Information practices: the relevance of the concept to information user studies

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The concept of information practices and the recent perspective of studies on information users are discussed. A framework of the human and social sciences from where the concept originated is presented. The history of the studies of information users with the notions of "use studies" and "information behavior", show that the approach of information practices differs. Finally, some recent studies in informational practices are described and discussed.

Keywords: Information practices; Information user studies; Social sciences theories.

Introduction

In this article, we intend to develop a contribution from the presentation of the concept of "information practices", which has been used in several types of research in recent years. It is known that the field of studies on the information users is a research area that emerged in the 1930s. Since then, an extensive tradition of studies has been developed, sometimes called a traditional approach, a positivist approach or studies of information use. In the 1980s, the field experienced a significant conceptual renewal, with the so-called alternative approach, also known as cognitive approach or information behavior studies. In the last two decades, a new research proposal has been developing. It has received distinct denominations, such as "social", "sociocultural", "interactionist" or "constructivist"¹. In this approach, the central element is the concept of "information practices".

In order to understand it, it is necessary to characterize the type of intellectual movement that marks this perspective, as well as the understanding that is made both of "user" (subject, individual) and "information" (and knowledge). In this text, we seek to present the theoretical framework that marks, within the human and social sciences, this type of intellectual movement, as well as situate it within the context of the field of study of information users.

The intellectual framework

The research proposal around the idea of "information practices" originates in the intellectual framework of the human and social sciences taken as a whole, a framework marked by the existence of different schools or research traditions that are structured around certain conceptions. Lallement² presents a systematization of these traditions, identifying the existence of three great intellectual positions: theories oriented to social ordering, that is, to the integration and logic of functioning of the social system as a whole (which includes culturalism, functionalism and structuralism); the theories directed at the contradictions of the social, that is, that examine human life from a macroscopic point of view, like the previous one, but with emphasis on the conflicts that permeate and structure it (Marxism, post-Marxism historicity); and perspectives for social and construction, which take individuals as the starting point of the investigations, giving preferential place to the players (pragmatism, interactionism and ethnomedology). Such traditions can be summed up in the construction of two dichotomies: "agent/system" and "order/conflict", although, the author warns, it is convenient to evoke non-rigid sets with variables that intersect rather than so closely defined territories².

Another way of putting the question is presented by Corcuff³, who distinguishes the classical oppositions present in the human and social sciences: between idealism and materialism, between subject and object and between the collective and individual dimensions. He identifies, from this, two great intellectual movements that sought, in some way, to overcome these dichotomies. The first is composed of those who sought to start from social structures to reach the interactions between individuals, that is,

sought to overcome dichotomies, but with a certain predominance of social structures and macro-social aspects of reality. Included in this movement are authors like Elias, Bourdieu and Giddens. The second is composed of those who sought the opposite, from interactions to reach social structures, among which are Berger and Luckmann, Schutz, Cicourel, Garfinkel, Callon, Latour and Elster.

Bourdieu⁴ presents a partially similar picture, in distinguishing three ways in which scientific knowledge about human and social reality was constructed. The first one, as pointed out by the author, is the phenomenological (represented by symbolic interactionism and ethnomethodology) that analyzes the ways in which the subjects see the world as something natural, obvious, and apparent - and that would, therefore, be on a subjective level. The second is the objectivist, in which are found Marxism and structuralism, which analyzes the objective relations that structure the practices, independently of the individual consciences. Such an approach would neglect the agents' subjective point of view.

In an attempt to overcome the limitations of both trends, Bourdieu⁴ proposes what he calls a "praxiological" approach, which repositions the researcher, who has as a subject matter of study the system of objective relations and also the process of internalization of this system under the form of dispositions for action. The idea of "praxis," that is, the very movement through which subjects act in the world, and as a cause and also a consequence of that action, they build the same world through the expression "praxiological." This is the basic idea that underlies the concept of "practices" in the expression "information practices".

The reasoning behind this idea seeks to criticize both subjectivism and objectivism in the understanding of human action. Subjectivism presupposes that human action is always a product of the will of a conscious subject and capable of projecting itself in the future, anticipating the consequences of its actions. The action is then the result of projects, preferences, choices, intentions and calculations performed by an individual, therefore something that can be explained in individual terms, which also means granting a great autonomy to the subjects. At the other end, objectivism views players as mechanical supports of structures, as if unconsciously moved - their actions understood as the simple execution of social rules, application of externally given meanings. As a way of overcoming this dichotomy, and thus developing its praxiological perspective, Bourdieu develops the concept of *habitus*, which provides at the same time a principle of association and individuation: *partnership* because our categories of judgment and action, coming from society, are shared by all those who have been subjected to similar conditions and social conditions (thus we can speak of a male *habitus*, a national *habitus*, a bourgeois *habitus*, etc.); *individuation* because each person, having a unique trajectory and location in the world, internalizes an incomparable combination of schemes⁵.

