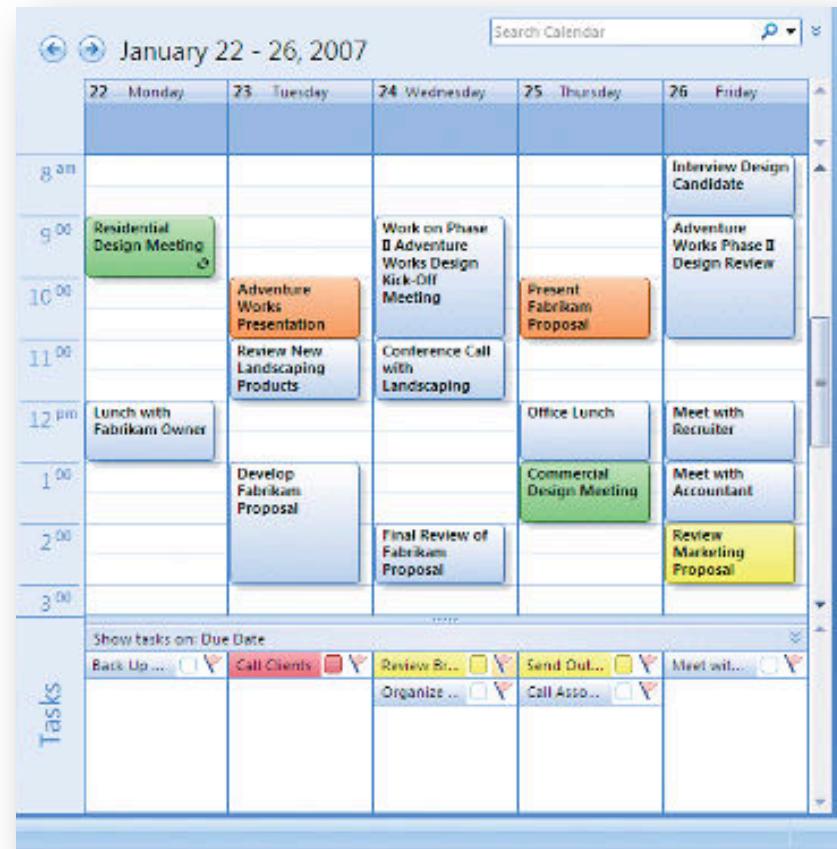




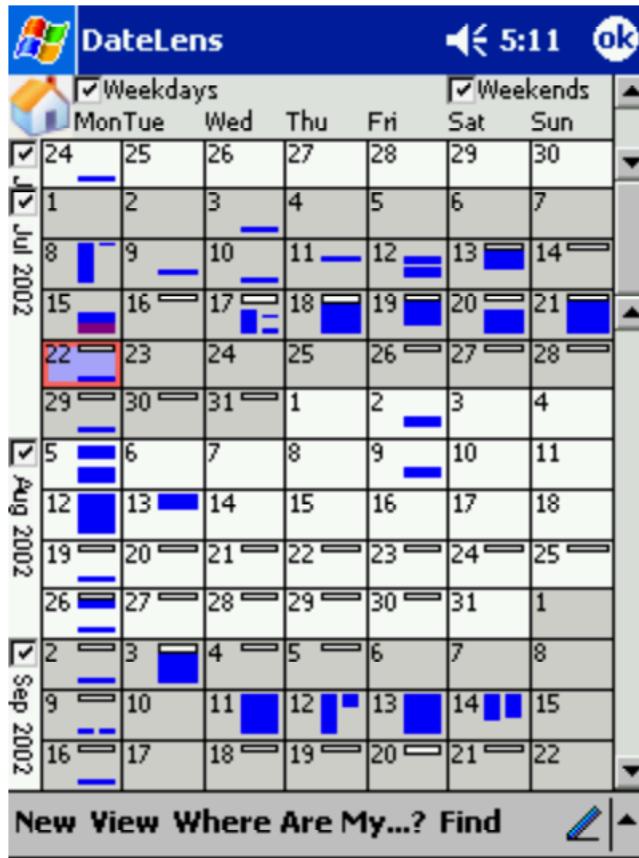
Module #10c: **Visualization of Calendar Data**

Visualization of Calendar Data

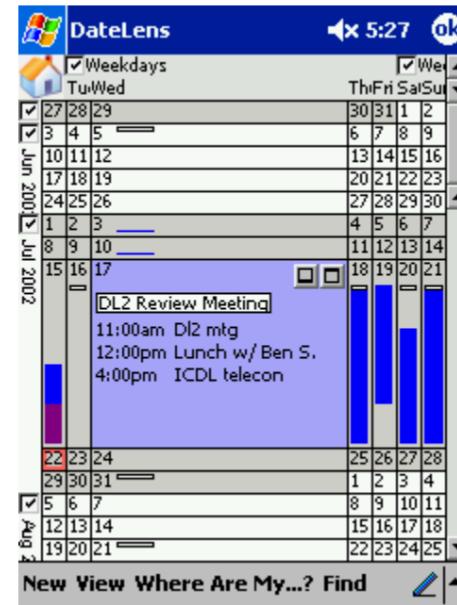
- Calendar data are a subset of time-oriented data
- Time-oriented data
 1. data relate in some way to time
 2. the context or the nature of the data has to be considered
 3. finding an appropriate visual representation of time-oriented data depends on several factors.



