The Situatedness of the Seeker: Toward a Heideggerian Understanding of Information Seeking

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ABSTRACT

While recent scholarship in library and information studies, such as the work of John M. Budd and Ronald E. Day, explores how the thought of philosopher Martin Heidegger may provide a model for understanding the nature of information, none of this scholarship has yet addressed how Heidegger's thought can be used specifically to conceptualize the process of information seeking. In my paper, I argue, first, that several representative models of information seeking are philosophically inadequate in light of the consequences of what Day calls the conduit metaphor. Second, I argue that the concept of Dasein, a phenomenological description of human experience found in Heidegger's book Being and Time, can be used to develop an information-seeking model that avoids instantiating the conduit metaphor. Instead, my analysis shows how Dasein permits a new conception of the information seeker, whose situatedness provides a new understanding of the activity of information seeking and the concept of information more broadly.

Keywords: information-seeking behaviour · Martin Heidegger · philosophy of information · phenomenology · Ronald E. Day

RÉSUMÉ

Bien que des études récentes en bibliothéconomie et en sciences de l'information, telles que les travaux de John M. Budd et Ronald E. Day, explorent comment la pensée du philosophe Martin Heidegger peut fournir un modèle pour comprendre la nature de l'information, aucune d'entre elles n'aborde la façon dont la pensée de Heidegger pourrait servir spécifiquement à conceptualiser le processus de recherche d'information. Je soutiens, d'abord, que plusieurs modèles représentatifs de la recherche d'information sont philosophiquement inadéquats compte tenu des conséquences de ce que Day appelle la métaphore du conduit. Deuxièmement, je soutiens que le concept du Dasein, une description phénoménologique de l'expérience humaine figurant dans le livre de Heidegger Être et Temps, peut être utilisé pour développer un modèle de recherche d'information qui évite l'instanciation de la métaphore du conduit. Mon analyse démontre comment le Dasein permet une nouvelle conception de l'information, dont la situation entraîne une nouvelle compréhension de l'activité de recherche d'information, et du concept de l'information dans son ensemble.

Mots-clés : *comportement en matière de recherche d'information · Martin Heidegger · philosophie de l'information · phénoménologie · Ronald E. Day*

Research should be governed by question, not by method.

—John M. Budd, “An Epistemological Foundation for Library and Information Science”

Any serious examination of informing should take into account the interpretive ontology of Heidegger.

—John M. Budd, “Phenomenology and Information Studies”

IN the field of library and information studies (LIS), there have been many attempts to produce a model of information-seeking behaviour.¹ Nicholas J. Belkin's Anomalous State of Knowledge (ASK) model, Carol Kuhlthau's Information Search Process (ISP) model, and Brenda Dervin's Sense-Making model are three of the most cited and influential examples, and they persist as theoretical touchstones for the field (González-Teruel et. al 2015, 9). These models also serve as the basis for practically oriented areas of research in LIS, such as the development of information resource interfaces. One may argue that in LIS, it is necessary to have some conception of information seeking in order to develop theoretically grounded LIS tools and practices. Additionally, and more abstractly, it is necessary to have some conception of information seeking simply to understand better what it is that information professionals provide as a service. From the perspective of LIS, it is the task of the information professional to aid the information seeker in satisfying an information need, and an adequate understanding of this process can only help with this task.

However, an issue identified by researchers in the field of LIS, e.g., Ronald E. Day, is that these representative models of information seeking have as their respective bases philosophically inadequate concepts concerning the nature of both information and the information seeker. I will argue that the three aforementioned theories of information seeking do not include an analysis of the *situatedness* of the seeker in a philosophically robust way. For the purposes of this paper, holding a position that an information seeker is always to be understood as situated means that the distinction between subject and object, implied in the distinction between the information seeker and the information sought, breaks down. In light of what I will argue to be the representative models' shared presumptions about the nature of the information seeker's situatedness (or lack thereof), I believe that it is necessary to reconceptualize

1. This paper is based on a presentation I gave at CAPAL 2015, University of Ottawa. I wish to thank the audience members who commented on my presentation, as well as the comments of Lisa Richmond and two anonymous reviewers.

the formal parameters of what constitutes an information seeker philosophically, both for theoretical and practical reasons.

