, though rooted in the individual components and their interplay.
> 3. Interaction between two social systems is an individual-individual affair, where each individual acts on behalf of the system he or she represents. The members of a social system can act severally upon a single individual, and the behavior of each individual is determined by the place he holds in society, as well as by his genetic endowment, experience, and expectations. And every social change is a change in the structure of a society, hence a change at both the social and the individual levels.

This is relevant for comparative studies and for studies of LIS relations among countries, and particularly relevant to relations of influence, which can be adequately explained neither by the actions of influential individuals (such as innovators or gatekeepers) nor by structural forces in the relevant societies alone.

Some implications

Given the multiple roots of LIS, some of our most fundamental concepts are ontologically indeterminate, for example, the concepts of data, information and knowledge, touched on in Chapter 3, Section 3.3 (cf. Saab and Riss 2011). One's ontological scheme will determine what one considers legitimate objects of study. In a study of information literacy, for example, an extreme (behaviourist) positivist approach would be to ignore anything other than test scores collected in controlled circumstances. Students' search strategies, assumptions, rationalizations, and emotional responses to the information-seeking task – of interest in a cognitive approach – would be dismissed as subjective and impossible to measure accurately. In a study comparing information literacy in different countries, the units of analysis would differ depending on the different ontological schemes.

Looking ahead to chapters 5 and 6, another distinction may be made between atomist or holistic approaches. These are not absolutes, rather the poles of a continuum. For example, a holistic approach in which school libraries are seen as embedded in their contexts would require that the development of school libraries in different countries be compared in the context of educational policy and governance, curricula, schooling and teacher education, etc. along with the influence of political ideologies, as well as geographic, demographic, economic, social, cultural, linguistic and linguistic factors. A comparison by Knuth (1995) of school library development in the UK and the USA comes close to the holistic pole, as does a study by Lauret (2006) comparing school libraries in France and Quebec. The study by Henri, Hay and Oberg (2002) of the influence of school principals on information services in schools is closer to the atomist pole. A hypothetical international comparison of the cataloging rules or subject headings used in school libraries in different countries, would be near the atomist pole.

Ontological assumptions underlie basic methodological choices discussed in Chapter 5, for example, between quantitative and qualitative approaches. According to Goertz and Mahoney (2012) differences in the way quantitative and qualitative researchers deal with concepts are basically ontological in nature. Quantitative researchers see concepts of interest as being dependent on other concepts, which they use as indicators, whereas qualitative researchers take a semantic approach in constructing concepts by identifying essential attributes. These assumptions also have implications for research strategies, e.g. the choice between case studies and surveys. A relevant assumption in quantitative comparative studies is that a concept can "travel" (that is, be understood identically in different countries so that questioning or measurement will yield comparable results). That this reflects a questionable ontological assumption is evident from a perusal of the country responses to the surveys reported in the

World Report[22] published by IFLA's Freedom of Access to information and Freedom of Expression (FAIFE) core activity. A comparison of the country reports suggests that there is very wide variation in the way respondents understand the concept of freedom of expression – this concept does not travel well. If social reality is seen as essentially relational, constituted by a network of complex and nuanced human relationships, a qualitative comparative researcher may well prefer a case study to a survey approach in an attempt to understand what freedom of expression means in different countries.

Ontology is fundamental to research design. A frequent ontological problem is confusion about what is being studied. For example, Galuzzi (2014) analysed newspaper coverage (newspaper articles about libraries) in Europe as a means of studying "public perceptions" of libraries. This made an assumption that what journalists write in major newspapers is an accurate reflection of public perceptions. Ontologically, public perceptions and the newspaper articles are in two quite different categories.

Ontology as classification or typology

The second of Craig's questions, "what general sorts of things are there?", offers another angle from which to consider the ontological dimension of international and comparative research in LIS, an angle which is more closely aligned with the meaning of ontology as classification. According to Mouton and Marais (1990, 11), social scientists study "humankind in all its diversity, which would include human activities, characteristics, institutions, behaviour, products, and so on". This is very diverse and makes possible many different perspectives. We could classify phenomena as observable and unobservable, verbal and non-verbal, individual and collective, human behaviour and products of human behaviour, etc.

Mouton (1996, 46–50) provided a typology of social entities or objects. In listing them, I note the possible relevance of some of them in international and comparative librarianship:

- Individuals
- Collectives (here Mouton included geographical, political and cultural entities including tribes and nations)
- Organizations (formal and informal; this could include intergovernmental and non-governmental organizations, foundations, corporations, universities, and libraries)
- Institutions (here Mouton followed Berger 1963 in understanding institutions as "regulatory patterns" rather than as organizations, thus institutions would include language and science; but there is some confusing overlap with organizations)
- Social actions and events (various sub-categories were mentioned: face-to-face interaction, collective or group action, patterned social action, and political or structural action; these could possibly innovation and policy borrowing)
- Cultural objects (these include all the products or outcomes of human behaviour; in our field, one thinks of books, citations, and heritage artefacts)
- Interventions (these include structured and patterned human actions such as programmes, policies, and systems; in our field one thinks of resource sharing, networking, digitization programmes, open access, etc.)

