Combining Cognitive and System-Oriented Approaches for Designing IR User Interfaces

A new generic framework for designing user interfaces for interactive IR

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- Four-stage workflow model of search
- Extends the ISS classification of Belkin and Cool by a new dimension.
- Describes the aspect of the documents considered
- Supports the concept of polyrepresentation as formulated by Ingwersen.

Dimension

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<th>Method of Seeking</th>
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Goal of Seeking: Learning, Selecting

Aspect Considered: Content, Structure, Layout

Selection based on meta-information on structure (author), then projection on structure (DBLP)

Projection on structure and layout, then visualization including the thumbnail (Amazon)

Organization scheme “clustering” (Clusty)

Graph organization, then visualization, displaying links between pages (Mapucio)

Organization in 2D-space, then map-based visualization (Google)

Selection based on information on content (search terms), then projection on content (Google)

Visualization

Outlook

- Framework for interactive information retrieval interface to support all ISS and workflow steps shown here.
- System with a single, integrated but flexible