

IN4MATX 231:

User Interface Design & Evaluation

Class 5:

Other needfinding methods

Daniel Epstein

Today's goals

By the end of today, you should be able to...

- Provide examples of needfinding design activities and apply them

Affinity diagramming



Qualitative coding

- Sometimes done in addition to affinity diagramming, sometimes done instead, sometimes skipped
- Labeling instances where a participant said something which matched a theme (“code”)
- “open coding”
 - Coding without predefined codes
- “closed coding”
 - Coding with predefined codes

Focus groups

- Moderated conversation among peers
- Benefits over interview:
 - Easier to build consensus or surface diverging opinions
 - Might increase sample size or voices you hear from
 - Collaborative design activities possible
- Drawbacks:
 - Social dynamics may interfere; may not hear from all stakeholders
 - Not as rich data

Diary studies

- Give participants a diary and ask them to record data about themselves
 - Usually structured: maybe with a form, maybe with description
 - Physical and visual design of that structure are crucial
- Provides bursts of information around the logging activity
 - Not as rich as observation ([why?](#))
 - Must be brief recordings ([why?](#))

Cultural probes (design probe)

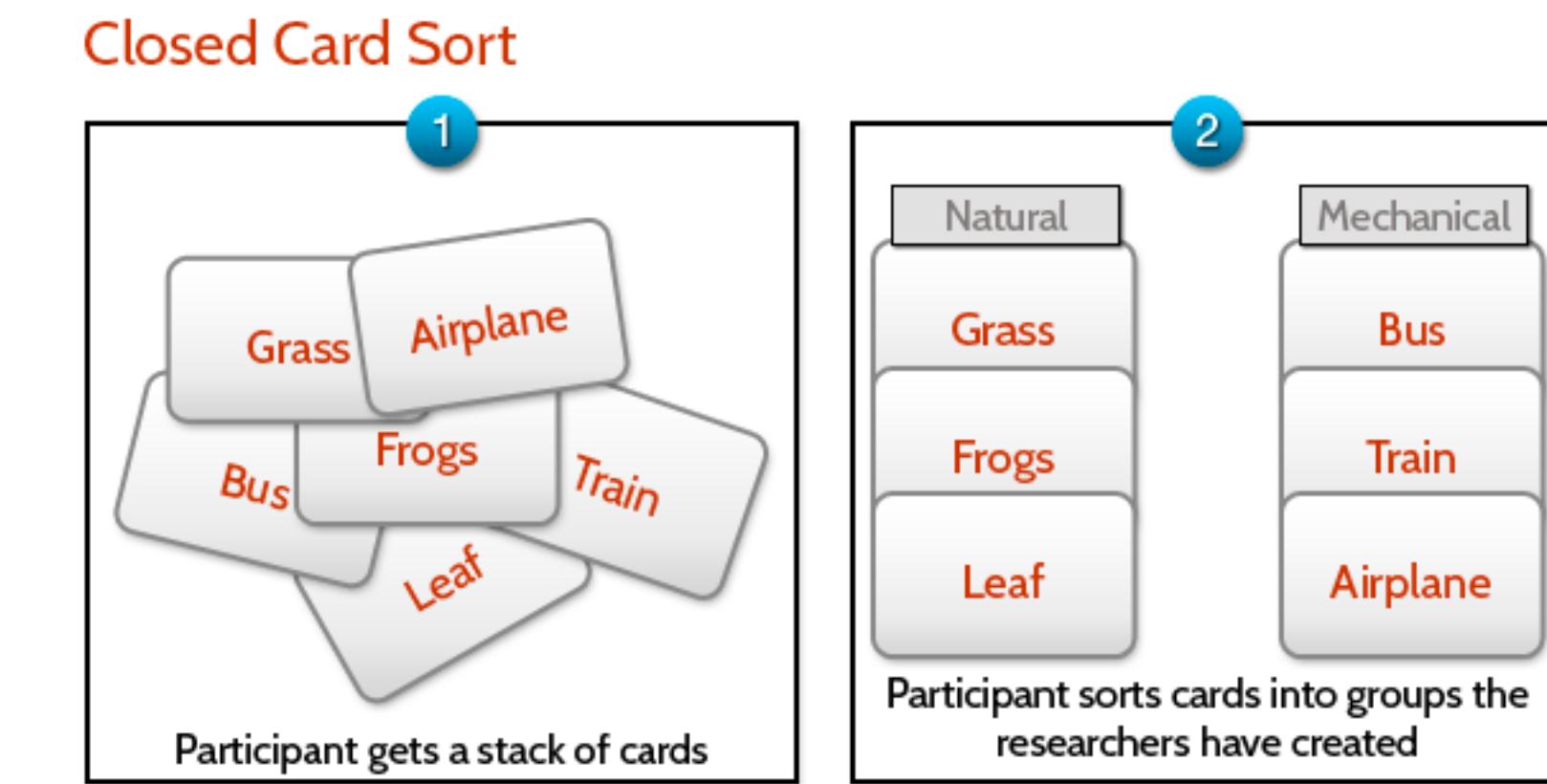
- The inclusion of an artifact to think about or interact with
 - Using a diary to record thoughts and experiences
 - Perhaps as a precursor to an interview
- Sometimes a needfinding tool, sometimes an evaluative method