Martin Heidegger, a German philosopher associated with the fields of phenomenology, ontology, and existentialism, provides a conceptual “model” that can be relied upon to develop such formal parameters, namely the concept of Dasein, a word meaning “existence” in everyday German but rooted literally in the notion of “being-there” (the respective words in German are *sein-da*). In his book *Being and Time*, Heidegger describes Dasein as the entity possessing the particular “manner of Being” (1962, 32), or the way of existing, that human beings possess. Dasein fundamentally understands the things it encounters in the world as having meaning only in relation to itself (1962, 95). As I will elaborate below, for Heidegger the world can be said to “exist” only in relation to Dasein’s structure, and, conversely, Dasein’s structure is determined by and through that world. One may say that Dasein is always *situated* within a particular world, and “[t]he situation is an event that constitutes the ‘I’ and the ‘world’ simultaneously” (Ciborra 2006, 135). If one considers human beings to have the character of Dasein, a redefinition of the activity called “information seeking” is required. This redefinition then requires a critical reconsideration of prior information-seeking models, and subsequent to this, a reconsideration of the forms of practice that have followed from those models.

In this paper, I will first briefly examine the three representative information-seeking models named above, those of Belkin, Kuhlthau, and Dervin, by examining an illustrative sample of their respective works. In light of this examination, I argue that despite their differences, the theories all repeat the philosophical problem of understanding information seekers without taking into account the seeker’s situatedness. Ronald E. Day (2000) considers this problem to be a result of LIS’s general adherence to an understanding of information that relies on the conduit metaphor, and I will briefly discuss this metaphor and Day’s work more generally in relation to the three representative models. I will then provide an outline of Heidegger’s conception of Dasein, elaborating several of its formal parameters that potentially allow us to avoid the problem Day identifies. I will finally indicate some promising avenues through which such a conception could be adopted or modified in order to reconceptualize the practical elements of information seeking, not to mention information itself, in a more philosophically robust way. This is important not only for a critical reconsideration of the theoretical underpinnings of current LIS literature. As I will show in the conclusion, a philosophical reconception of information seeking could influence the subsequent practical development of methods and tools that information professionals use in the course of their service.

Some Representative Models of Information Seeking

I have not chosen to examine Belkin's, Kuhlthau's, and Dervin's respective information-seeking models together because these models understand information seeking in the same way. Rather, González-Teruel et al. (2015) identify these three theorists, in addition to several others, as among the most-cited theorists of information seeking. The way in which I initially encountered the three theorists together as representative of LIS's overall theoretical view of information-seeking behaviour provided inspiration for this paper; further investigation provided evidence for my holding these three theorists as representative for this paper's purposes.

The three LIS theorists hold different formal understandings of, and conclusions concerning, information seeking. Nevertheless, I will argue that all three theorists have an unexamined theoretical basis, namely, an understanding of the information seeker as a subject, as well as a concomitant understanding of information as an object, that is 1) an instantiation of the conduit metaphor, and 2) philosophically untenable in light of the Heideggerian analysis that I elaborate in the third section of this paper. To repeat, this then leads to a reconsideration of the activity of information seeking and the methods and tools by which information professionals can aid the information seeker.

Considering Belkin's ASK model first, the basic phenomenon that information science examines is "the text and its associated information, and the relationship of these to the sender and recipient" (Belkin and Robertson 1976, 202).² Following from this conception, information science's purpose is "to facilitate the communication of information between human beings" (200), or, to facilitate the transmission of the information between the sender and the recipient. Belkin describes the basis for the ASK model of information seeking as "that an information need arises from a recognized anomaly in the user's state of knowledge concerning some topic and that, in general, the user is unable to specify precisely what is needed to resolve that anomaly" (Oddy, Belkin, and Brooks 1982, 62). Belkin thus assumes that the process of information seeking consists of the seeker having a particular "need," due to the seeker's current "state of knowledge," and that the process of finding the correct information, in the context of Belkin's essay via the interaction with an information resource "mechanism" (65), will "satisfy" that "need." Belkin bases his model on what he calls the "cognitive viewpoint," that "interactions of humans with one another, with the physical world and with themselves are always mediated by their states of knowledge about themselves and about that with which or whom they interact" (65).

2. For this paper, I cite several works written by Belkin and other co-authors, drawing out what I consider to be Belkin's concept of information-seeking behaviour. I repeat this same method of citation when discussing Dervin below.

