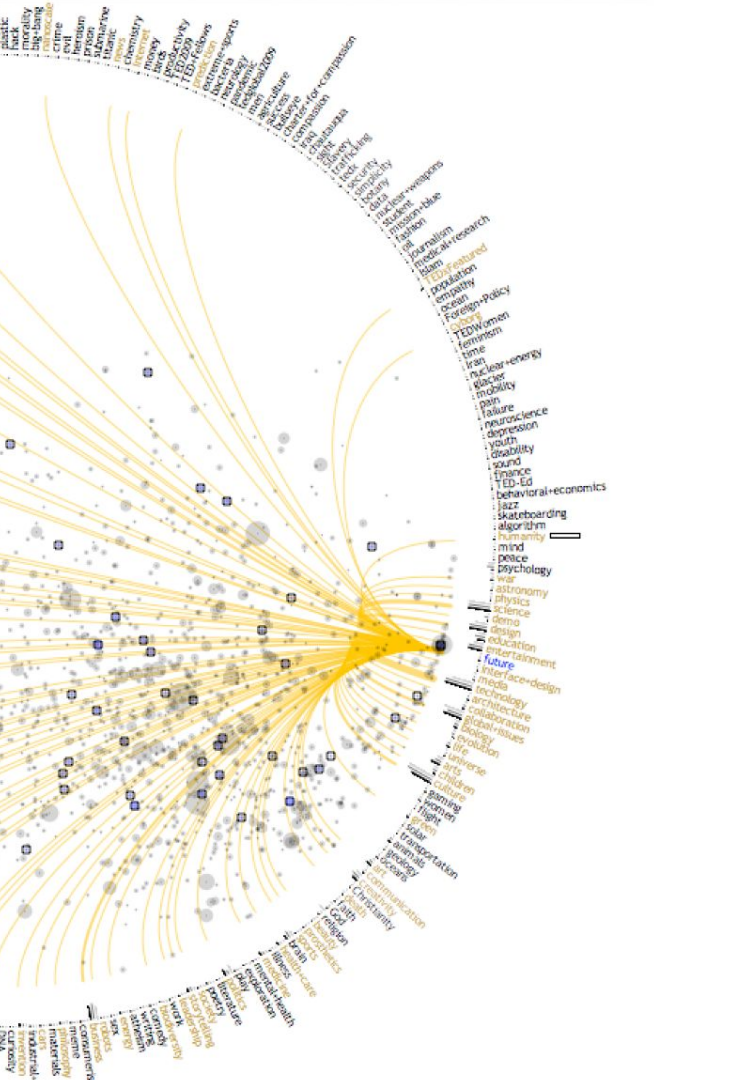
We will get started at 3:15

Relax

Here for questions. Also take a moment to dry off.



Tasks and Domains

A Samuel Pottinger
Stat 198: IDSV
Mar 12, 2025

Context Setting

Visualization as Representation

Visualization as Task

Visualization as Narrative

Visualization as Dialogue

Today

> Tasks and Domains: Introducing the concept.

Group activity: Revisiting some earlier graphics.

What, Why, How: Optional framework to consider

Looking forward: Upcoming interactive experience

Tasks and domains

Domain / Context

Who is the user?

What social context is that user in?

What are the concepts the user is interacting with?

What prior knowledge or understanding might the user be interacting with?

How are the data produced?

Tasks and domains

Domain / Context

Who is the user?

What social context is that user in?

What are the concepts the user is interacting with?

What prior knowledge or understanding might the user be interacting with?

How are the data produced?

We will talk about how to figure this out in detail but basically the three moves: talk to them, ask them to share their work with you, or share prototypes with them.

Tasks and domains

Domain / Context

Who is the user?

What social context is that user in?

What are the concepts the user is interacting with?

What prior knowledge or understanding might the user be interacting with?

How are the data produced?

Task / Questions

What questions are the users trying to answer or actions are they need to take?

What will the user do with that answer or action?

Why is the task important?

What information is needed to answer that question?

Tasks and domains

This tells you what to encode and why / with what priority.

Task / Questions

What questions are the users trying to answer or actions are they need to take?

What will the user do with that answer or action?

Why is the task important?

What information is needed to answer that question?

Today

Tasks and Domains: Introducing the concept.

> Group activity: Revisiting some earlier graphics.