Gaver, B., Dunne, T., & Pacenti, E. (1999). Design: cultural probes. *Interactions*, 6(1), 21-29.

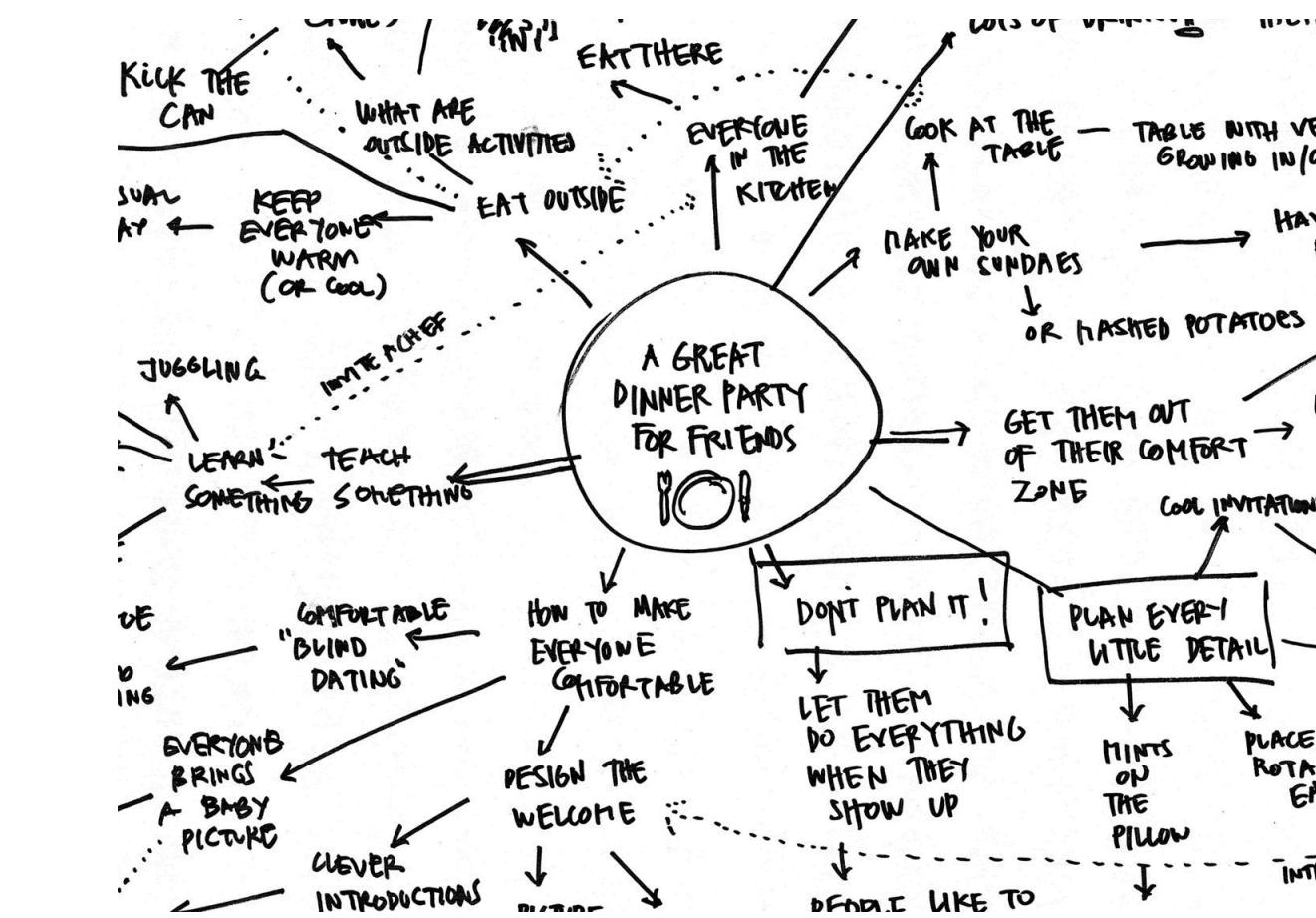
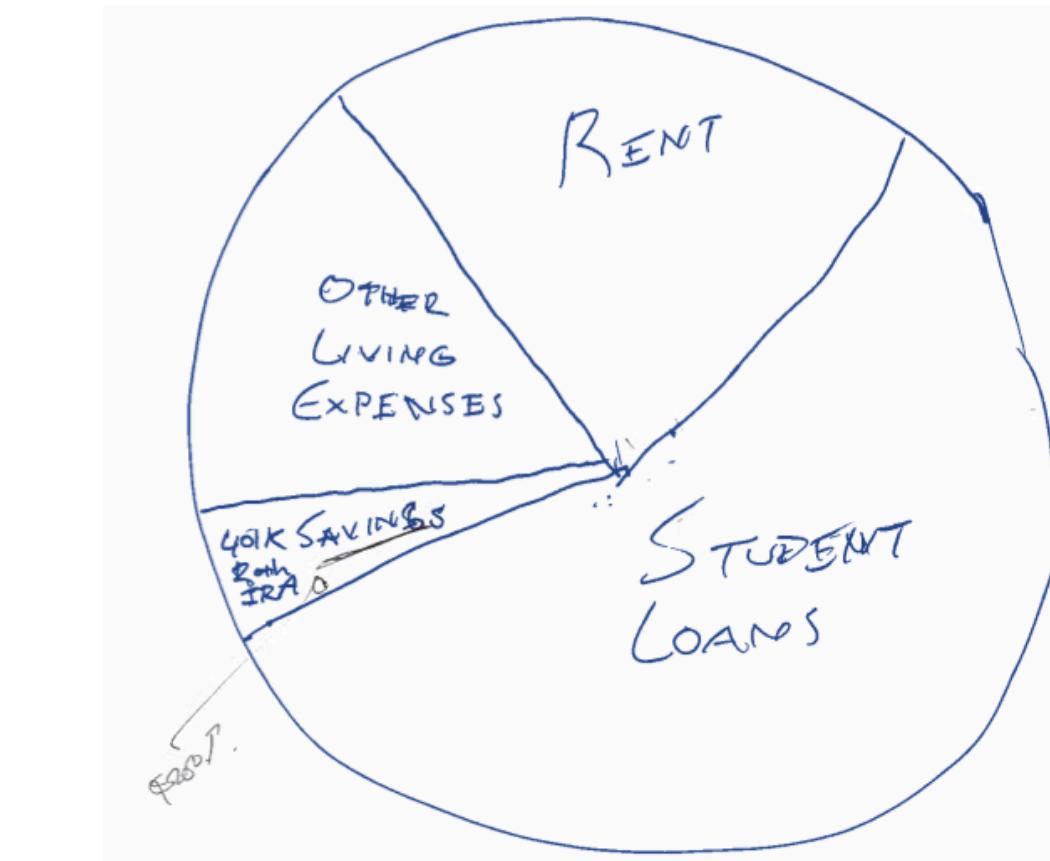
Card sorting and clustering

- Design activities used to cluster or organize thoughts
- Can be used in a variety of ways
 - To understand people's priorities or values
 - To form information hierarchies
 - To evaluate people's impressions of design ideas or prototypes



Sketching and mapping

- Design activity to understand participant's mental models, circumstances, or design ideas
- Can surface attitudes, motivations, and challenges
- Can debunk prior notions about people's priorities or interests



Joseph Jofish Kaye, Mary McCuistion, Rebecca Gulotta, and David A. Shamma.
Money talks: tracking personal finances. CHI '14.
<https://doi.org/10.1145/2556288.2556975>