This means, for Belkin, that human beings possess conceptual apparatuses which mediate that which surrounds them, i.e., the “physical world” and other human beings, and thereby allow for cognition to occur. If the user has an information need, for Belkin “this means that the user, attempting to realize a goal or solve a problem, recognizes that her/his state of knowledge is inadequate (anomalous) in terms of the goal; resolution of the anomaly will help to solve that problem” (68). For the anomaly to be alleviated, this information-seeking model implies that information can be given or transmitted to the user, seemingly either by a mechanism or by the efforts of an information professional. Such a transmission of information will resolve the anomalous state of knowledge and thereby satisfy the information need. Information is transferable between human beings in order to satisfy an inadequate knowledge state, and information seeking is inspired via recognition of that state and completed through that state’s change or elimination via the reception of appropriate information. For Belkin, then, information is conceptually separable from the information seeker.

Kuhlthau’s ISP model attempts to be a more holistic conception of information seeking by introducing affect or emotion into the search process (1988, 233). Kuhlthau explicitly provides the theoretical basis of this model, stating that the ISP model elaborates “a process of construction” that describes the affective component of information seeking, one that Kuhlthau identifies as corresponding to Belkin’s cognitive theory (1991, 362). Kuhlthau also agrees with Belkin in that a user’s attempt to seek out information implies a “gap in knowledge” (362). We can hear further echoes of Belkin’s ASK model in Kuhlthau’s notion that an information seeker has uncertainty, and, through the seeker’s acquiring understanding, filling a gap in meaning, or further aiding a conceptual “construct,” that uncertainty will be alleviated. Kuhlthau’s advance over the ASK model is that it “goes beyond the cognitive aspects of information seeking” to analyze, and draw conclusions from, “the whole experience of users” (370). Under Kuhlthau’s model, however, information is again considered as something that can be transmitted or given to the seeker. The search process is fundamentally composed of an “interplay between the individual’s experience and the information sought” (233), which implies that information is still considered to be something separate and separable from the information seeker.

Finally, in her “sense-making” model, and unlike the previous two, Dervin portrays information as “the construct of the user” rather than as “an autonomous object that can be stored, accessed, and transferred” (Dervin and Dewdney 1986, 507). She conceives of information seeking as beginning when “individuals find themselves unable to progress through a particular situation without forming some kind of new ‘sense’ about something” (507). This results in a claim that, from the general

perspective I hold in this paper, is more profound than those found in the previous two models, namely that “information needs are situationally bound” (507). Dervin elaborates elsewhere: “[k]nowledge is a verb, always an activity, embedded in time and space, moving from a history toward a horizon, made at the juncture between self and culture, society, organization” (1998, 36). Despite an unclear delineation between information and knowledge (one that may be intentional), Dervin’s model appears to sidestep the problematic notion of information as something transmittable. Information cannot be passed between individuals. Rather, what can be called information requires the user’s productive act to make it so. Information, for Dervin, is both “product of and fodder for sense making” (36).³ One may conclude that to attempt to pinpoint information is a category mistake: information cannot be classified as a thing, as information can be said to arise between the user as “maker of sense” and the “fodder” that the user “makes sense of.”

Yet Dervin still persists in conceiving of information as a thing, even if that thing exists only in relation to the user’s constructing it. The “right” information to give is situationally determined, but the information and the seeker are still conceived of as separate or at least separable. Information is a construct made by the user; this is emphasized by the notion of the user/subject making sense of, or acting upon, the fodder that becomes or allows for information to exist. Further, a fundamental feature of Dervin’s (1998) model of information seeking is that the user encounters a “gap” in her knowledge, one that prevents further “movement” (39).⁴ Under this model, an information service provider would work with the user in such a way as to permit the user to “cross the gap,” presumably by providing proper access to the fodder upon which the user would act. While “information transmission” is not an entirely accurate way to describe this model of information seeking, it still seems to incorporate a concept of what could be called the transmission of “proto-information.” In describing information as an action or a verb, Dervin seems only to have shifted the vocabulary without entirely addressing the philosophical problem. Dervin’s conception of information seeking, one may conclude, is that human beings act upon proto-information when seeking to find information itself. Instead, as I will discuss below, I believe that it is more accurate to begin one’s analysis with the notion that human beings exist in a certain way once they become informed, and as a result, Dervin’s description of the action specific to sense-making starts with the wrong philosophical frame of reference.

3. Dervin does not elaborate exactly what she considers information to be further than this, at least in the writings I read for this paper.

