# 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

```
; dependency analysis
;
Level0(100)
Level1(0)= adjacent(Level0, bwdedge)
Level2(75)=adjacent(Level1, bwdedge)
```

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