It is a type of intellectual movement marked by relational thinking (as formulated by Cassirer), that is, that always seeks the "between", the incessant movement between the structured and the structuring. It is in this sense that studying information practices constitutes a constant movement of capturing the social, collective dispositions (the socially shared meanings of what is information, what is feeling the need for information, what are the adequate sources or resources) as well as individual elaborations and perspectives on how to relate to information (whether accepting social rules or not, negotiating information needs, recognizing one or another source of information as legitimate, correct, current), in permanent tension between the two dimensions, perceiving how one constitutes the other and vice versa. It is in this place that the studies of information practices are located, within the framework proposed by Lallement, Corcuff and Bourdieu.

Several other authors share the same proposal of intellectual movement for the understanding of human and social reality, each of them bringing new elements and illuminating other aspects of the question. Considering its importance for consolidating the perspective of information practices, it is worth mentioning three of them. The first is proposed by Heller⁶. The Hungarian researcher, concerned with an adequate understanding of the Marxist method as an ontology of social being, sought to oppose both the subjectivist historicism (which dissolves human objectification in its immediate social genesis) and the structuralist versions of Marxism (formalists and, above all, anti-historical). It develops the categories of "individuality" and "genericity" in the permanent tension in which they coexist in "everyday life", that is, the "life of every man", from which no one can completely withdraw - but there is no one who lives only in it. This daily life is the life of the whole

human being, because he participates in it with all aspects of his individuality, and is heterogeneous, composed of different types of activity (work, leisure, private, religious). In these different spheres "value" stands out: everything that, in any of the human spheres, is related to the possibilities immanent to the human race. This "value" identified by Heller is objective but has a different objectivity from "natural" objectivity. This value has a "social" objectivity: it is independent of the evaluations of individuals but not of the activity of men because it is an expression and a result of social relations. The example it gives is the gods, who actually "existed", "acted", but as social realities, that is, they existed, served as reference and caused consequences even for those who did not believe in their existence. And it is this kind of "objectivity" presented by Heller that characterizes documents, records of knowledge, sources, services and information systems as understood by the perspective of "information practices": as elements endowed with "value" from the praxis of the subjects immersed in the different spheres that compose the daily life.

The second is formulated by Certeau⁷, who developed a research proposal that arose from the interrogation about the operations of users supposedly given to passivity and discipline. Rejecting a posture of understanding of technical reason with organizer and control of people and things in places, roles and activities, the French researcher developed a theory and a method aimed at valuing the players' inventiveness, for the escape movements of the ordinary man, for the astuteness, resistances and reappropriations by means of which the human being "invents" the daily life. The core of his argumentation is, therefore, the concept of "tactics", to which he opposes that of "strategies."

The third is related to the concept of identity, as formulated by Hall⁸. For this author, identity is a concept historically understood from two points of views: one as something related to origins, similarities, a common unity among a group of people - an essentialist conception, relative to what, underneath differences, sewing and creates unity; and another as a permanent process, something that is never completed, always being built on the field of representations. Identity thus evokes more questions about 'what we become' than 'what we are', which calls for a close look at the points of similarity, these unstable points of identification, made through the positions of the players. "Information users" from this perspective could never be understood as "essences" derived from social and demographic attributes. Through the identities, and the tactics as formulated by Certeau, the active character of the subjects is constructed, but also their relations with the world and the other subjects with whom they act.

The question of the relations between the individual and the social is not the only dimension of the intellectual movement that marks the perspective of information practices. A second question, equally important and in a certain complementary sense, is the nature of the process of knowledge effected by the human being in relation to the real. In this sense, a fundamental contribution is a work of Piaget⁹, who develops a theory in which he postulates that knowledge is not simply acquired. Rather, it is the product of a dialectical relationship between two processes: accommodation and assimilation, that is, the movement through which the world enters and constitutes the subject, at the same time that the subject also constitutes the world, framing it and or trimming it. In this sense, subject and object are formed in partnership, that is, at the same time in a process of knowing. The subject acts and interferes, insofar as he incorporates his experience into the alreadv elaborated schemes of interpretation (assimilation), but also when he modifies his schemes to get closer to reality (accommodation).

