Community, Identity, and Knowledge: A Conceptual Framework for LIS Research

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Abstract

Communities are a source of identity. Every community has its distinct traditions, values, and norms. Communities provide a wealth of organized and deep rooted knowledge, which builds from countless interactions of various socio-political, socio-economic, and socio-cultural attributes that occur over time. This knowledge becomes the property of that particular community and plays an important role in shaping the identity structures of its members. The emergence of various communities, e.g. professional, academic, and virtual has provided the opportunity for individuals to acquire diverse knowledge by assuming membership in these communities. The interaction of various sub-identities of an individual through his/her membership in different communities continuously shapes the learning, thinking, and perceptual environment, which forms the nature of experiences, value preferences, and knowledge arrangements. This intricate and complex system of socialization shapes the identity of a person. The role of communities in shaping the personalities of its members depends on the nature of the knowledge that is organized in its socio-cultural traditions. Analysis of an individual's community affiliations can enable the researchers to comprehend the role that community specific knowledge plays in forming the identity. Consequently study of community memberships of an individual can help us to understand the identity dynamics of a person; furthermore examination of community knowledge can shed more light on social interaction process. Community knowledge, individual knowledge, and identity are the three constructs that need considerable attention in order to broaden and deepen our understanding of the relationship between a person and the community.

This paper has taken the aforementioned stance to propose a theoretical framework. A framework that calls for the analysis of different interaction processes not only at different levels but also from diverse perspectives. It is hoped that proposed framework will provide new viewpoints to LIS research and resultantly will benefit both the academic as well as the professional practices.

1. Introduction

The concept of communities[1] gained quite much of attention in social science research (Komito, 1998). The notion of community is examined in various academic disciplines e.g. organizational studies, education, and information science (Cox, 2005).

[1] Community consists of persons in social interaction within a geographic area and having one or more additional common ties (Kaufman, 1959, p. 9)

The role of communities in developing the sets of norms, beliefs, and shared understanding of a phenomenon is well acknowledged (see e.g. Burke, 1991; Stryker and Burke, 2000; Denison, Hardy, Johanson, Stillman, and Schauder, 2002). Communities facilitate social interactions among its members and foster the process of identity formation. According to Komito (1998) norms developed within a community guides the behavior and enable the members to develop *collective identity*[2]. It is important to understand the mechanism that enables the actors to develop shared understanding i.e. the underlying structure that allows the members to interact and to develop a sense of identity. Multiple communities thrive in a society and have distinct frameworks of knowledge, which are the product of specific social arrangements within a society (Holzner, 1983). Commonality of various interests, e.g. educational, professional, cultural etc. becomes the distinguishing features of a community and develops, in the words of Holzner (1983), *situated rationality*[3]. Situated rationality gives meaning to an action for all the actors of a particular community. According to Paine (1976) there are incorporative (as cited in Komito, 1998) and transactional exchanges in a society (Komito, 1998). Incorporative exchanges are based on co-identity and sharing, whereas transactional exchanges are based on differing interests. Increasing diversity and informatization[4] among many other factors, leading to the development of diverse communities both in physical and in virtual world. Improvements in the configuration of information (Glazier and Grover, 2002), in understating the nature of interactions (Belkin 1996), in making these interactions successful (Hjørland, 2003), and in representing socio-cognitive concepts (Ingwersen, 1996), are some of the primary concerns of LIS. It is the contention of this paper that LIS can address the aforementioned issues from a different theoretical perspective, which will examine the varied relationships among community, self, and knowledge. It is hoped that this guiding lens will enrich our understanding of knowledge construction, its structure and hierarchy. In addition, the

[2] According to Komito (1998) collective identity is the shared norms and values within a group

[3] According to Holzner (1983) "The concept of situated rationality means that actors tend to proceed rationally within their frames of reference, given a situation in which they find themselves and given a host of assumptions which are not likely to be subjected to detailed scrutiny " (p. 199)

[4] Informatization is a phenomenon that signifies the increasing influence of information and communication technologies in the global society (Kluver, 2000)

theoretical framework will enhance the disciplinary bounds of LIS and will bring new awareness that can ultimately guide to the process of theory construction.