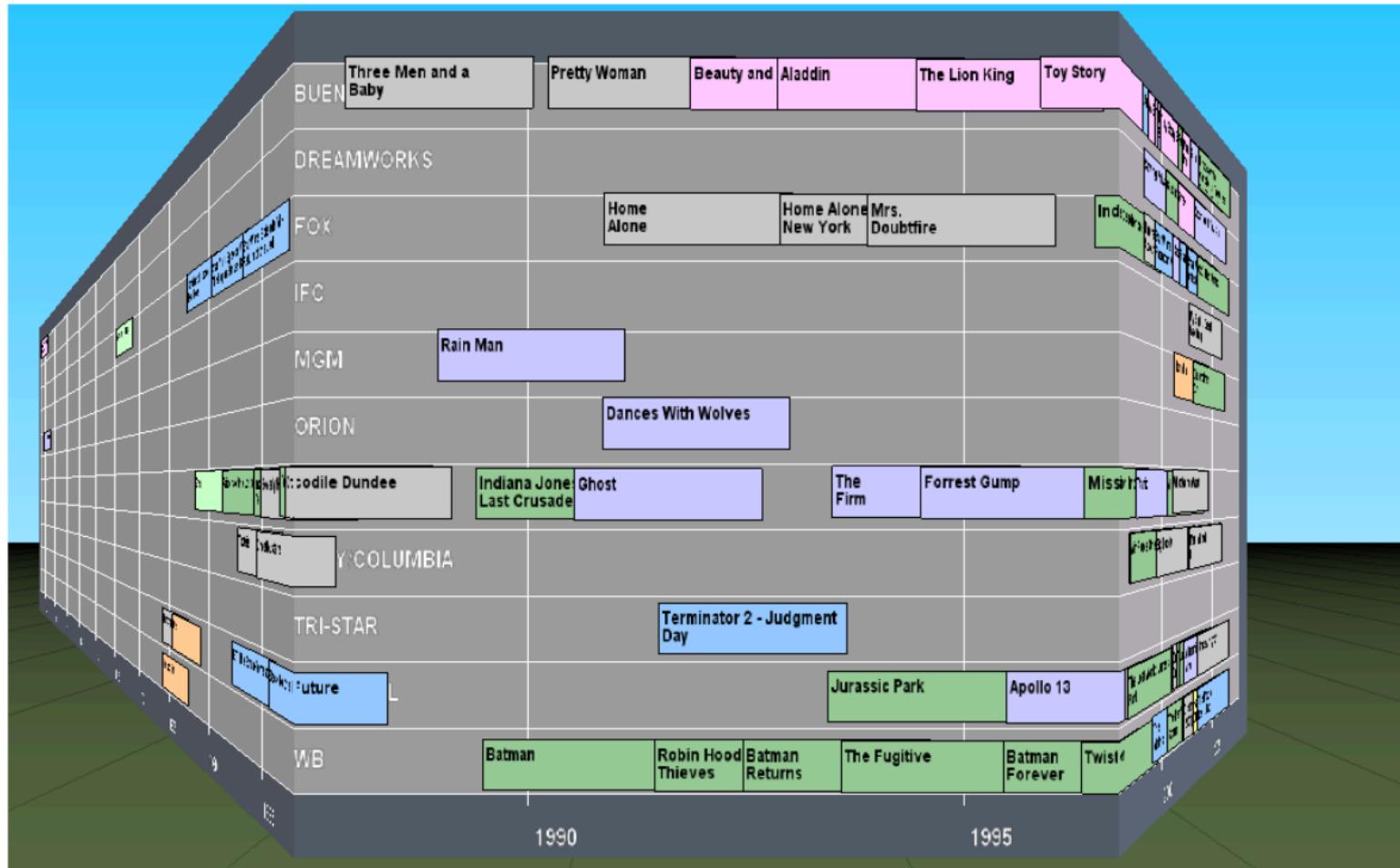
DateLens



- Back in 1994, DateLens (in PDAs) offered several different views to show the schedule
- Recognized patterns and outliers, when searching for some information