What Piaget calls "awareness," another author, in a more applied perspective, calls the "process of awareness". It is Freire¹⁰ who, in formulating a theory of pedagogical practice, also develops an understanding of the dialectical character of the process of knowledge. For the author, it is not a "transference of knowledge", since the human being does not exist in the world only by "seeing" things, but also acting, positioning himself, which implies decision, choice, intervention in reality.

This view of the knowledge process, in fact, reinforces the perspective previously presented in the human and social sciences, as it also represents a type of intellectual movement marked by the search of the "between", of a field of tension between distinct elements and their interactions. In the field of information practices, this idea is translated through the concept of "appropriation," which means thinking that knowledge is not simply something transferred from one person to another, something that has an objectivity in itself (a "data") that leaves one point and reaches the other in the same way. Nor is it the knowledge, the product of an accumulation, of an "affectation" of something external to a certain mental state of a subject.

The history of user studies

The beginnings of user studies can be identified among some studies of frequency of use of scientific periodicals, in different disciplines, performed by Gross and Gross in 1927, Allen in 1929 and Hooker in 1935, although the "official" beginning in this field is normally associated with studies on the use of libraries, conducted at the University of Chicago, in the 1930s. These studies were soon used as diagnostic tools in information *feedback* for the system, by determining material usage rates (guiding element of collection development policies, determining acquisition and discarding needs). Another significant milestone was the Royal Society Scientific Information Conference, in 1948, when Bernal presented a study of how scientists search and obtain information (what they read, the reasons for reading, the use) and Urquhart presented another on the distribution and use of scientific and technological information. A new field was opened to study users in the science and technology environment¹¹.

Although different in some of their objectives and in empiricism, the two traditions share a same theoretical model, around the idea of "use" of information, that is, of physical access to information items and services, of the characterization of this use (by frequency, parts or sectors, by urgency, degree of satisfaction) and its decomposition by socio-demographic aspects of users (by "objective" attributes such as sex, age, profession, income, schooling, among others). The conceptual basis lies between the notions of demand, desire, need, use and requirement, on the one hand, and sources, services, systems and information units, on the other¹². Gathering all these issues and underlying them lies the fundamental inspiration of this approach: positivism.

The positivist model consists in the application of the same methods of the natural sciences (exact and biological) to the human and social phenomena. As a consequence of its application in user studies, there has been a central concern with the establishment of laws of information user behavior, such as the principle of least effort. The purpose of these laws is to establish patterns of behavior that are invariable, that is, valid for different contexts, in different places and times. In addition, such studies sought to "measure" the behavior of users. Most of the studies carried out in the traditional approach of user studies use the questionnaire as a data collection technique, usually composed of questions with the objective of quantifying habits of information search and use behavior and verify access frequencies and degrees of satisfaction. Thus, almost all study of use presents a series of tables in which the results are quantitatively analyzed.

The user, in this perspective, is almost completely devoid of the condition of "subject", resembling a "data processor". This is because it is understood in terms of a "bearer" of a demand (understood, this, as a lack of a specific data) and its satisfaction as the delivery of a documentary item to satisfy this demand. At the same time, the subject is understood in an absolutely functional way, like a piece in a gear: an engineer who needs to complete a project, a scientist writing an article, a teacher who needs to prepare a class, and so on.

It was developed a second approach to user studies through several models that sought to see the existing steps and intervening factors between the manifestation of the information need and the use. Among the steps we can mention the selection, exploration, collection, differentiation, extraction and verification; and among factors, emotional, cognitive, physiological characteristics, work and cultural environment, among others. The conceptual basis lies, in this case, around the notion of the process between the need and the use, passing through the search, and of a cognitive dimension that determines the whole process.

This second approach began to be outlined in the late 1970s. One of the works considered fundamental for its consolidation is *On user studies and information needs*, of *Tom Wilson*, published in 1981¹³. Because it is well quoted, due to its pioneering nature in proposing models of information behavior, and because it influenced the configuration of all other cognitive models that followed, it will be the basis of the argument in this text. The first model proposed by Wilson¹⁴ is presented in Fig. 1.

In this model, we can see the idea of an "activation mechanism", which initiates the entire process of information behavior, which is then decomposed into successive stages, always marked by a double possibility related to "success" or "failure" of the action objectives related to each step.

