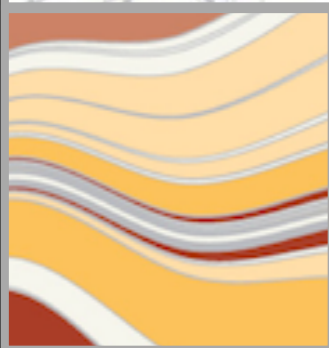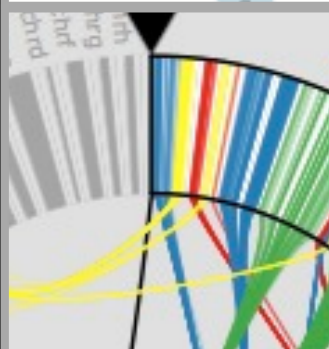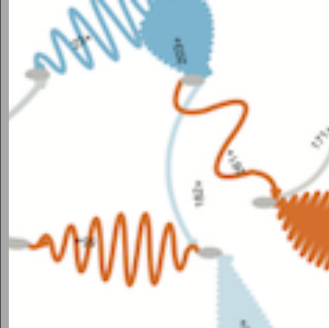# DATA & TASK ABSTRACTION 2

Miriah Meyer
University of Utah
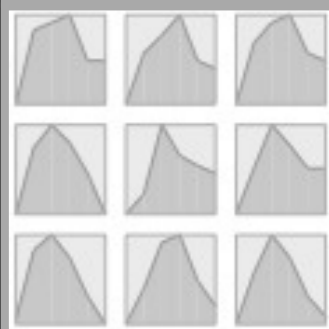
administrivia

-for final projects that have been approved, email me:
- working title
- group member names
- two or three sentence description

LAST TIME

ITEM REDUCTION METHODS

- **filtering and navigation**
  - leave some things out

- **aggregation**
  - merge things together

- **overviews**
  - temporal through navigation
  - separate dedicated view
  - focus + context
    - *selective filtering*
    - *geometric distortion*
    - *distortion costs/benefits*

change of plans...

THE SMARTPHONE CHALLENGE

part 1

- **find a partner**

- **decide on a question for the challenge**
  - think of some sort of question that makes use of the spatial, temporal, and relational aspects of the data

    - *How connected or disjoint are the neighborhoods of SLC?*
    - *Where are the most popular places to hang out?*
    - *How do my social habits compare to other SLC residents?*
    - *I'm tired of being single: who might be the best match-makers in town?*

part 2

- create a data and task abstraction

- What are the subquestions you need to address in order to answer you challenge question?
- What kinds of visualization analysis tasks are these subquestions?
- What classes of change will support these tasks?

- What additional data besides the SmartPhoneSLC records to you need to collect?
- What sorts of derived data do you need to create?
- What are the data types, dataset structure, and semantics of your data?

part 3

- **pair up with another group**

- **talk about your questions**
  - Can you create a bigger, more encompassing challenge question that is interesting to all group members?

part 4

- create a new, more refined data and task abstraction

- prepare to present your abstraction to the class

- each group gets four minutes to present abstraction

part 5

- **each person needs a copy of the abstraction**
  - assign one person to bring the abstraction to the next class
  - put each group member's name on the abstraction

- **sketch three different visualization system ideas**

- **pick one and describe and justify design**

- **bring sketches and prose with you to the next class**