

Beyond 'Needy' Individuals: Conceptualizing Information Behavior

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Understanding information users and their behavior is a question of central importance for information research and practice. The paper challenges several aspects of existing approaches to understanding information behavior, including: the focus on individual cognition at the expense of social and affective factors; the construction of information users as defined by their areas of ignorance and uncertainty, rather than their expertise; and the focus on purposive rather than non-purposive information behavior. It argues that only by addressing these weaknesses and developing new research strategies and theoretical frameworks which focus attention on the social processes and relationships which underpin users' information behavior can we hope to develop a truly holistic understanding of the relationship between people and information. The paper uses the author's study of information behavior researcher's constructions of an author (Brenda Dervin) to illustrate how a social constructivist approach can both build on existing approaches to information behavior research and address some of their weaknesses. It argues that social constructivist approaches provide a theoretical lens through which information researchers can gain a clearer picture of information users not as 'needy' individuals to be 'helped', but as social beings, experts in their own life-worlds.

Introduction

Understanding information users and their behavior is a question of central importance for effective information research and practice. The aim of this paper is to provide a critical overview of existing approaches to understanding users' relationship with information and to suggest alternative approaches based both on emerging trends in the literature of information behavior research and a range of other fields. The author's own research (Olsson, 2003) is used to illustrate some of the different insights that a social constructivist approach to information behavior research can bring.

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The article is in three parts. 'Prevailing Approaches' provides a critical analysis of existing approaches to theorising and researching information behavior, especially those associated with the increasingly dominant cognitivist school. 'Social Approaches to Information Behavior' describes the emergence of a range of alternative, socially oriented approaches to understanding people's relationship with information. The paper argues that these social constructivist approaches provide a theoretical lens through which information researchers can gain a clearer picture of information users not as 'needy' individuals to be 'helped', but as social beings, experts in their own life-worlds. 'Constructing an Author' uses the example of the author's study of information behavior researcher's constructions of an author (Brenda Dervin) and her work to illustrate the ways in which a social constructivist approach can lead to insights into aspects of participants' information behavior that prevailing approaches have left under-examined.

Prevailing Approaches

The last two decades have seen a profound change in the way in which we conceptualize information behavior. The influence of writers such as Wilson (1981) and Dervin & Nilan (1986), has led to a paradigmatic shift in research away from the study of systems use and towards the examination of information needs and information seeking behavior. This period has also seen, as noted by Belkin (1990), Hewins (1990) and Pettigrew et al (2001), the growing influence of cognitive theories of information needs, seeking and use.

Cognitivist information behavior researchers have addressed a wide range of questions and adopted a variety of methodological approaches. Shared by all of them, however, is a common object of research: the knowledge structures of individuals (e.g. Brookes, 1980; Belkin, 1990; Ingwersen, 1992). Thus if, as Capurro (1992) and Talja (1997) have suggested, the central object of the cognitivist approach is not information but man, then the cognitivist conception of "information man" (Talja, 1997, 67) is one grounded in a focus on internal cognition rather than external behavior.

The influence of cognitive theory has had a powerful transformative effect, not only on information research, but also professional practice across a range of fields. The view of information as an 'object' to be transferred – and of information practice as the design and management of 'information delivery systems' – is one that has increasingly been challenged by models that emphasise the constructive nature of users' interactions with information.

Yet as with any interpretive framework, cognitive theory brings with it weaknesses as well as strengths. This paper, drawing on the works of a range of critics including Frohmann (1992), Talja (1997), Julien (1999) and Pettigrew et al (2001), as well as my own research (Olsson, 2003), questions some of the fundamental assumptions underpinning cognitive approaches, and argues that they fail to consider some important features of the relationship between people and information. It argues that only by addressing these weaknesses and developing new research strategies and theoretical frameworks which focus attention on the social processes and relationships which underpin users' information behavior can we hope to develop a truly holistic understanding of the relationship between people and information.