Mason (1996, 11–12) provided a much longer list of "ontological properties" (also referred to as "ontological elements") which might be seen as constituting social reality. She pointed out that, depending on a researcher's ontological perspective, social reality can be seen as being

[22] IFLA, "World reports series", http://www.ifla.org/faife/world-report, accessed 2016-12-16.

made up of different subsets of these properties or elements. One cannot simply pick and choose elements eclectically, since some of them may be incompatible or disputed. The following are some examples that appear relevant to LIS:

- People, social actors
- Understandings, interpretations, motivations, ideas
- Attitudes, beliefs, views
- Experiences, accounts
- Representations, cultural and social constructions
- Actions, reactions, behaviours, events
- Interactions, situations, social relations
- Institutions, structures, the 'material', markets
- Underlying mechanisms

In a chapter on the implications of ontology for methodology in comparative politics, Hall interpreted 'ontology' to refer not so much to entities or objects but to causal relationships: "an ontology consists of premises about the deep causal structures of the world from which analysis begins and without which theories about the social world would not make sense" (Hall 2003, 374). Hall insisted that methodological decisions should be informed by ontology. The ontological assumptions of researchers about the nature of causal relations in their research domain should therefore be reflected in their decisions on research design. For example, if it is believed that outcomes of political processes are determined in a fairly straightforward way by a limited number of independent variables, statistical studies employing regression analysis[23] may be appropriate. If, on the other hand, it is believed that contemporary outcomes may be the result of many different factors, interacting in complex ways over a long period of time, where the conjuncture or co-occurrence of given factors may have a significant impact, other research designs should be considered. Here much more would be learned from in-depth case studies, such as Johnson's (2016) study of the evolution of LIS education in Iraq, or in comparisons using few cases (small-*N* studies) such Dalbello's (2008; 2009) study of cultural factors in digital library development in a number of European national libraries.

In LIS the set of *Functional Requirements for Bibliographic Records* (FRBR) (IFLA Study Group on the Functional Requirements for Bibliographic Records 2009) has been described both as a model and as an ontology. It identities entities, attributes associated with each of the entities, and relationships. In distinguishing, inter alia, between works, expressions of works, manifestations of works, and items, it provides high-level categories that are useful not only in developing standards for various cataloguing tools but also in more general thinking about the contents of libraries and movable cultural heritage. An ontology can be a powerful tool for analysis.

Various classifications of phenomena have been proposed in the literature of international and comparative librarianship. The entry by Krzys (1974b, 333–34) on research methodology for international and comparative librarianship in the first edition of the *Encyclopedia of library and information science* included a checklist for the comparison of library phenomena. In her "Outline for the study of a foreign library system", Simsova (1982, 83–86) provided a very similar checklist covering background factors (geography, climate, population, etc.) as well as the components and aspects of the library system (types of libraries, services, personnel, developmental factors). Parker (1983, 10) listed seven sets of concepts as part of a "systematic framework" for planning library and information services. In their attempt to construct a "world

[23] Regression analysis: a statistical procedure for estimating relationships among multiple variables.

librarianship" Krzys and Litton (1983) devised a grid with areas (e.g. the Middle East, Africa, and Western Europe) on one axis and "aspects of librarianship" on the other. They identified eleven aspects, including bibliographic control, legislation, the profession, and literature (1983, 47). A systematic analysis of each of the cells in the grid would result in a theory of world librarianship. The analysis would be carried out by asking questions of each aspect. Checklists such as these can be very useful, but they reflect significant ontological assumptions. As such, they can have the effect of framing research in such a way that other, unlisted and unanticipated aspects or dimensions may be overlooked or disregarded as irrelevant.

4.9 The epistemological dimension

Knowledge as justified true belief

Epistemology is the theory of knowledge. It is concerned with "the nature, sources and limits of knowledge" (Klein 2005, 224). From the time of Plato knowledge has traditionally been defined as "justified true belief" (Ichikawa and Steup 2016, sec. 1). This "JTB theory"[24] gives rise to quite technical questions about each of the three components, belief, truth and justification, the grounds on which belief is based. In the context of research method, the latter is particularly important. The first key question can then be phrased as, "what must be added to true beliefs to convert them into knowledge?" (Klein 2005, 224).

In the social sciences, this translates into questions about how well statements we make fit the entities or "social reality" that we investigate: if we describe relationships among entities we observe, are our statements valid, and can we make further valid statements about relationships among other similar entities? Issues of validity (internal and external) are important in the experimental and comparative methods, and will be touched on later. Validity is not the only criterion for knowledge claims, however. Mouton argues that the "truth" of scientific knowledge claims can be expressed as "plausibility" (in respect of complex theoretical frameworks), "goodness of fit" (in respect of middle-range theories), or "correspondence" (in respect of empirical statements). In science rules of evidence and validation, notions of objectivity and rigour, and control mechanisms such as peer evaluation, are of critical importance in the pursuit of truth in science, which is the "epistemic imperative" of the scientific community (Mouton 1996, 30–31). Various research paradigms apply somewhat different criteria in evaluating knowledge statements.

While epistemological assumptions determine our methodological approach (Dick 1991b, 77), epistemology, which is concerned with the nature of knowledge, should not be confused with methodology, which is concerned with *how* knowledge is arrived at. Arriving at knowledge implies a human actor, an investigator, who seeks to know. This gives rise to a second key epistemological question, which focuses on "the relationship between the knower and the would-be known" (Mertens 1998, 8). In the various research paradigms, there are different beliefs about this relationship, particularly concerning the cognitive and affective distance that can and should be kept between the investigator and what is investigated. This is especially relevant in the social sciences. Investigators of social phenomena are themselves part of society.