2. Literature Review

Community, identity, and knowledge are the integral constituents of a society. Communities play an important role in shaping premises, which in turn guide the social action[5]. According to Skyes (1951) "our understanding of the forms of social action cannot be completed unless we have some idea of the knowledge with which the individual and the group operate" (p. 376).

The action of a group or of an individual is based on knowledge that serves as the premise of an action. Knowledge is constructed through interactions[6] as well as actions[7] of individuals with organizations, institutions, groups, and other humans. Fuller (2005) considers professions and disciplines as vehicles for personifying knowledge in people.

The self acquires knowledge through socialization in communities. The acquisition of knowledge in different social contexts leads to the formation of distinct individual identity. Hogg and Abrams (1988) describe the concept of *identity* as "…a person's knowledge that he or she belongs to a social category or group" (as cited in Stets and Burke, 2000, p. 225). The preceding argument raises the question: how does a person knows that he/she is a member of a community (i.e., how that awareness arises)? According to Barnes (2005), learning takes place through two processes: a) the receipt of information stimuli from the external physical environment, and b) the awareness of a social context, the experience and exposure to the classification system of a community (p. 152). An individual acquires knowledge through interacting with the physical as well as the social environment, Fuller (2005) describes the classical political economic conception of knowledge as an institution that develops from the interactions of various persons with a shared understanding of achieving different goals. Cooper (2004) acknowledges the uniqueness of individual experiences and also the importance of

[5] Social action refers to the actions that are taken by giving consideration to the action of others
[6] The term interaction depicts the focus on the relationship among persons (Kaufman, 1959)
[7] The term action depicts the focus on time sequence (Kaufman, 1959)

agreement on the meanings of concepts that ultimately makes the human communication possible.

Knowledge has both a physical and a conceptual structure; the physical structure includes design, format, and content, whereas the conceptual structure is related to the meanings and semantics (Ward and Reed, 1983). Understanding of these structures and their interrelationship is important for, what Ingweresen (1994, 1996) describes as poly-representation, a representation that takes into consideration the knowledge structures of all those who are involved in information interaction. Knowledge institutionalized in various socio-cultural institutions develops the socio-cognitive maps of individuals and creates awareness of belongingness to a particular community/social context. This process forms an individual's identity structure. Identity can be viewed as a:

1) Culture of a people
2) Common identification with a social category
3) Parts of a self composed of the meanings that person attach to the multiple roles he/she plays (Stryker and Burke, 2000, p. 284)

These concepts have distinct meanings and theoretical consequences, e.g. identity as awareness with a social category emphasizes the development of a common understanding of standards and principles that are specific to a community. However, identity as a role stresses the interactions among the members who will have different roles, and therefore different expectations about the behavior. A person who is a member of different communities has multiple roles, and therefore multiple identities. According to Stryker and Burke (2000) "…identities within self are organized in a salience hierarchy reflecting the importance of hierarchy as an organizational principle in society" (p. 286). By accepting the hierarchy of identities within self, it seems reasonable to infer that knowledge pertaining to these identities is also hierarchical. As knowledge is constructed through interactions in communities, the relative importance of various communities in shaping one's identity is also hierarchical. Communities are a part of society and have a structure, which in turn gives order to different social processes. Individuals, on the other hand, also have an internal structure that contains knowledge about meanings, perceptions, and expectations (to name few social constructs). The knowledge structure

of a community as well as that of an individual interacts with each other and continuously reforms the knowledge base (see e.g. Burke, 1991; Stryker and Burke, 2000).

LIS is concerned with the interaction among bibliographic records, users, and intermediaries (Hjørland, 2003). This interaction is a process of finding a match between various knowledge structures. According to Toms (2002) information interaction "is the process that people use in interacting with the content of information system" (p. 855). Classification and organization are the fundamental processes that can make the interaction among various knowledge representations successful. However, the process of interaction requires an understanding of the socio-cognitive maps (Ingweresen, 1996), knowledge needs and their structure (Belkin, Oddy, and Brooks, 1982), disciplines, and communities (Hjørland and Alberchtesen, 1995).