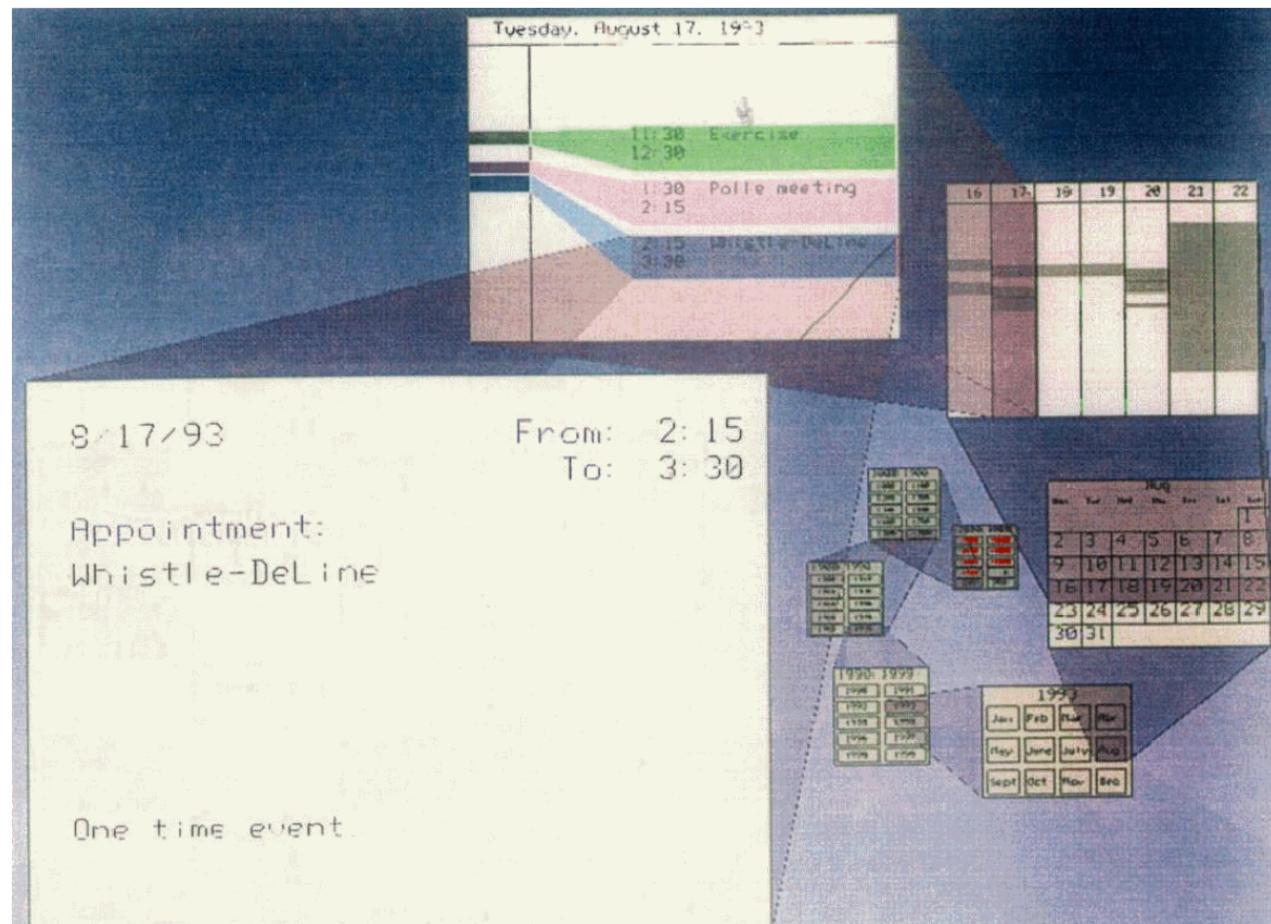


Perspective Wall





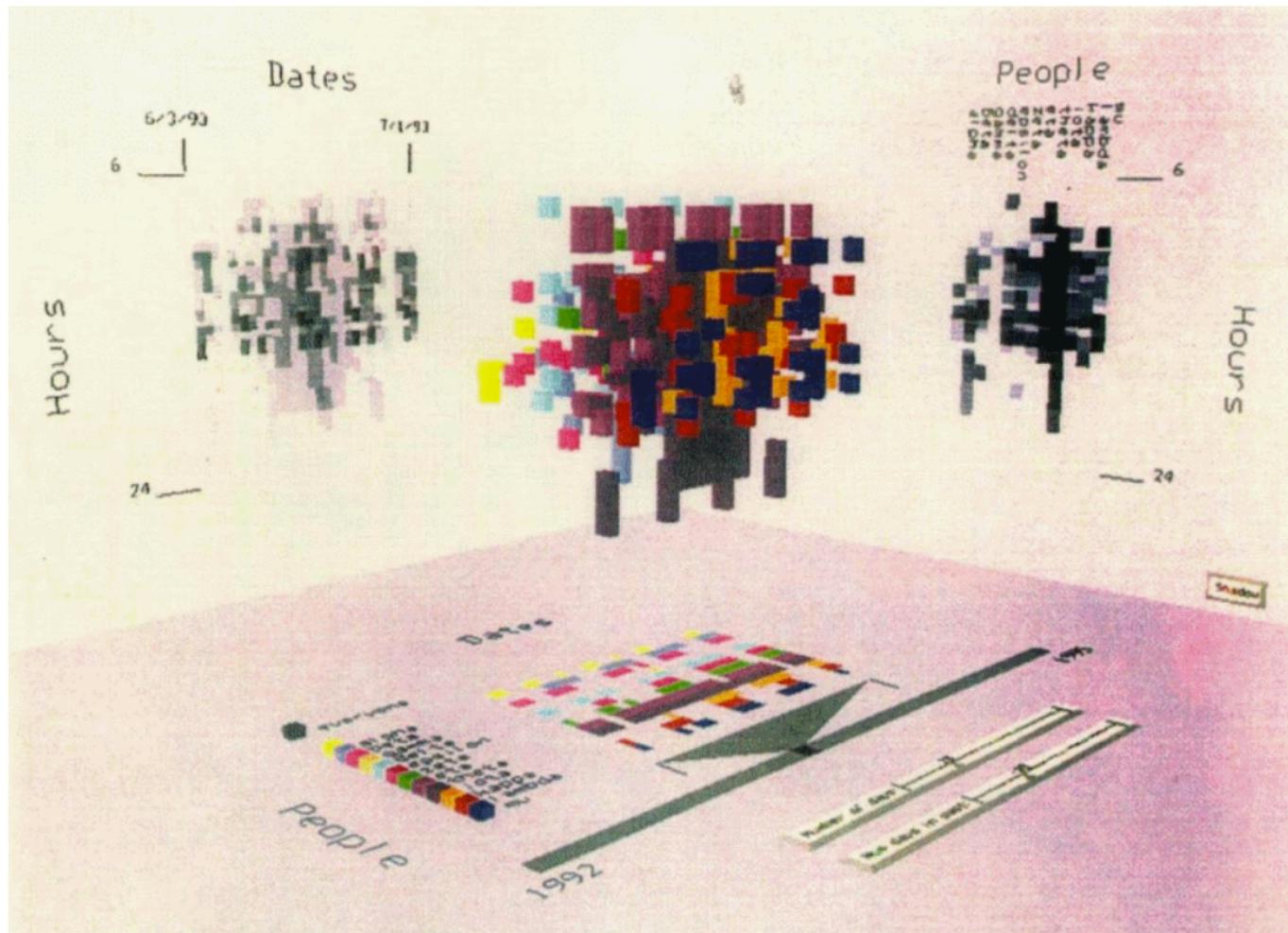
Spiral Calendar (1994)



Mackinlay et al.
developed another focus
+context technique by
placing objects
in an 3D spiral.

