

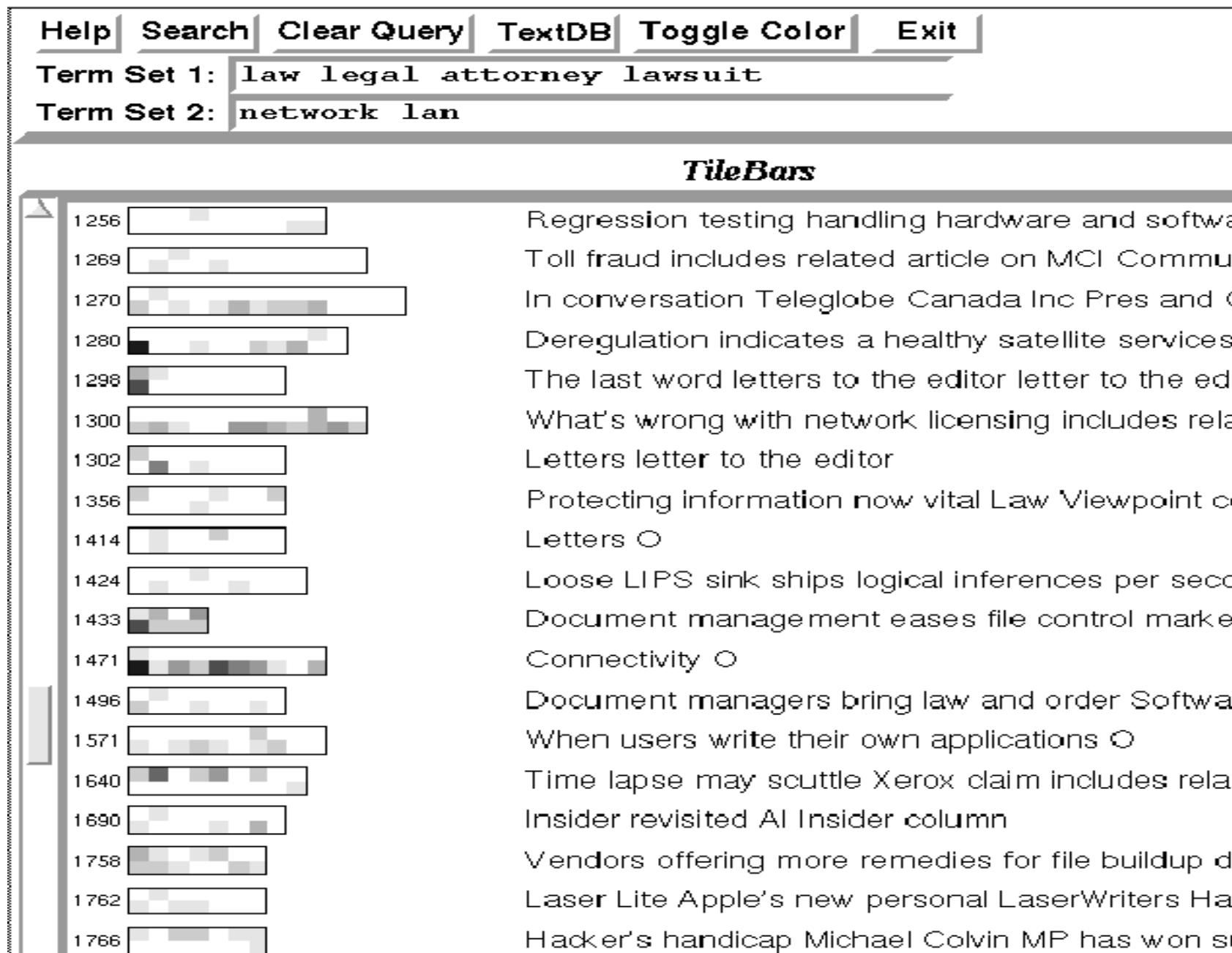
# Information Visualization in IR

The next step beyond text-based interfaces

- Visualizing Internal Document Substructure
  - Show where the content of interest resides
    - If only a paragraph on page 37 is relevant, then we want to pinpoint this.
  - Distribution of relevant information in a document
    - Aid to selecting documents
    - TextTiling
    - DotPlot
- Visualizing Document/WebPage Clusters and Relationships
  - Graphical Elements of Information Browsing Systems

