Storytelling and Visualization

Design for Government
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Schedule

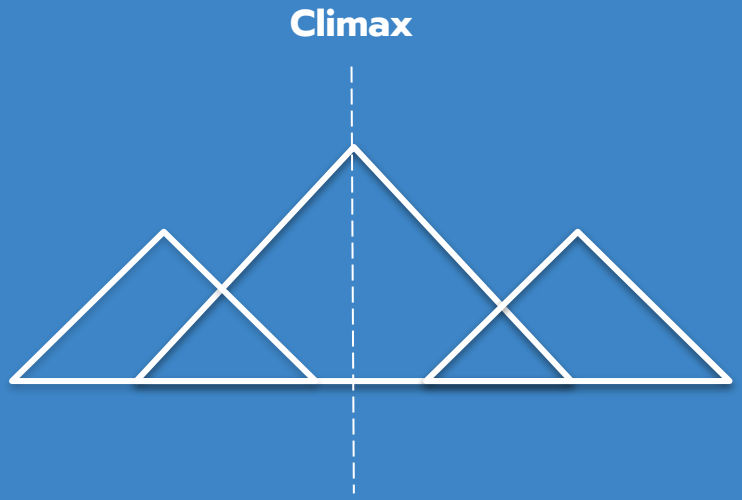
10:00	Start session
10:30	Q & A
10:40	Break (10 minutes or so)
10:50	Scenario+persona exercise
11:20	Group presentation
11:50	Comments & Q/A

Why do we tell stories

- Teach / learn / historical records
- Connect to, and recreate past experiences (myth)
- Call to action
- To understand the past and to envision the future

Joseph Campbell
The stories that guide us

How are stories structured?



Structure of stories.
Freytag Pyramid (1863)

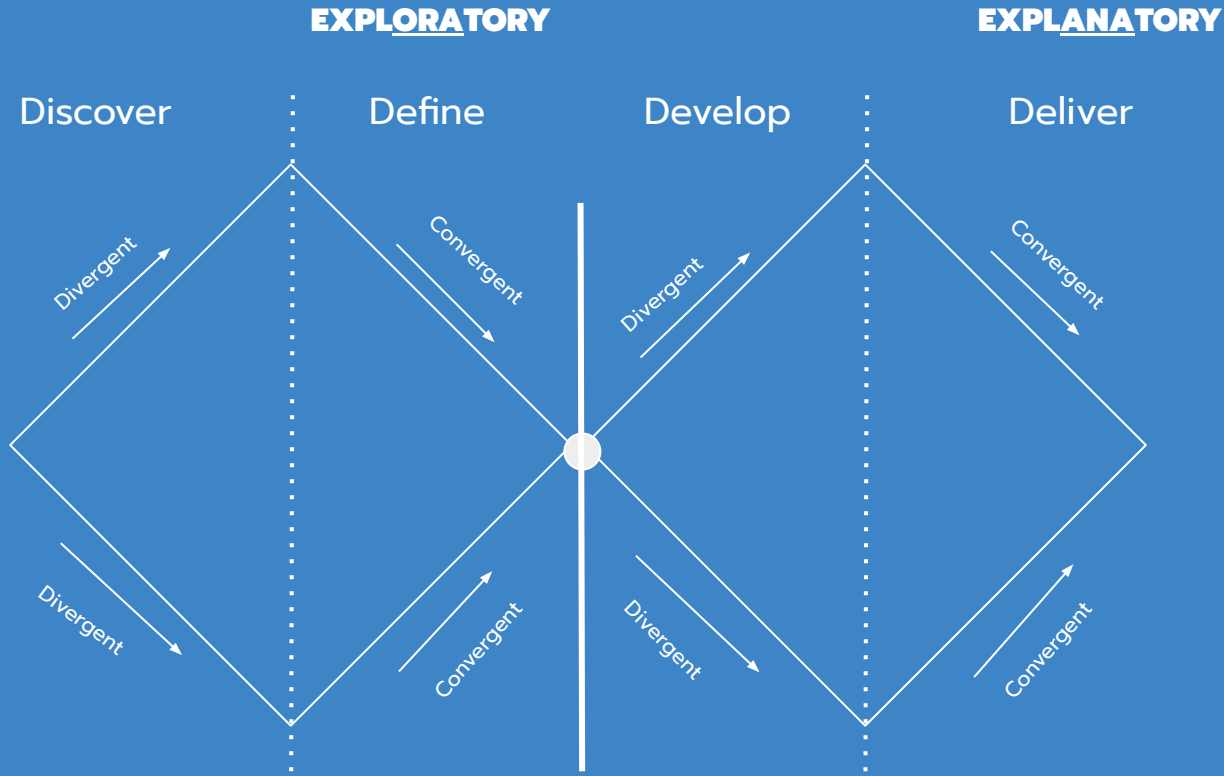
Characters:
your personas and stakeholders

Settings:
Preamble, background...