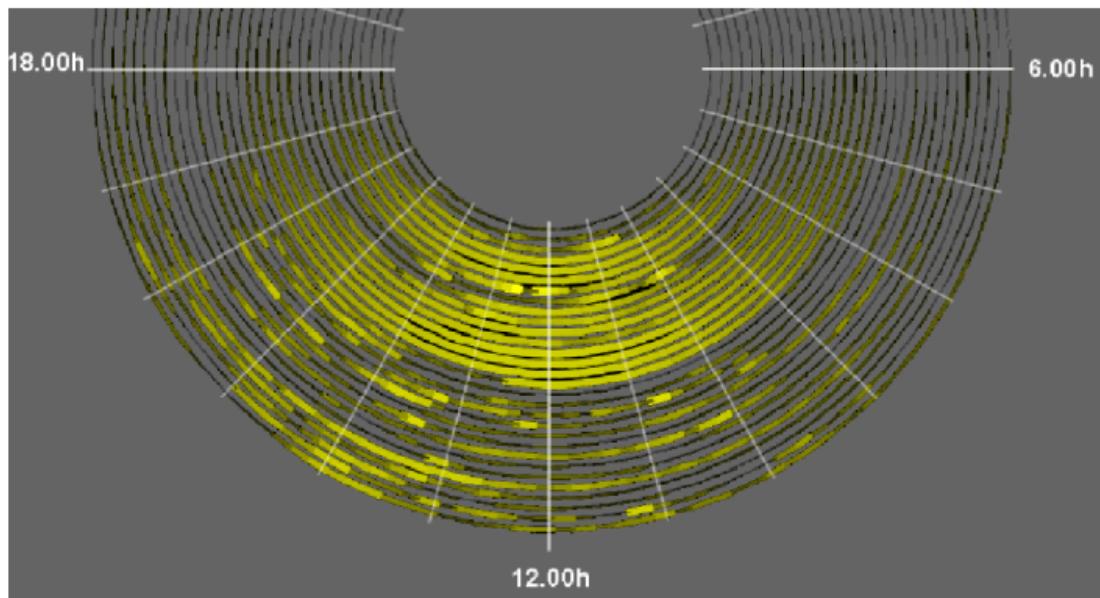


Time Lattice

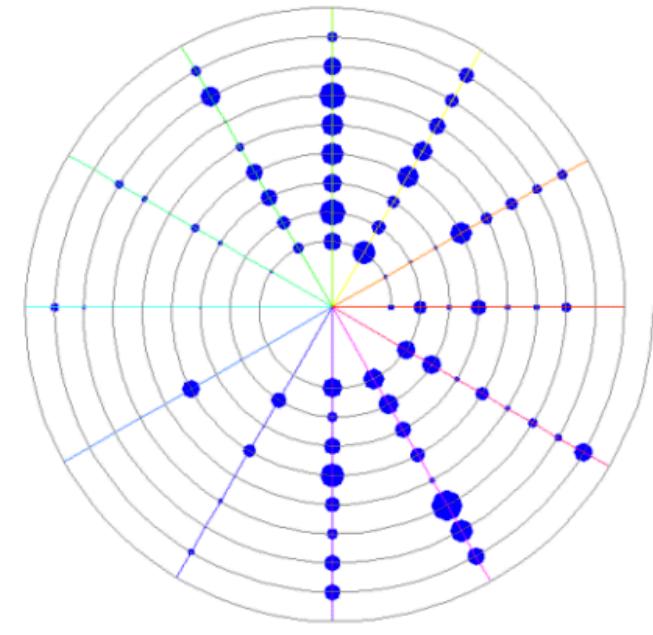




Time Series on Spiral



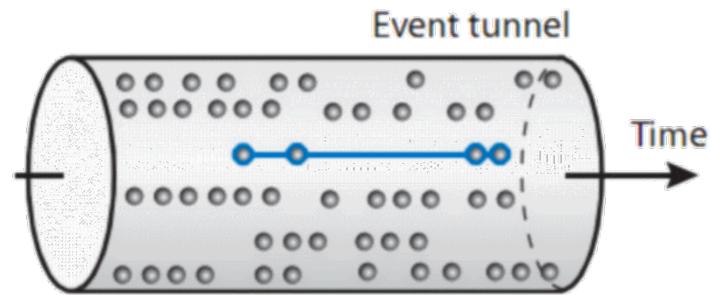
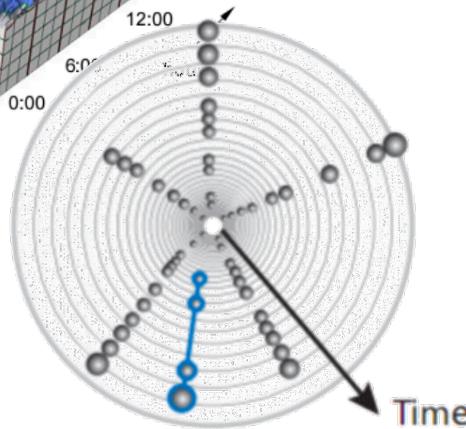
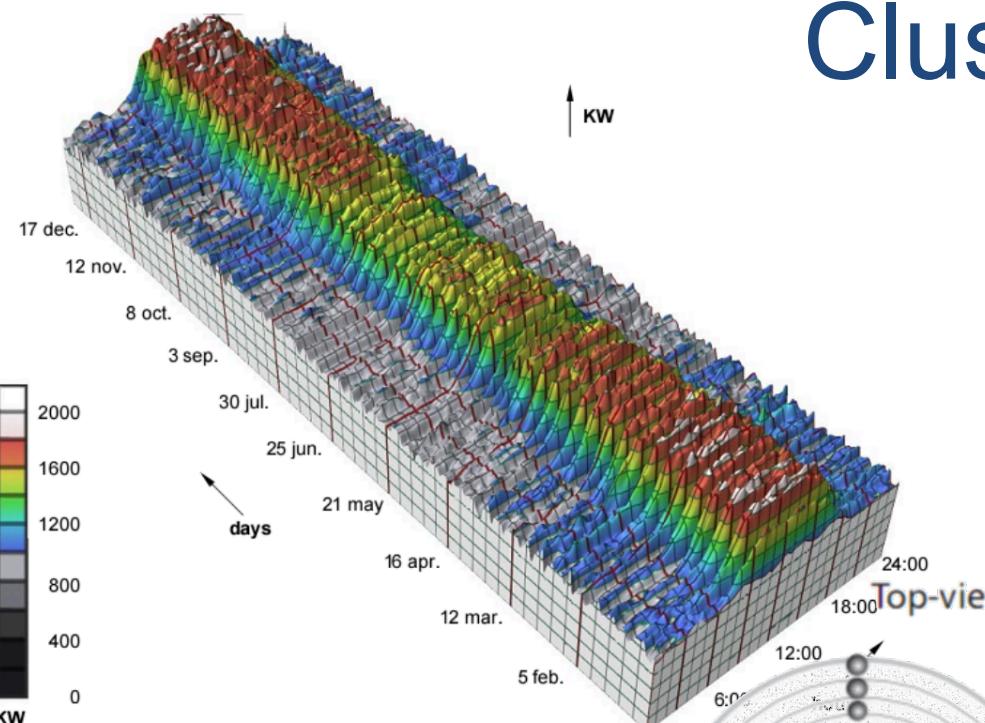
(a)



(b)