What, Why, How: Optional framework to consider

Looking forward: Upcoming interactive experience

Tasks and domains

Find the domain and tasks

Today

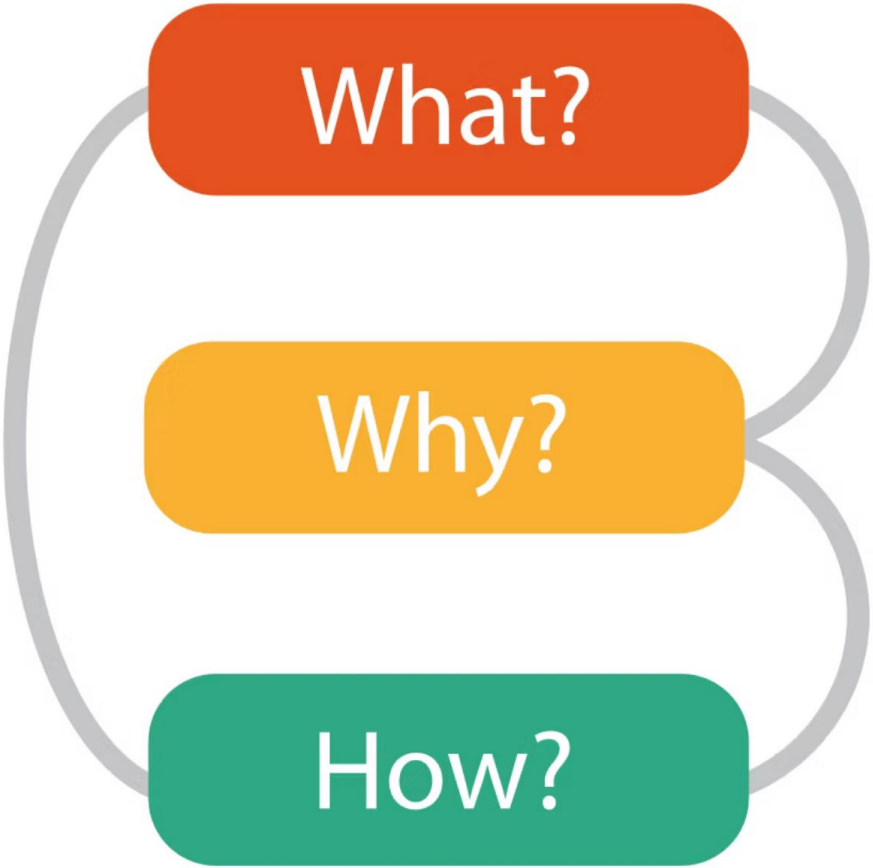
Tasks and Domains: Introducing the concept.

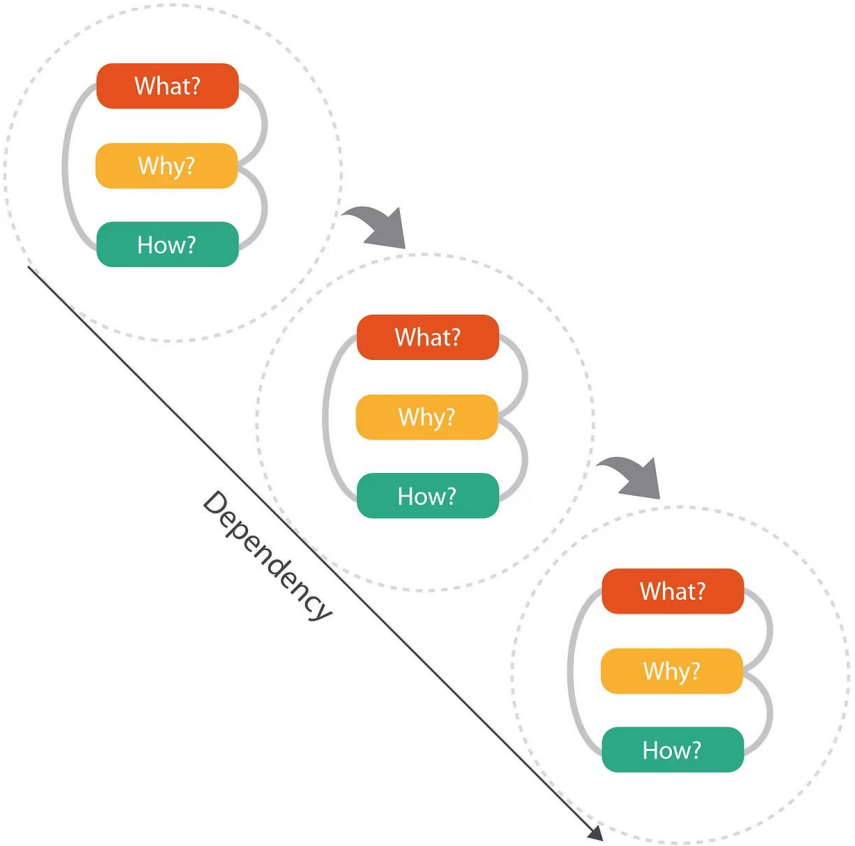
Group activity: Revisiting some earlier graphics.

> What, Why, How: Optional framework to consider

Looking forward: Upcoming interactive experience

Process from Tamara Munzner





Process from Tamara Munzner

What are the dimensions and measures?