Focus on the Individual

Critics such as Talja (1997) and Pettigrew et al (2001) argued that in focussing on the individual, the cognitivist approach neglects the role of social context in shaping an individual's information behavior and that it is therefore "a research approach that omits the fundamentally social nature of all knowing" (Talja, 1997, 70). Pettigrew et al (2001) pointed out that:

The work of information behaviour researchers identified with the cognitive approach has therefore focussed on explaining variations in information behaviour according to characteristics or attributes of the individual and the processes in which the individual is involved... These attempts have resulted in models of the information-seeking process that are context-independent. (Pettigrew et al, 2001, 53-54)

Similarly, Frohmann (1992) and Talja (1997) argued that in considering individuals' mental states/knowledge structures as an object of research separate from their social context, cognitivist researchers perpetuate a mind-body dichotomy central to Western philosophical discourse since Plato. Frohmann argued that most cognitive research adopted a positivist epistemological standpoint. This led, he argued, to a construction of the relationship between thought and the material world derived from the principles of Cartesian dualism – that approaches such as Brookes' (1980) 'Three Worlds' theory

lead to a reification of both “stable and objective ‘knowledge structures’” and “an objective reality, with truths waiting to be discovered” (1992, 370). Thus, he argued, the cognitive paradigm constitutes information behavior as “the production, distribution, exchange and consumption of ‘information’ as given, natural-scientific, cognitive events taking place within radically individualised ‘information processing devices’”(1992, 381). Frohmann (1992) argued that such a model, based on notions of objective reality and individual subjectivity, offers no theoretical framework for considering complex social relations between people and information, such as the political manipulation of truth.

Talja (1997) has questioned the fundamental methodological basis of cognitive research – the question of whether a researcher can ever access another person’s knowledge structures. She argued that cognitivist research is built on a conceit:

... that we have direct and unmediated access to the individual’s mind ... Speech is understood as the unmediated expression of the individual’s original thoughts and experiences ... The individual’s thinking is seen in Platonic terms: as pre-linguistic, immaterial ideas which can for communication purposes, as if in afterthought, be attached onto the signs of language. (Talja, 1997, 70)

Talja questioned the validity of this approach, arguing that speech of all kinds (including in a research context) is an essentially social process, since language itself is a social construct: “... there are no immaterial concepts, categories or ideas ... Communication would hardly be possible without a common frame of comprehension and negotiation. No concepts thoughts or meanings can exist outside language ...” (Talja, 1997, 71).

What cognitivist research methods produce, therefore, are representations not of the participants’ cognitive structures but of the social interaction between researcher and participant. She argued, in consequence, that cognitive internally-oriented approaches to information behavior research are fundamentally flawed, as the researcher can never directly access the central object of their theoretical approach: the participants’ knowledge structures.

Needy’ Information Users

Dervin and Nilan argued that ‘information need’ was one of the “two central concepts of information needs and uses research” (1986, 17). Pettigrew et al (2001, 47) have highlighted the central role of constructions of information need for cognitive information behavior researchers. Belkin (1990), for example, argued that information seeking behavior is driven by a person’s recognition of an Anomalous State of Knowledge (ASK) – that their existing knowledge structures are no longer adequate to resolve their current problem-state. Other influential models of information behavior to position information need and uncertainty as central concepts include: Krikelas (1983), Ingwersen (1992), Kuhlthau (1993) and Wilson (1997). A recent major study by Wilson et al (1999), ‘Uncertainty in Information Seeking’, is perhaps emblematic of the central role that constructions of information need and uncertainty have for contemporary information behavior research.

Frohmann (1992), Talja (1997) and Julien (1999) have all critiqued this focus on information need as the primary instigator of information behavior. They pointed out that this has led to a construction of the user in which “[t]heir ignorance ... rather than their knowledge” (Frohmann, 1992, 379) is their defining characteristic. Similarly Julien (1999) pointed out that prevailing approaches “conceive of users of information systems as ‘children’ or ‘patients’ whose symptoms require diagnosis” (1999, 586). She further pointed out the inequity of the implicit power relations embedded in this construction: “When we construct our positions as experts and our clients’ positions as novices who require help, we set up an unequal

power relationship. In Western societies, accepting help has connotations for the recipient of "inferiority, dependency, and inadequacy ..." (Julien, 1999, 586).