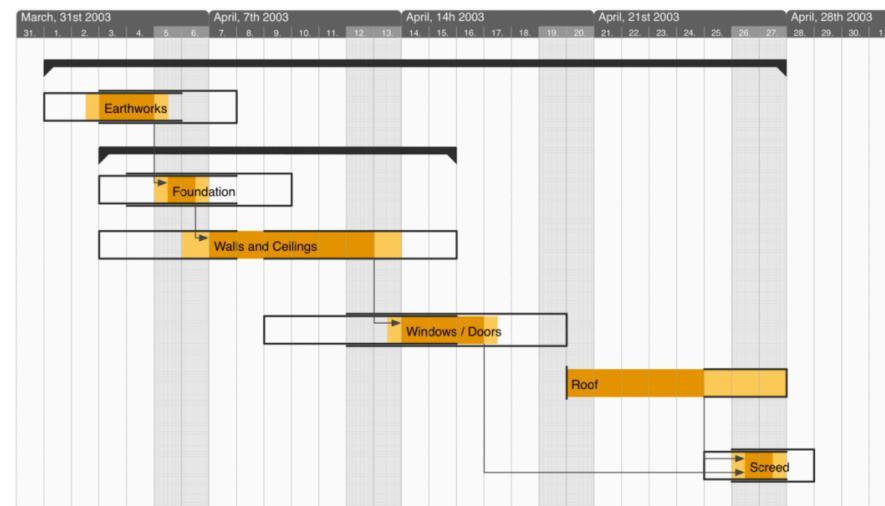
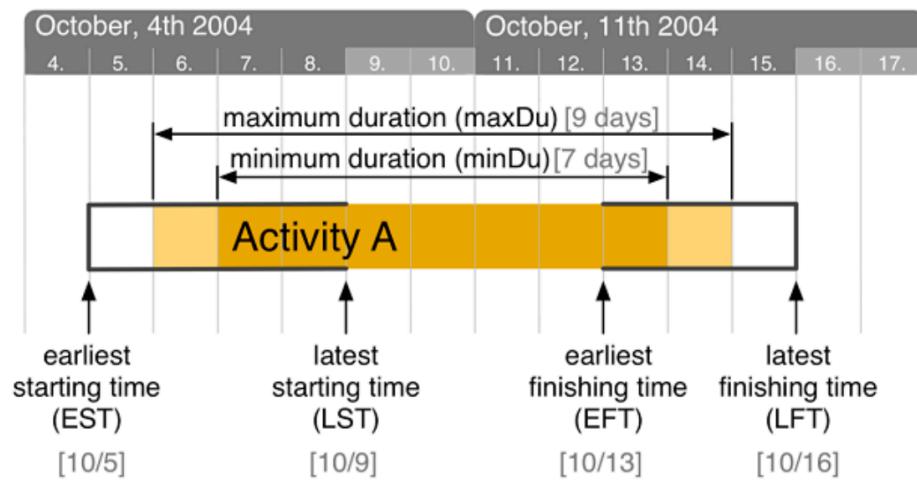


Clusters and 3D



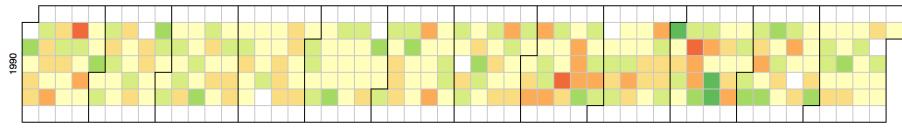


Planning Lines

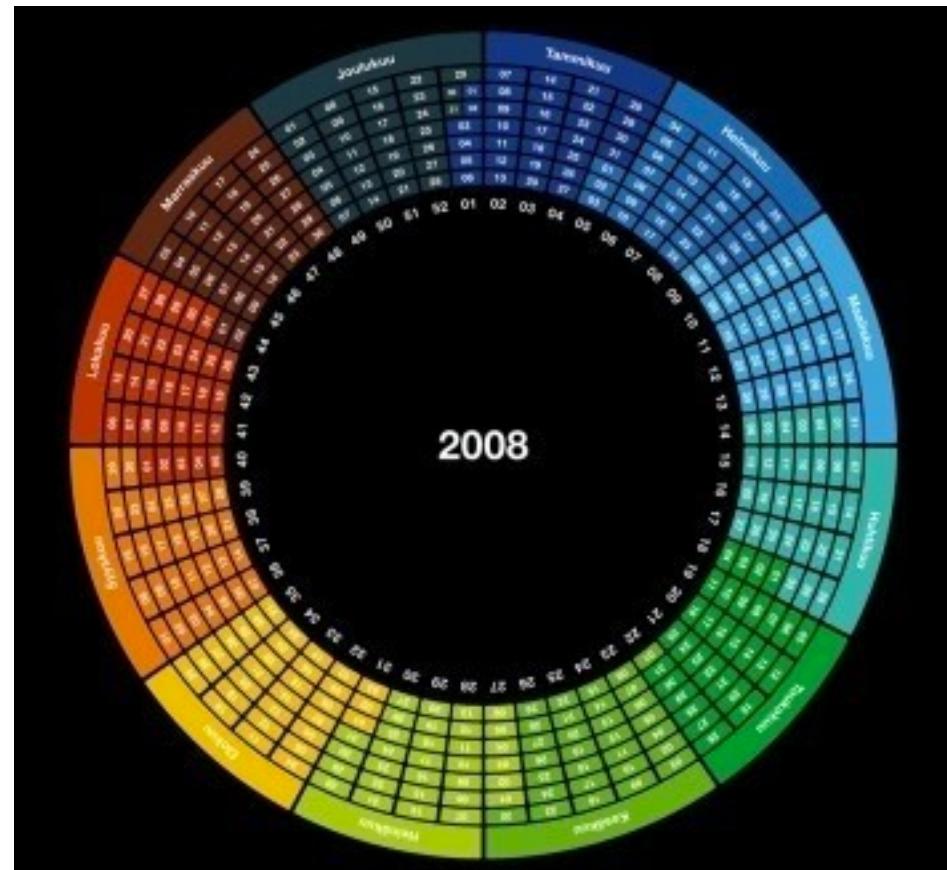
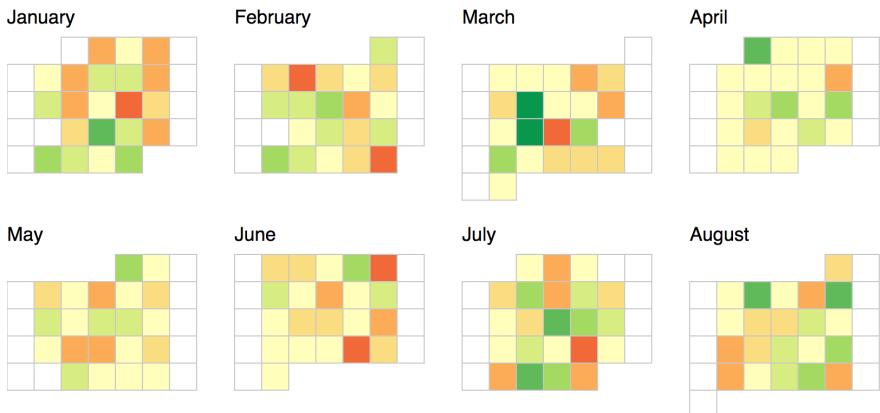


- Many methods and tools have been developed to understand calendar and project management ^(a)
- How to deal with resources, deadlines and other challenges.
- Ex: Gantt charts ^(b)