In the vein of the aforementioned context, Thellefsen (2004) called for developing a broader understanding of meanings, perceptions, and experiences so that epistemology can be represented with its real essence. This cross-community and multidisciplinary understanding can lead to what Glazier and Grover (2002) describe~~s~~ as *"configuration of information."*[8] Configuration of information however requires the awareness of domain specific knowledge that guides the external posture and internal structure of a community. The concept of poly-representation (see e.g. Ingwersen 1994, 1996) emphasizes giving attention to users' various cognitive and socio-cognitive states. These states develop in certain social contexts that enable the members to attach meanings to cognitive maps, which in turn evoke an action in a situation. Social context is larger than a situation (Sonnenwald, 1999); multiple situations exist in every context. Expectations about the action in a certain situation are related to the knowledge of individuals. Communities impact the knowledge and cognitive maps and provide an important tie between the context, situation, and the action. Buckland (1991) states that information is always situational, i.e. information in one situation may not be information in another. Green (2001) explains the nature of relationships in knowledge organization and

[8] The organization of information in order to meet the needs of specialized disciplines and individuals (Glazier & Grover, 2002)

emphasizes the importance of identifying the relationships as "the expression and manipulation of relationships is perhaps our best hope for infusing higher quality into our retrieval systems" (p. 14). It is therefore important to give due consideration, while developing knowledge repositories and information seeking environments, to communities, individuals, and to the knowledge that develops through various interaction processes.

3. Discussion

Buckland (2003) stressed the importance of research on communities, and its possible contribution in making the user's interaction with the knowledge. From a domain specific perspective, every community represents a distinct set of traditions, values, and therefore the knowledge pertaining to a community would have special characteristics, which if identified can enable LIS to create better information seeking environments. Hjørland and Alberchtesen's (1995) domain analytic approach also called for attention to understand the knowledge of domains/communities.

Smith (2002) while commenting on the 4th CoLIS[9] states, "Themes and questions threaded throughout the conference papers and panels addresses the uniqueness of LIS as a contemporary *intersection of information, technology, people, and society"*[10] (p.2). This statement by Smith focuses on the emerging concern of LIS, i.e. a concern with the design of effective interactions among various knowledge structures. The interaction process can be successful if the relationship between a user and the library can be explored from a different perspective. Libraries serve diverse communities; provide knowledge of different disciplines organized according to certain principles. The interaction between the users and the knowledge requires greater attention to the user, his/her community, and to the knowledge.

Different epistemological approaches have been proposed to enrich the theoretical base of LIS, e.g. Benediktsson (1989) suggested the use of *Hermeneutics* as a framework to

[9] Conference on Conception of Library and Information Science
[10] Italics added

enrich the theoretical foundations of LIS. According to Natoli (1982), the ultimate objective of this methodological framework (hermeneutics) should be to increase the tacit knowledge (as cited in Benediktsson, 1989). Hermeneutics is concerned with the interpretation of meaning (Bleicher 1980, as cited in Benediktsson, 1989), the meaning that is rooted in the communities and social structures. Scholars such as Budd (1995) recommended the use of phenomenology and hermeneutics to develop the LIS knowledge base. According to Budd (1995), interpretation of meaning (hermeneutics) and understanding of essence (phenomenology) are interrelated. In addition to the epistemological frameworks, debates about the disciplinary identity of LIS also raised questions regarding the underlying knowledge premises or prevailing paradigms, e.g. Dick (1995) discussed questions regarding the disciplinary status as well as the identity of LIS and regarded the sole use of positivism as a cause of disciplinary and professional underdevelopment. Smiraglia (2002) noted the progress of theory in LIS from rationalism to empiricism. Grover and Glazier (1986) describe the narrow focus of research as a reason for lack of theory development. Hjørland (1998, 2000) analyzed the LIS practice, theory, and philosophical basis and elaborated on the disciplinary structure of LIS. According to Hjørland (2000), "LIS is a professional domain drawing on ***many kinds of Knowledge***[11]. LIS is both a knowledge producing field and a Knowledge utilizing field…" (p. 502).

A precursory view of the literature mentioned above has a common concern at its core, i.e. to enhance the effectiveness of the theoretical and epistemological premises of LIS. However, this concern is related to the prime objective of LIS (like all other disciplines), which is, the examination of social phenomena (Kim & Jeong, 2006), exploration of knowledge, and its availability to the seekers. It is this objective that is driving the author's effort to propose a new conceptual framework. The previously mentioned discussion provides the theoretical grounding as well as rational for the following framework.