Talja (1997) argued that information users might, with at least equal validity, be defined not by their lack of knowledge in relation to a given problem situation – as "uncertain people who need help" - but rather as "knowing subjects, as cultural experts" (1997, 77).

Purposive Seeking and Affective Factors

Talja (1997) and Julien (1999) have argued that this focus on information need/cognitive gaps has led to an effective limitation on the types of information behavior that researchers in the field examine. Wilson has pointed out that 'information searching' is but one aspect of 'information seeking', which is itself but one aspect of 'information behaviour' (2000, 49). However, Talja (1997) argued that, due to cognitivist influences, it has "been natural in the context of information seeking research to focus on information needs arising from problem situations" (Talja, 1997, 77). This focus on information behavior as a problem-solving strategy has, she argued, led to information behavior research focusing almost exclusively on purposive information seeking.

Julien (1999) argued that the dominance of constructions of information behavior as being about rational problem-solving has had a number of effects on the nature of research in the field, such as the failure to consider affective aspects of information behavior: "We typically construct 'users' as bungling fools whose affective responses are at best only an annoying interference with effective application of cognitive skills to information retrieval but which, at worst, are the primary barriers to information retrieval. (Julien, 1999, 586)

She argued that "affective and rational behaviour cannot be polarized" (1999, 588), suggesting that "people's insistence on human information sources in many contexts" (1999, 590) "is a direct result of people's need for social interaction: the need to establish, develop and maintain social relationships" (1999, 588).

This focus on rationalist approaches may also account for the field's on-going research focus on users' interactions with formal information sources and systems. This, Julien argued, calls into question the depth of the field's commitment to a user-centred paradigm: "[w]e claim that we have considered the user and her needs apart from information systems or services" (1999, 586), but an examination of prevailing research approaches suggests that much research remains "ultimately systems-centred" (1999, 586).

Social Approaches to Information Behavior

A growing awareness of the limitations of prevailing cognitive 'internal approaches' to the study of information behavior may account for the fact that:

Approaches to studying information behavior that focus on social context emerged slowly during the early 1990s and are becoming more prominent. ...social approaches were developed to address information behavior phenomena that lie outside the realm of cognitive frameworks. (Pettigrew et al. 2001, 54)

These social approaches to the study of information behavior have included phenomenological and phenomenographic

work by, for example, Wilson (1997; 2003) and Limberg (1999); and social network analysis research as undertaken by, for example, Williamson (1998) and Sonnenwald (1999).

Further, the last decade has seen the emergence of social constructivist approaches to information behavior research, including Chatman's 'life in a small world' and 'life in the round' (1991; 1996; 1999); the more recent developments of Dervin's Sense-Making (1999); Savolainen's (1995) use of Bourdieu's 'Mastery of Life' and the discourse analytic work of Talja (1997; 2001), Tuominen (1997), Given (2002), McKenzie (2002) and the author (Olsson, 2003). These approaches consider social context not only as a factor influencing the individual information user's cognitive processes, but as the primary focus of theoretical attention.

Yet these researchers were not the first to consider the social context of knowledge creation and dissemination. Nor can the 'social turn' in information behavior research be understood in isolation from developments in other areas in the social sciences. Theories about the social construction of information and knowledge can be found in a variety of fields, including philosophy, sociology and social anthropology.

Social Constructivism

Savolainen has noted that "Western social science has experienced a shift from methodological collectivism (or holism) and individualism to methodological situationalism" (1993, 23). Over the last three decades, the influence of theorists and philosophers such as Schutz (1972), Berger & Luckman (1967) and Foucault (1970, 1972; 1978; 1980), as well as the empirical work of social anthropologists and sociologists such as Bourdieu (1977), Knorr-Cetina (1983) and Mulkay (1991), have led to the emergence of a range of social constructivist approaches to research in the social sciences.