Before proceeding to these questions, I note that there is a close relationship between epistemology and ontology. Sometimes they are conflated as "onto-epistemology" with or

[24] The JTB theory is by no means universally adhered to by contemporary epistemologists.

without the hyphen. This has complex philosophical and political overtones. Regardless of these, the epistemological stance should be congruent with the ontological components that the researcher has identified as central (Mason 2002, 13–14). An example of such congruence is found in the use of institutional theory, which provides an ontological basis, and qualitative comparative case studies, in a comparison by Audunson (1997) of turbulent change in metropolitan library systems in three European counties. For a quantitative example, see the study of job satisfaction of librarians in Denmark and the UK by Pors (2003).

Positivism and postpositivism

In conjunction with the ontological assumption that reality exists independently of the observer (dualism), a *positivist* epistemology assumes that the investigator is detached from the object of study and can assume an objective stance towards it (objectivism). In *postpositivism* the assumption of dualism is largely abandoned and it is accepted that it is not humanly possible to maintain the independence of the investigator and what is studied. There is a greater awareness of the investigator's limitations, but a concomitant emphasis on the use of rigorous, standardized methods to prevent the investigator's bias or values from possibly influencing the findings (Mertens 1998, 7–10). Formal testing of hypotheses developed in the context of a theory is characteristic of this stance; however, as mentioned in Section 4.5, it is not the substantive hypothesis that is tested, but the null hypothesis. If the latter is rejected, it provides confirmation of the substantive hypothesis. However, substantive hypotheses are never definitely 'proven'; there always remains a possibility that an alternative explanation will be found (Pickard 2007, 10).

The assumption that the investigator is detached from the object of study provides the basis for the procedures of control and manipulation of the object of study that are characteristic of experiments. In an experiment the investigator aims for a high degree of validity. Therefore, the investigator will typically draw a known probability sample of 'research subjects' from a population, to ensure that the sample is representative of the population so that findings can be generalized to the whole population. This generalizability is, roughly, what is meant by *external validity*. The investigator will also randomly divide the sample into experimental and control groups which are subjected to different 'treatments', that is, different values of an independent variable, while other variables are held constant, or 'controlled'. This is to ensure that the effects observed are the result of the manipulation and not of other, extraneous factors. This is, roughly, what is meant by *internal validity* (Pickard 2013, 22).[25] In order to demonstrate experimentally a relationship between the chosen variables, the number of variables that comes into play must be limited. In the social sciences, where we deal with human beings, these procedures are difficult to carry out with sufficient control to ensure internal validity. Attempts to exercise experimental control give rise to artificial situations, which constitute a threat to external validity. In the social sciences, one of the alternatives to the experimental method is the comparative method. This is deal with in Chapter 5.

At the risk of oversimplification one may say that the positivist paradigm generally employs a thin ontology, which focuses on variables, rather than a thick ontology in which the details of particular cases, are of primary interest. Given certain assumptions of the positivist paradigm, this has implications for positivist epistemology. These are the assumptions that (a) objectivity is possible because there is a considerable distance between the investigator and what is investigated, (b) human behaviour is subject to universally valid mechanisms, and (c) the

[25] External and internal validity are forms of validity specifically relating to research design, mainly in relation to experimental and related designs. The literature of research method distinguishes various other forms of validity. See for example Connaway and Powell (2010, 60–63) and Mouton (1996, 108–13).

methods of the natural sciences are appropriate for the social sciences. The corollary is a strong emphasis on the formulation of general laws that are capable of explaining social behaviour.

Interpretivism

Pickard (2013, 12) stated that in interpretivist epistemology the results of the investigation are produced by the interaction between the subject and the investigator. Both are simultaneously changed by this interaction, so that the knowledge that results from the process is not universally valid but contextual and restricted to the particular time of the interaction. While positivist and postpositivist epistemology utilizes the "conventional benchmarks of 'rigor', internal and external validity, reliability and objectivity" (Guba and Lincoln 2005, 194), interpretivist epistemology puts more emphasis on fairness and various criteria for authenticity that have moral and ethical overtones, including for example "catalytic and tactical authenticity", referring to the potential of the research to promote action and empower research participants or communities to embark on emancipative community action. Related to this is the category of "voice" (Guba and Lincoln 2005, 209), which implies, in interpretive epistemology, a move away from the disembodied observer outside the investigation towards allowing research participants to speak for themselves—something worth emulating in comparative studies in LIS. However, although a wide variety of theoretical perspectives, many of them embodying an interpretivist epistemology, is under discussion in comparative education, as discussed for example by Crossley (2002), Dale (2005) – particularly in response to globalization and the knowledge economy –, by Klees (2008), and in the volume edited by Schriewer (2012), and while various strands of interpretivist epistemology, particularly critical theory, have achieved widespread acceptance in comparative education, they have yet to make an explicit appearance in comparative LIS.

Under the broad umbrella of interpretivism, Guba and Lincoln (1994, 110–11) distinguished between critical theory and constructivism, characterizing their epistemological position as follows:

> *Critical theory and related paradigms*: transactional/subjectivist; value-mediated findings – there is an inevitable, value-laden link between the investigator and the 'object' of the investigation, which influences the findings, thereby blurring the line between ontology and epistemology.
> *Constructivism*: transactional/subjectivist; created findings – the investigator and the 'object' of the investigation are interactively linked and the findings are developed or 'created' in the course of the investigation through the interaction of a particular investigators and the 'object' of investigation. Here too the line between ontology and epistemology is blurred.

