

Is There Any Viable Definition for LIS?

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Abstract

In this paper the author argues that in spite of the expert' effort to find a fundamental basic for the LIS discipline still there is a lack of theoretical basis.

Methodology: the methodology in this paper is content analysis in which some famous experts' sayings are analyzed.

Findings: In this article some sayings from several distinguished scholars were considered and their statements were analyzed

Originality: despite many efforts from the experts still there is a lack for a fundamental theory for LIS without which this discipline can not stand tall along with other disciplines.

Keywords: Library, Librarianship, Information science, Information studies, Meta science, Theoretical foundation.

Introduction

Nowadays the library and information science (LIS) has reached its highest degree of attention and I think it is mostly due to the electronic development. By electronic development (Vickery, 2008b) which is presented through internet and intranet activities, one may consider that it is the librarianship which has got its real place; but one may argue that technology and especially information technology has changed many disciplines and subjects. It would be much better to say that this discipline has got much benefit from technology development due to its nature, i.e. information, book and knowledge. Although being an important phenomenon, change cannot nevertheless alter the structure and nature of any discipline. And if they are subject to change, no entity would exist (Vickery, 2008a). Every discipline and field of study must have its theoretical or philosophical foundation first; in that case, technology will certainly help it to be more exposed and widely used.

Although being very essential and well-known every where and in any time, librarianship and then information science suffers from lacking a theoretical basis in comparison with other disciplines. These days there exist a lot of debates and controversial discussions among the rhetoricians who try to find an appropriate basis for library sciences as well as for information studies.

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cians who try to find an appropriate basis for library sciences as well as for information studies.

This article aims to answer some questions as follows: Is librarian the best designation for the specialists in this domain? Are the famous librarians or information specialists satisfied with the lack or uncompleted definition for the discipline? Are there any theoretical

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shortcomings in this field? Does this discipline challenge specialists in other fields, such as those in communication? Is there any consensus among experts in this domain?

Herein, I am trying to discuss several viewpoints of distinguished scholars in this field and to examine whether an agreeable and viable definition for LIS could be reached. Although it is quite evident that the experts in LIS have made their efforts to find an acceptable foundation for the field, the result has not reached consensus so far. Therefore, some try to define a relationship between LIS and philosophy of science (Hjorland, 2005); others endeavor to find some similarities between communication and information, while the third group tends to relate LIS with discourse analysis (Budd, 2001). Zins (2007b) in his critical Delphi study for information science has tried to find a solution; but, I think, he did not reach a reasonable stable point. In his research, there is a variety of definitions made by about 57 experts from all over the world which show the differences and their dissatisfaction of the subject. The number of issues they have agreed on varies from one example to nearly 30 ones (Zins, 2007a). This might lead him to propose that:

The field of Information Science is constantly changing. Therefore, information scientists are required to regularly review—and if necessary—redefine its fundamental building blocks.

He also tries to investigate the terms data, information and knowledge and even message to define the case. Some of his passages are as follows (2007a):

These concepts are interrelated, but the nature of the relations among them is debatable, as well as their meanings. Many scholars claim that data, information, and knowledge are parts of a sequential order. Data are the raw material for information, and information is the raw material for knowledge. However, if this is the case, then Information Science should explore data information's building blocks and information, but not knowledge, which is an entity of a higher order.

But here, he confirms that the two terms information and knowledge in relationship to each other are confusing, as he states:

Nevertheless, it seems that information science does explore knowledge because it includes the two subfields, knowledge organization, and knowledge management, which can be confusing

For this reason, he then emphasizes that the name for the field of LIS is not acceptable and he proposes the name *knowledge science*:

Should we refute the sequential order? Should we change the name of the field from *Information Science* to *Knowledge Science*? Or should we go to the extreme of excluding the two subfields of knowledge organization and knowledge management from information science?

In his valuable article about the emergence of information science, Vickery (2008b, 13, and 17) emphasizes that technology has had a great effect on the emergence of information science. But in another of his articles (2008c, p. 4) after a long discussion, he proposes several statements as the basic theory for information science (IS). One is message interpretation. The other one is the effectiveness in information transferring, and he says: "we might say that this is a theory as to the nature of message interpretation". The last statement which he advocates for the information science theory is "measurement of the information received". Finally, he doubts whether the "reduction of uncertainty" in IS with the theory of Shannon - Weaver is helpful. Nevertheless, at the end of his discussion he asks:

Does what has been discussed above suggest elements of "a general theory of information? Or is there a lot more to it?"

