

## **The LIS Domain: Emerging, Expanding, Blending or Collapsing?**

**Andrew Dillon, France Bouthillier, Diane Sonnenwald and David Bawden**

*These are the notes provided by the four panelists as background to their contributions.*

### **Andrew Dillon**

#### **Field conditions; Interdisciplinarity as blending**

The LIS field is considered by many within the discipline to be under threat. Once tied firmly to the organizational form of libraries, LIS researchers and practitioners are witnessing a shift in both the material nature of information resources and the expectations of expertise required to manage their collection and delivery. Among LIS programs there are challenges to the intellectual core of library and information science both from cognate disciplines and from university administrations concerned with relevance and educational impact. In this light, the four authors explore the question of where the LIS domain is heading: is the field in expansion, is it blending with other disciplines or perhaps even collapsing, or is it emerging as a new field.

For better or worse, something is happening in the information field. I believe the situation is better, the field is growing but the process of growth is not without pain. Faculty recruitment in LIS programs over the last decade or more can be characterized, at least in part, by the importing of researchers from disciplines outside the LIS domain. Unlike many other fields, even professional domains, LIS has always employed faculty with doctoral degrees in a range of other subjects. However more recently, LIS faculty openings have been filled with individuals with backgrounds in computer science, anthropology, psychology, communications, linguistics and more. This shows no sign of lessening but it brings with it a unique set of problems that characterize discourse in LIS at these times: the ongoing search for mutual understanding.

Interdisciplinary work is championed by university administrations though rarely fully enabled. Rather than opting for the traditional approach of fostering interdisciplinary work by cross-appointment, LIS programs in general, and iSchools in particular, are genuinely becoming centers of truly immersive interdisciplinary work where faculty co-exist within the same academic unit. Beyond the supposed benefits of such an approach, there is the very real problem of creating the scholarly infrastructure and system of rewards and benefits that can accommodate the differing expectations and understandings of faculty schooled in one tradition when judging the work and contributions of faculty schooled in another. For example, the publication requirements for tenure among computer scientists place more emphasis on competitive conference papers than monographs, while social scientists typically place more emphasis on academic journal articles than humanities scholars. Beyond type of publication, there can be very real difficulties recognizing the hierarchy within a type for work on areas of information studies that are distinct from one's own. Thus, for example, knowing what constitutes a good journal in HCI is not common to scholars in archives.

Even assuming the best environment in which faculty might form nuanced and appreciative recognition of others' work, the members of such academic homes are likely to find themselves spending time articulating how their work fits and exploring how others' work might relate to their own concerns. Such articulatory effort is beyond the typical member of an established discipline. Furthermore, this discourse colors the research discussion and output of LIS programs.

I believe we can see this at work in the content of conferences and journals within the broad information field. At CoLIS 2010, there were panels and sessions exploring how differing methods were employed and metatheoretical stances adopted by researchers within LIS. Many LIS conferences have sessions explaining methods or theories brought into the field from outside, and even individual speakers typically take time within their talks to explain their stance at a level which presumes non-familiarity among the audience of fellow researchers. This is not a criticism of our field as much as a data point to consider and perhaps to act upon as we more consciously try to shape our domain's research culture.

Because of this effort at forging mutual understanding borne of faculty diversity, LIS discourse tends to engage issues of identity and boundaries to a greater extent than is seen in other disciplines. Consequently there is less attention given in the literature and in conferences to tackling fundamental research questions. At CoLIS 2007 I argued that LIS would only meaningfully engage in serious research if it stepped up to tackle the big information problems of our time. Now in 2010, I think this is more important than ever. Agreeing on the problems is a first step, and from here, allowing the problems to drive the development or selection of methods would advance our sense of cohesion as a field in a manner that would advance the health of this field.

Interdisciplinary work is essential but poorly enabled in most universities. LIS programs are one of the few academic centers where true interdisciplinary collaboration is possible. It is inevitable that we go through the processes of forging mutual understanding but those efforts cannot be the primary focus of our field. We demonstrate our value by our advancement of the understanding of information problems that matter to the world. As a field we have a unique role and a strong commitment to human and social advancement. It is time for us collectively to gather around clear problems not methods, and therein lies our best hope and our emergence as a new discipline.

**France Bouthillier**

**LIS domain: Expanding or collapsing?**

The shaping of the LIS domain did not follow specific plans but one could argue that there has been expansion of the domain in many ways. Considering the last four or five decades, several data points can be used to support the argument.