Interpretivist epistemologies are generally associated with "thick" ontologies. Attention is focused holistically on the phenomenon or case as a whole in its particularity, complexity and detail. This is in contrast with the positivist and postpositivist epistemologies, which tend to look at reality in terms of variables and where the need to operationalize concepts for purposes of 'measurement' (collecting quantitative data) and the testing of hypotheses, leads to simplification and loss of detail. Generally, interpretivist epistemology gives more weight to hypothesis *generation*. It takes contextual factors into account, and for this reason is sometimes referred to as "culturalist" (Hantrais 2009, 38). It pays attention to the evolution of the phenomenon over time, which gives rise to another label, 'historicist'. Writing from an information retrieval science perspective, Hjørland (1998, 607–9) expressed a preference for the 'historicist' approach, which accepts that humans are social and cultural beings and that psychological processes such as logical thinking, memory and decision making are culturally

determined. Such a point of departure seems appropriate for international and comparative librarianship, where it is sensible to try to understand library development and conditions in terms of cultural and other contextual factors. In fact, this is commonly the case, even when authors may not necessarily subscribe to the interpretivist paradigm (e.g. Juznic and Badovinac 2005; Shachaf, Meho, and Hara 2006; Mutula 2008; Foster and McMenemy 2012 to mention just a few).

In Section 4.8 I referred to comments by Schwandt (2000, 191) on the importance of meaning in interpretivist ontology. This implies that understanding of social phenomena requires a process of interpretation: "To find meaning in an action, or to say one understands what a particular action means, requires that one interpret in a particular way what the actors are doing." This calls for a process of "interpretive understanding" known by the German term *Verstehen* which implies "empathic identification", requiring "psychological reenactment" [sic] – getting inside the head of an actor" (p.192), or phenomenological analysis and related approaches. The important thing is that interpretivist epistemology concerns itself with meaning.

Heron and Reason (1997), proposing an extension of the set of basic paradigms summarized by Guba and Lincoln (1994), argued for a "participative worldview", with a subjective-objective notion of reality, to which they refer as "critical subjectivity" (n.p.) which requires a self-reflexive awareness of four ways of knowing: experiential (direct encounter, both sensory and spiritual, of people, places and things), presentational (symbolic and metaphoric reliving of experiential knowing, propositional (expressed in statements and theories), and practical (knowing how to do things).

Non-Western epistemologies

The emancipatory paradigms referred to in Section 4.5 above put forward various alternative epistemologies. Some scholars in developing countries object to the 'hegemony' of Western epistemological approaches. Writing from an African indigenous perspective, Chilisa (2005, 662) criticized the "mainstream [Western] research epistemologies and their assumed universal validity in assembling, analysing, and interpreting and producing knowledge [which] remains a highly foreign and colonizing instrument". In recent decades, interest in the worldviews or "Cosmovisions" of traditional or indigenous peoples has increased greatly. In spite of colonialism, these worldviews continue to coexist with Western science and technology (Millar and Dittoh 2004). They are often relational, comprising the spiritual, the natural and the human "constellations", rather than being compartmentalized into different categories, as in the West. Writing about traditional people in northern Ghana, Millar (2007, 295), himself an African scholar, has stated that for his people, "gods, spirits, ancestors, spiritual and political leaders, sacred groves, lands and shrines, ritual crops and animals, food items and cash crops are all interrelated." There are many African worldviews. Millar has attempted to build a general model of African knowledge, incorporating epistemological elements. He pointed out that:

> Some of this knowledge can be, and indeed is, expressed outwardly for expanded learning and sharing, but most of it is 'internally' locked up and requires 'different sets of tools for scientification'. These tools include empathy, immersing/embedding, initiation and just being born into it, tutelage/apprenticeship, experiencing/experiential learning and a calling (Note 2007, 301).

Of course, indigenous worldviews are not limited to Africa (e.g. Escóbar 2007; Haverkort 2007; Rist et al. 2007 in the same volume). A sympathetic understanding of indigenous

epistemologies can be very relevant to LIS workers engaged in LIS development or aid projects and in comparative research.

Nomothetic and idiographic research

Earlier I touched on the implications of thin and thick ontologies for positivist and interpretivist epistemologies respectively. In this connection it is useful to refer to the distinction between nomothetic and idiographic research, a distinction introduced by the German philosopher and historian of philosophy, Wilhelm Windelband ([1894] 1980) .[26] In his lecture, which should be seen against the background of the rise of logical positivism in the 19th Century (Oakes 1980), Windelband addressed what he considered to be the misleading distinction made between the natural sciences (*Naturwissenschaften*) and the sciences of the mind (*Geisteswissenschaften*), and proposed replacing the content-based distinction by a methodological distinction (Staiti 2013, sec. 3). Although Windelband himself did not use the distinction in quite this way (Lamiell 1998), the two terms, nomothetic and idiographic have come to refer to general approaches to scientific research. Nomothetic refers to research aimed at establishing general regularities or laws[27] through the formal testing of hypotheses. Idiographic research, on the other hand, is more concerned with comprehensive understanding of a phenomenon in itself, in depth, in its uniqueness and in its context (Mouton & Marais 1990:48-50).[28] Heinrich Rickert, a student of Windelband, introduced the terms generalizing and individualizing as preferable to nomothetic and idiographic respectively (Staiti 2013, sec. 3).