Social constructivism has been described as part of the 'linguistic turn' in the social sciences (Talja, 1997). The nature of language as a social construct, and its central importance for individuals' sense-making, is a key feature of the social constructivist approach:

By social constructionism I understand that people live in a common reality which they largely share with the help of language. Language provides people with vocabularies, i.e. concepts and categories for use in different situations. This vocabulary varies according to the discourses they are participating in. By using the vocabulary people construct meaning or make sense in their lives. (Vakkari, 1997, 456)

Hjørland & Albrechtsen (1995) point out that findings in social psychology about the fundamental role of language in an individual's cognitive processes have had a strong influence on social constructivist theory. The link between the two, a social constructivist would argue, means that even our most apparently individual decision-making processes are, on one level, social constructs.

Dervin (1989; 1999) and Frohmann (1992) have both criticised existing information behavior research for largely ignoring issues of power and power relations. By contrast, Foucault's discourse analytic framework constructs the relationship between knowledge and power as central of central importance. Indeed, it constructs knowledge and power not as separate entities but as conjoined products of the same social processes - knowledge/power (*pouvoir/savoir*):

We should admit ... that power produces knowledge (and not simply by encouraging it because it serves power or by

applying it because it is useful); that power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations. (Foucault, 1977, 27)

Constructing the Author

The ways in which a social constructivist theoretical 'lens' can allow information researchers to see users in a different light can be seen in my own doctoral research (Olsson, 2003). This study examined the social processes that influenced the construction by 15 international academic (information behavior) researchers of the meaning/s and significance/s of an author and her work prominent in the literature of their field (Brenda Dervin). Its findings both built on and challenged existing theoretical constructions of information behavior seeking to address some of the issues and weaknesses raised by critics such as Talja (1997), Julien (1999) and Frohmann (1992).

The researcher conducted semi-structured qualitative interviews, based in part on the 'Life-Line' and 'Time-line' techniques developed by Dervin and her collaborators (Dervin, 1999; Dervin & Frenette, 2001), with 15 information behavior researchers from eight universities in five countries in Europe and North America. Participants were purposefully sampled based on analysis of their published work to reflect a range of experience levels and conceptual approaches. Participants described the events and relationships they regarded as significant in their relationship with the author and her work

Participants as Social Beings

In contrast to many prevailing approaches, the study found that participants construction of the meaning/s and significance/s of the author and her work were an essentially social process. Their interpretations of the author's work were intimately connected to their relationships with their colleagues and mentors, the philosophical standpoint and conceptual framework, and their constructions of existing knowledge in the field. In examining the constructions conveyed to them, participants did not simply ask 'What does this mean?' or even 'What does this mean for me?' Rather, they asked 'What does this mean for me in terms of my understanding of and engagement with my field? My specialization/s and particular research interests? My philosophical and conceptual frameworks? My current projects, current teaching?'

The study found that participants' constructions of the author and her work drew on a complex array of existing knowledge/power structures, derived not only from information science, but a range of other disciplines (see Figure 1 below).

