

Presentation at Information Retrieval and Interaction Fest in honor of Peter Ingwersen

Musings:

About relevance in general and connections with interaction in particular.

Tefko Saracevic, Ph.D.

Distinguished Professor Emeritus

School of Communication and Information, Rutgers University

New Brunswick, New Jersey, USA

Relevance emerged as a central notion in information science because of extensive concerns with and commitments to searching and not only to organization of information. In turn, searching was accomplished using modern information technology (IT). A variety of information systems provide ways and means of organizing of and searching for information that attempt to provide higher probability of finding relevant information by people. Interestingly, organization of information can and is being done without recourse to specific tools (such as classification), by algorithms that concentrate on exploiting patterns in the raw data e.g. as revealed by word counts, links, page ranks, and the like, all geared toward searching. Traditionally, librarianship concentrated on *organization* of information and thus on *aboutness*, while information science concentrated on *searching* and thus on *relevance*. This describes both their relation and difference.

Today, people search to find information relevant to their problem-at-hand and context. A never-ending succession of systems, processes, algorithms, and displays are being devised to do searching. People interact with technology and they interact with information. To underscore the reason: They interact to find relevant information or information objects.

Everybody knows what relevance is. It is an “y’know” notion, concept, idea – no need to explain whatsoever. In information science relevance was an issue both hotly debated and seriously researched from the start of the field in the aftermath of Second World War to this day.

Peter Ingwersen contributed mightily to both, debate and research, summarized and elaborated in his crowning publication: the 2005 book with Kalervo Järvelin “*The turn: Integration of information seeking and retrieval in context.*” Even the title of the book implies that there is much more to information retrieval (IR) than algorithms. The book also shows that there is a problem between users and systems that needs a resolution.

Everybody also knows what interaction is - no need to explain. However, interaction attracted much less research than relevance. Particularly, fewer experiments addressed various questions about interaction than the number of experiments that addressed relevance.

In information science, interaction was mostly subsumed under research related to human information behavior. The 2012 book by Raya Fidel “*Human information interaction: An ecological approach to information behavior*” is a case in point. In the book Fidel explicitly, even repeatedly, recognizes, quotes and cites Ingwersen and his cognitive model of information retrieval (IR) interaction.

The hallmark of Peter Ingwersen’s lifelong work was to try to bridge the gap between human information interactions on the one hand, and algorithmic IR focusing on systems retrieving information potentially relevant to queries, on the other. With the cognitive model of information seeking, Ingwersen represents both, the user (actor) and the IR system that provides information objects. The model is based on cognition and is directly associated with providing a link, a connection between people and systems. He advocates the resolution of the user - system problem in an integrative manner. Quite an issue. Quite an achievement.