The rise of the nomothetic approach in the social sciences has been attributed to the desire of social scientists for 'scientific' respectability (Hantrais 2009, 43). In comparative education, the 1960s saw a big push to develop a nomothetic 'science' of comparative education using methodologies derived from the social sciences, emphasizing the formal testing of hypotheses using statistical techniques. Bereday's (1964) pioneering work and the text by Noah and Eckstein (1969), which emphasized empirical and quantitative methods, exerted great influence in our field too. Bereday's methodology[29] provided the basic structure for the well-regarded comparison by Hassenforder (1967) of public library development in France, Great Britain and the USA. It also formed the basis for the research methodology set out by Krzys and Litton (1983) for "world study in librarianship", which aimed at "the formulation of theoretical knowledge that underlies librarianship". Basing their work on the assumption of "a basic immutability of human nature" (p.6), Kryz and Litton proposed four "laws of world librarianship", which reflect a progression from context-dependent national variants, through partial convergence across national boundaries, to global standardization, formulated as follows in the fourth law, the "Law of Total Convergence":

> Eventually all world variants of librarianship will, through standardization, converge to form a global librarianship. The success of the global librarianship will be controlled by the preciseness by which all elements of world librarianship are standardized (Krzys and Litton 1983, 197).

[26] This topic could also be dealt with under Teleology. However, I choose to deal with it here because Windelband himself originated the distinction in the context of his theory of knowledge. In any case, this distinction is highly relevant to the discussion of case-oriented vs variable-oriented studies in the next chapter.

[27] Nomothetic derives from the Greek *nomos*, law.

[28] Idiographic (frequently misspelled ideographic[28]) derives from the Greek *idios*, own, private, which also appears in the words 'idiosyncratic', 'idiopathic' and 'idiot'. Curiously, the term was misspelled by Mouton & Marais (1990). In his later book, Mouton (1996, 133) persisted in spelling "idiographic" incorrectly.

[29] Rust et al. (1999:86) have pointed out that Bereday remained true to earlier educational comparativists in his use of induction, with observation and classification preceding the formulation of hypotheses.

The project of Krzys and Litton illustrates the nomothetic approach that is associated with positivist epistemology. In addition, one could hardly wish for a more vivid illustration of universalism, the desire to demonstrate the universality of social phenomena (cf. Hantrais 2009, 28), than this aim.[30]

Importance of epistemology

Epistemology is not only relevant to researchers. In a thoughtful study of the significance of epistemology for research and practice in LIS, Dick (1999) identified specific epistemological problems in LIS, and explored both general and specific difficulties encountered in studying the epistemological frameworks within which LIS practitioners carry out tasks such as book selection and classification, but of which they are generally unaware. In a later article (Dick 2013, 9) he pleaded for recognition of alternative, indigenous epistemology, “an alternative way of knowing and constructing reality at work in indigenous knowledge".

4.10 The ethical dimension

Ethics, also known as ‘moral philosophy’ is the branch of philosophy that studies the rights and wrongs of human behaviour, the moral choices people make, and how they try to justify them (Thompson 2008, 1). It comprises studies of ethical theory and applied ethics. The word ‘ethics’ is often used to refer to “a code or set of principles by which people live” (Popkin and Stroll 1993, 1), for example, in medical, legal or business ethics. These fall within the scope of applied ethics, which also includes research ethics. Generally, research ethics deals with principles for the conduct of researchers in relation to persons, communities and artefacts they study, the wider society, the researchers’ colleagues, and the wider scientific community.

There are various schools of ethical thinking. Depending on whether the motives of the actor, the consequences of the action, or the nature of the action are emphasized, ethical theories are described respectively as motivist, consequence (or consequentialist), or deontological theories (Popkin and Stroll 1993, 47–48). Under these broad headings there are many strands. In research ethics, the consequentialist theory known as utilitarian ethics has been very influential. In utilitarian ethics, the anticipated costs and benefits to the people involved are weighed. This has been put crudely as attempting to ensure “the greatest happiness for the greatest number of people” (Thompson 2008, 82). All three schools have been labelled as ‘universalist’ in that it is assumed that, although they are based on Western values, they are appropriate for all cultures. However, this assumption is increasingly challenged today, and a number of new ethical non-universalist ethical theories have emerged.

The “biomedical” ethical model

The most widely-used ethical framework in the English-speaking world and in many other countries in which social research has been influenced by US practice, is one which arose out of revulsion occasioned by a number of highly publicized ethical scandals, such as the Nazi medical experiments, the Tuskegee Syphilis Study and (arguably unfairly) the Milgram experiments (Cave and Holm 2003). It is worth noting that these concerned medical and psychological experiments undertaken along positivist lines. Disturbing research projects such as these resulted in the formulation by professional associations and government agencies of guidelines, codes and regulations governing research with human subjects. In the USA, the

[30] Krzys and Litton appear to have confused scientific laws, which are intended to explain, with normative laws, which lay down how things should be done.

Federal Government requires universities to establish institutional research boards (IRBs) to which staff and students wishing to undertake research involving human subjects have to submit their projects for approval before they may proceed. IRBs were established under the US *Federal policy for the protection of human subjects*, known as the "Common Rule"[31]

Most social science research methodology texts have a chapter or section on research ethics, covering the canonical ethical principles of respect, beneficence and justice in research with human subjects, usually including such aspects as refraining from harming participants, voluntary participation, refraining from deception, informed consent,[32] anonymity and confidentiality (Rubin and Babbie 1993, 57–64; Pickard 2013, chap. 7; Creswell 2009, 87–92; Connaway and Powell 2010, 88–93). Much of this derives from problems encountered in experimental biomedical and psychological research – hence its label in some quarters as the "biomedical model of ethics" (Denzin and Lincoln 2005, 37).

Other ethical aspects of academic and scholarly conduct (e.g. integrity in reporting and publishing research, objectivity in peer review, and respect for intellectual property) are often dealt with in such texts, and usually feature in the ethical codes of professional associations of social scientists such as that of the American Sociological Association (1999).