What kinds of data types are those dimensions and measures (nominal, ordinal, continuous)?

In what form are those data?

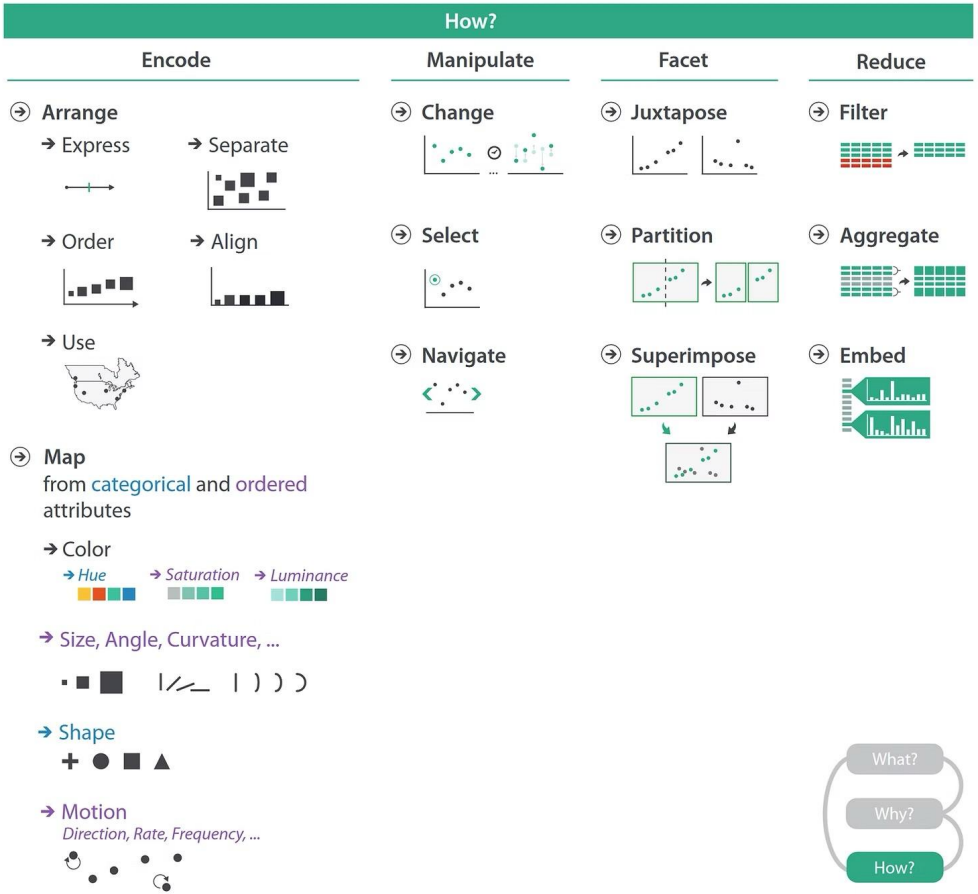
Process from Tamara Munzner

Why is visualization helpful?

What is the motivation for the user in examining these data?

What action or question is the visualization assisting with?

Process from Tamara Munzner



How does the visualization help achieve this goal?

What encodings should be used?

What actions should the user be able to take?

Today

Tasks and Domains: Introducing the concept.

Group activity: Revisiting some earlier graphics.

What, Why, How: Optional framework to consider

> Looking forward: Upcoming interactive experience

Coming Up

Next

User Research

Measurement / Evaluation

Later

The Player

User as co-creator

Making room due to midterms / requests...

Assignment 12 cancelled

Will move it into additional time for the interactive experience and a bonus reading.

Interactive Experience

1 - Video Game

Well behaved. Violent / non-violent. Short. Can be inexpensive ($7) and played on your phone.

1.1 - In-Class Discussion with grade

1.2 - Zoom Discussion with grade (will be on a Friday 3pm)

2 - Essay

4 different interactive visualizations with 4 sentence response to each prompt.

No cost, browser only needed.

Need you preference by Friday 3pm PT messaged on Zulip.

Citations

T. Munzner, “Visualization Analysis & Design,” University of British Columbia, 2021. Available: https://www.youtube.com/watch?v=pHljd-cgICY

T. Romanowski, “Visualisation Analysis & Design by Tamara Munzner or the What-Why-How of data viz,” Datarocks, 2023. Available: https://www.datarocks.co.nz/post/data-viz-bookshelf_visualization-analysis-design-tamara-munzner

J. Stasko, C. Gorg, Z. Liu, and K. Singhal, “Jigsaw – Visual Analytics,” Georgia Institute of Technology, 2009. Available at: https://youtu.be/2CMw4i9DiaM?feature=shared

R. Binx, “Designing for Realtime Spacecraft Operations,” OpenVisConf, 2016. Available at: https://youtu.be/HuYKhSHcRSQ?feature=shared

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