4. Dervin goes so far as to state that “the gap idea is a fundamental assumption . . . about the nature of the human condition” (1991, 62). The gap/“gappiness” has the status of an ontological category (Savolainen 2006, 1120). Discussing ontology, especially in light of Heidegger’s understanding of the term, is beyond the scope of this paper. See Dervin 1995, 45 for a discussion of ontological commitments found in her theory.

The three models just discussed all consider information as something conceptually separable from the seeker. For all three, despite their differences, the information seeker acts in such a way as to alleviate an information need via acquiring, manipulating, or making sense of an object (or thing, or fodder) that may finally be called information. This is especially evident if one considers what an information professional's task is: to provide information (or proto-information) to the seeker so that the seeker may act upon it and thereby solve a problem, alleviate an anomaly, or make sense. Movement or transmission of something (information, fodder) is involved. For Day, this implies that all three models express a concept of information described by the conduit metaphor, which holds the information seeker to be a receiver of information rather than situated, which he sees as prevalent in both theoretical and practical LIS research. I will now turn to an elaboration of this metaphor.

The Principal Problem with the Representative Models: Day's "Conduit Metaphor"

Day (2000) begins his discussion by noting that the metaphor originates in the work of Norbert Wiener, whose book *The Human Use of Human Beings*, published in 1954, contains a model of the process of information transmission: from a source, through a transmitter and a receiver, to a destination (806). The conveyance of information thus occurs via "passing through" a "conduit" connecting the source and the intended recipient. For Day, this model, based as it is on a particular conception of information, "has remained foundational in information science" (806). This model has a concomitant understanding of information, namely that it "has, among other qualities, that of being quantifiably measurable and 'factual,' in the sense of being clear and distinct semantic units" (806). Under Wiener's conception, information can therefore be understood as a "thing" to be sent to the intended receiver and, if clearly and distinctly expressed, understood by that receiver.

The philosophical problem becomes apparent if one believes this to be the essence of communication, or, perhaps even more fundamentally, the essence of language. If this is the case, any ambiguity or vagueness in language would be seen as interference, or what Wiener calls "noise" (cited in Day 2000, 806), that disallows a properly clear transmission of information. Theories that reinstantiate the conduit metaphor rely, Day notes, on "a folk-model of communication that has long ago been dismissed as inappropriate for human communication and understanding" (2011, 80). This is because, for Day, "[h]uman language does not function in the manner of signals sent from a transmission device to a receiving device" (80). Instead, Day argues for an understanding of communication that may be called intersubjective, or even nonsubjective, one that conceives of human existence fundamentally as "historically, socially, and culturally constructed" (2010, 177) by language. Under the conduit

metaphor, language has been characterized as “a transmission and communication medium”; instead, argues Day, it should be understood as “an agency for social, cultural, and political change” (2000, 811). Information, under this sort of conception, cannot be passed between individuals, nor can it be constructed or made sense of by an individual; rather, what we identify as information, as well as the individual seeking it, are *codetermined* by the relations in language between them. Day writes that

[t]he subject and the object do not correspond to one another other than in pragmatic instances of stabilized language use, which marks not a subject-object correspondence in a positivist sense, but rather, the subject’s self-positioning in relation to the object, as both are located within social norms and cultural forms and . . . within the material openings and closures of each to the other’s expressive powers. (2011, 82–83)

The “subject” (information seeker) is related to the “object” (information) via language, but subject and object constantly correspond and thereby codetermine each other. Understanding subject and object in this way circumvents the possibility of conceiving information seekers and information as conceptually distinct. Metaphorically speaking, the border between the information seeker and information is porous. This position is what leads Day to conclude that “[i]nformation is the quality of being informed” (2001, 120). Understood in this way, information is not *received or constructed by*, but rather is conceptually *inseparable from*, the informed being. To conceptualize information as an object or thing, or to be able to point to information as a concept within an information-seeking model, is, according to Day, a philosophical error.