Conflict:
The root of the problem

Resolutions:
How did the problem get solved

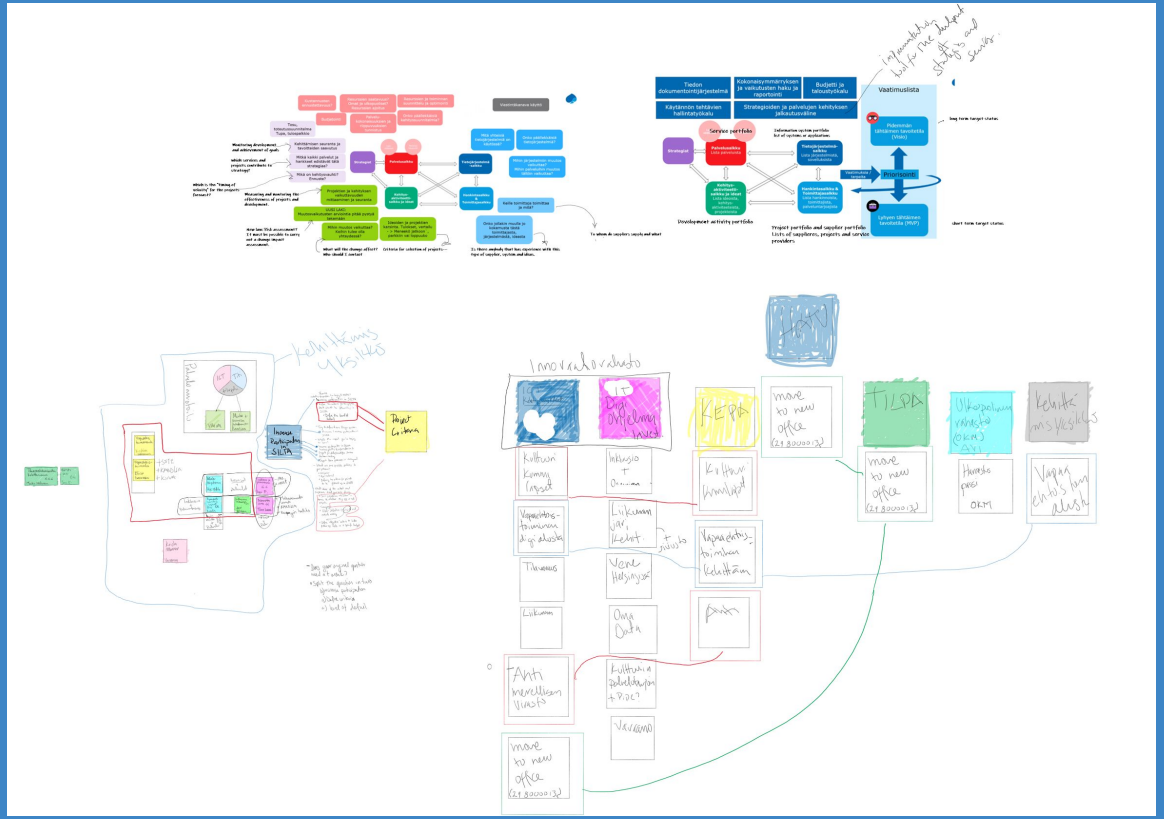
From discovery to insight



Exploratory

Descriptive
(what happened)

Diagnostic
(why did it happen)



Explanatory = visualizing

Predictive
(what will happen)

Prescriptive
(what should happen)

“

[…] [visualizing] is when they [researchers] **convert transitory observations into durable records;**

when they manage those records as evidence, and when they communicate evidence patterns to others.

