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Fields and pathways: Contrasting or complementary views of information seeking

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Abstract

This research contrasts two different conceptions, fields and pathways, of individual information behavior in context. These different approaches imply different relationships between actors and their information environments and, thus, encapsulate different views of the relationship between individual actions and contexts. We discuss these different theoretical views, then empirically compare and contrast them. The operationalization of these conceptions is based on different analytic treatments of the same raw data: a battery of three questions based on respondent's unaided recall of the sources they would consult for information on inherited cancers, a particularly rich information seeking problem. These operationalizations are then analyzed in a nomological network of related concepts drawn from an omnibus survey of 882 adults. The results indicated four clusters for fields and 16 different pathways, indicating increased fragmentation of information environments, with different underlying logics and active ingredients, although the use of the Internet appears to be an emerging common theme. The analysis of the nomological network suggests that both approaches may have applications for particular problems. In the implications, we compare and contrast these approaches, discussing their significance for future methodological, analytical, and theoretical developments.

Keywords: Information behavior; Information seeking; Context; Fields; Pathways

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1. Introduction

This research compares and contrasts two conceptions of information behavior, particularly as they relate to information seeking, one focusing on the more static notion of field and the other on the more dynamic conception of pathways. Both of these views offer different insights on the relationship between context and information seeking, a problem increasingly viewed as a central issue in information behavior research (Cool, 2001; Dervin, 1997, 2003; Johnson, 2003; Pettigrew, Fidel, & Bruce, 2001; Talja, Keso, & Pietilainen, 1999). Indeed, a persistent theoretical problem in the social sciences more generally is accounting for individual action in a social context (e.g., Dervin, 1980; Emirbayer & Mische, 1998; Savolainen, 1995).

Information seeking is one of many actions an individual may choose to engage in; it cannot be separated from the specific context in which it occurs. Increasingly research in information behavior has turned to contextual explanations and concepts like information horizon and information grounds (Fisher, Durrance, & Hinton, 2004; Sonnenwald, Wildemuth, & Harmon, 2001). Here we will focus on the context of genomic information seeking to illustrate our arguments, an area that has been termed the perfect information seeking research problem (Johnson, Andrews, Case, & Allard, in press). Information seeking is governed by available information carriers, norms related to appropriate behaviors, and individual beliefs; thus, it provides a focus for efforts to develop a more general theory of individual action. In the following sections we will detail how fields and pathways provide alternative approaches to the classic problems in information behavior specified in Table 1.

1.1. Information seeking

Information seeking can be defined simply as the purposive acquisition of information from selected information carriers (Johnson, 1996, 1997a). Information carriers may include a variety of channels, a variety of sources within channels, and a variety of messages contained within these sources. There are many, often contradictory senses of information, here we will focus on the classic one of being able to discern patterns of matter and energy in the world around us (Johnson, 1996).

1.2. Fields

One conception of an information environment is that of the information field within which the individual is embedded (Cool, 2001). An individual's information field provides the starting point for information seeking (Rice, McCreadie, & Chang, 2001). It represents the typical arrangement of information stimuli to which an individual is regularly exposed (Johnson, 1996, 1997a), the information resources they routinely use (Sonnenwald et al., 2001). The concept of field has a long tradition in the social sciences tracing back to

Table 1
Comparing fields and pathways

Dimensions	Fields	Pathways
Temporal	Static	Dynamic
Inertia	Passive	Active
Cognition	Schema	Mindful
Interplay of carriers	Interacting, Blending	Path dependence
Sources	Concordant, Thematic	Potentially discordant
Event progression	'Garbage Can'	Sequenced
Context	Equivalence	Changing
Analytical approaches	Clusters	Sequence typologies
Generating force	Natural predispositions	Gap, problem solution