Belkin’s ASK model and Kuhlthau’s ISP model, based as they are on the cognitive model of information seeking, exemplify the conduit metaphor via their conception of information as something that can be given or transmitted to the receptive seeker in order to satisfy an information need. For Belkin and Kuhlthau, information is conceptually separable from the information seeker. While Dervin attempts to avoid this notion of information, it is unclear if she is successful. Information under Dervin’s rubric is constructed by the seeker and exists only as a product of the seeker’s sense-making activities, but there is still a lurking conception of information, or at least of what I called above proto-information, as something upon which the seeker acts, in order to become informed. Additionally, as was mentioned above, for Dervin an information professional’s practical task would be to provide the right (or adequate) proto-information for the seeker in order to allow for sense-making to occur. As such, it is arguably the case that Dervin shifts the conversation—from information as object to proto-information as object—without solving the problem.⁵

5. This is not to say that Dervin’s theory is not an advancement, philosophically speaking, over Belkin’s and Kuhlthau’s theories. Savolainen examines the epistemological background of Dervin’s theories in great detail, pointing out that Dervin holds a “constructivist” account that holds information seeking and use to be “processes” (1993, 19). My argument in this paper, however, is that Heidegger provides a concrete conceptual framework by which to understand information and information seeking that

A turn to Heidegger's book *Being and Time* provides one possible solution, however. To a reader of Heidegger, Day's claim that "information is the quality of being informed" uses familiar language. For a Heideggerian, the use of the term "being" implies that those who use the term possess a conception of a particular way in which beings, or things in the world, exist (Heidegger 1962, 25). In Day's formulation, information is to be understood as the quality of a particular thing in the world that *becomes* informed and thereafter is informed. If human beings are the particular things that may become informed, a philosophical conception of information seeking must have as its basis a previous philosophical conception of human beings and the way that they exist specifically in the world. Asking about the "being" of information leads to the question of "human being" understood as the particular way in which humans exist. As Budd writes, "[t]he question 'what does it mean to be informed' is the kind of reflective questioning that is integral to being" (2005, 48). Heidegger argues that the only way to begin a response to the question of being is to interrogate the meaning of being for the thing whose existence is an issue for it, namely Dasein (1962, 32–34), and it is to a discussion of Dasein in relation to its activity of information seeking that I will now turn.

Toward a Heideggerian Solution: Situating the Information Seeker

The introduction of Heidegger's thought into information studies has thus far been addressed by a small number of authors (e.g., the previously cited Day and Budd), and, to my knowledge, has not been used to conceptualize the information-seeking process specifically. In *Being and Time*, Heidegger does not examine the concept of information specifically, or, as Day claims that Heidegger would call it, information (2010, 178). Day's essay just cited gives a more thorough analysis of what a Heideggerian conception of information is, as well as what that conception would mean for LIS (including information ethics specifically). In the following section, I will narrow the investigation, outlining only the formal parameters of what can be called a Heideggerian "model" of the information seeker based on Heidegger's concept of Dasein. I will then outline a Heideggerian conception of information seeking.

To begin, a broad question must be asked, one that, to answer fully, requires more space than this paper is permitted: what is Dasein? Simply put, Heidegger's analysis of Dasein (literally "being-there," *sein-da* in German) purports to describe the particular way in which human beings exist (Heidegger 1962, 32). Heidegger begins *Being and Time*'s investigation by discussing the particular way in which human beings exist because Dasein stands out from other things in the world as objects of

supplants Dervin's model (not to mention Belkin's and Kuhlthau's respective models). This supplanting is necessary, I believe, because Dervin has not adequately distanced her theory from Day's conception of the conduit metaphor, though Savolainen (and Dervin herself, I imagine) would argue otherwise. See Davenport (2010) for a detailed critique of Dervin and sense-making more generally.

study: Dasein is the only thing whose existence “is an issue for it” (32). We as human beings take issue with our own existence in a way distinct from all other things in the world. Specifically, “Dasein understands itself in terms of its existence—in terms of a possibility of itself” (33). In this formulation, Heidegger is explicit in stating that, fundamentally, human existence is possibility. Human beings understand their own existence in terms of possibilities, in terms of possible choices of particular human activities that, upon selecting, are then carried out.

