

# Seminar: Selected Topics in IR

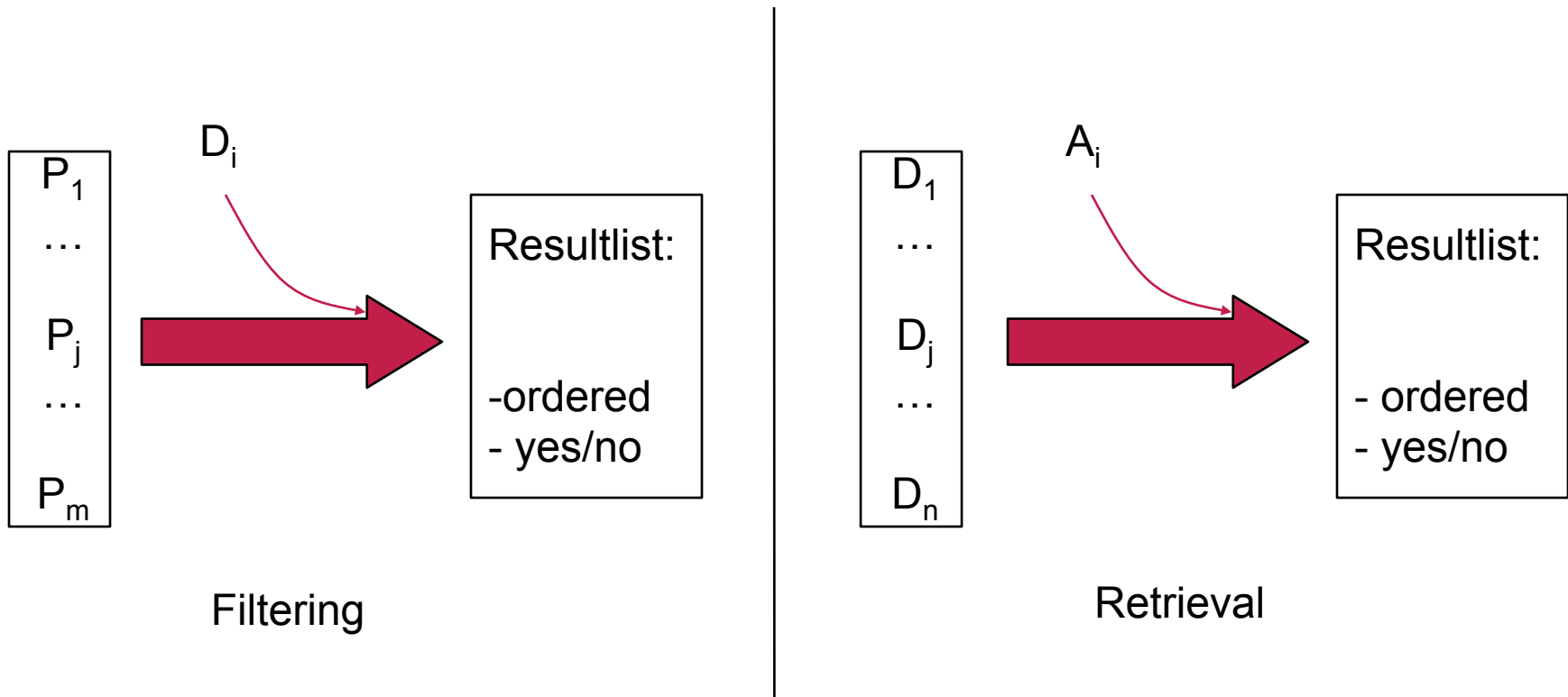
## Presentation of topics

Jens Bleiholder

Hasso-Plattner-Institut für Softwaresystemtechnik GmbH  
FB Informationssysteme  
Prof.-Dr.-Helmert-Str. 2-3, D-14482 Potsdam  
[Jens.Bleiholder@hpi.uni-potsdam.de](mailto:Jens.Bleiholder@hpi.uni-potsdam.de)

# Filtering vs. Retrieval

- „Collaborative Filtering“ is part of „Information Filtering“
- Also known as: „Recommender Systems“