Interpretivist critique of the "biomedical model"

The "bio-medical model" has come in for much criticism from social scientists using qualitative methodologies within interpretivist and related paradigms, particularly from those working with indigenous[33] communities. Denzin and Lincoln (2005, 36) criticized what they called "the deception-based, utilitarian IRB system" and cited a long list of deficiencies in the IRBs identified by the American Association of University Professors (pp. 37-38).

In a discussion of ethics in qualitative research, Punch (1994, 88–94) pointed to the moral dilemmas that researchers may face when working within an interpretive paradigm, for example within the framework of critical theory, where the researcher's relationship with marginalized or downtrodden groups and his commitment to them may be seen as justifying the exercise of deception vis-à-vis dominant groups or authorities. A decade later, Christians (2005) and Markham (2005) took a much more critical stance towards the conventional concepts of research ethics, which they attributed to a positivist paradigm. They were particularly critical of the institutional review boards, which they saw as imposing inappropriate and stifling constraints on interpretivist research. They indicated that positivist and interpretivist scholars pose quite different ethical questions (cf. also Lincoln 2005).

Linda Smith (2005), a New Zealand educationist of Maori origin, commented that "… most ethical codes are top down in the sense of 'moral' philosophy framing the meaning of ethics and in the sense that the powerful still make decisions for the powerless." In these codes, principles such as respect and informed consent are dealt with in an abstract manner, "…partly through a process of wrapping up the principle in a legal and procedural framework" (p.98). Ethics codes are mainly underpinned by human rights, which emphasize the protection of the

[31] US. Office for Human Research Protection, https://www.hhs.gov/ohrp/regulations-and-policy/regulations/common-rule/, accessed 2017-01-06.
[32] Informed consent is the centre-piece of the Common Rule. The basic elements of informed consent are specified in the document (page CRS-75).
[33] Linda Smith (2005, 86) has defined indigenous peoples as "the assembly of those who have witnessed, been excluded from, and have survived modernity and colonialism… They remain culturally distinct, some with their native languages and belief systems still alive. They are minorities in territories and states over which they once held sovereignty."

individual, not the collective. The composition of ethics committees or boards is narrow and does not reflect the broader society. Generally, the codes assume "ethical universalism", and have an "atomistic focus" (concerned with individuals rather than communities). They do not readily accommodate "emerging methodologies" or indigenous perspectives (Smith 2005, 98–101).

Non-utilitarian approaches

Various alternatives to the "biomedical model" of research ethics have been proposed. These in include indigenous, postcolonial, participative, feminist and communitarian ethics among others. The editors of the third edition of the *SAGE handbook of qualitative research* (Denzin and Lincoln 2005, 36, 40) explicitly endorsed a "feminist, communitarian ethic":

> We endorse a feminist, communitarian ethic, that calls… for collaborative, trusting, nonoppressive relationships between researchers and those studied. Such an ethic presumes that investigators are committed to stressing personal accountability, caring, the value of individual expressiveness, the capacity for empathy, and the sharing of emotionality." (p.40)[34]

This ethic was described in more detail in the chapter by Christians (2005, 151–55), who attributed the label to Denzin (1997). He saw it as "an antidote to individualist utilitarianism", placing much emphasis on social commitments and the interconnection of personal autonomy with "communal well-being", and the participation of communities in decision making on all facets of the conduct of research. Moral rules that are grounded in the community should be negotiated bottom-up of instead of accepting those that are imposed top-down. It is also an ethic of care[35] and one concerned with social justice.

Ethics in research involving indigenous people

While much of the discourse on alternatives to the utilitarian approaches appears somewhat abstract and very evangelistic, more concrete insights into what this may amount to in the actual conduct of research may be gained from discussions of ethics in cross-cultural research and research involving indigenous people. In a discussion of psychoeducational research on minority youth in Canada, Marshall and Batten (2003) identified a range of ethical issues arising from work with culturally diverse populations. Inappropriate approaches to cross-cultural research may arise from attempts to apply what are largely European Western values, ethics, and norms" (p.140). These may be incongruent with the values, worldview, beliefs, aspirations, and expectations of the groups in question. There may be cultural differences in the understanding and interpretation of concepts such as privacy, confidentiality and informed consent. According to ethical research norms, individual informed consent is required prior to inclusion of each participant in a study and it is typically given when the participant signs a standard letter of consent. Marshall and Batten comment:

> In some cultures, ethics is a more fluid concept that requires constant reexamination and redefinition, with informed consent viewed and implemented as an on-going process. What this means is that consent must be asked for and given at almost every step of the research process to assure that it is valid and that the participants remain fully informed and cognizant of each aspect of the research proceedings. The standard letter of consent that participants read and sign is only one part of this process, and

[34] Italics by the cited authors, who cited Collins (2000, 216) as their source.
[35] Some feminists have reservations about the link between feminism and the ethic of care, rejecting the essentialist notion that women are "natural carers". See Olesen (2005, 254–56).

> indeed, can act as a barrier to truly informed participation unless fully explained in understandable language (Marshall and Batten 2003, 143).

Whereas in Western societies much emphasis is placed on individual freedoms, in many societies in the developing world the orientation may be more collectivist. In such cases, the extended family, the village or the community structures may need to give consent, rather than the individual research participant. To gain access to a community, the researcher must understand its structure and dynamics.

Failure to respect the norms, values, and knowledge of local communities can have serious consequences. Chilisa (2005, 672) asserted that such failure is itself unethical, warning that it may lead to the dissemination and perpetuation of outsider prejudices:

> Research knowledge authorizes views and perceptions about the researched. An accumulated body of knowledge on the researched becomes the point of reference for legitimizing new knowledge. The problem of giving legitimacy to research knowledge is that most of the accessible research was not carried out by the researched.