These possible choices are to be understood first of all in terms of their being practically oriented. For Heidegger, Dasein always finds itself within an “environment,” defined as “the world of everyday Dasein which is closest to it” (94). Dasein, as “being-there,” is *there* within and surrounded by its environment, which consists of its everyday “dealings in the world and with things within-the-world” (94, translation modified). Dasein interacts with the things that it encounters first and foremost in terms of how those things fit with Dasein’s particular, ordinary tasks: “the kind of dealing which is closest to us is . . . that kind of concern which manipulates things and puts them to use” (95). Hence, for an information seeker, the first way in which she would encounter, for example, an online search tool is always in relation to and in the context of her everyday activities. Heidegger calls such manipulable things “equipment” (97). This is not to say that a particular thing considered as equipment is identifiable as such in isolation from the task for which it is intended. Rather, for Heidegger, equipment exists in such a way that it “always belongs to a totality of equipment, in which it can be this equipment that it is” (97). Equipment is always embedded within, and cannot be understood apart from, the totality that defines it as the equipment suited for a particular task. Heidegger characterizes this totality as defined by its “in-order-to,” a “structure” of other things that, taken together, constitute the equipment for a particular task (97). Equipment, as encountered in the context of Dasein’s everyday activities, is understood to carry out something *in order to* accomplish an activity. In addition to this, equipment also exists as *assigned* to a particular element of that task (97). Equipment receives its function through its assignment to a particular aspect of a task, and it functions well if it works in conjunction with other things within that equipment structure to lead to the accomplishment of that task. Finally, equipment appears to us as “ready-to-hand” (98). This means that equipment does not appear to us first of all as an object in the world, because in setting out to accomplish a task, we are first and foremost not concerned with “the tools themselves” needed to accomplish that task, but rather just “the work” (99). To continue the above example, an online search tool understood in this way is defined via its function to accomplish the task of bringing together a set of results according to search terms, and it is meaningless to the information seeker if the seeker does not understand this function. Also, the search tool can be understood

as equipment only in relation to, for example, the physical computer in which the search tool functions, the search terms used, the language in which the search tool is written, and so forth. All of these relations are, first and foremost, invisible to the user, as the user is concerned with accomplishing her task, not necessarily with the equipment used to do so.

Understanding things in the world as equipment indicates the complex web of relations that gives things in the world their status *as* equipment for a particular task. In fact, for Heidegger, a fundamental element of Dasein is indicated in light of this complex web: “Being-in-the-world” (80). Dasein understands itself to be in a world via “absorption in references or assignments constitutive for the readiness-to-hand of a totality of equipment” (107). Through recognition of the complex web of “equipmental” relations, that is, each piece of equipment being assigned to particular elements of a task, Dasein thereby begins to understand *itself* to exist within that complex web. Additionally, Dasein begins to understand itself as *giving shape* to that complex web, via the web’s structure being determined by Dasein’s tasks. Things encountered as equipment are given meaning and use within that web via their assigned relation to Dasein’s tasks and to each other as elements of the totality of equipment.

To restate the argument thus far, Dasein, the way in which human beings exist, is first to be understood as constituted by its dealings with things that surround it in order to carry out particular tasks, and such things take on the character of equipment that can be understood as equipment only in the context of those tasks. For the purposes of this paper, how can one say that Dasein has the character of situatedness? For Heidegger, not only does Dasein exist in relation to equipment (defined in light of Dasein’s tasks) within its own dealings, it is in fact defined by those tasks: “a thing ‘within the world’ [i.e., Dasein] has Being-in-the-world in such a way that it can understand itself as bound up in its ‘destiny’ with the being of those things which it encounters within its own world” (82, translation modified). Dasein thus understands itself always to exist in relation to the things around it, and, as things surrounding Dasein are understood in light of Dasein’s tasks, Dasein is fundamentally situated within the world of equipment in which it finds itself. For Heidegger, Being-in-the-world is a “unitary phenomenon” (78), and hence Dasein and its world are not conceptually separable.

This notion of how Dasein finds itself is extremely important for the discussion of situatedness. Heidegger defines the term *Befindlichkeit*, which literally means “the state in which one may be found” (172), as the way in which Dasein’s Being-in-the-world is disclosed to Dasein itself (176). Hence, Dasein’s having the feature of *Befindlichkeit* allows Dasein to understand itself as situated in a particular world, or, allows Dasein to understand itself as having the character of situatedness. For Heidegger,

Befindlichkeit, or situatedness, “implies a disclosive submission to the world, out of which we can encounter something that matters to us” (177). It is through Dasein’s, and hence human beings’, situatedness that things can be encountered in the world as having significance. Most fundamentally, for Heidegger, situatedness “is a basic existential way in which Dasein is its ‘there’” (178). It is through situatedness that Dasein may be understood as “being-there.”

One may conclude, then, that if situatedness is the means by which Dasein can encounter things in the world as having significance, it is only through situatedness that things take on the character of equipment for the purposes of Dasein’s tasks. Therefore, Dasein’s being situated in a particular world is critical for understanding how Dasein can successfully carry out a task, and, in turn, how that Dasein may become informed to do so.

