

# Brainstorming

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CS 247

THANKS TO SCOTT KLEMMER AND MANEESH AGRAWALA

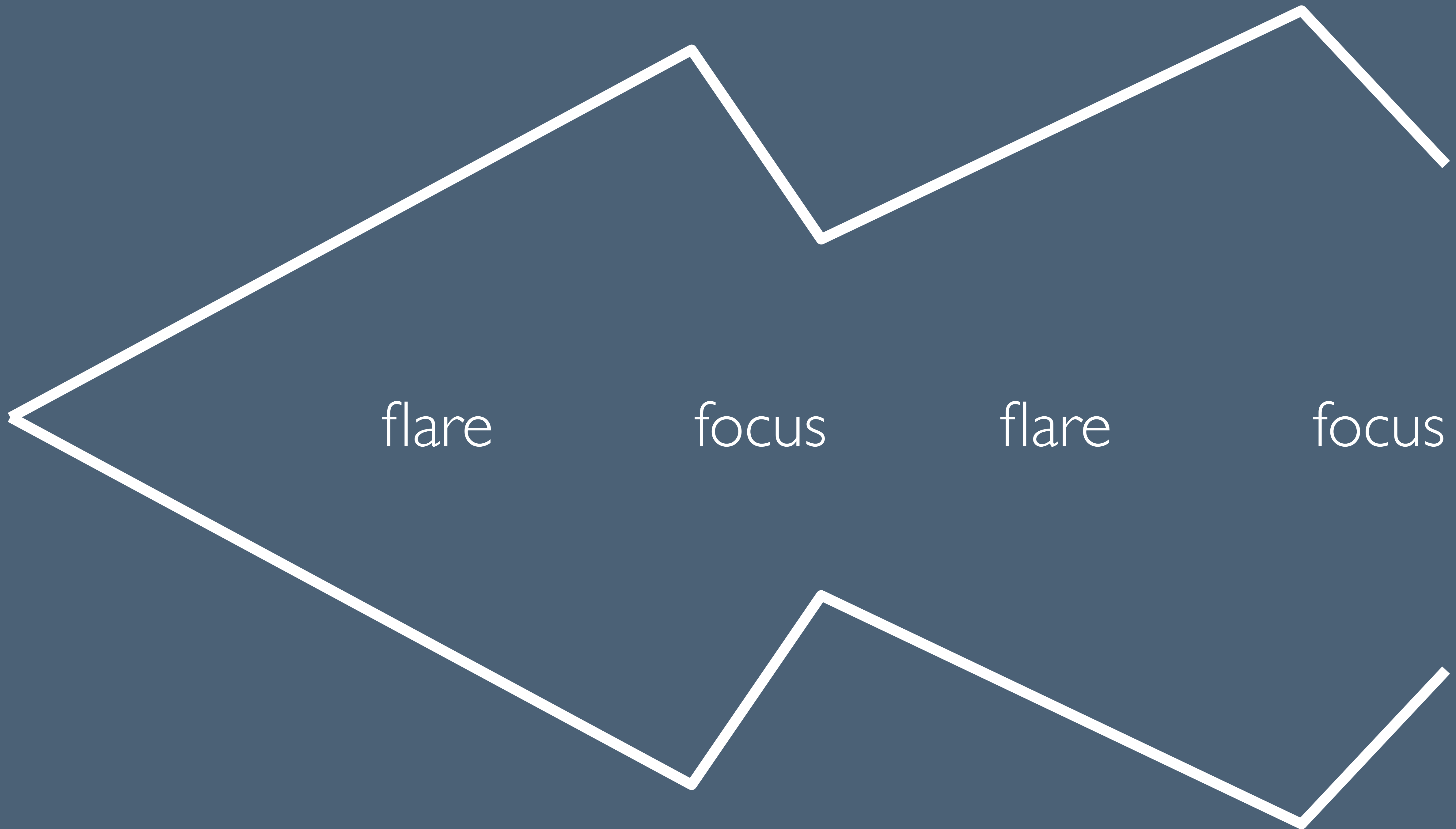


# Forty circles

Sixty seconds. How far can you get?

“Math is easy.  
Design is hard.”