Uninformed research can lead to bad planning decisions in developing countries. Chilisa accused Western approaches to research on the HIV/AIDS epidemic in Botswana of exacerbating the problem by dismissing local understandings of disease, asserting that it is unethical of researchers to present information which is incomplete, out of context and misleading, given that this information is used by health planners to design interventions for combating the disease.

Linda Smith pointed out that research on indigenous peoples is rooted in colonialism. The history of research ethics with indigenous peoples is

> …a study of how societies, institutions, disciplines, and individuals authorize, describe, settle and rule. It is a study of historical imperialism, racism, and patriarchy and the new formation of these systems in contemporary relations of power." (Smith 2005, 101)

Ethical principles for research with indigenous groups have been formulated by various bodies, including the Australian Institute of Aboriginal and Torres Strait Islander Studies, which has published *Guidelines for ethical research in indigenous studies* (Australian Institute of Aboriginal and Torres Strait Islander Studies 2012), which stated fourteen principles, grouped into six broad categories:

- rights, respect and recognition;
- negotiation, consultation, agreement and mutual understanding;
- participation, collaboration and partnership;
- benefits, outcomes and giving back;
- managing research: use, storage and access; and
- reporting and compliance. (p.3)

In the USA the African Studies Association (ASA) published *Guidelines… for members' ethical conduct in research and other professional undertakings in Africa* (African Studies Association 2005) which are "designed to orient members to the issues involved in research and other professional endeavors across cultures and nations and especially where there is highly unequal access to the means for engaging in them."

Ethics in cross-national and cross-cultural research collaboration

Hantrais (2009, 146–49) discussed research ethics in international comparative social research, with particular emphasis on the maintenance of scientific standards in international projects. As mentioned earlier, within a cross-national or cross-cultural research team there may be cultural differences in the understanding and interpretation of key ethical concepts. Social researchers working across national border should not assume that their ethical stance is shared by their counterparts in other countries, even countries with a shared Western heritage and comparable socio-economic conditions. For example, whereas the utilitarian philosophy is dominant in American ethical discourse, which tends to be legalistic, researchers in continental Europe, especially the Nordic countries tend to take a deontological stance in which ethical decisions are taken in interaction with the human subjects (Markham 2005, 814). In any case, the ethical codes of national professional associations and regulatory agencies differ from country to country. Thus, in cross-national and cross-cultural team research, ethical issues need to be clarified at the initial stages, and attention must be paid to such issues as the ownership and ultimate disposition of data, reporting, and dissemination of results. In the case of research conducted in or on countries with undemocratic regimes particular care must be taken with access to research data so as to protect the identities of research participants and informants. Citing even quite innocuous-looking facts or reproducing mildly unfavourable comments, if these can be traced to a local informant, can have very serious consequences for that person.

In collaborative research in developing countries researchers should expect to encounter issues arising from asymmetric power relations. When projects are undertaken in developing countries in collaboration with local partners, the local partner may be at a disadvantage in respect of resources, skills, experience, language competence, etc. Warwick (1983b, 325) asserted that "[t]he single most frequent topic in discussions of cross-cultural research ethics has been the relationship between foreign scholars and local collaborators in developing countries". Asselin (2011, 21) warned that "…in international contexts ... power relations between the researchers and participants, and between local and foreign researchers, can be misused, intentionally or unintentionally." Researchers from developed countries need to be aware of their privileged position and occupy this "unstable space" responsibly.

Chilisa (2005, 676) highlighted the practices of international donor organizations that fund research in developing countries, pointing out that their grant contracts invariably place Third World researchers in a subordinate position (p.676), the First World researchers being giving the positions of leadership and the responsibility for producing the final report. She attributed this to persistent colonial attitudes.

Knowledge sharing

In international and comparative LIS research we need to consider the ethics of international knowledge sharing and information flows. This applies particularly to comparative research involving developing countries (or for that matter any LIS research in such countries) where asymmetries may exist in respect of power relations and information flows. People, communities and institutions should not be exploited as 'fodder for research'. The autonomy and dignity of research participants and collaborators should be respected. It is important that the authentic voices of those studied in other countries and societies be heard. Therefore, the flow of information should be reciprocal, encompassing South-North as well as North-South flows. At the conclusion of the research project feedback should be given to communities that were studied and that provided research data, so that they too can benefit fully from information and insights gained (Britz and Lor 2003; Lor and Britz 2004). One should not

assume that writing up the research in a scholarly journal will ensure that local scholars and the studied community gain access to the findings. Access may be impeded by intellectual property issues. Chilisa (2005, 676) pointed out that copyright in the intellectual property created by a collaborative research project that is undertaken in a developing country typically vests in the donor agency. Researchers should insist that reports and publications arising from the research be made readily available in the country or countries where the research was carried out, ideally on open access.

Attention also needs to be paid to the disposition of research data for access by the community or country concerned, provided that this does not conflict with requirements for confidentiality.

4.11 Evaluation of metatheoretical assumptions

By way of a summary, this section lists a set of questions for each dimension. These questions may serve to characterize and evaluate a given piece of research. The focus is on comparative research, but the questions are also relevant to other international work.