”

Jon Wagner (2012)

Boil it down
to a 3min. story

Storytelling with data

For the perfect 3 min. story

Consider for engagement:

What background information is relevant or **essential**?

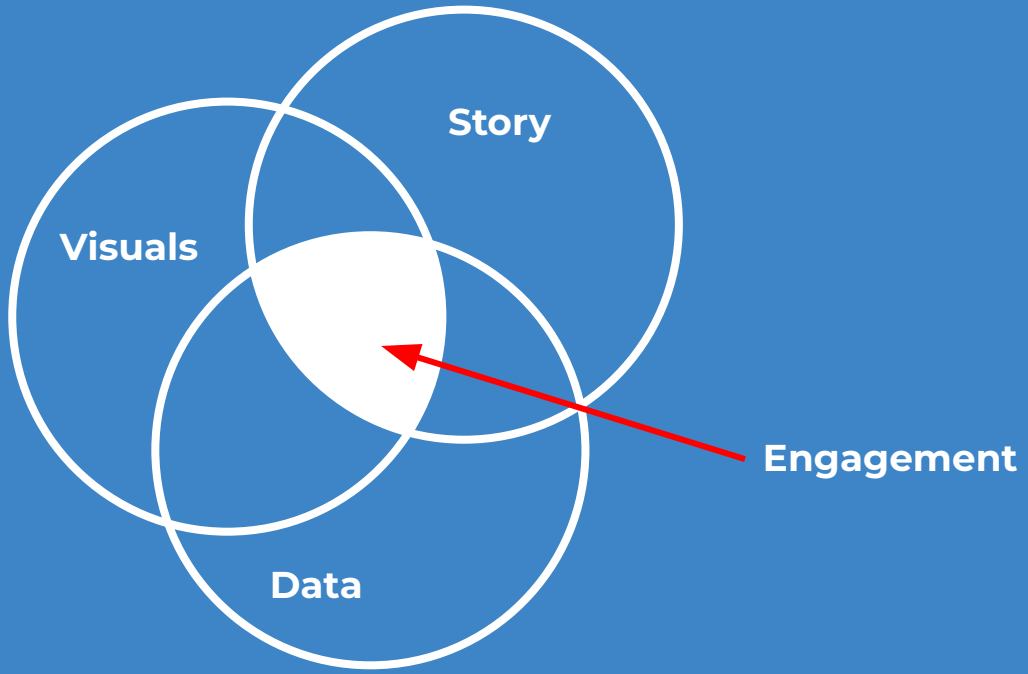
Who is your audience and which the decision makers?

Could there be any biases amongst members of the audience?

What data supports your arguments?

What data may pose a risk?