From a quantitative point of view, more LIS schools exist today than in the past at least in the United States and in Canada and among them several schools offer programs that are not accredited by the American Library Association revealing expansion beyond the traditional accreditation parameters. Many schools, if not most schools, have experienced significant growth in terms of faculty positions. This growth was in line with the design and redesign of new educational programs at the undergraduate, graduate, and even post-graduate levels to address special needs for new knowledge and skills in the areas, among others, of information science and technology, management of information systems, digital libraries, human computer interaction, telecommunications, knowledge management, bio-informatics, health informatics, museum studies and competitive intelligence. In addition, many schools have developed joint or dual degrees with other academic units such as departments or faculties of art history, law, management, music, public affairs, and so on to offer new areas of specializations to a larger number of students. These trends reveal expansion both in terms of scope and depth, contributing to increase and accelerate the interdisciplinarity of the field.

On the research front, we have seen also constant growth as many schools have introduced doctoral programs to educate LIS researchers. More importantly, there is more research done in the LIS domain than ever before whether we count the number of projects conducted in schools or whether we take into account the funding received by faculty members. We have seen also the launch of many new scholarly and professional journals, sometimes disseminating research related to very narrow and specific domains such as bibliometrics or information retrieval and addressing very particular concerns in the professional communities of librarians and information managers. Therefore, by any account, whether we consider units, people, programs, publications and research, there is evidence of expansion.

This phenomenon begs for several questions. Is expansion good or bad? Does more mean better? Not necessarily one could suggest, however, from a territorial perspective, expansion probably represents good news as the LIS territory is larger and may be perceived as having more potential for further development. Although one may ask why do we acknowledge such growth? Why does the LIS field expand? The simple answer here is that since the LIS field is dealing with new technological developments, new information behaviors, new ways for retrieving, handling and preserving information and documents, new information problems emerging in various contexts, inevitably this calls for more research and more educational programs for enabling individuals, organizations, and societies to deal with new challenges stemming from these changes.

A more difficult question to ask is whether our expansion led to a significant intellectual contribution of the field such as developing new knowledge, nurturing innovation, and facilitating new discoveries? In other words, do we have a bigger impact in society by taking risks in addressing original research questions and new problems or do we tackle

similar problems by using the same models and methods over and over, thus offering incremental change in our understanding of information issues? This would require a qualitative assessment of LIS research and programs and certainly a comparative examination with research conducted and programs offered in other domains. Ultimately, the definition of significant impact may be challenging to provide but it seems to be, nevertheless, a growing concern for universities and research funding agencies to assess such an impact and clearly we cannot avoid such a debate forever.

Another area of concern is if the LIS domain has expanded, is it also the case of other domains such as communications, computer science, management, psychology and all these other disciplines that we claim to interact with? If their territories are also expanding, does that mean that we then all play on the same playground? As we know, company can be great until we need to talk about the ownership of the playground. In addressing very small research problems, there is a danger of not seeing the big picture and ignoring that we have no monopoly over the study of information problems: more and more people are interested and able to study these problems.

Finally, although we acknowledge growth of faculty in the LIS domain, most schools remain fairly small in comparison to other academic units and most LIS researchers are not involved in large and collaborative research teams similar to those found in other domains. Therefore, in spite of a genuine expansion, we can see potential competition with other fields and still isolation that make the LIS domain vulnerable. One could argue that the expansion that has been achieved so far is on very thin foundations, thus the danger for collapsing may be real.

While there are many opportunities and conferences for disseminating research, there are very few venues for discussing the research agenda and directions of the LIS domain. Perhaps, most players in the field feel that the domain is still emerging and it would be impossible at this stage to arrive at clear conclusions on which directions we need take. There are, however, more and more occasions when we are asked to explain what is specific to our domain and what is our particular contribution to academia and, without clear and simple answers, inevitably we will continue to face collectively lack of understanding. Thus, expansion alone does not guarantee bright future

**Diane H. Sonnenwald**

### **The Infrastructure Perspective**

I view our discipline is an infra-structure discipline, impacting people's lives, facilitating science, business, government and other organizations, and sustaining societies.

As Andrew notes, LIS has many connections to other disciplines. I see this as a strength of our discipline. We know from social network theory that it's better to have many connections rather than just a few. Our discipline intellectually sits between many disciplines, and can interact with and contribute to these disciplines. An analogy can be

found in football (soccer). Experts in football know that the game is won or lost in midfield. Sure, everyone enjoys seeing goals scored and those players who score goals (or block goals) are frequently featured in the media. But the game is won or lost in the midfield. LIS is a midfield player. Chances are our discipline won't discover a cure for cancer or make a breakthrough in nanotechnology; but without what our discipline has to offer perhaps no one will.

This is because our discipline creates new knowledge regarding the interplay of people, information, technology and social structures. The discipline achieves by conducting research regarding multiple aspects of information, including:

*The social:* We investigate personal, group, organizational and societal aspects of information from national and international perspectives.

*Contexts:* We research the fundamental roles of information in a variety of contexts, including leisure, cultural, scientific and business contexts.

*Temporality:* Information can be dynamic or archived for use over time, and we consider the temporality of information in relation to other aspects of information.

