**Exploratory Search Pipes with Scoped Facets**

**Contribution.** We present a faceted search system designed for content-level explorations of document collections.

**Spans.**
Traditional faceted search systems treat documents as atomic units.

In our system, facet terms are connected to character spans in the documents. Two facet terms are related, only if their character spans intersect (see Documents D3 vs. D4).

**Pipes.**
With traditional facet semantics, Facet Term C1 below is not reachable as it does not intersect with character spans of the selected Facet Term A2.

In our system, facets are arranged as a sequence (=pipe) by the user. The character spans of Facet A “activate” intersecting character spans of Facet B. These spans are in turn the basis to “activate” spans of Facet C.

**Scopes.**
With the introduction of facet scopes, the user can decide which prior facets should be considered to determine “activated spans”.

By reducing the scope of Facet C from two to one, also the green character span of Facet Term B1 in Document D5 is activated, although no character span of Facet Term A2 intersects.

**Prototype.**
Example pipe based on bibliographic records from dblp and entity linking with DBpedia Spotlight. The example e.g. reveals in Facet 3 Conferences similar to ICTIR in terms of Author overlap, as well as in Facet 5 Companies that occur in the Publications of ICTIR Authors at IR Conferences.

**User Study.** Comparison to dblp.
14 users performed search tasks in two phases: P1 simple search tasks, P2 complex search tasks. Overall, our system poda is perceived as good as dblp after P1, clearly superior after P2.