Tell a story with your data



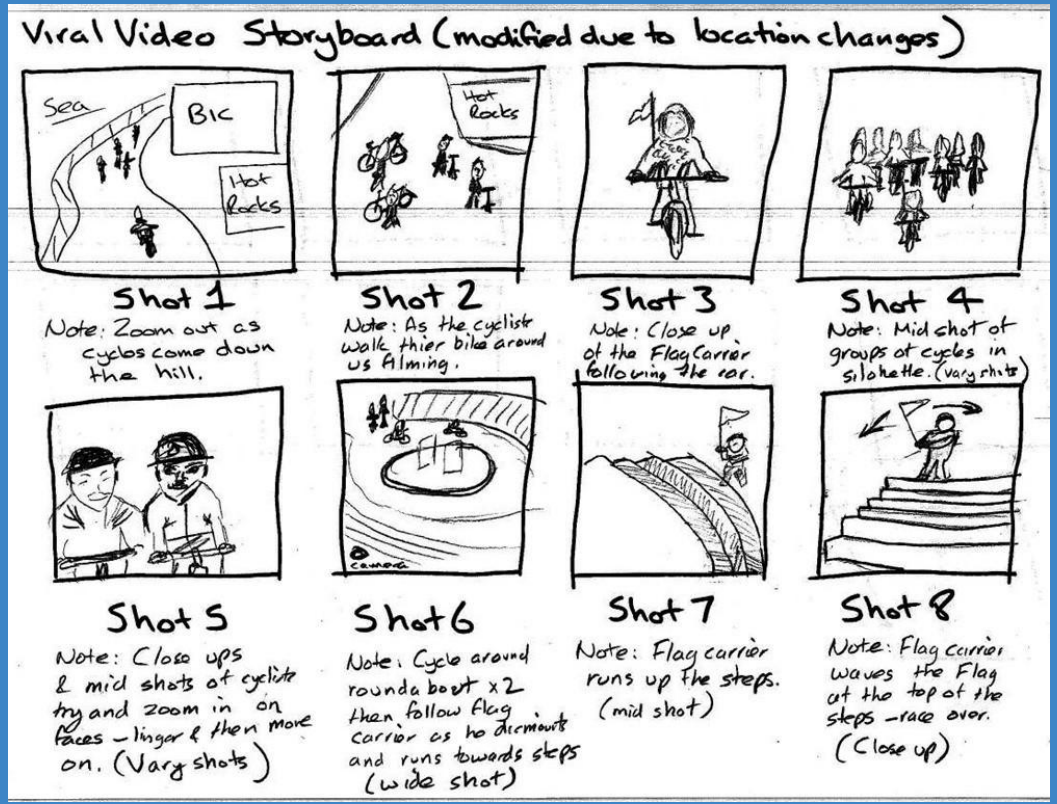
The tools

Scenarios + personas

Scenarios + personas

Future vision (visioning / foresight)

Storyboard



A review of IDEO's Storyboarding technique: https://medium.com/@yarsky/a-review-of-ideos-storyboarding-technique-36723847f4dc

Visual Information

“

Visual literacy is the ability

to read / decode / interpret visual statements

&

to write / encode / create visual statements

“

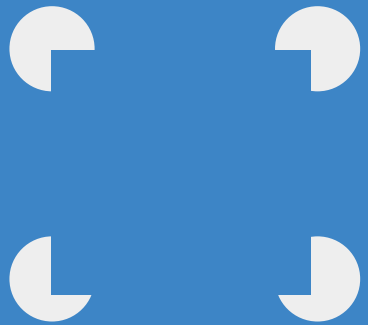
Joanna Kedra (2018)