4. Conceptual Framework

[11] Italics and bold font added to emphasize

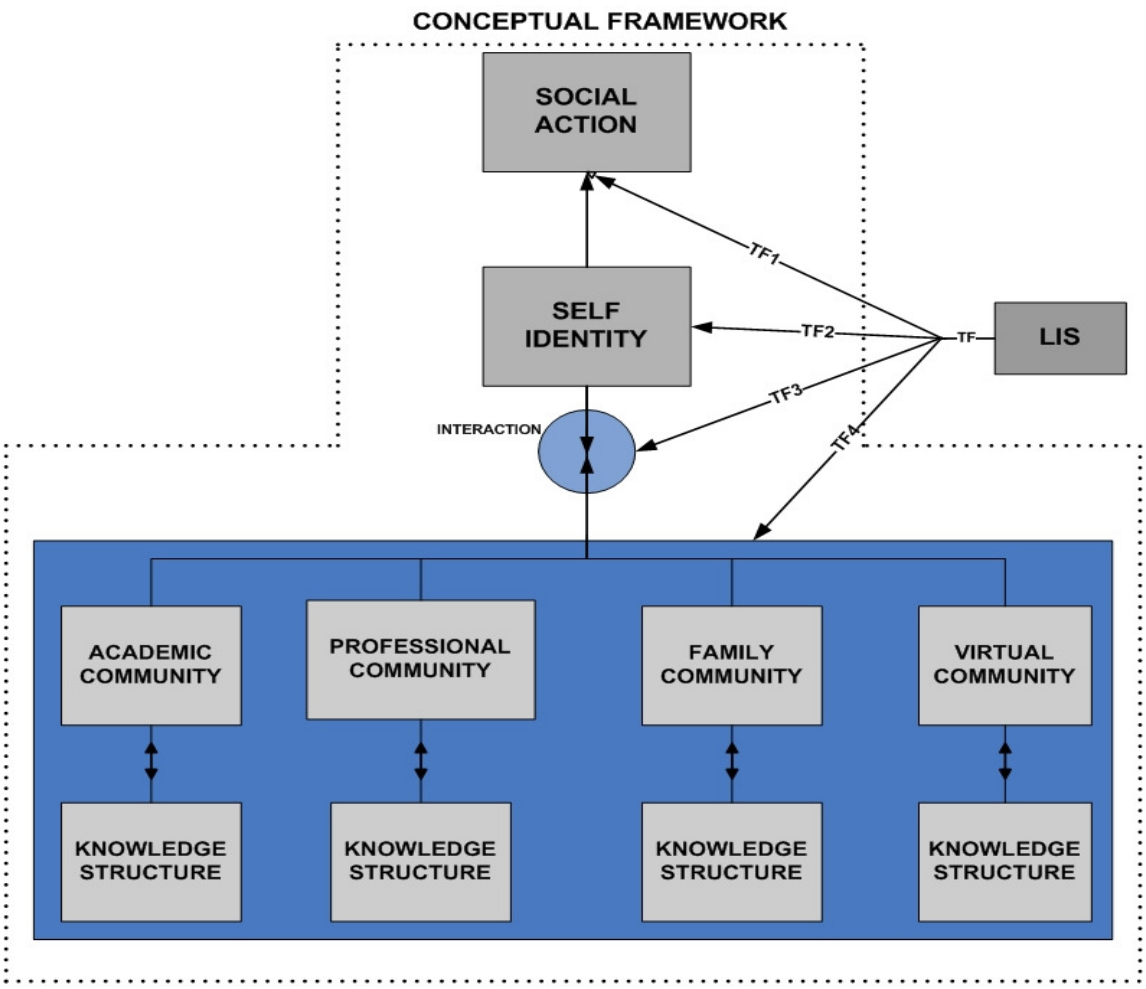
The proposed framework includes communities, self- identity, and knowledge in the theoretical lens of future LIS research. The understanding of interactions among community knowledge, individual knowledge, and the self are the primary concerns of the proposed framework.

