Chapter XII
Relevant Intra–Actions in Networked Environments

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ABSTRACT

In this chapter the author uses a study of human assessments of relevance to demonstrate how individual relevance judgments and retrieval practices embody collaborative elements that contribute to the overall progress of that person’s individual work. After discussing key themes of the conceptual framework, the author will discuss two case studies that serve as powerful illustrations of these themes for researchers and practitioners alike. These case studies—outcomes of a two-year ethnographic exploration of research practices—illustrate the theoretical position presented in part one of the chapter, providing lessons for the ways that people work with information systems to generate knowledge and the conditions that will support these practices. The author shows that collaboration does not have to be explicit to influence searcher behavior. It seeks to present both a theoretical framework and case studies that can be applied to the design, development, and evaluation of collaborative information retrieval systems.

INTRODUCTION

Relevance is a central concept for information retrieval used as a measurement for evaluating information systems. However, it is a concept that significantly extends far beyond this traditional domain, since it is also at the heart of the human communication of meaning. It is an essentially human construct that is embedded in the everyday practices of communication, information seeking, and knowledge generation. In this chapter we look at the social and contextual dimensions of human relevance judgments, particularly within the complexity of computer-mediated information activities. When examined from the searcher’s—as opposed to the system’s—perspective, the social and collaborative aspects are seen to be far more embedded in these practices than is accounted for in many depictions of collaborative information retrieval. The inherently interactive character of
human relevance judgments means that social and private aspects are interwoven in the seeking and gathering of information. Human relevance judgments are radically different from those of information retrieval systems, and thus our understanding of collaborative systems must take into account the ‘real-life’ experiences of searchers and searcher communities.

The aim of this chapter is to demonstrate the emergent, socially situated character of human assessments of relevance and to discuss the implications for the design and development of collaborative information systems. After discussing key themes of the conceptual framework, we discuss two case studies that serve as powerful illustrations of these themes for researchers and practitioners alike. These case studies—outcomes of a two-year ethnographic exploration of research practices—illustrate the theoretical position presented in part one of the chapter. The extracts from the detailed accounts of the two informants demonstrate how they draw on interactions with colleagues (e.g., face-to-face, e-mail, casual as well as formal encounters) and with ideas communicated in their own works as well as those of other researchers. Thus, in this chapter we provide both a theoretical framework and case studies that can be applied to the design, development, and evaluation of collaborative information retrieval systems.

A CONCEPTUAL FRAMEWORK FOR RELEVANCE AS A SOCIALLY SITUATED PHENOMENON

This first part of the chapter provides a conceptualization of relevance assessment that acknowledges the interplay between the individual (personal) and social (collaborative) elements of these human judgments. It is based on the framework developed for a longitudinal study of relevance assessments made in the context of scholarly research.

Relevance: A Fundamental Human Activity

In today’s highly networked information environments, determining relevance is fundamental for finding the appropriate information to resolve problems and fill gaps from the overwhelming volume of what is available. It is the process by which encounters with “new” information are related to what is already familiar to us. Alfred Schutz positions relevance as a feature of our consciousness embodying enormous complexity. To illustrate his point, he uses the process of writing one of his influential essays on relevance, observing:

...although I spend but an hour at my desk, I traverse within this measurable period of our time an ongoing span of my inner life which condenses experiences, skills, and knowledge acquired in the greater part of my lifetime into the writing down of a single page. (Schutz, 1970, p. 10)

Schutz goes on to explain that, while the task might be experienced as a single activity, there are in fact “a set of heterogeneous activities” taking place (1970, p. 10). This observation can be compared to the “situated information retrieval” described nearly 30 years later by Hert (1997), who depicts searchers working simultaneously in different levels of time-space. Such research demonstrates the complexity and dynamism of the human judgments associated with locating and using information. It also alerts us to the fact that there are no straightforward explanations for the way judgments of relevance are made.

If we are to understand the human processes used for judging relevance in situations driven by the searcher, relevance has to be examined in the context of everyday practice. The notion of an “everyday context” of relevance is raised in a number of papers examining information seeking behaviors (e.g., Chatman, 1996; Given, 2002; Savolainen, 1995). Harter (1992) and Sar-