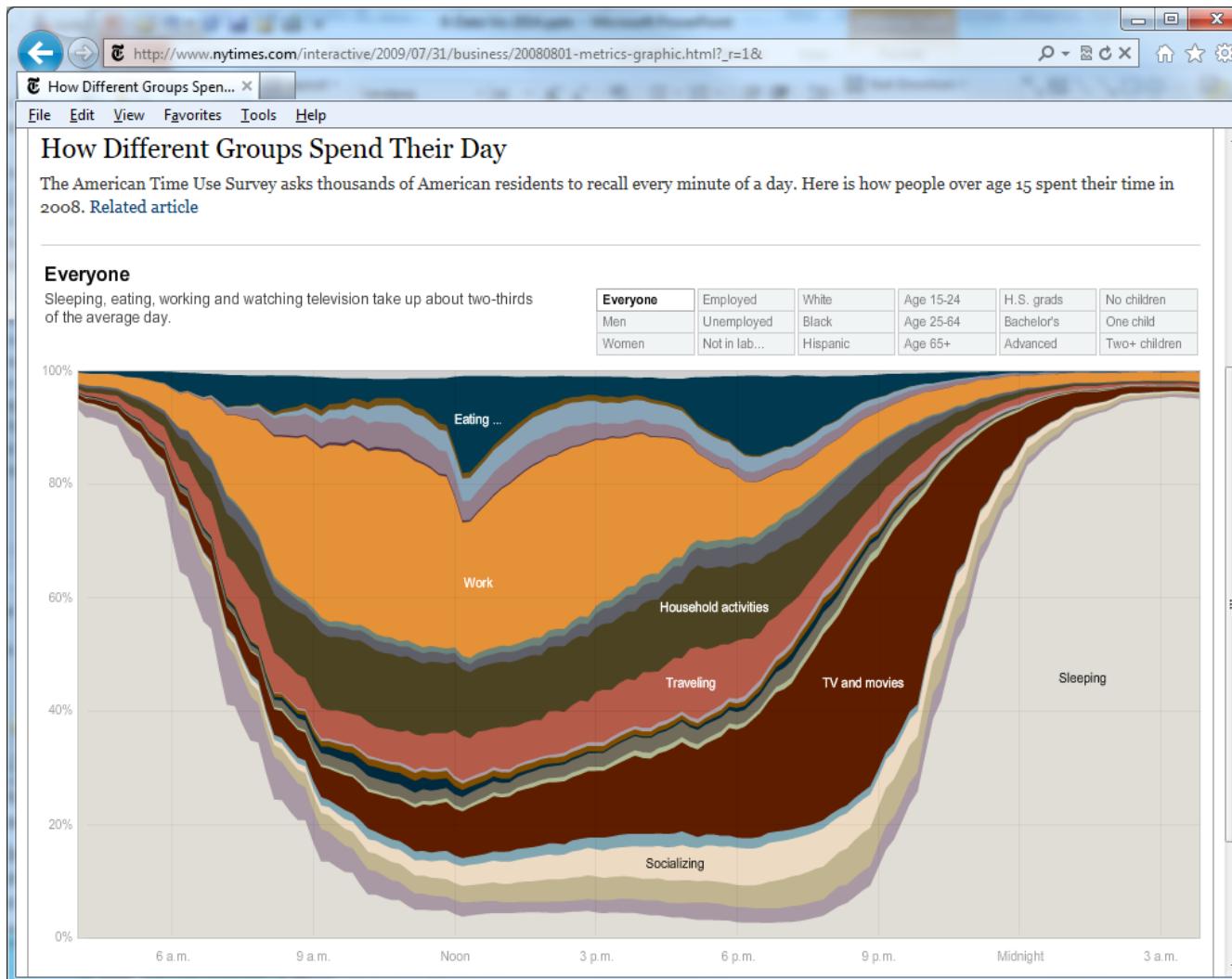
Recent Visualization Techniques



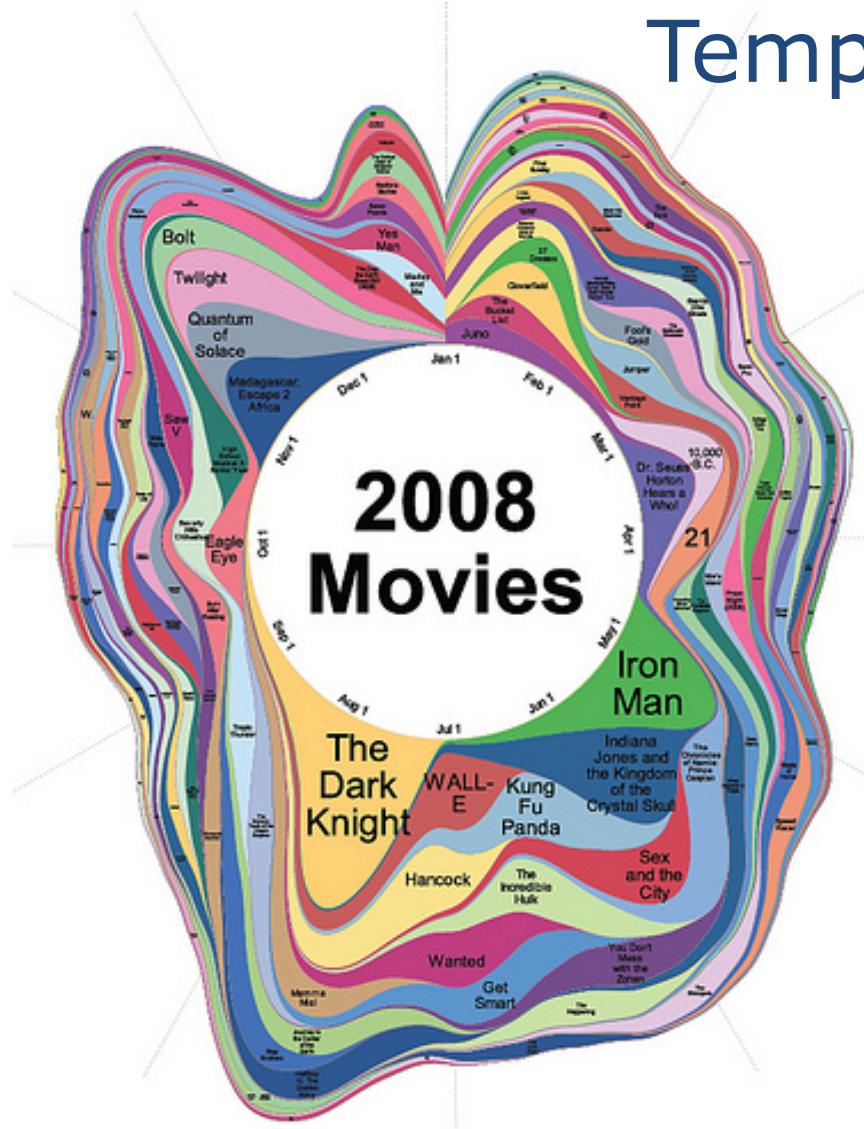
2008

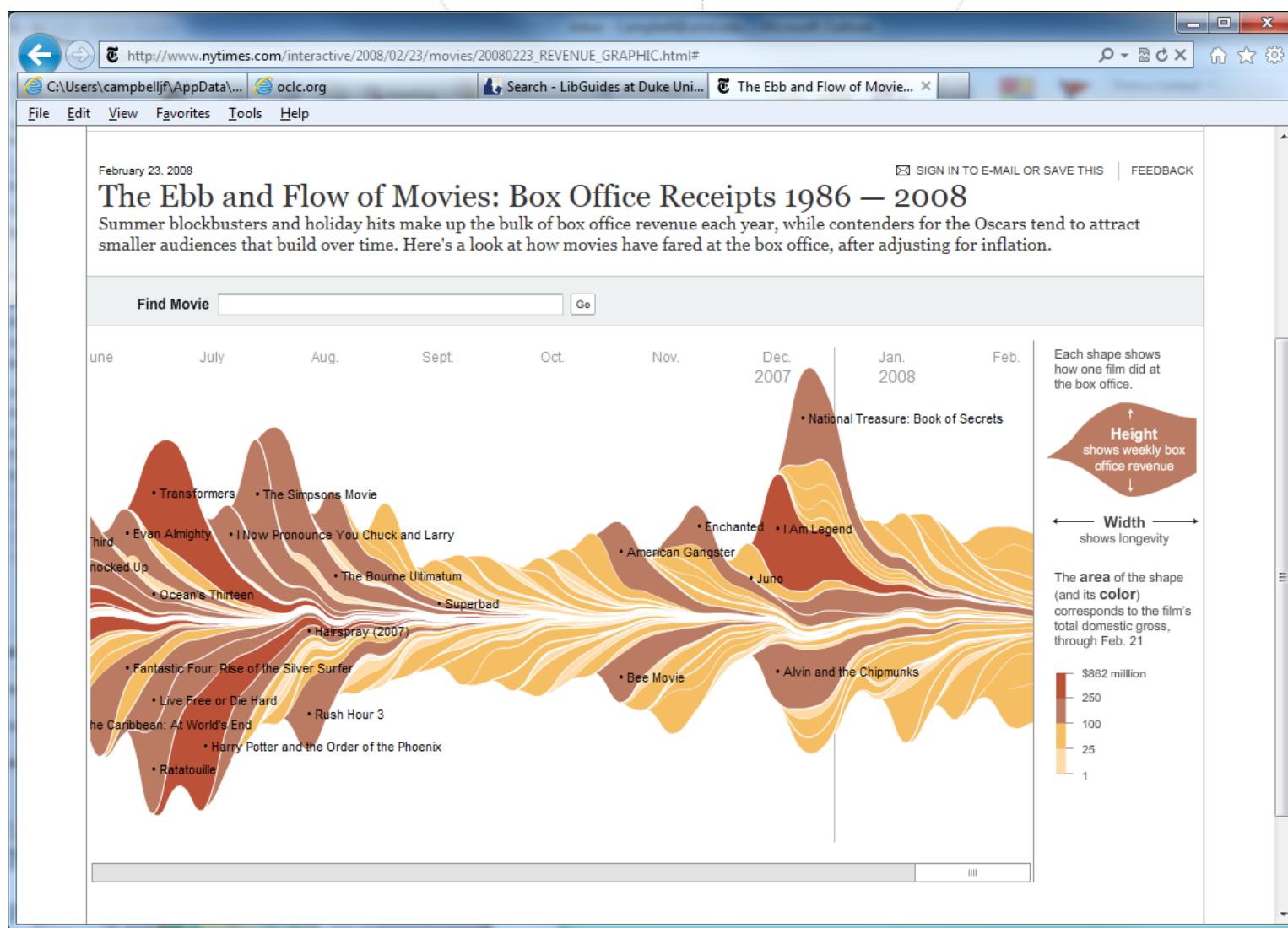


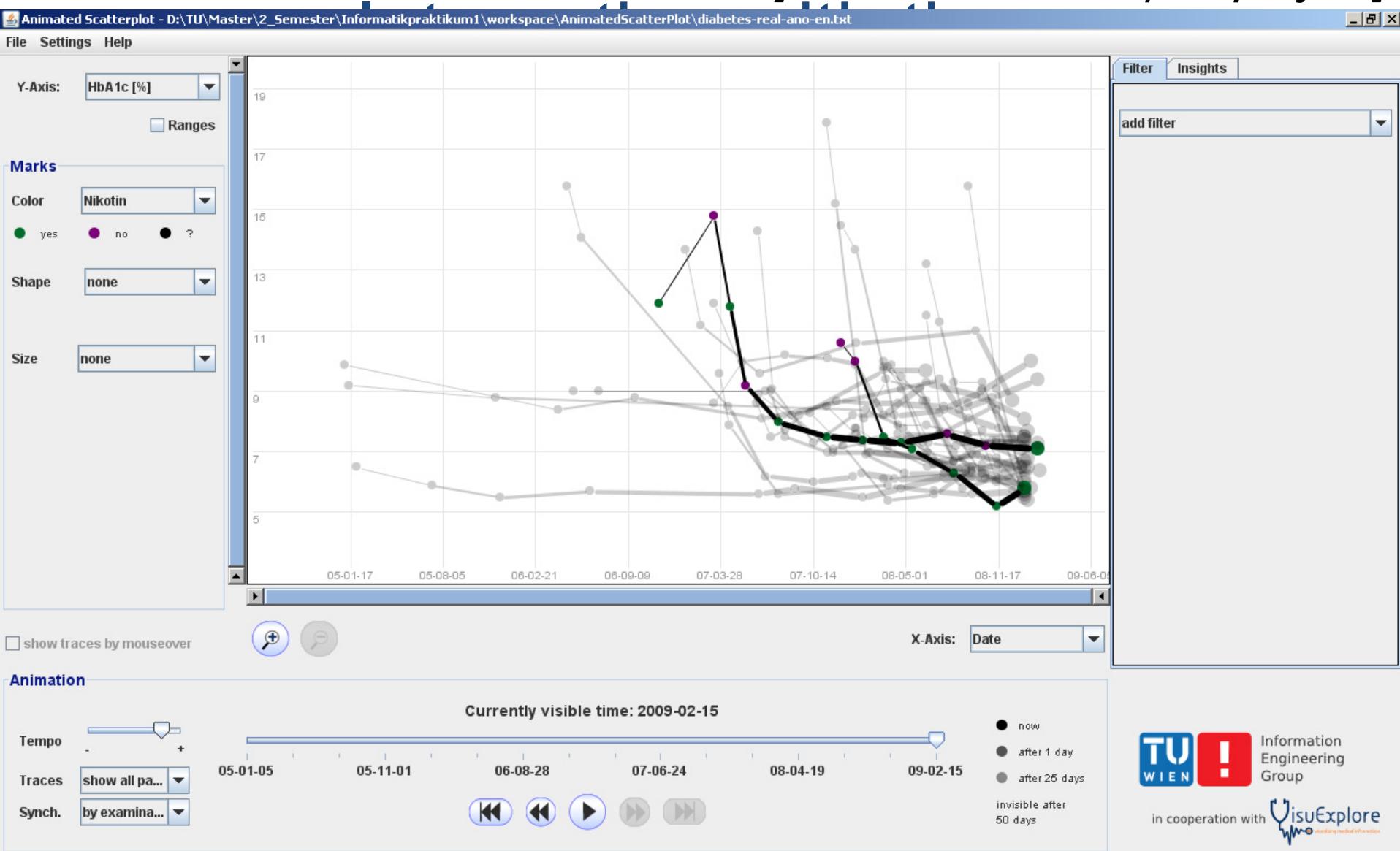
Data Visualization



Temporal Charts





[Animated Scatterplot project]

A number of techniques

The TimeViz Browser

