From Library Science to Information Science to Knowledge Management: providing contexts for LIS research

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Introduction

Library and Information Science (LIS) has traditionally been regarded as a social science. Hence LIS research is largely concerned with analyzing, interpreting and understanding LIS related aspects of the social world. Therefore context becomes a significant factor in our research strategies. Research theorist, Wilhelm Windelband (1980: 175) remarked:

> *In their quest for knowledge of reality, the empirical sciences either seek the general in the form of the law of nature* [for example, in the natural sciences] *or the particular in the form of the historically defined structure*…, [that is], *they are concerned with the unique, immanently defined content of the real event* [as in the social sciences].

Due to this contextual nature of social science research, it is important to understand the evolving contexts in LIS in order to draw full benefit from the presentation on the research process by our eminent guest, Professor Don Petkov. May I take this opportunity to thank, Professor Petkov, for so willingly agreeing to share his research expertise and experiences with the LIS fraternity. **My** role here this morning, then, is to provide a LIS context within which you can locate Professor Petkov's research ideas and use them meaningfully in your research endeavours.

The grand old lady (*Library Science*) *vs* a new vehicle for studying the generation, use and transfer of information (*Information Science*)

It is hard to ignore the inconsistency in the use of terminology to refer to academic departments, professional associations and journal titles in our discipline. Sometimes both the words 'library' and 'information' are used, and at other times either one of these terms are used with the latter in more recent times being the more popular choice. Many academic programmes have changed their names to include 'information studies' or 'information science' or 'information management' or 'knowledge management'. While some of these changes may be seen as cosmetic and designed to assist with image problems associated with the discipline of Library Science, the changes in name do reflect a real shift in orientation for academic staff, students and programmes. Educators and institutions have been responding to the changing information and technological environment (Broadbent 1985; Todd & Southon 2001) – a dynamic environment offering rich opportunities for research.

It was in the 1960s that Information Science emerged into the arena of Library Science. Library science educators could not ignore the fact that an entirely separate field of study was developing in a way that threatened the very foundations of Library Science (Grotzinger 1986: 459). Librarianship, before the revolutionary effects of information technology, had focused on developing physical collections of books and other materials in library buildings staffed by people who had been trained to select, acquire, organize, retrieve and circulate these materials. Hence research too narrowly focused on these activities. However, evolving information and communication technologies (ICTs) have revolutionized the services and management of libraries and information centres (Sengupta & Umarani 1996; Tedd 2003; Tredinnick, 2004; Bawden, Vilar, & Zabukovec 2005). As a result library and information services have extended beyond "physical collections and buildings to the virtual world of the Internet" and the focus became information provision in a variety of contexts (IFLA 2000: para. 1) – and thus concomitantly extending the terrain for LIS research.

The inclusion of information science into basic professional library science programmes was partly in response to the challenge of new information-handling technologies that had been evolving, and partly "to provide a more satisfactory vehicle for studying the generation, use and transfer of information." (Martin 1987: 130). Importantly, Information Science represented "a conscious attempt to introduce academic rigour and standardized research methodologies into an area which evolved on a largely *ad hoc* and pragmatic basis" (Martin 1987: 130). This line of thinking was reiterated by Wilson and Hermanson (1998: 487-488) who argued that for some time there had been an increasing call for an intellectual base in Library Science that could stand in its own right. There was a need to unify practice and theory and many leaders in the field believed "information science is what will bring the profession to full flower"; and thus provide what research methodologists refer to as a theoretical base to frame social enquiries. As Henning (2004: 12) points out, "research cannot be conducted in a theoretical vacuum. Social scientists achieve their position by virtue of their knowledge of what the field has to offer in terms of its theory - also its methodological theory".

While there have been various arguments about what unifies Library Science and Information Science, a significant feature of this concept is that Information Science is not tied up with any particular information organization. Consequently, "the transition from Library Science to Information Science has broadened the scope" of the discipline of Library Science (Vakkari 1994: 11) to include not only libraries of many kinds, but also online retrieval services, archives, databases, records management and documentation of many kinds – and thus broadening the scope for LIS research as well.