Sociological dimension

- Who is/are the author(s)?
- From which countries? (From countries on/in which research was conducted or from a third country?)
- Do they explicitly deal with the challenges of inter-cultural understanding and cultural relativism?
- If comparative, was the study, with its instruments and techniques, designed in both/all of the countries being compared (symmetrical), or in one of the countries (asymmetrical)?
- Is there a possibility that the author(s) could have been affected by bias?
- What measures were taken to avoid cultural bias and methodological nationalism?
- If authors from more than one country collaborated, do they describe the collaborative process and how they dealt with cultural differences and differences in their intellectual styles?

Teleological dimension

- What is the overarching purpose of the research: basic and theoretical, or aimed at practical application?
- If practical, is it aimed at applying findings to evaluate, change or improve institutions, systems, processes or products through comparative rankings, benchmarking, adaptation, innovation, etc.?
- Is the research aimed at policy borrowing or advocacy?

Ontological dimension

- What is investigated – what kind of phenomenon? (E.g. human characteristics, attitudes, perceptions, behavior, cognitive activity, institutions, processes, products of human activities.)
- Is the phenomenon something that exists ‘out there’ in external reality and can be observed (naïve realism) or something that exists in external reality but of which the relations are more difficult to pin down (critical realism)?

- Is the ontology thin (concerned with decontextualized phenomena, taken at face value) or thick (taking into account history, culture and meaning of human action to the actors)?
- Is there an explicit or implicit ontological framework such a systems approach or an underlying ecological or evolutionary metaphor?
- Are nation states assumed as necessary units of analysis?

Epistemological dimension

- How does the author see him/herself in relation to the phenomenon that was studied: completely detached and independent from it (positivism), imperfectly detached from it but striving for objectivity (postpositivism), or in a continuous interaction with it (interpretivism)?
- How critical is objectivity and how acceptable is a subjective element?
- What role do values play in the research: are they rigorously excluded, or included as a formative element?
- What is the nature of the knowledge envisaged: is it a conventional 'scientific' accretion of verified or non-falsified hypotheses, or is there a less conventional concept of knowledge, e.g. critical revision and reinterpretation of accepted structures, or emphasis on authenticity, experiential or transformative knowledge?
- Does author adopt a *nomothetic* approach emphasizing of explanation, prediction and control and striving to arrive at valid generalizations, or an *idiographic* approach striving to arrive at a deeper, more comprehensive understanding of the phenomenon in its uniqueness and complexity?

Ethical dimension

Here I list questions relating to international and cross-cultural research. The range of issues in research ethics that are potentially to be addressed in any research project in LIS is of course much greater. See, for example, those cited by Connaway and Powell (2010, 87–93).

- Do the authors demonstrate an awareness of potential national and cultural differences in the understanding of concepts such as beneficence, privacy, confidentiality, informed consent, the right to withdraw from the study, and the re-use of data?
- In cases where research was conducted in developing countries, did the authors demonstrate care for the autonomy and dignity of *research participants* who may have been disadvantaged in terms of language, literacy, poverty, etc.?
- In cases where research was conducted in developing countries, did the authors deal appropriately with potential asymmetries in respect of power relations and information flows among members of the *research team*? I.e. were team members in all participating countries treated with respect and fully involved in decision making?
- Was provision made for debriefing or feedback to groups in the countries that were compared, to ensure dissemination of information to enhance understanding and promote development?

General metatheoretical/paradigmatic stance

To the above we can add some general evaluative questions:

- Do the authors explicitly identify the paradigm within which they work, e.g. cognitive, constructivist, Marxist, feminist, post-colonial, etc.?

- If not, do the authors give any evidence of awareness of metatheoretical issues? (If there is no such evidence, their stance is most likely naïve empiricism.)

In practice, very few of the above questions are likely to be answered explicitly in shorter reports, such as conference papers or journal articles. More explicit answers will be found in longer reports such as academic dissertations. However, in the case of each of the metatheoretical dimensions, there are two key criteria for evaluation:

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

When we look at the methodological decisions (considered in Chapter 5), we will need to consider whether these were taken in alignment with the above decisions.

4.12 Towards methodology

While (to my knowledge) metatheoretical reflection in comparative librarianship failed to progress beyond positivist and postpositivist assumptions, such reflection continued in other disciplines. In comparative education in the 1970s and 1980s a growing interest in educational outcomes and the experiences of different groups and minorities, a concern with social inequalities, and greater awareness of the socio-economic and political context of education gave rise to controversies over the nature of comparative education (Altbach and Kelly 1986, 6–7). It also led to the importation of new perspectives from anthropology, feminism, and postcoloniality, among others (Cowen 2006, 568). The diversity of approaches is currently such that Hantrais (2009, 42) has characterized comparative education as "fragmented". Similarly, Sartori (1991) deplored the state of confusion in comparative politics. It appears that the general trend in comparative studies has been towards a greater acceptance of epistemological stances associated with what Pickard has grouped under interpretivism: not only critical theory and associated paradigms, and constructivism, but also stances labelled as culturalism or historicism, depending on the discipline.

In this overview of metatheoretical considerations, reference is made to many metatheoretical "-isms". Impatience is sometimes expressed with metatheoretical concerns. Referring more specifically to epistemological and ontological assumptions, Mouton (1996, 39) has taken a nuanced view: while some metatheoretical assumptions about the social world are incompatible,

> …depending on the research problem, most social scientists can happily tolerate a range of seemingly conflicting assumptions about the social world… most social scientists are quite happy to leave … metascientific issues to the philosophers and get on with the job!

The main points to be retained here by those considering comparative and international studies in LIS are that our thinking may well be slanted positivistically without our realizing it; that there is a rich variety of alternatives to positivism; and that whatever paradigm we adopt, knowingly or unknowingly, will have implications for our methodology, which is the subject of the next chapter.

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