It should be noted that, although presented as a "cognitive" model seeking to overcome the limitations of the previous model (linked only to use), Wilson's



Fig. 1 — First model of steps in information behavior



Fig. 2 — The second stage model of information behavior

framework reproduces the need / search binary logic as an application of the stimulus-response mechanism of the behavioral psychology. The difference here is the interest in decomposing the steps that mark this process in order to see the role of success and failure, or the demand for such type or resource type, as intervening elements of the process. In the same article, Wilson presents a third model, in which it is possible to identify the factors and dimensions that act in the information process, as can be seen in Fig. 2^{14} .

On the one hand, it is important to emphasize the presence, in this second model of Wilson, of varied factors, linked to the person's attributes (psychological, affective, cognitive), his social role (profession, social position) and environments (work, socio-cultural, political-economic and physical). But they are, all of them, worked as intervening factors therefore, external to the subjects. In this model, the users are "forced" by the external conditions that affect them. The variables act in a way to reinforce, weaken or redirect the stimuli initially placed as propellants of the process of search and use of information. That said, it would be up to the researcher not to precisely study these dimensions (attributes of the person, the social, etc.), but only to identify (or rather measure) their degree of impact in relation to the process, their influence - it would be better to say their interference. They are not part, in this explanatory model, of the very constitution of the subjects, but rather as something external. Therefore, although a cognitive dimension is considered, the human dimension of the users (symbolic beings, social beings) remains disregarded.

It should be noted, however, that at the beginning of the construction of the cognitive perspective, there are some traits that point to a certain concern with the concrete contexts in which information phenomena occur. Bawden¹³ is devoted to critically analyze the aforementioned article of Wilson¹⁴, pointed to it as a fundamental text in the development of user studies. Bawden identifies in this article a pioneering aspect of the studies, the notion of "user's life-world," a philosophical concept brought from Schutz, though Wilson did not develop it in that article. Bawden argues that this idea was subsequently expressed in Vakkari (with the idea of "information in context") by Blair (with the concept of "forms of life" taken from Wittgenstein) and by Savolainen, from the concept of habitus of Bourdieu, already mentioned in this text, and that will have fundamental impact on the constitution of the perspective of information practices.

A number of models followed Wilson's, such as Krikelas', which predicts future or immediate needs, Dervin's from the sense-making metaphor, Taylor's value-added metaphor, Ellis' eight-step information search, the process-based approach of Kuhlthau among many others¹⁵⁻¹⁶. Although they foresee other stages or other directions, they reproduce the same theoretical framework of *Wilson* and, therefore, consist more properly in models of consolidation of the cognitive approach than in elements of its overcoming.

Nevertheless, despite all the elements included in the cognitive studies, it can be seen that the user continues to be understood in a mechanistic logic, one that suffers the effects of external forces acting on it (the variables identified by *Wilson*). Or, it is only a "cognitive" being, that is, a being that accumulates data about external reality and that from time to time, as it feels a "gap" in these data, it resorts to information systems to solve the "anomaly".

The perspective of information practices

As an alternative to the restrictive and "suffocating" nature of the concept of "information behavior" (an individual who, from an external stimulus, seeks an information system to satisfy his information need), some researchers in the field of user studies proposed the concept of "information practice", returning to the idea of praxis as a whole way of acting in which the agent, his action and the product of his action are terms intrinsically linked and dependent on each other, and it is not possible to separate them¹⁷. The design of this perspective consists in the application of a certain way of understanding the subject and the knowledge process, from the theoretical and conceptual starting movements presented in topic 2 of this text.

Noteworthy in this sense is the pioneering ELIS (Everyday Life Information Seeking) model of Savolainen¹⁸. By proposing a certain complementarity between the formal dimension (of work, science, industry) and the daily routines of life (housework, leisure). Savolainen paves the way for a more plural understanding of subjects - more suited to what people effectively are. More than this, it presents a model, as can be seen in Fig. 3, which presents a complementarity also between the individual and social instances, that is, he seeks to see both the active character of the subjects as well as the determinations that affect about them. At the same time, by identifying how subjects act in the face of distinct "life control" strategies (related to optimism and pessimism, to cognitive and affective) and mobilizing distinct resources of social and cognitive capital, the author opens the way for an understanding of the properly symbolic instances that are related to information phenomena. These elements are presented in Fig. 3.