Visual decoding

Proximity

Similarity

Continuity



Enclosure

Visual decoding

Pre-attentive attributes are used to create hierarchy, stratification, segmentation, and coding.

Color

Type

Size

Spatial arrangements

****Cognitive load (5-7 elements per slide)**

Diagrams

Edward Tufte suggests six fundamental principles of data display design:

- **Show comparisons**

- **Show causality**

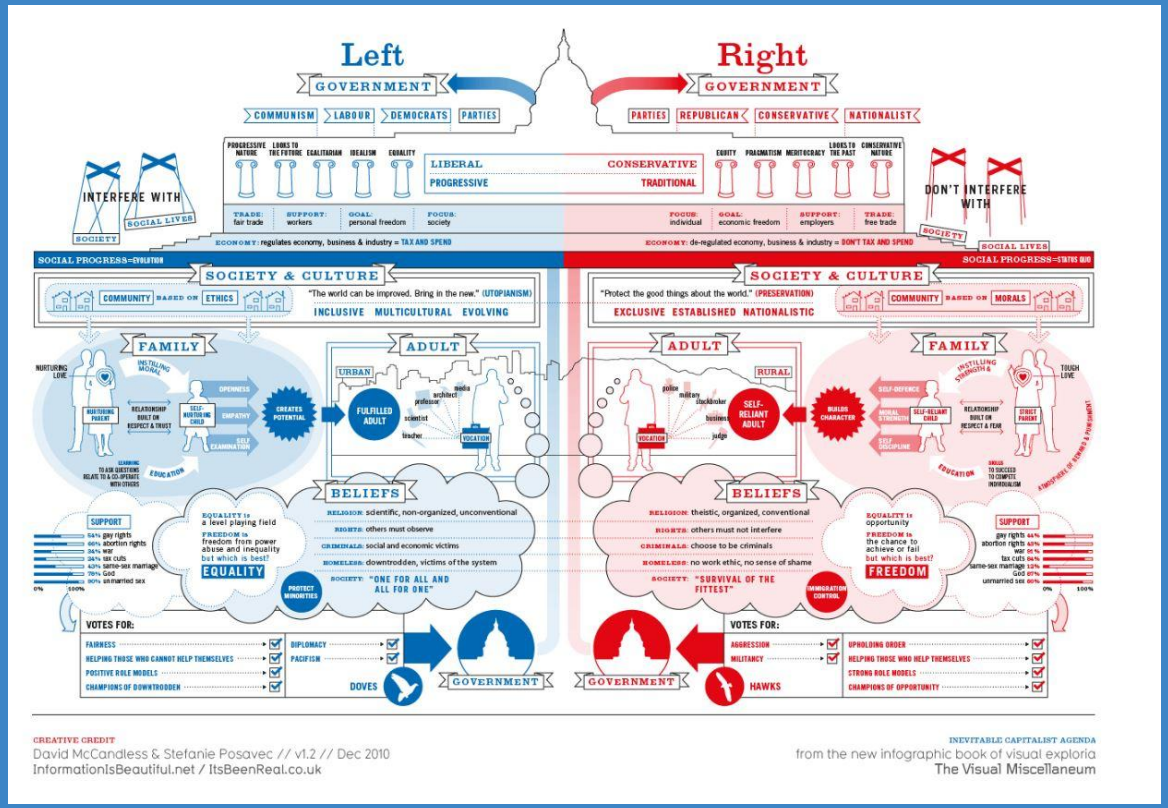
- **Use multivariate data**
  (Different types: time, space, behaviour)