So, after all of this “Heideggerese,” where are we? Under Heidegger’s understanding, it is not possible to conceive of information as something that stands apart from or against the human subject, since under his rubric the subject/object dichotomy breaks down. Information does not exist as a thing, either “in the head” or “out there.” Rather, what can be called an information need arises in and through Dasein’s situatedness, described as a meaningful encounter with the world and the things found therein within their respective totalities of equipment. For Heidegger, the world is a world because of Dasein’s situated encounter with it in the context of Dasein’s tasks. To continue the example of an online search tool above, it is through the situatedness of the tool’s user that the tool matters to that user and hence that the tool has the character of equipment for the user’s task of collecting a set of search results for the broader goal of becoming informed.

After Heidegger, what could be considered information for LIS is, to paraphrase Day, the quality of Dasein’s being informed in order to carry out its tasks and to select and use equipment appropriately in the fulfilment of those tasks. Information cannot be “observed” and does not possess “qualities,” because, as a part of Dasein’s being-informed, information is *itself* a condition or quality that Dasein becomes in codeterminative relation to the things surrounding Dasein. Most importantly, as information is not a thing, it cannot be transmitted or received. Concepts of information and information seeking that reinstantiate the structure of the conduit metaphor do not fit with a Heideggerian conception of human existence.

Concluding Remarks and Future Research Avenues

With the above discussion in mind, we may begin to outline an information-seeking model that does not commit the philosophical error described by the conduit metaphor, an error seemingly committed by the theories of information seeking

examined earlier in this paper. If information is understood as the quality of Dasein's being informed, then it is necessary to develop new information-seeking "models." Human beings, each an instantiation of Dasein, "need information" in a similar way, namely, *to be informed* for the sake of their tasks and how to proceed with them, as well as to be informed of the appropriate equipment to use in order to accomplish those tasks. It may still be possible to provide a model of information seeking that LIS researchers can develop practically in order to discover new methods of aiding such a seeking. In turn, this model may then be adopted by information professionals in positions where contact with information seekers occurs. Information professionals would then understand that the aid they give to an individual in order to complete her tasks must take into account that things surrounding that individual will appear as useful (i.e., as equipment) in accordance with that individual's world. This world is in turn to be understood as composed of the structures in which that individual's tasks have meaning for her. Finally, information professionals would understand that the individual becomes informed through finding the totality of equipment specific to a particular task, enabling her to use that equipment properly. Using the language of phenomenology, Liberman puts it succinctly: "our professional task is to identify and describe what are the horizons of [others'] experience, and especially what are the horizons of their understanding" (2012, 55). Although this claim is meant to apply to social research specifically, the sentiment is similarly applicable to the work of an information professional.

Furthermore, information resources and their respective interfaces might be redesigned in accordance with a Heideggerian understanding of information and information seeking. For example, resources and/or interfaces might be designed with due recognition of their function as embedded within the totality of equipment specific to an information seeker's task, rather than resources and/or interfaces accepting single queries or search strings and providing (lists of) responses one at a time, as even the most sophisticated search engines now function. As Ciborra states, such resources/interfaces would be "so 'aligned' with the execution of our daily tasks that they disappear and become part of the world" (1998, 13). An example of this might be a search interface that analyzes what a researcher is writing and suggests information sources in accordance with her acknowledged needs at any given point in the text. If it functioned well, a search interface such as this would "disappear" into the researcher's complex web of equipment, and would offer search results in accordance with the task this researcher was attempting to carry out.

There are many other elements of Dasein that remain to be discussed, such as how *Befindlichkeit* breaks down the distinction between the inner emotional life of the subject and the outer world (*Being and Time*, section 29) and how Dasein's structure

involves understanding, defined via grasping what Dasein is able to do (section 31), not to mention how Dasein's possibilities have a historical origin and character (section 74). These topics, critical as they are for a complete understanding of Dasein and its becoming informed, remain to be explored in further research. My plan is to elaborate these issues in another work.

Regardless, if we accept Heidegger's conception of Dasein as an accurate description of human existence, we may conclude that information professionals are not to be understood as participants in what could be called an "information delivery service," passing information through a conduit to the information seeker in order to fulfill her needs, but rather as part of an individual's world, helping that individual to be (better) informed about how to carry out her own tasks. Heidegger's thought transformed the history of philosophy into a question; it is my position that his thought can do the same for the history of information-seeking models, not to mention LIS more broadly.

ABOUT THE AUTHOR

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