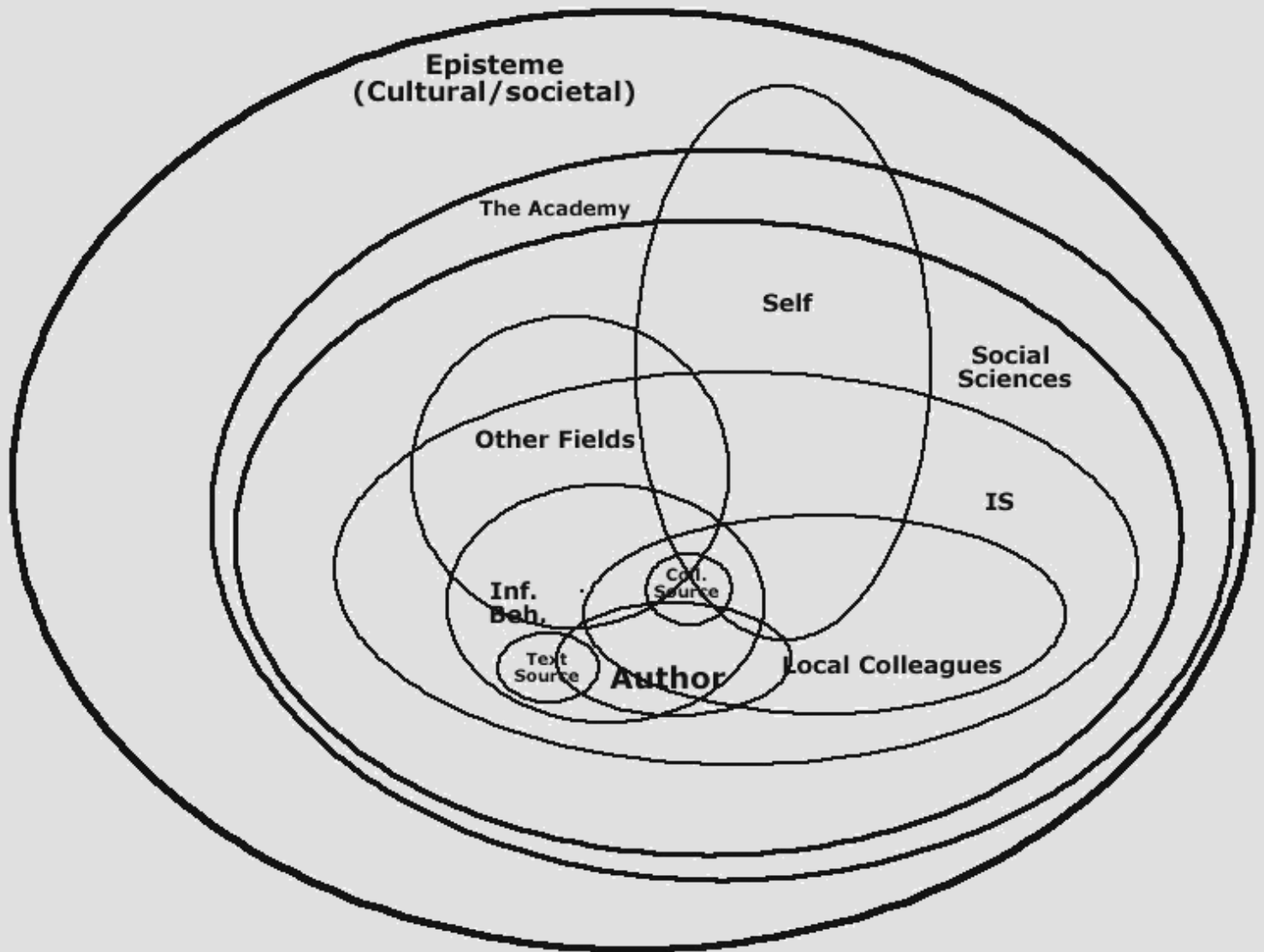


Figure 1: Constructing the Author

For example, eleven participants described their engagement with a particular conceptual framework/school of thought, such as 'Social Constructivism' (4 participants) or 'Cognitivism' (2), as a significant influence e.g. "...I had discovered social constructivism and discourse analysis...And I was from the beginning finding her to be a social constructivist...".

Similarly, 11 participants reported ideas, approaches and works by authors outside information studies as important influences on their constructions of both the author and the field e.g. "...You need to understand that my orientation to her was as a linguist ... I am first and foremost linguist...".

Whether accepting or rejecting an interpretation conveyed to them, it was important for participants to relate their constructions to the views of established authorities. This allowed them to 'justify' their own constructions, both to themselves and other members of the academic community.

Participants' accounts were also very much at odds with a view of information behavior as being made up of discrete information-exchange events. Instead, their stories were about the complex inter-relationship between people, texts and

existing bodies of knowledge. For example, participants' interactions with 'author texts' were commonly mediated by their interpersonal communication with their colleagues, collaborators and mentors – including the author herself. Seven of the eight participants who had an ongoing relationship with the author described it as a significant influence on their interpretation of her written work.

Participants frequently described the significant influences on their constructions in terms of long-term relationships – with other people and with the written work of authors. Rather than a series of isolated encounters with information sources, participants spoke of the on-going nature of their relationships. Each individual encounter (whether with a person or a text) built on the participant's previous experience, enriching their constructions of both the author and their informants.

