Table-based Visualization and Interaction for Bipartite Graphs

Bipartite graphs
- Two disjoint node sets
- No adjacent nodes within one node set

General layout
- One table for each node set: nodes in rows, attributes in columns
- Edges as lines between tables
- 1 mode projections (paths of length 2) as arcs at the sides of the tables

Challenges
- Large node sets
- Large attribute sets
- Large edge sets
- Selection mechanisms

Handling large node sets
- Table lens to reduce table height
- Fish eye scrollbar with selection markers
- Filter view to hide unselected rows

Handling large attribute sets
- Primary attributes in table
- Secondary attributes in external HTML

Handling large edge sets
- Clickable edges for fast access to nodes outside the screen
- Heuristic minimization of edge crossings

Structure based selection
- 1st step: Interactive node selection
- 2nd step: Automated selection using selection scripts

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