An attempt to construct this theoretical approach, among others, is that of Tuominen and Savolainen¹⁹ from the understanding of the use of information as a



Fig. 3 - ELIS model

"discursive action". From the point of view of social constructionism, the authors seek to understand the language in its dimension of construction of reality. To seek and use information consist, in this perspective, not only actions that are influenced by the structuring elements of social reality but they are elements that shape these elements. Every human action is also an interference in what conditions us. The isolationist, monological and mechanical character of the traditional approach is surpassed - a character that is replicated in the cognitivist model.

Since then, several studies in the line of the study of "information practices" have been developed. Many tried to continue the process of theoretical and conceptual construction of the proposal. An example is the work of McKenzie²⁰, who proposes that the "information practices" would be more term appropriate than "information behavior" precisely to account for the non-directive dimension, that is, spontaneous, with respect to information. The author develops the notion of "serendipity"- the possibility of making important discoveries by chance or, in this case, finding relevant information resources without looking for them. McKenzie seeks to analyze how unexpected situations "summon" the subjects and reinterpret their concrete situation, experience, desires

and expectations, constructing for them a twodimensional model with four phases: active search for information, active scanning, (when situations of *serendipity* happen) and the search "by proxy", that is, through other subjects. Such a model is shown below in Fig. 4^{20} .

Although she does not use the expression "information practices", the researcher Elfreda Chatman presents a very similar approach, based on her theory of life in the round. Articulating concepts such as the "restricted world," "social norms", "worldview," and "social types", it seeks to understand how, in an environment with great social control and predictable routines (a prison), the individual attempts to adapt to survival and search for security²¹. She uses some of the concepts borrowed from Berger and Luckmann about how socially shared meanings are constructed, within them the "appropriate or adequate behaviors" and within them the appropriate information-seeking behaviors - with the identification of boundaries in that individual actions must be maintained, and the exceptional occasions when such limits can be exceeded (in the case of the study mentioned, when information is perceived as something critical, as being especially relevant and when the boundaries of the restricted



Fig. 4 — Two-dimensional model of McKenzie's information practices

world are not sufficient). Such conceptions are constructed mainly by the reciprocally referenced character of the actions of the subjects: people take others as an example, categorizing them in certain frameworks of "legitimacy", imitating certain actions, which begin to constitute crystallized models of action. The author goes so far as to approach the idea of "fashion" in Simmel, an essentially cultural phenomenon and constructed from socialization processes.

In a next line, Harlan's²² research on adolescents who created content (movies, music, storytelling) in a digital environment was developed through grounded theory. The researcher identified five "information practices" developed by the community studied: knowing the community (rules, norms, roles), "aesthetics" negotiating the (developing and representing their identities and tastes). the negotiation of control (how to create content and publish), the negotiation of capacities (skills to create content) and the representation of knowledge (the result of the previous three, producing information as an artifact, and also articulating the actions of reflection, modeling and composing). These practices are crossed by three dimensions: communities of practice, information experiences (participation, inspiration, collaboration, processes

and products) and information actions (obtaining, analyzing and creating content). The merit of the author's work is to present a broad panorama of the different actions undertaken by the subjects and articulate them to the collective dimensions of learning and, above all, the "negotiation", that is, the collective constitution of processes and products.

Another important contribution is that of Llovd²³. The author presents a distinction between what she calls traditional social theories and practical or praxiological theories. She points out that although this second possibility is still little known in the field of information science, it can be extremely useful for the analysis of aspects of human reality such as subjectivity, intersubjectivity, construction of meaning, rationality, among others. Although the notion of "practice" goes back to Aristotle, the author points out that, in the field of cultural theory, its precursors are Bourdieu, with his field theory, and Giddens, with his theory of structuring. Nevertheless, the author develops her reflection from another contribution, the idea of site ontologies of Schatzki, that is, an understanding that social life exists, and is updated, always within a context, is imbricated to it. Schatzki's criticism is to the authors who have promoted a certain separation between the subject and the world. In his vision, subject and world are always

connected through "practices" like dressing, eating, talking, walking, working, studying, etc. In her study of information competence, the author identifies that skills are also a social product, and reflect the social, historical, and political aspects of a specific context.

In the approach to the concept of practices there is, therefore, a progressive approximation to what is properly human in the information users: their imaginative, creative capacity in the appropriation of information; and the collective dimension of its "existence", which constitutes all its acts, among which are those related to information¹.

