

## Visualization

Ben Schneidermann Designing the user interface – strategies for effective human-computer interaction

3rd edn. Addison-Wesley, July 1997

visualization

Grasping the whole is a gigantic theme, intellectual history's most important. Ant vision is humanity's usual fate; but seeing the whole is every thinking person's aspiration.

David Gelernter, Mirror Worlds 1992

...

- Overview first, zoom and filter, then details on demand.
- Storytelling, as a paradigm for information presentation.

data types

- 1-D linear data – text, source code, word index
- 2-D map data – floor plan, office layout
- 3-D world – molecules, schematics, ...
- temporal data – 1 D (start, finish)
- multi-dimensional data – n-dimensional (information) space
- tree data – hierarchical
- network data – graph structure

tasks

- overview – ...
- zoom – ...
- filter – ...
- details on demand – ...
- relate – ...
- history – ...
- extract – ...