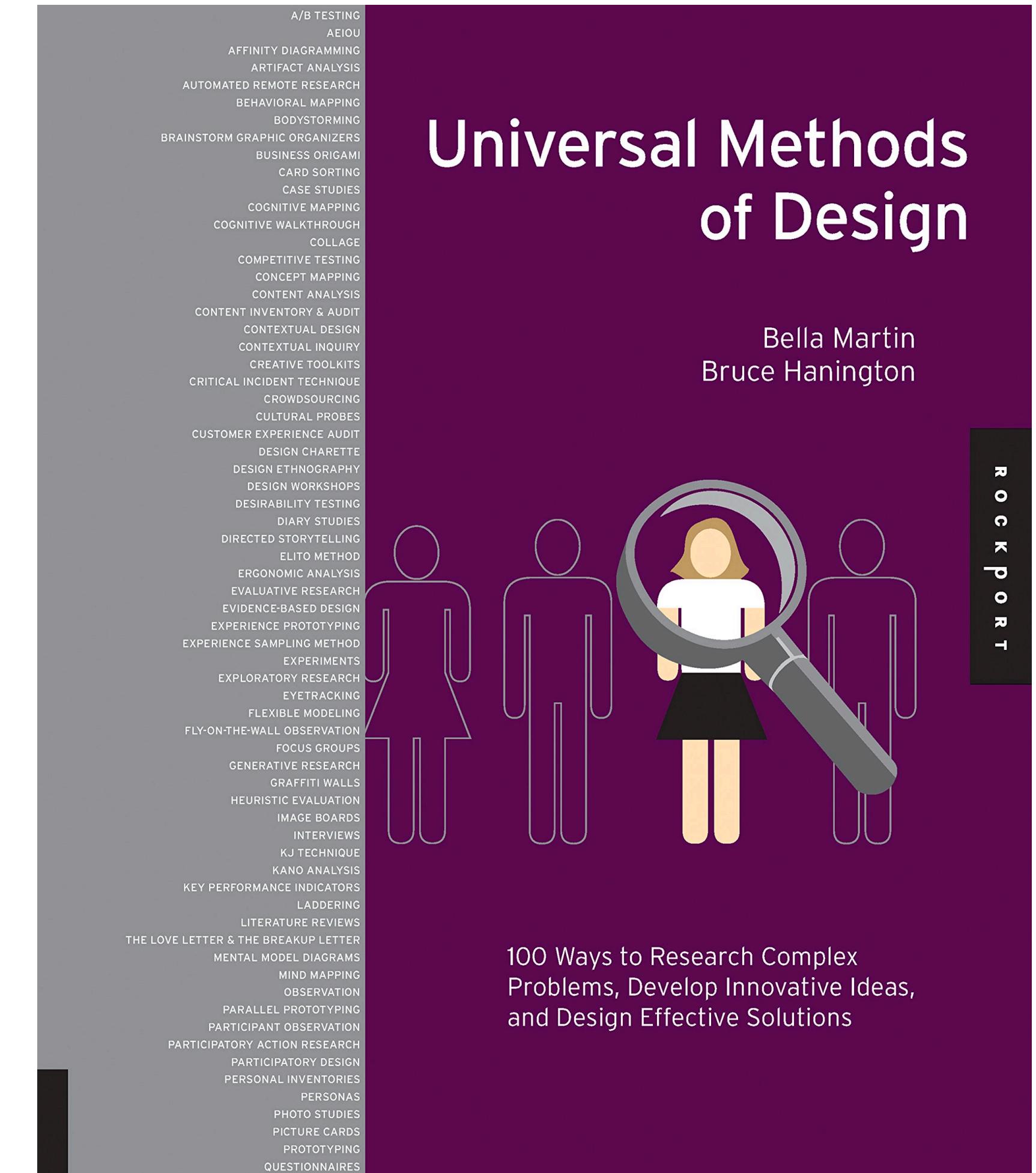
Other needfinding methods



- What method did you read about?
- When might you think about applying that method? With whom?

Other methods

- There are infinite different ways of approaching needfinding
 - The tried and true ones are often sufficient, but different populations, environments, etc. may suggest new methods
 - Children do better with design activities than surveys, for example



100 Ways to Research Complex
Problems, Develop Innovative Ideas,
and Design Effective Solutions

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