# TextTiling/TileBars Visualization of Term Distributions

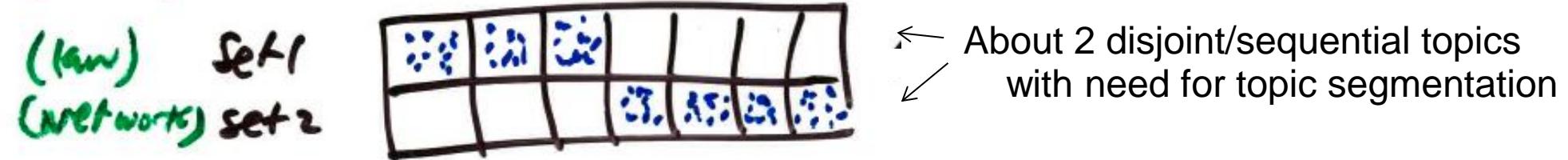
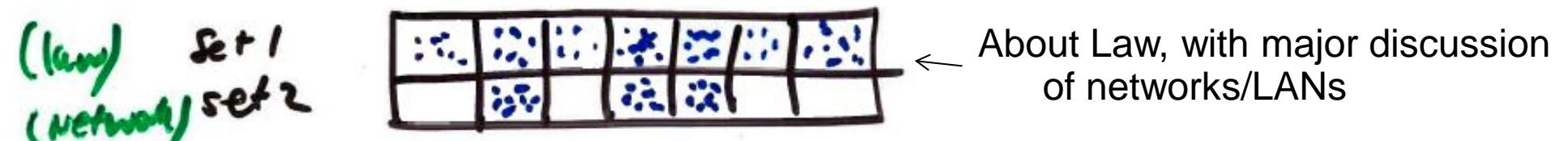
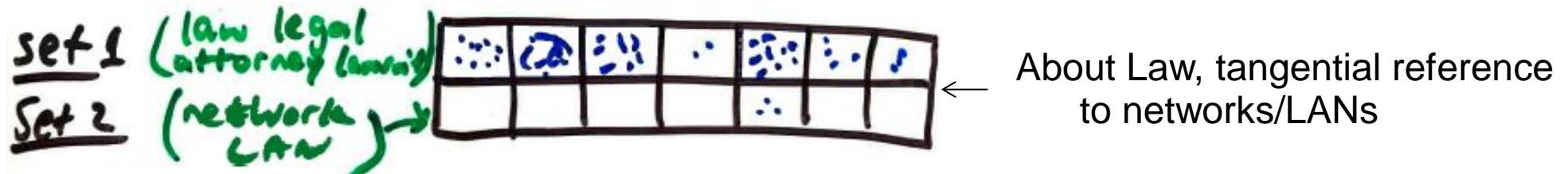
Marti Hearst (1993, 1994)



# TextTiling/TileBars Visualization of Term Distributions

Marti Hearst (1993, 1994)

Tool for visualizing terms or term-set matches within a document

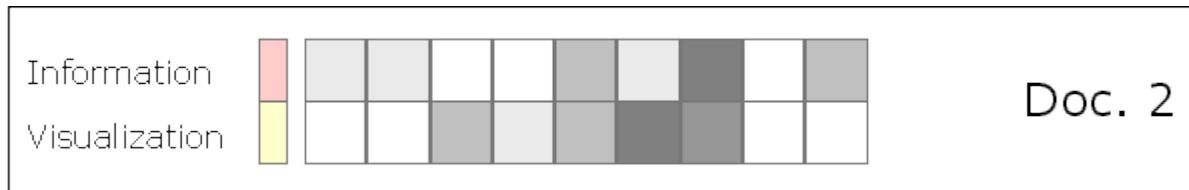
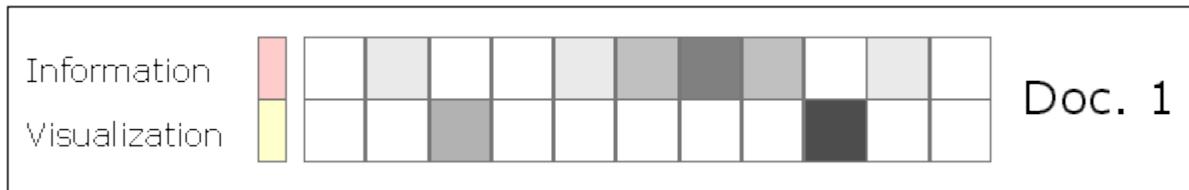


Block density proportional to weighted term frequency (TF-IDF)

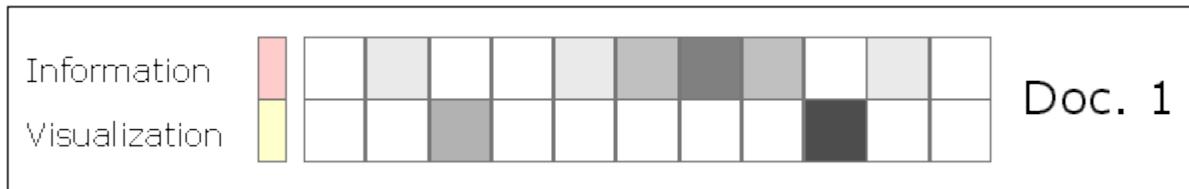
Fixed-length blocks (e.g. 1000 words), so total length indicates document length:



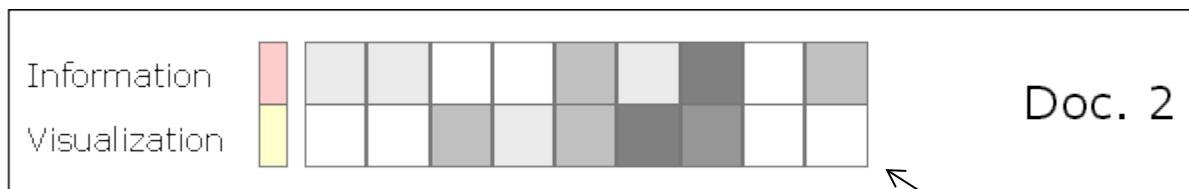
# TextTiling/TileBars Visualization of Term Distributions



# TextTiling/TileBars Visualization of Term Distributions



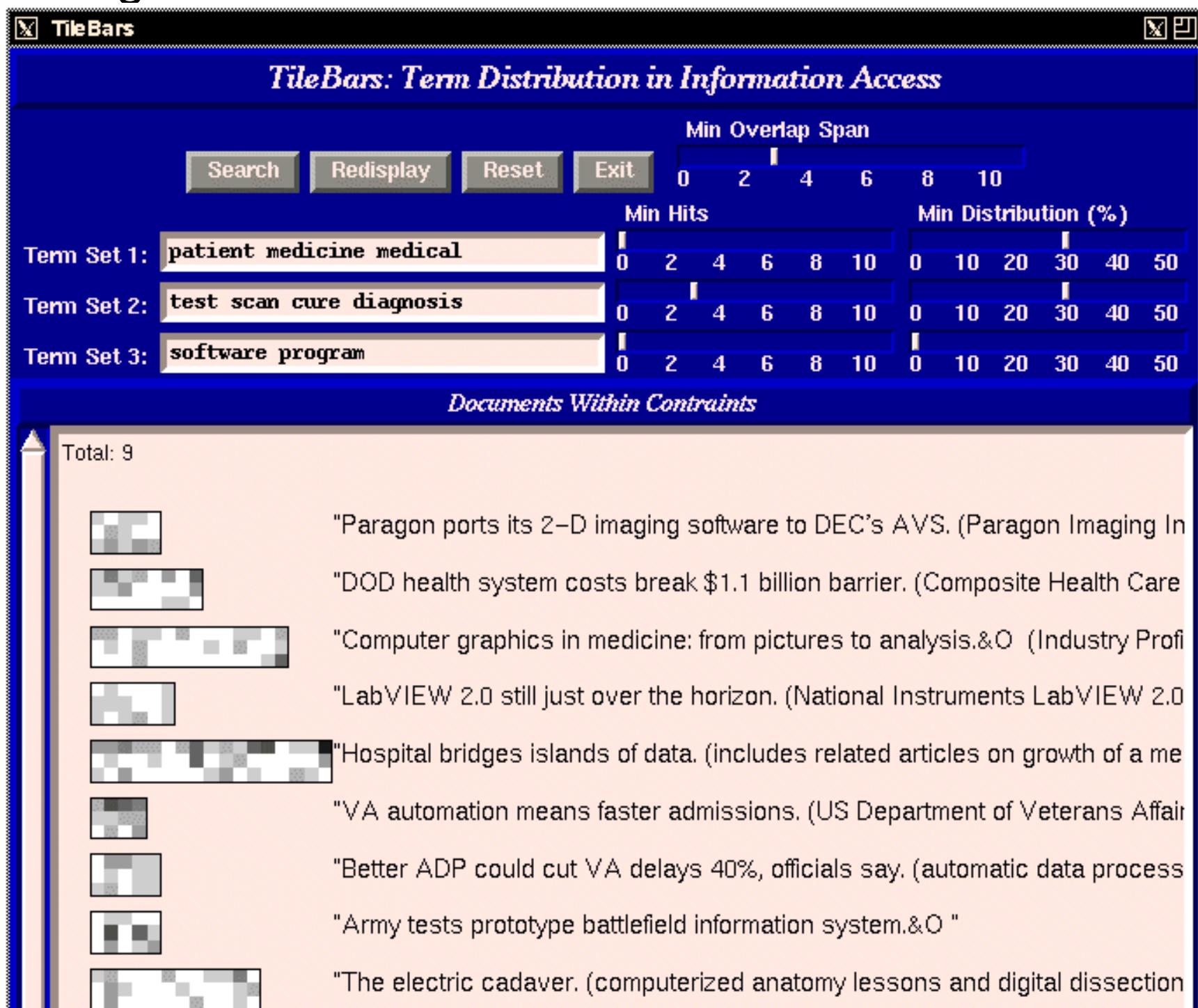
Brief segue to topic #2



Document #2 is shorter

Overlap of Topics in this region

# TextTiling/TileBars Visualization of Term Distributions



# TextTiling/TileBars Visualization of Term Distributions