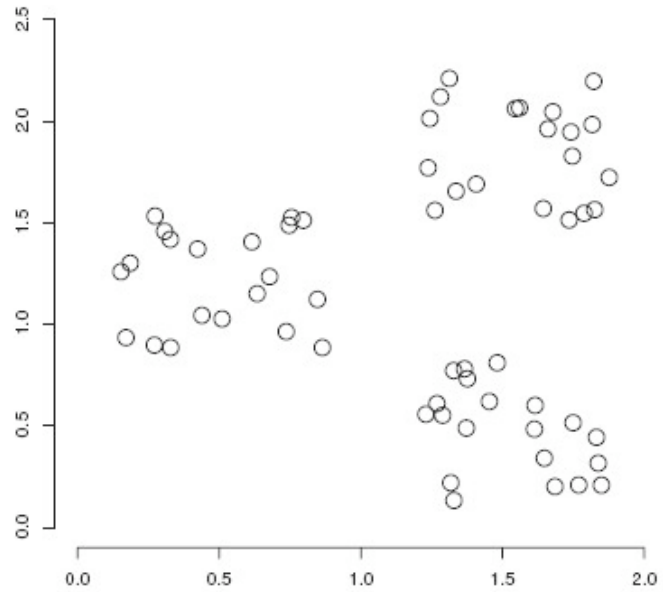


# Collaborative Filtering

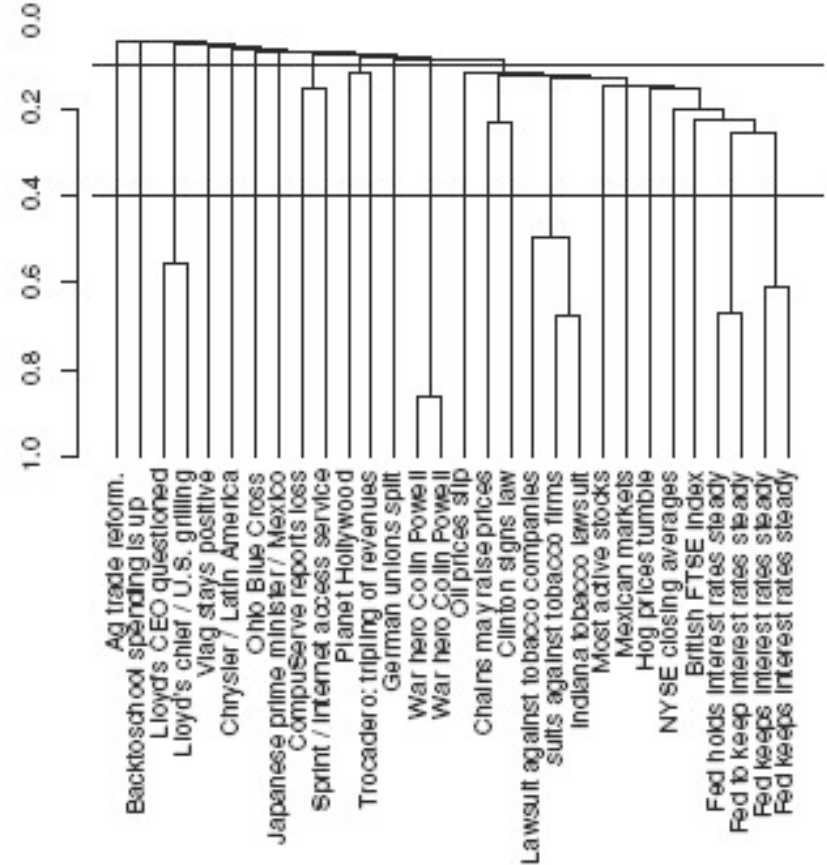
- Algorithmic Implementation of mouth-to-mouth propaganda
  - There are other people with a similar taste to mine
    - I may not know them
    - Everything they like, I will also like
  - There are also things I don't know, but will like
    - Because these other people like them

# Clustering

## Flat Clustering



## Hierarchical Clustering



# Collaborative Filtering

- „Item-Based Collaborative Filtering Recommendation Algorithms “
  - WWW 10, **2001**
  - B. Sarwar, G. Karypis, J. Konstan, J. Riedl
- 
- Some item-based recommendation algorithms are presented and compared against each other and a traditional user-based recommendation algorithm.



# Flat and Hierarchical Clustering

- „Flat Clustering“, „Hierarchical Clustering“
- Introduction to Information Retrieval, Chapter 16/17, **2008**
- C. Manning, P. Raghavan and H. Schütze



- The basic algorithms, techniques and concepts of clustering are presented along with some examples. Presentation includes some implementation work.