Budd (2001, p. 256) in supporting Bakhtin's thought of rethinking of public services in libraries concludes that (p. 262):

The need for the concentration between conceptual frameworks and practice is not trivial; it is essential to effectiveness in librarianship. ...Theory and practice are not separate entities, with the former being abstract and the latter concrete. Bakhtin's thought provides us with a framework for investigation of information seeking in practice in two essential ways: it offers a means for observing the contextual or noncontextual communication in the act of seeking; it offers a theoretical basis for understanding that communication. In short, his thought provides a way to move toward praxis in both the action of information seeking and mediation, and the inquiry into such action.

Describing Jesse Shera's view as a socialist of knowledge, Budd (2002, 437, 8) indicates that he is still in the mood of users and social application. His statement is much similar to the field of communication.

Belkin, Oddy, and Brooks (1982, pt.1) try to emphasize on anomalous state of knowledge (ASK). They state:

For the future, what we need is classification which will help us to select an appropriate retrieval strategy; that is, a classification with predicative power. Our first effort, however, have been less ambitious. We have tried to find a classification which is descriptive of people's problematic situations which can be algorithmically generated. This classification may or may not be useful for determining how:

- (a) the representations produced by the text analysis procedure are closely related to ASKs, and
- (b) types of anomaly are reflected in corresponding types of structural features in the representations.

We may expect a classification of representations on a structural basis to classify ASKs in a meaningful way.

Hjörland (2002, 430) also emphasizes on domain analysis and believes that indexing and retrieval must do their best in every subject separately:

Indexing and retrieving information is always specific. Main stream IS has, however, largely ignored the way different domains may put different demands on systems for organizing and retrieving documents. A stronger focus on different domains may make our field more realistic and our masters more relevant in different environment. Such research might benefit by co-operating with, among others:

- producing special classification and thesauri;
- bibliometrical studies;
- epistemological and critical studies' and
- terminological studies, and LSP (languages for special Purposes), discourse studies.

Hjörland (2000, 2002 in Zins, 2007a) also states that classifications always reflect (consciously or unconsciously) the theoretical and philosophical approach of the field being classified.

Anyway, there are many controversial statements here, so an article cannot afford explaining the whole literature and debates.

Discussion

As mentioned above, it is very difficult to consider all scholars' view in one article. But it may be possible to consider and analyze the stated viewpoints of distinguished researchers which might have got some support from others.

I think the varieties of definitions and tasks given to this field by the scholars might have led Zins to state that the field of LIS is an ever changing field. I believe that all entities in the world experience a kind of change, but if change influences the deep parts of an entity and alters its fundamental parts and modify its structure, we may not call that entity the same as it has been altered to another entity. Herein, if Zins by addressing the change meant slight alteration in the discipline of LIS without changing its foundation, that may be considered reasonable.

Although talking about the nature of data, information, and knowledge is interesting, in my opinion it is not the main aim of the so called LIS discipline. Talking of information as building blocks and the information receiver as a person whose brain receives those blocks in a passive way, as was believed in behaviorism, is not mainly helpful in this discipline. I believe that the function of this discipline is to retrieve data, information or knowledge, no matter what their definitions are. Defining these entities as I think is the task of other disciplines, such as epistemology. As a matter of fact, we do not work with tacit knowledge in LIS; rather, in this field one would like to find and use information or knowledge, whatever their definitions are! The following provides some definitions Zins (2007c) brought in his articles:

"Subjective knowledge" is equivalent here to the knowledge of the subject or the individual knower, and "objective knowledge" is equivalent here to knowledge as an object or a thing. Subjective knowledge exists in the individual's internal world, while objective knowledge exists in the individual's external world. In this context, they are not related to truthfulness and arbitrariness, which are usually attached to the concepts of "objective knowledge" and "subjective knowledge". The distinction between subjective knowledge and objective knowledge is essential. Still, it differs from the distinction between private knowledge and public knowledge.

I would like to state although I agree with changing the name of the field as Zins suggested, I am not convinced with his designation. To explain more, LIS suffers from the name and naming, especially in some languages such as Persian (Fadaie, 2008). The author in his article *In Search of a New Identity for LIS* proposed to call it *Metadata and Information studies*. To him, *Knowledge science* recommended by Zins (2006) is rather vague because there is some overlapping in the meaning of science and knowledge and it may not convey what the author intends to say by this name. Did he mean merely the experimental science for knowledge (tacit or explicit)?