Social, Role-Related Information Behavior

In addition, very little of the behavior participants described fit with existing models (e.g. Belkin, 1990; Wilson, 1997) which see information behavior as being driven by user's desire to fulfill recognized information needs. Only four of the study's 15 participants reported that any of the significant events in their relationship with the author and her work involved active information seeking on their part. Instead, participants' interactions were far more likely to arise from conversations with their colleagues or academic mentors, attendance at a conference or workshop, or other social activities associated with their role as an information behavior researcher.

Nor would it be accurate to describe most of the interactions participants described as 'serendipitous' or 'non-purposive'. For while participants may not have instigated these encounters as part of an information search, their accounts made it clear that they did not regard them as unexpected or surprising. Rather, they saw them as a normal part of the working life of an active researcher in the field: that part of their role was to be involved in such information-sharing events, both formal and informal.

For example, seven participants reported their introduction to the authors work came through another member of their department – a colleague (5 participants) or a research student (2). These participants emphasised the informal and interactive nature of their discussions, talking about how they occurred "over quite a long time...many months" and contextualising them in terms of their established working relationship with their colleagues: "And we worked together, she worked with me and that's where we did some stuff together".

The relationship between participants' behavior and their role as academic researchers and their expertise in constructing the author and her work in terms of existing bodies of accepted knowledge in a range of disciplines strongly suggest that Talja's suggestion that information behavior may arise "more from selected interests and cultural expertise than a lack of knowledge" (1997, 77) is the most appropriate model for understanding their behavior.

Affective Factors

Participants' accounts demonstrate that participants' constructions of their informants included not only analytical assessments of their knowledge, but also affective elements - a rich picture of their relationship and of their informant as a person. They often described their significant encounters and relationships in affective terms: "I was enthusiastic", "I was amazed", "I was very suspicious ...I was fighting against them". Some participants also talked about their encounters with texts in this way – "I found her something like; I would say a long lost buddy". Their accounts emphasized the importance of their long-term personal relationships (with colleagues and/or with the author) – "we were friends ...we got along well

together” – that friendship both increased opportunities for information sharing and increased the likelihood that meanings conveyed would be accepted.

Given the context of the present study – academic researchers’ constructions of a prominent author in their field – is one in which unemotional critical analysis might be expected to dominate, its findings add weight to Julien’s claim that “affective and rational behaviour cannot be polarized’ (Julien, 1999, 588).

Nor were affective factors only a characteristic of participants. Participants’ accounts indicated that the constructions of the author and her work conveyed to them by other people also contained an affective element. This was illustrated by their discussions of ‘evangelism’ – encounters where the informant/s (whether the author or another person) actively championed the author’s methodological approach and/or conceptual framework. In these cases, the participant invariably talked about their informants’ own enthusiasm for the author’s work, while seven participants commented on the author’s own enthusiasm and zeal in promoting her conceptual approach, her “charisma” in face-to-face encounters. While two participants reported a negative reaction to their informants’ enthusiasm – “Is it only a kind of hype? Because all people talk about Sense-Making, user centred way ...I thought it was just a kind of fashion, it's only a fashion, it's nothing really important in it” – for the most part they reported their informants’ enthusiasm as a positive influence on their own constructions of the author.

In contrast to previous research into the impact of affective factors (e.g. Kuhlthau, 1993), which have focussed on their negative impact as a barrier to information seeking, the present studies’ findings tell a more positive story. They suggest that participants’ friendships with their colleagues enrich their experience, facilitate communication and help tie information behavior researchers together as a community.

‘Objective Knowledge’

The portrait of participants’ constructions of the author and her work which emerged from the study raises serious questions about Brookes’ (1980) ‘Three Worlds’ model. Brooks follows Popper in arguing for the existence of a:

...third world, that of objective knowledge which is the totality of all human thought embodied in human artefacts, as in documents of course but also in music, the arts, the technologies. These artefacts enshrine what Popper declares to be his autonomous – or near-autonomous – world of objective knowledge. (Brookes, 1980, 127)

In characterising information artefacts as “objective knowledge”, and contrasting this with the “subjective world” of individual consciousness, Brookes’ model implies that information artefacts have a stable and/or absolute meaning.