*Human information interaction:* We explore how people discover, access, provision, share, use and discard information, and how they claim ownership of information in an effort to facilitate human information interaction.

*Physicality:* We discover new ways to design and organize information.

*Technology:* We investigate how technology can facilitate and/or impede human information interaction.

In discussions regarding our discipline we seldom discuss our values. As Andrew notes, we focus quite a bit on methods. However, methods and practices can never provide the answers for all circumstances, and values can help guide our decision-making and actions in those circumstances not addressed by methods and practices. Values also help communicate who we are and who we aspire to be.

Five values to consider are:

*Ethical:* We always endeavour to uphold high ethical standards in our research, teaching and service.

*Respectful:* We are respectful of our students, colleagues and others throughout UCD and society both nationally and globally. That is, we respond "constructively to difference among individuals and among groups; seeking to understand and work with those who are different; extending beyond mere tolerance and political correctness." (Gardner, 2007, p. 157)

*Creative:* We go "beyond existing knowledge and syntheses to pose new questions, offer new solutions, [and] fashion works that stretch existing [knowledge]." (Gardner, 2007,

p. 156)

*Disciplined:* We work diligently, constantly striving to improve what we do, and strive to uphold the highest standards of academic integrity.

*Sincere:* We work in an open, honest and straight forward manner.

The first four values are inspired by Gardner's recent book, *Five Minds for the Future*, 2007, Harvard Business Press.

We should continue, and indeed increase, our efforts in sharing our knowledge with others in ways that are meaningful to them. I specifically chose the progressive verb form in the first sentence: impacting, facilitating, sustaining. I propose we should continually seek out opportunities to impact, facilitate and sustain. We should continually strive to make our knowledge and efforts relevant for students, our universities, organizations external to our universities and society in general. And when successful in our efforts, we should share the story of that success with others. The stories will inspire others and help others identify new opportunities for us.

### **David Bawden**

#### **Expanding, diffusing, engaging**

In a *JASIST* review of a volume of essays on the first fifty years of the information discipline, entitled *Information Science in Transition* (Facet Publishing, 2009), Michael Buckland mused "What transition? one might ask". This resonates well with my, perhaps unduly cynical, view of what seems to me to be a continual, and somewhat unnecessary, negative questioning of the nature and validity of the information science discipline.

Not that I have any objection to ruminating on foundations and principles. I am happy to agree that we need to work out an idea of the scope of our subject; not for purposes of navel-gazing or nit-picking, still less in order to declare ourselves unworthy or obsolescent, but rather so that we can understand how to relate constructively to cognate disciplines and professions who are interested in our area, and arguably encroaching on it.

Saying we are focused on 'information' is not inaccurate, but is too broad and generic to be useful.

There has been no shortage of attempts to define, explain and delineate information science. In a general approach with which I have sympathy, mentioned in the paper by Robinson and Karamuftoglu at this conference, we can regard LIS as concerned with the management of meaningful human recorded information, understood in terms of the communication chain, studied through the methods of domain analysis, and expressed in the 'collection disciplines'. Other disciplines and professions clearly have interests in various aspects of this area; computer science in retrieval, publishing in dissemination, and so on. Our interactions and overlaps with them can be understood through this picture.

A specific place for information science can be identified in two respects. First and broadly, as being the only discipline concerned with the totality of the communication chain / information domain matrix; which make information science very much a generalist's discipline. Second and more narrowly, as having a unique focus in the study of aspects of information behaviour and information organisation which are invariant to technology changes, and applying the understanding gained.

If this picture is in any way acceptable, then it suggests a number of consequences.

First, and perhaps most important, as suggested at the outset we should stop apologising for ourselves and our discipline.

Second, we should resist the temptation to leap upon passing bandwagons, saying that this or that technological or social innovation is what we are really all about. In my own experience, I have known this happen with, *inter alia*, the online intermediary role, the development of what were then termed 'text retrieval systems', knowledge management, the evaluation and accrediting of internet information, and the instilling of information literacy. All these are, or were, worthy activities, but none is, or could have been, the basis for a discipline or profession.

Third, we should realise that we are in an excellent position to interact with, take from, and give to other disciplines and professions, from a central, and indeed strategic, position, based on our 'information generalist' stance.

Fourth, we should be prepared to take a long-term view. The papers in Alan Gilchrist's book reflect on fifty years of information science, and the same period is also covered in an analysis of information science education at my own institution (Robinson and Bawden, *Journal of Information Science*, in press). Of course, if we consider also documentation, library science, and the other disciplines and professions which have been based on the information communication chain, then the perspective is longer still. At all events, although we must of course be prepared to respond to rapidly changing events and contexts, it is good to think of the longer term of developments.

Michael Buckland comments that he sees a field that "has expanded steadily but evenly, and perhaps is diffusing its separate identity through increasing engagement with adjacent fields". I think I agree.