Vickery (2008a) emphasizes on the effect of technology on LIS as a great change factor. The author really agrees with him, as technology awakened the LIS scholars about the importance of this discipline and gave them motivation to find some new definitions and theoretical foundation for the field. In fact, by emergence of electronic technology we came to understand the significance of information and knowledge. But Vickery in his articles tries to investigate a theoretical basis for this discipline. As mentioned above, he proposes with doubt three concepts as: *message interpretation*; *the effectiveness in information transferring as the nature of message interpretation*; and *the theory of the measurement of the information received*.

The author really understands what Vickery does for finding a theoretical basis for LIS; but he thinks Vickery emphasizes mostly on users and communication. As is obvious, the three concepts "message interpretation", "effectiveness in information transferring in message", and "the measurement of the information received" all imply users' point of view. Message interpretation may not be in the field of LIS or information retrieval, because interpretation by user may create a new idea or information and the question still remains unsolved. That is, in information retrieval or

LIS do we create new information or retrieve it? The author believes that the users' point of view is very important but although LIS has something from communication discipline it differs from it. One must not confuse communication discipline with LIS. Vickery may be thought to be successful in proofing his ideas as mentioned; nevertheless, his idea has more tendency to establish theoretical foundation for communication rather than LIS.

In defining Bakhtin's theory of dialogism and information seeking, Budd (2001) also explains LIS through communication. That is, similar to Vickery, by discussing dialogism, he is trying to find out a theoretical basis for communication instead of LIS. If we accept that communication and LIS are two separate disciplines (with some overlapping), we must accept that his efforts are mostly allocated to the former rather than the latter. His description (Budd, 2001, 261) of Jasse Shera's position on social application of LIS confirms this.

Anomaly state of knowledge (ASK) which is supported by Belkin, Oddy, and Brooks (1992, pt.2), as the author thinks, is also mostly out of the domain of LIS discipline. Because when we talk about anomaly state, it means that either the user does not know what s/he wants and this comes in the realm of communication to discover the real intention of the user, or the server (man or system) is not sure about what it has or is not certain about how to provide the information; so it refers to obscurity in the retrieval system. In this case, the retrieval system must try to clear out the holdings as well as to better introduce the system organization to users. Considering the mentioned obscurity, is there any place for anomaly state of knowledge? But as Budd describes, it refers to philosophical statement of word and speech. Budd declares that the word is two-sided; one for the interviewer and another for the interviewee (Bakhtin, in Budd, 2001, 259). This may imply that information does not exist and it may come to being because of dialogical communication. If so, to the author's view it is not in the realm of LIS; rather, it may fall in the realm of epistemology and communication. Besides, one either knows what information or data is and asks for it or does not know it. In the first case, s/he may ask for the place or the situation of information and the needed information/ knowledge is clear for the user. In the latter case, s/he may not be able to talk about the information and knowledge because s/he does not know what s/he wants and must talk with somebody such as reference librarian to clear out and describe it. In this case the interviewer or the reference librarian tries to clarify the request and provide the user some options to make him/her understand what s/he really needs. In any case, the author thinks that this also cannot make a theoretical foundation for LIS.

Although Horjland's view on domain analysis is very useful and helpful, it cannot create a theoretical basis for LIS.

What the author is going to argue here is that LIS (which he prefers to name it information retrieval (IR), and he has discussed it in a published article, Fadaie, 2009) can find a theoretical foundation provided that we purify the domain and redefine it according to what we expect from it. If we compare an LIS system with a store, it may help to understand the situation better. Any store has two sides: the user side and the provider side; the latter is mainly responsible for retrieving the needed information. You can put these two at the extremes of one spectrum and one may stand at any point of this spectrum. In putting emphasis on any side we can assume three states: in the first case, the provider (as one who retrieves) is the main point and focus is on him. The other state is to define the user as the main point whose needs must be satisfied, and the third state is to think about the two, equally. In recent decades, according to the author's view, we have paid much more attention to the users and neglected the other side which is the provider. This new look towards the users' needs might have occurred because (1) scholars emphasized on some new philosophies such as pragmatism, pluralism and democracy, and (2) we have defined LIS as a mere social activity. In such philosophies the users are the main point and it is s/he who defines the needs. One may agree with this idea somehow if s/he believes in them, but it must not lead to ignore the other side's essential and precise responsibility.