The new kid on the block: Knowledge Management

The growth in the number of information-related occupations and the parallel growth in information consciousness generally, have resulted in an increasing number of higher education institutions moving into the business of providing professional information-related programmes. This represents an increase in the variety and sophistication of programmes designed to produce a new wave of information specialists. Library schools

no longer have a monopoly over the education and training of professional information workers.

The 'information revolution' has resulted in a "growing acceptance of the strategic value of information" and a growing number of workers involved primarily in the handling of information (Lor 1990: 70). Lor points out that this emerging information market is diffuse and difficult to define as it "cuts across conventional industries and sectors". Cronin (1985: 14) referred to it as the "invisible marketplace"; and especially so with the advent of Knowledge Management, the newest kid on the block. Information flow is now global and institutions and organizations are increasingly recognizing that the "creation, management and utilization of company-wide information and knowledge are of strategic importance" (Bruce 1999: 189-190). In this knowledge environment where information is the key ingredient in many kinds of work, individuals working with the creation, diffusion and utilization of information do not necessarily regard themselves as information professionals belonging to a specific profession.

Many commentators (Todd & Southon 2001; Enser 2002; Tedd 2003; Bawden,Vilar & Zabukovec 2005) have alluded to the fact that no particular profession or field of study has a monopoly on job opportunities in this emerging information market. Although librarians and related information professionals such as archivists, records managers and documentalists can contribute valuable expertise and competencies to the emerging information market, they are not the only ones in the field. Since information technology, specifically computers and data communications is extensively used in the organization, processing and dissemination of information (including Web-enabled information delivery), computer scientists are well placed to move into this field. Computer science departments have been developing programmes in information systems and business data processing. Business schools have also developed programmes in management information systems and information management.

The pervasiveness of information work has made it very diverse with LIS graduates taking up positions beyond the traditional boundaries of libraries and information centres.

The emerging information market in which these graduates are pursuing careers include database services, as entrepreneurs, in small information enterprises, in publishing and the book trade, and in information resource management and knowledge management in government and industry (Todd & Southon 2001; Brine & Feather 2002). The emergence of the information and knowledge economy, while presenting challenges in a highly competitive higher education environment, also creates new and diverse opportunities for research. The shifting and changing nature of the information landscape offers exciting opportunities for research. Van House and Sutton (1996: 145) claim "that the field is changing: the boundaries, players, capital and rules of competition are all in flux". Evidence of this is the arrival of Knowledge Management which is seen by some as a "saviour of the beleaguered image of librarians" and by others as "offering substantial enhancement of the role of the information professional and an opportunity [yet again] to rejuvenate the [LIS] profession' (Todd & Southon 2001: 315).

Implications of these evolving contexts for LIS research

It is evident that the LIS discipline is a rapidly evolving one that has been almost completely dominated by digital technology. Further, its boundaries have become blurred as emerging information markets in a modern knowledge economy have resulted in multiple disciplines laying claim to the business of information and knowledge management. While this presents many competitive challenges, in terms of research it opens up the arena for exciting research possibilities, including multidisciplinary research involving LIS with disciplines such as business, computer science and management. As information professionals I implore you to take full advantage of the opportunities and excitement generated by the knowledge economy by using ideas from Professor Petkov's research presentation to engage in research not necessarily for formal degree purposes, but, more importantly, to creatively meet the many challenges presented by this dynamic information landscape located within a knowledge based, technology driven and global economy.

This is what would breathe new life and rigour into our profession, irrespective of what nomenclature you choose to describe it with (Library Science or Information Science or Information Management or Knowledge Management).

Conclusion

To end I would like to cite from research gurus, Babbie and Mouton (2001: 4-5). They explain that in our current age of the Web and the Internet, of global networks and instant communication, an age in which access to information and knowledge has become more important than access to capital or labour, "the ability to produce knowledge, and to use it effectively has become one of the most important features of modern-day society". Hence knowledge produced though scientific research and investigation of social reality (the dynamics of which Professor Petkov has enlightened you), is critical to meet the challenges presented to us as LIS professionals in a dynamic and elusive knowledge environment.

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