- **Completely integrated modes**
  (Text, images, numbers)

- **Use them to establish credibility**

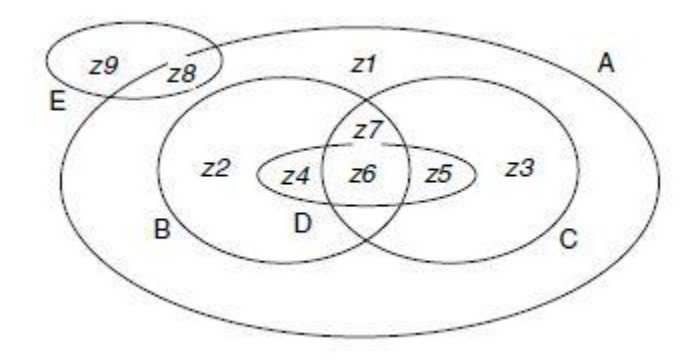
- **Focus on content**

Comparison



Concept & Research: David McCandless
Design: David McCandless & Stefanie Posavec

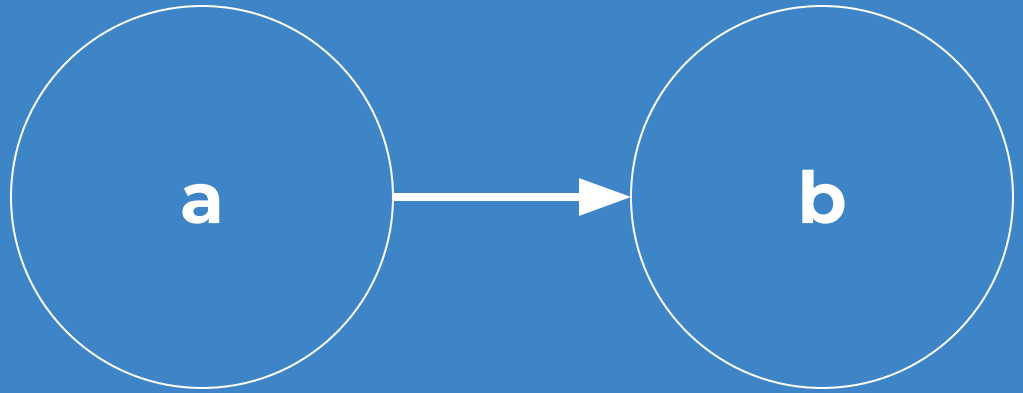
Integrated mode



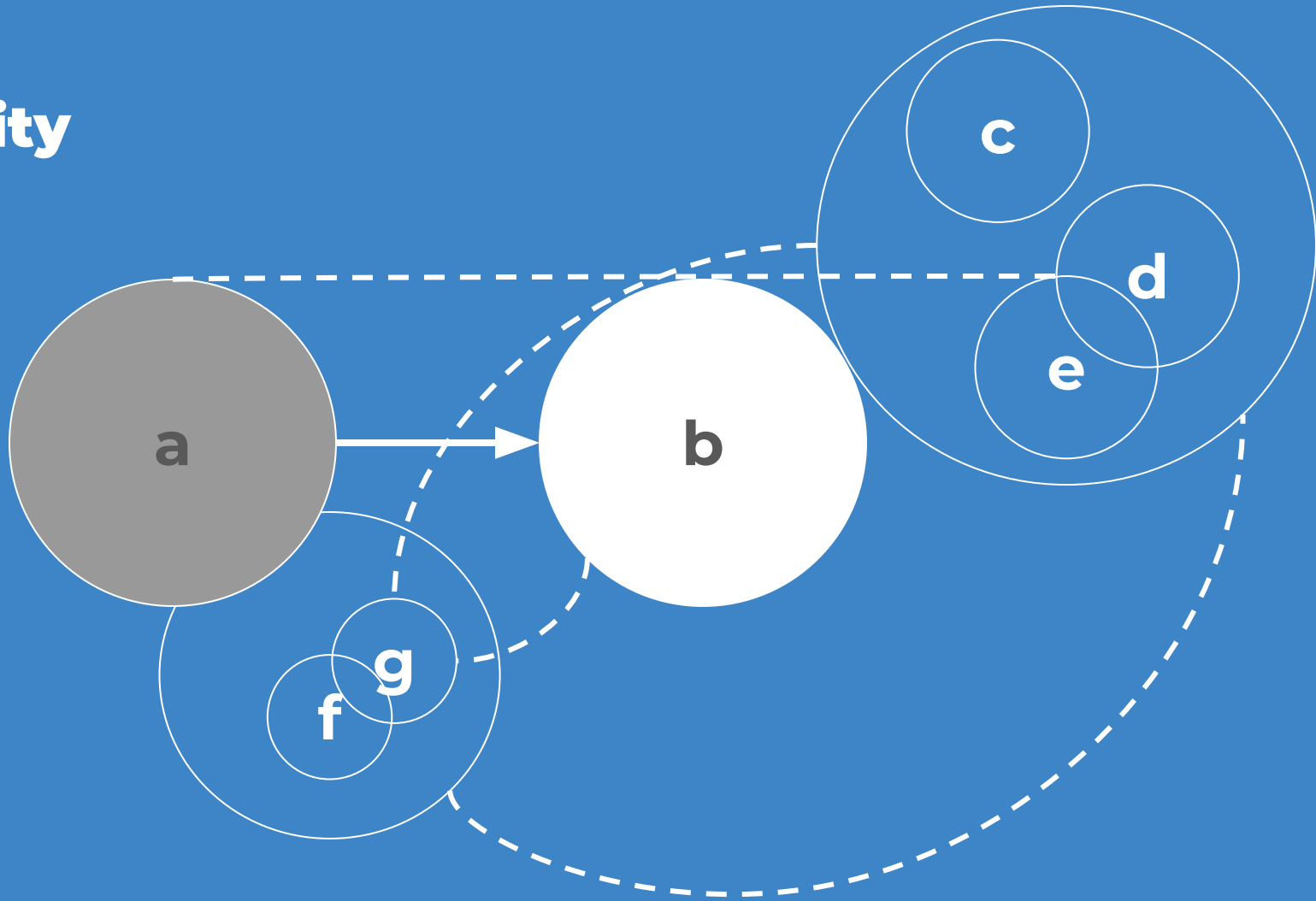
$$z_1 = \{A\} \quad z_2 = \{A, B\} \quad z_3 = \{A, C\}$$
$$z_4 = \{A, B, D\} \quad z_5 = \{A, C, D\} \quad z_6 = \{A, B, C, D\}$$
$$z_7 = \{A, B, C\} \quad z_8 = \{A, E\} \quad z_9 = \{E\}$$

Joseph (Tossi) et. al., Theory and Application of Diagrams (2000)