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Here by "ignore" the author means that the producers provide too much excess information from wherever they find and offer it in their sites or search engines which causes information pollution and confusion instead of purification. This does not result in a user-oriented approach. In my opinion however, the providers should not be free to supply whatever information they want. Furthermore, it should not be considered only the users' task and obligation to try to become accustomed to the producers' conditions. Besides, in most cases the providers emphasize on the users' viewpoints not because they want originally to satisfy their information needs rather they mainly try to increase their supremacy and economic profits.

To explain more, a desirable information store is not one which collects whatever people need as well as what are unnecessary to them. If the providers offer too many things which are not needed or desired by users, it may cause to distract most people from what they really want. The spams are one example in the side of information providers and its search engines manufacturers (Fadaie, 2004). When you search some information and receive in a very short time more than e.g. 150 thousand items or more, how can you deal with them? You just open a few files and ignore others and you are not sure about the result so far! This might be because the focus of the information providers is not the real needs of users. Indeed, in many cases the main motivation of search engines and information providers is their tendency to increase their information dominance, fame, and economic settlement. Case (2007, 103) describes this situation as "information overload and anxiety".

We may compare an information provider system with medical practice, too. In fact, the main physician's task is not always to ask too many questions from the patients. But sometimes if he or both, the physician and the patient, do not realize the problem the dialogue is helpful for a better treatment. Here, I think, the dialogue between user and librarian is not always the main task of LIS discipline, but it is necessary as preparation activities and must be regarded. Therefore the dialogues and communication activities or discourse analysis (Budd, 2006; Simmons, 2005) or as McCook affirms (2001, 127) public library services as a channel for authentic discourse are all necessary for better retrieval from the user's perspective. But all these actions are social acts (Budd, 2006, 72) and if we consider LIS only as a social service the other side which has not equally gained attention is the side of information provider who must prepare the organized information in a way that the user can find his or her proper information need with no difficulty. When dialogue becomes the main core in LIS or information retrieval, it is because either the user does not know what s/he wants or the retrieval systems (including classification and indexing system) are not in apt situations. Take note that the user does not always have enough time to spare on the job and being stuffed with so many items which may not help him. Case (2007, 100) states:

Patrick Wilson (1995) points out that filtering behavior (or "nonuse," as he calls it) is both efficient and perfectly rational if it is a matter of conscious *policy*: being presented with more information than one could absorb ... being burdened by a large supply of relevant information, that is, forced to spend more time and energy on assimilating new information than one would like to do ... information one thinks to be probably relevant but does not use because of lack of time. (pp. 45–46)

Here using mirror metaphor may be useful. In LIS or as I preferred to call it information retrieval (IR), the information providers must act as a mirror. As you see in Figure 1, the main task of LIS is to retrieve the information/knowledge, and for this purpose it must be organized in a way that the user can find his/her needs easily. Of course those, who do not clearly know what they want, may be helped by means of dialogue, discourse or communication through the process of reference librarianship or information analysis. Information pollution and confusion which is a trouble now is mostly due to overloading of information from the provider's side. It is the matter of

overwhelming with information instead of its purification. The users' cultural and environmental aspects must also be taken into consideration (Burke, 2007). Figure 1 may present more:

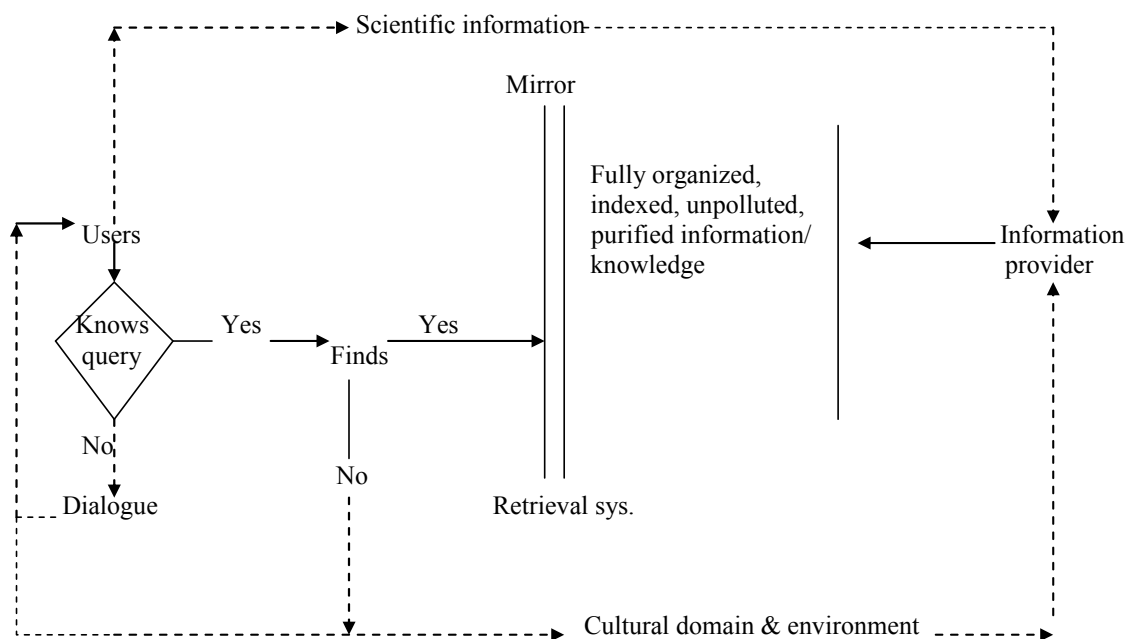


Figure 1. Information need and its retrieval and providing

Conclusion

The author believes that although LIS discipline is important, still there is a lack of theory which holds it back from being prominent among disciplines. One mistake, he supposes, is due to the fact that the idea of librarianship was derived from library as a building (Fadaie, 2008), while the library is created by human real needs for retrieval of information. In other words, it is true that before the industrial age there have been libraries all over the world, and it is true that during the industrial revolution they expanded rapidly and led to the vast collection of books and other documents; but the main fact is that the concepts of categorization and classification for retrieval have been at the center of every body's mindful life, even prior to industrial age.

Another mistake is that we have highlighted much more the user's attitude and behavior, which is true in its place if it is defined in a correct way, but we have neglected the role and responsibility of the providers as those who prepare the primary basis for accurate retrieval. As mentioned above, the experts are trying to develop a theoretical basis for LIS discipline, but the dilemma is so complex that up to now they have not reached a satisfactory one. Some believe that this discipline is so unstable that we must modify it as an ever-changing field. Others try to find foundation based on the users' side as their behavior in information seeking, communication, discourse analysis or dialogism. These experts due to the new philosophies such as positivism, pragmatism and democracy try to maximize the social aspect of LIS; while in opposite side, it is the provider who is responsible for acting more accurately to meet the real information needs of the users. As mentioned above, the providers who possess technology and money do not much respect the users' ease and comfort in information retrieval process. That is, the information superpowers try to

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monopolize the information gathering and information dissemination in their own will. Therefore the experts have to try to search for alternative strategies in the side of users.

One may be so glad to hear that, the librarian or information specialist' duty is so vast that covers or overlaps several other disciplines. Also they may state that, for this reason they have considered this discipline as an interdisciplinary one and the librarian with many responsibilities. For example, Yoder (2003) states: "Cyborg librarian as a teacher, a guide, a machine, a consultant, a specialist, a salesman, and much more!" But this poly-task role may bring some sort of false proud as well as ambiguity, whilst the problem might still remain; that is, this discipline has borrowed its real parts from other disciplines. Thus, although some ideas such as communication, dialogism, discourse analysis and the like are very interesting and attractive and apparently expand the duty and responsibility of LIS specialists, they cannot bring any powerful and stable theoretical basis for it.

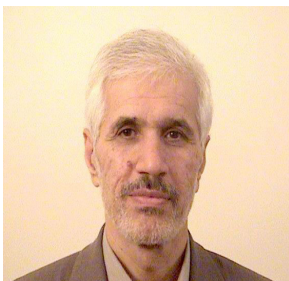
Therefore, the author believes that we have to redefine LIS and search for its original mission. If we accept that the main duty of the librarian and information specialist is to retrieve information or knowledge which already exists, just like anyone who learns and then memorizes in order to retrieve, many problems in this field may be alleviated. The author (Fadaie, 2009) has a new definition for this discipline and has stated it in an article named: *The LIS Discipline or Retrieval of Information: a Theoretical Viewpoint*. He also emphasizes on indexing, with the three functions of condensing the information in a document, providing a bridge between the author and the researcher, and acting as an instrument that governs search strategy (Bloomfield, 2001). He believes that, the only perfect definition remains in successful retrieval. The domain analysis then may help in better retrieving the information.

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Biography



Gholamreza Fadaie, Ph.D in LIS is professor in Faculty of Psychology & Education, University of Tehran. Iran. He has about 14 books and more than 30 articles in Persian. Also he has several articles in English and Arabic. Four of his English articles have been published in *Cataloging and Classification Quarterly* journal in 2004 and 2005. He has some new idea about classification and philosophy of LIS.