The constructs and description of the framework follow:

1) Community
2) Self- identity
3) Knowledge

The theoretical Framework (TF) has four different levels of analysis. TF at the macro-level examines social action, self- identity, community memberships, and knowledge structures. The primary objective of studying these structures within the broader societal makeup is to understand the knowledge and its resultant impact on various interactions. To achieve this objective, the following sub-theoretical frameworks have been proposed within TF[12]:

[12] It was assumed that self in question is a teacher and has membership in four different communities. The analysis can be done by including any kind of role and memberships



TF = Overarching framework
TF1 = Examination of relationship between social action and identity
TF2 = Examination of identity structure
TF3 = Examination of interaction processes
TF4 = Examination of every community and its knowledge structure

a) TF1

TF1 will deal with the study of social action and its relationship with the identity. According to Stryker (1968), self is constructed from various parts that give identity to an individual. The acquisitions of these sub-identities from social relations that are situated in specific communities give rise to *identity salience*.[13] Identity salience is the evocation of a response in a particular situation depending on the knowledge relating to

[13] According to Stryker (1968) Identity Salience can be defined as "the probability, for a given person, of a given identity being invoked in a given situation" (p. 560)

the expectation, i.e. the expectation of behaving according to the norms that are related to act in a certain way in a given situation. Social action has a relationship with the self, and this relationship has two dimensions: 1) general identity, and 2) sub-identities. General identity is the holistic posture of self, whereas sub-identities are the memberships in different communities. LIS being interested in developing knowledge repositories (Hjørland, 2000), building information configuration (Glazier and Grover, 2002), and in creating a successful interaction (Smith, 2002) can greatly benefit by exploring the relationship between the sub-identity and social action. As sub-identity is a community specific construct therefore domain specific approaches, e.g. poly-representation (Ingwersen, 1994, 1996), subject access points (Hjørland and Nielsen, 2001), and classification by using disciplines as structural principles (Beghtol, 1998) can be used to develop knowledge organization systems according to the salient features of individual belongingness to a particular community. This understanding can enable LIS scholars to critically examine the community specific traits of users (e.g. search behavior, relevance judgments, and information processing).

b) TF2

The examination of identity structure is at the core of TF2. Study of various community memberships, i.e. to map one's membership in all the communities and to derive the relative importance of each membership in the identity structure, is the concern of TF2. This process can lead LIS scholars to explore the internal composition of knowledge structure and to understand the role that each community plays in shaping one's posture in an interaction. In addition, this examination can shed light on the identity salience process. Understanding the knowledge hierarchy (Schott, 2001), cognitive overlaps (Ingwersen, 1994, 1996), and relevance judgments are some of the many avenues that can be explored within TF2.

c) TF3

This framework is concerned with the interaction between the self and various communities. The analysis in this framework can take different stances, e.g. at the interactional level, examination of relationships among people and at the observational level, study of objects, events, or projects (Kaufman, 1959). It can lead researchers to recognize the hierarchy as well as construction of knowledge within a community and in its members. Social structure affects the self, and self affects social structure (Stryker and Burke, 2000), and this implies that knowledge of community affects its members' knowledge and vice versa. Consequently, the analysis in this framework should be of the ***interaction***. This examination may permit LIS scholars to have a better understanding of the knowledge construction process both at the social as well as at the individual level.

d) TF4

Finally, the analysis of community and its knowledge structure is at the core of this framework. TF4 calls for the examination of all those processes that contribute towards the construction of knowledge in a community. This can include the application of ethnographic, phenomenological, hermeneutic, historic and cultural approaches (to name few) to synthesize the various interactions within a community so that construction of knowledge, its organization, and nature can be comprehended. The culture of the community as well as its knowledge structure will be examined. This process will help information professionals to customize the services according to the users who belong to different communities. Coherence among various knowledge representations will increase, which will optimize the information interaction process.

5. Conclusion

This paper has presented a new conceptual framework for LIS research. The importance of community, identity, knowledge and the interaction process has been emphasized for future LIS research. It is argued that future research should explore the aforementioned

relationships at different levels of analysis as well as from different perspectives. The primary objective of the framework is to develop a better understanding of interaction processes. It is hoped that application of the proposed framework will bring new insights to LIS research and will enhance its disciplinary bounds.

Acknowledgement
The author wishes to acknowledge the contributions of Mr. Umair Abbasi who assisted in drawing helped in drawing the conceptual framework model.

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