Conclusion

The use of the concept of information practices in recent research is not intended to supplant the research developed from the perspectives of "use" and "information behavior". Further research-oriented on a utilitarian and/or applied character is still necessary. What is expected with the development of a new concept and the reflexive movement that accompanies it, is to illuminate certain aspects of reality, certain problems, which until then had not been studied (or sufficiently studied). The emergence of a new concept, with all its different manifestations, comes to testify above all to the richness and complexity of the field of the real, a reality that always presents itself as a challenge for scientific research²⁴. This is verified even more incisively in the field of studies of information users, which deals with objects that are also subjects (users) using devices constantly changing (the technical and informational technologies) to deal with something of a fluid and changing nature - information, understood as a "cultural object"²⁵. The field of studies of users becomes richer precisely with the coexistence of different possibilities of study.

References

- Araújo C A Á, Estudos de usuários da informação: comparação entre estudos de uso, de comportamento e de práticas a partir de uma pesquisa empírica, *Informação em Pauta*, 1 (1), (2016) 61-78.
- 2 Lallement M, *Histoire des idées sociologiques Tome 2: de Parsons aux contemporains*, (Nathan; Paris) 1993.
- 3 Corcuff P, Les nouvelles sociologies, (Nathan; Paris) 1995.
- 4 Bourdieu P, Raisons pratiques: sur la théorie de l'action, (Seuil; Paris) 1994.
- 5 Wacquant L. Habitus. In Catani A, *Vocabulário Bourdieu*, (Autêntica; Belo Horizonte), 2017, p. 213-217.

- 6 Heller A. *O cotidiano e a história*, (Paz e Terra; Rio de Janeiro), 1992.
- 7 Certeau M, L'invention du quotidien Arts de faire, (Gallimard; Paris) 1990.
- 8 Hall S, *Representation: cultural representations and signifying practices*, (Sage; London), 1997.
- 9 Piaget J, *The construction of the reality in the child*, (Basic Books; New York) 1954.
- 10 Freire P, Pedagogia da autonomia: saberes necessários à prática educativa. (Paz e Terra; São Paulo), 1996.
- 11 Choo C W. The knowing organization: how organizations use information to construct meaning, create knowledge and make decisions, (Oxford University Press; New York) 2006.
- 12 Line M, Draft definitions: information and library needs, wants, demands and uses, *Aslib Proceedings*, 26 (2) (1974).
- 13 Bawden D, Users, user studies and human information behaviour: a three-decade perspective on Tom Wilson's "On user studies and information needs", *Journal of Documentation*, 62 (6) (2006) 671-679.
- 14 Wilson T D, On user studies and information needs, Journal of Documentation, 37 (1) (1981) 03-15.
- 15 Cunha M B, Amaral S A and Dantas E B, *Manual de estudo de usuários da informação*, (Atlas; São Paulo) 2015.
- 16 González Teruel A, Los estudios de necessidades y usos de la información: fundamentos y perspectivas actuales, (Trea; Gijón), 2005.
- 17 Chauí M, O que é ideologia, (Brasiliense; São Paulo) 1984.
- 18 Savolainen R, Everyday life information seeking: approaching information seeing in the context of way of life, *Library and Information Science Research*, 17 (1995) 259-294.
- 19 Tuominen K and Savolainen R, A social constructionist approach to the study of information use as discursive action. In Vakkari P, Savolainen R and Dervin B, *Information seeking in context*, (Taylor Graham; London), 1997, p. 81-96.
- 20 McKenzie P, A model of information practices in accounts of everyday-life information seeking, *Journal of Documentation*, 59 (1) (2003) 19-40.
- 21 Chatman E. A theory of life in the round. *Journal of the American Society for Information Science*, 50 (3) (1999) 207–217.
- 22 Harlan M A, Information practices of teen content creators: the intersection of action and experiences - a grounded theory study, PhD thesis, Queensland University of Technology, 2012.
- 23 Lloyd A, Framing information literacy as information practice: site ontology and practice theory, *Journal of Documentation*, 66 (2) (2010) 245-258.
- 24 Tuominen K, Talja S and Savolainen R, Discourse, cognition and reality: toward a social constructionist metatheory for library and information science. In BRUCE, H, *Emerging frameworks and methods*, (Libraries Unlimited; Greenwood), 2002, p. 271-283.
- 25 Giddens A, Structuralism, post-structuralism and the production of culture, *In* Giddens A and Turner J, *Social theory today*, (Stanford University Press; Stanford), 1987, 195-223.