Jeffrey Veen, VP of Product Design, Adobe



# Cardinal rules of brainstorming

- Go for quantity
- Defer judgment
- Enforce a time limit
- Riff and build on others' ideas

# Roles in brainstorming

- Facilitator
  - Not the manager or leader!
  - Keeps the conversation flowing
- Recorder
  - Gets everything up on the whiteboard (or sketchbook)
- Participant

# Brainstorming strategies

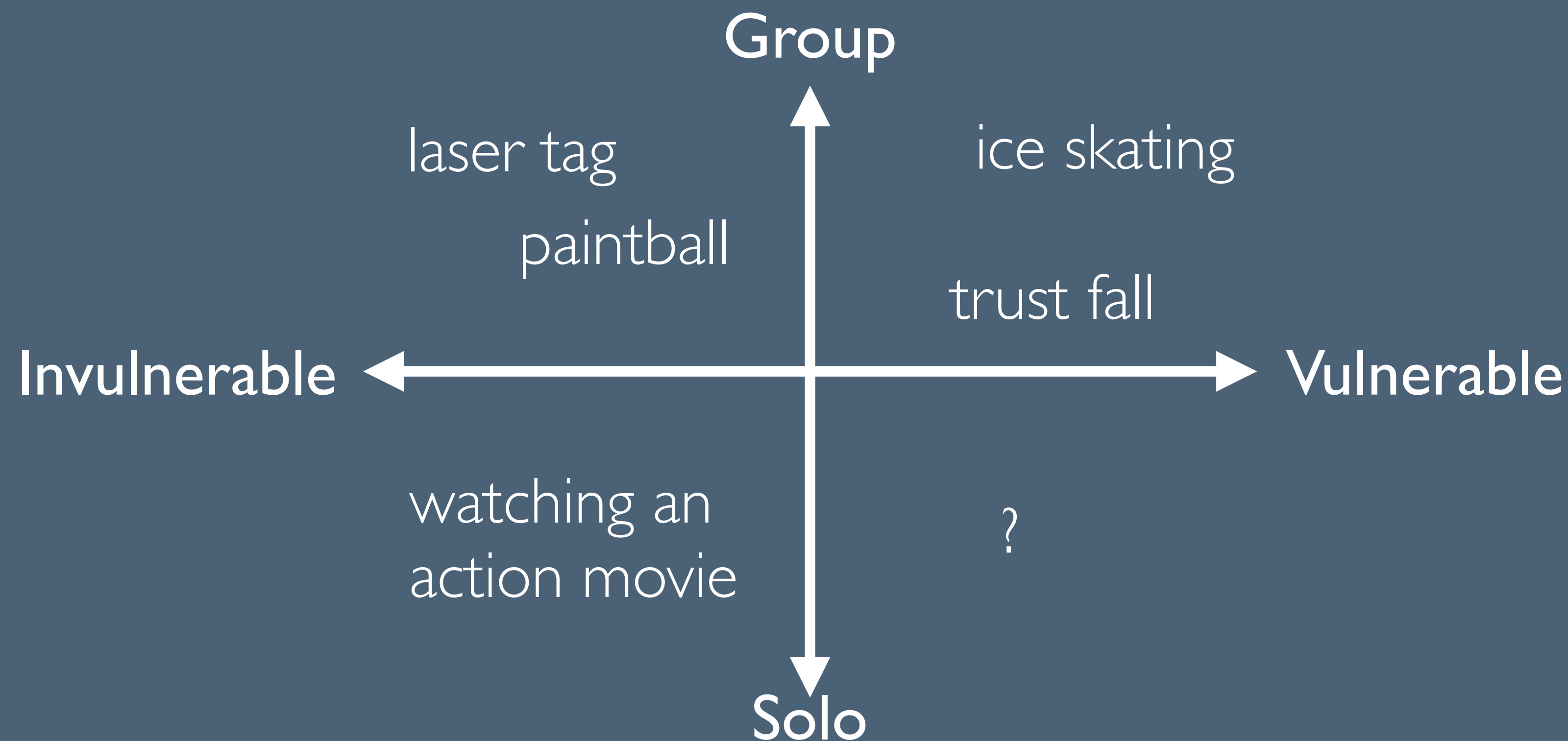
# One tactic: Powers of Ten

- When you're considering a question, scale it up and scale it down
- Ice skating as a deliberate controlled vulnerability...
  - Could 1000 people at once engage in a controlled vulnerability activity? Could someone do it alone?
  - Could we do this in extreme heat environments?



# Design space axes

- Pull out high-level dimensions along which your observations or ideas vary, then look for holes



# Warm-up time

- Your goal: loosen people up so that they aren't self-conscious about sharing ideas with the group
- Reinforce practices of volume, riffing, and fluidity
- Improv games work quite well

# Dark horse

He rides across the nation / the thoroughbred of sin

# Good ideas can be bad

- Ideas intended to address the How Might We's often end up as local fixes or “safe” solutions
- They are right, but boring. These ideas often become the targets of **design fixation**.



# Dark horse prototyping

- Include one idea and prototype that is intentionally far out or nearly impossible. Sometimes, it wins.
- Even when it doesn't win, it helps prevent design fixation.
- You will be doing this in P3