Causality

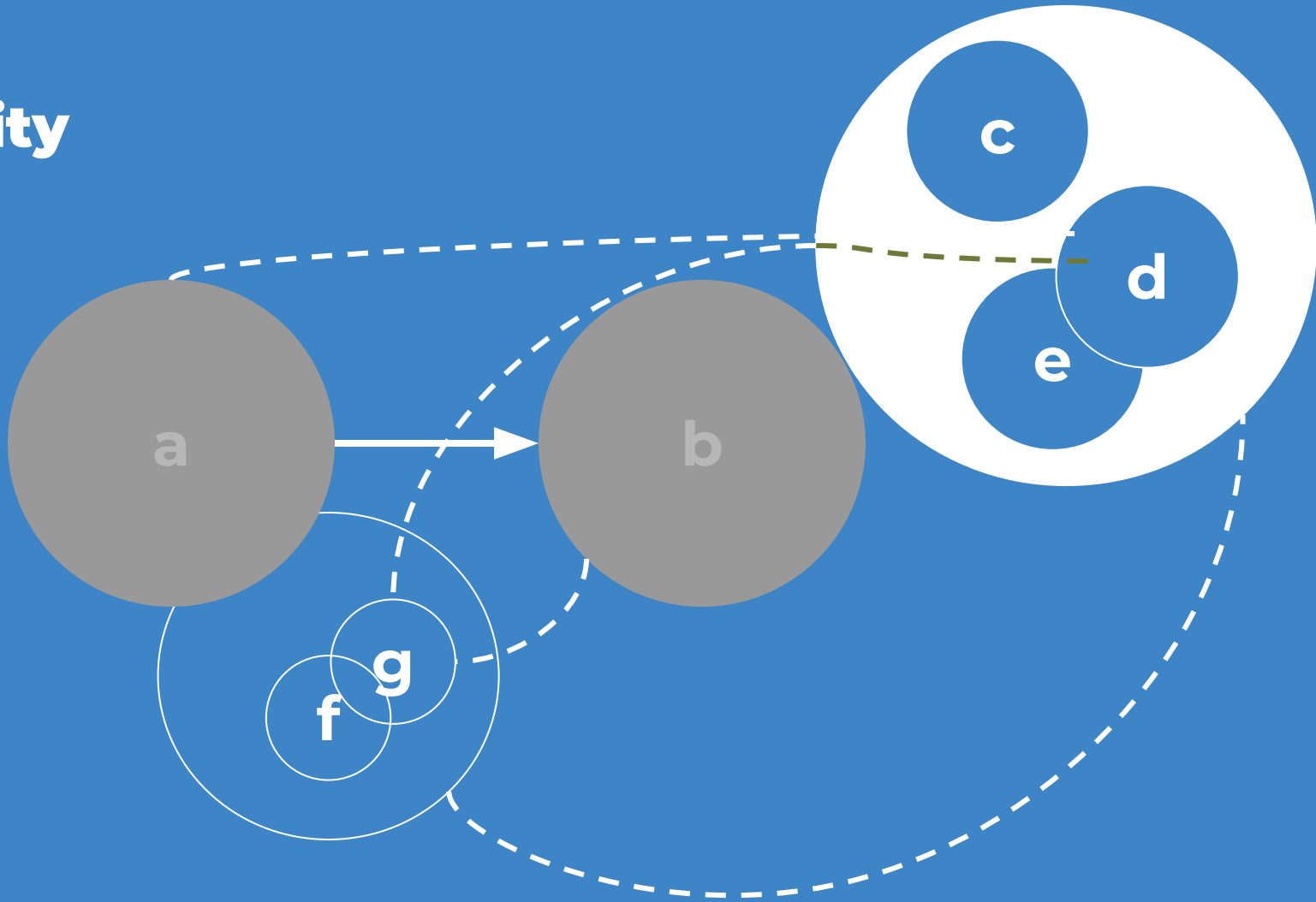


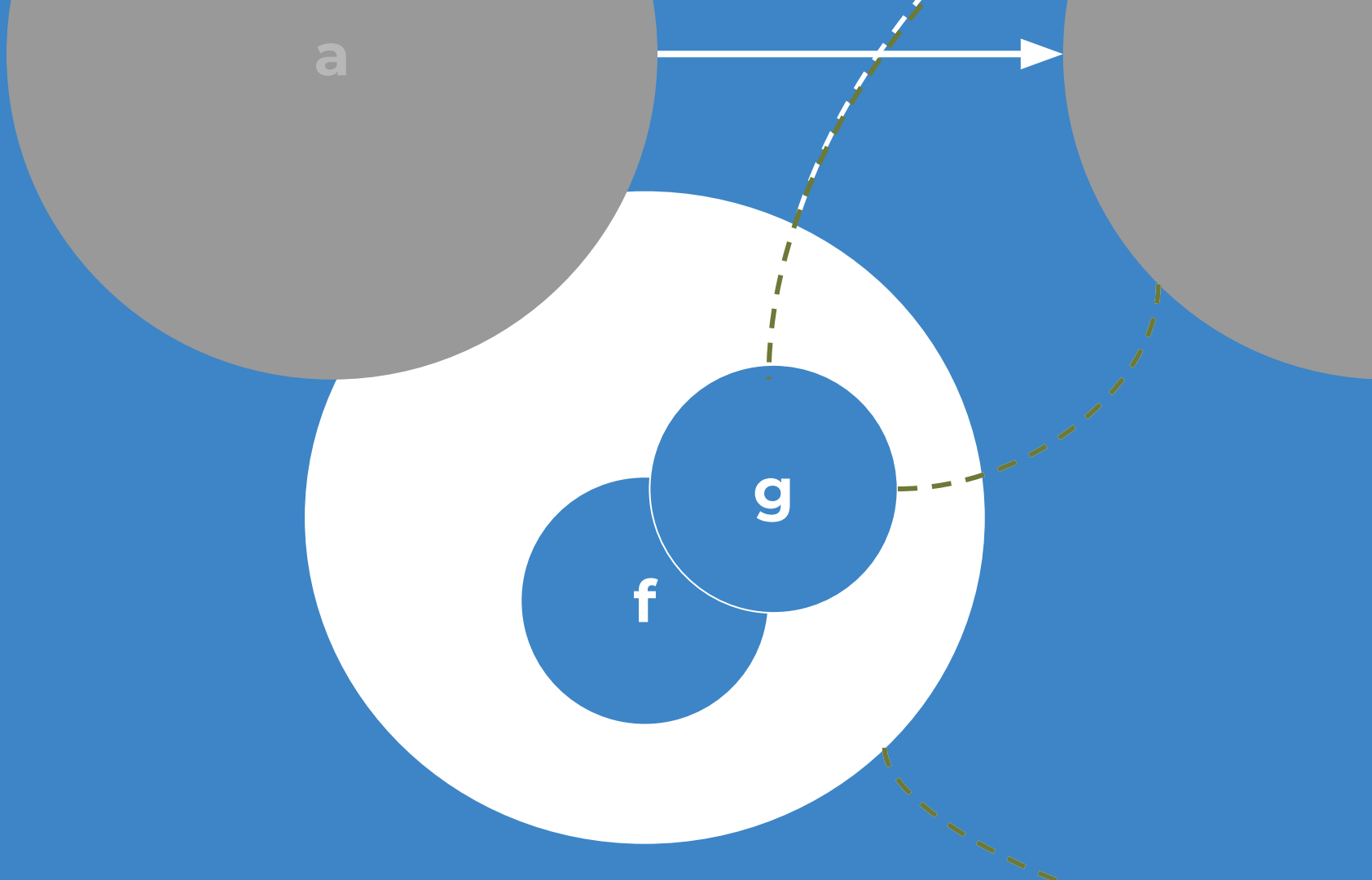
Causality



Information is beautiful

Causality

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Final presentation

- Setting the stage:
  be ready with materials, sound and all the works

- Be brief:
  write a clear and concise script that give you time to build up from slide to slide

- Eye-contact

- Speak clearly:
  If your team decides to include more than one presenter,
  rehearse your presentation accordingly

- Rehearse again!

Exercise

1. Create a persona (prototypical user)
2. Create and describe a potential scenario to test your plausible solutions
3. Try it out using Storyboarding (quick & dirty)
4. Present it to your peers.

References

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References

Videos:

Joseph Campbell. Stories that guide us

The age of Insight

Diagrams:

Comparison: David McCandless Design: David McCandless & Stefanie Posavec
Integrated mode: Joseph (Tossi) et. al., Theory and Application of Diagrams (2000)
David McCandless. Research: Miriam Quick, Dr Stephanie Tomasevic. Code & Additional design: Fabio Bergamaschi
Multivariate data: Levin LA, Baco AR, Bowden DA, Colaco A, Cordes EE, Cunha MR, Demopoulos AWJ, Gobin J, Grupe BM, Le J, Metaxas A, Netburn AN, Rouse GW, Thurber AR, Tunnicliffe V, Van Dover CL, Vanreusel A and Watling i