A Visual Survey of Visualization Techniques for Time-Oriented Data

by Christian Tominski and Wolfgang Aigner

of Techniques: 115

Search:

How to use filters:

- Want:** Show me!
- Indifferent:** I don't care.
- Hide:** I'm not interested!

Data

Frame of Reference

Abstract
 Spatial

Number of Variables

Univariate
 Multivariate

Time

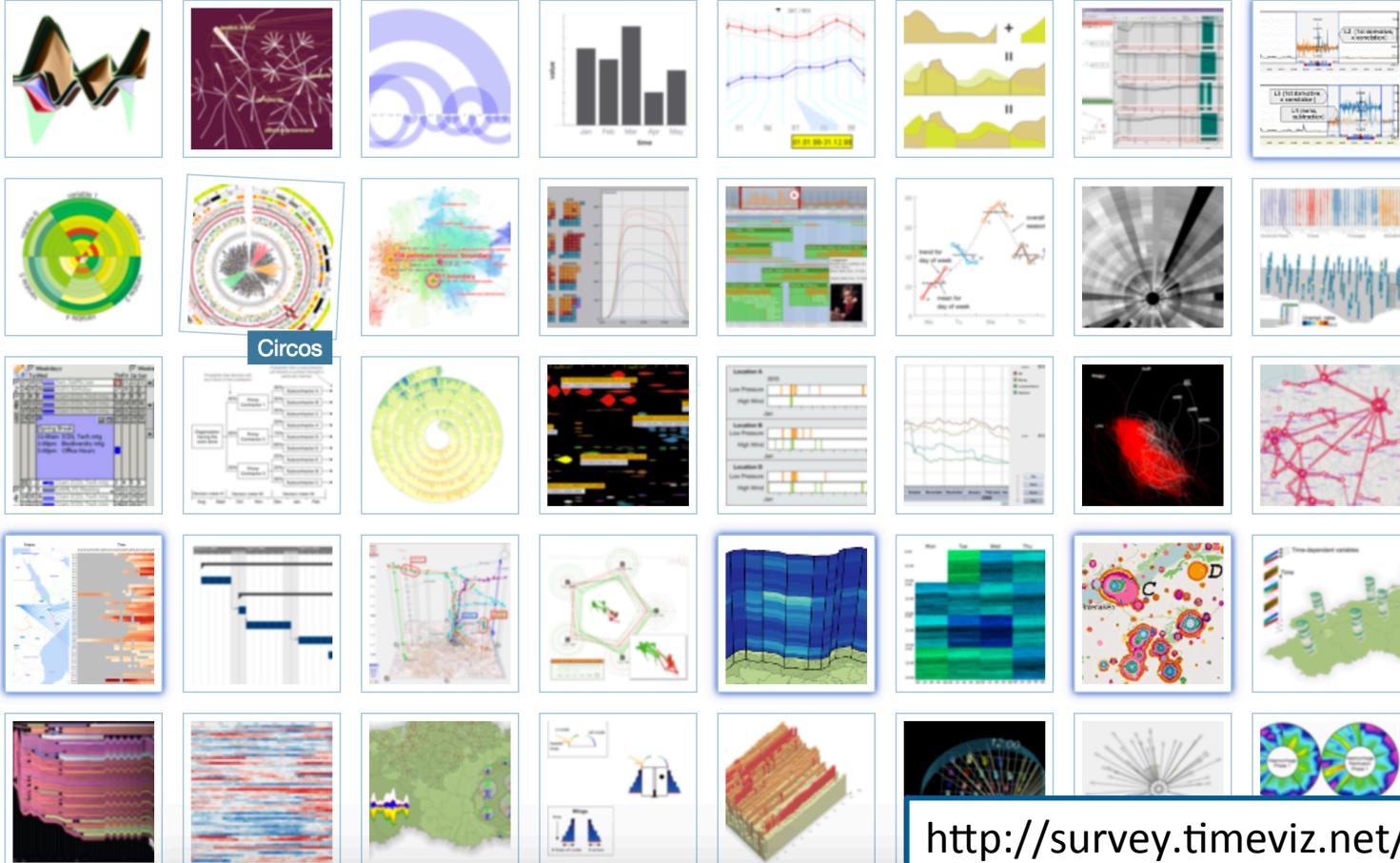
Arrangement

Linear
 Cyclic

Time Primitives

Instant
 Interval

Visualization



<http://survey.timeviz.net/>



Conclusion

- Think about the data
 - What characteristics?
- Can data Visualization help?
 - Maybe not needed
- Think about the visualization techniques
- Which technique(s) work best for your problem?