Yet the findings of the present study do not at all support such a contention. The findings show that participants were able to derive a wide variety of sometimes contradictory meanings from the same body of text-artefacts. Nor can such variation be readily described in terms of an objective ‘true’ meaning and multiple subjective interpretations. While the study’s findings readily demonstrate that, for example, a North American cognitivist information retrieval researcher can hold a construction of the meaning/s and significance/s of the author and her work that is very different from a European social constructivist researching public library users, they do not provide any basis for describing either participant’s perspective as more ‘legitimate’ than the other’s. Both are the result of rigorous, critical engagement, and both involved active engagement with a circle of knowledgeable peers (possibly including the author herself). Each participant’s construction of the author and her work is equally ‘valid’ – each adapted to their social/discursive context at that point in space and time.

This is not to suggest that the studies findings refute the central thesis of Brookes' model – that information users interactions with texts involve more than their own idiosyncratic mental processes. However, the study's findings tend to support a view of information artefacts not (as in Brookes' model) as "objective knowledge", but rather as the locus of collective or shared meaning- (sense)-making – as (to use Foucault's term) intersubjective.

Power-Knowledge

The study found that issues of power and authority were central to understanding participants' constructive processes. Participants' analysis of the meanings conveyed to them involved more than determining their aboutness; an integral part of their constructive processes was assessing the credibility of the informants' messages. This determination of the message's authority formed the basis of participants' decision to either accept or contest the meanings they conveyed. In other words, participants' constructive processes had two interdependent aspects, two sides of the same coin: the construction of meaning and the construction of authority.

Participants' accounts showed that they were very adept at making such meaning/authority judgments - to give detailed explanations of both their assessments of the knowledge claims of their informants and of the meaning and significance of the author and her work. Their abilities were very much consistent with Talja's conceptualisation of "users as knowing subjects, as cultural experts" (1997, 77).

An important aspect of participants' constructions of authority related to their construction of the authority of the informant, as opposed to the individual message or text. This related, in particular, to the importance of long-term relationships for participants' constructions of the author and her work. In dealing with a familiar source, a participant's existing constructions of that informant played a key role in whether they accepted or rejected it. If an informant was already viewed as authoritative in a particular context, they were pre-disposed to accept their message, almost before hearing its content.

The study showed that participants' constructions of authority were also essentially 'transportable' between the written and verbal forms. That is, if a participant regarded a researcher's published work as authoritative; they would also regard their informal communications as authoritative.

This would seem to be somewhat at odds with the post-modern concept of 'Death of the Author', as articulated by Barthes (1988) and Foucault (1980), which emphasizes the distinction between author-constructs (the disembodied authors of texts) and the author-as-person. While the findings are strongly supportive of the central precept of Barthes' and Foucault's theory – that meaning/significance is not determined by authors but constructed by readers – one product of these constructive processes, at least for some participants, was a construction of the author as the most authoritative interpreter of her own work.

That certain members of a community are acknowledged as more knowledgeable, and their opinions particularly influential among other members of the community, has long been established. In an academic context, De Solla Price (1963) developed the notion of the "invisible college", while Patrick Wilson (1983) defined such power in terms of "cognitive authority". Chatman's theory of 'life in the round' talked about "'insiders' ...people who use their greater understanding of the social norms to enhance their own social roles. By doing so, they establish standards for everyone else" (1999, 212). The present study provides further evidence for the on-going importance of this phenomenon, arguing that it is central to the construction of shared 'archives' of meaning/authority constructs.

Conclusion

As Pettigrew et al. (2001) have noted, social approaches to conceptualizing information behavior, although growing in influence, are still very much in their infancy. However, this paper contends that social constructivism offers information behavior researchers a theoretical lens which builds on the strengths of existing approaches whilst addressing some of their recognized weaknesses. If pioneering researchers such as Wilson (1981) and Dervin & Nilan (1986) allowed us to see information users as active constructors of meaning, social constructivism allows us to see that these constructive processes not as isolated incidents of individual meaning-making but rather as inextricably linked to on-going networks of shared understanding, social conventions and knowledge/power relations.

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