

# High-quality Online Deliberation using Hybrid Intelligence

Enrico Liscio and Michiel van der Meer

**SOCIAL MEDIA ARE BAD!**

# Wisdom of the crowd



Diversity



Equality



Independence

# Solution: Deliberation

Designed to parse the  
wisdom of the crowd



## Social media promote:

Content consumption

Sensational content

Local networks

## Deliberation promotes:

Content creation

Reasoning

Inclusivity



Repeal

FOR OUR DAUGHTERS  
YES

REPEAL

THE  
MUSIC

Love  
Coffee

# Scaling deliberation



AI-supported



Online

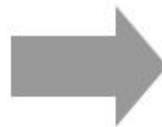
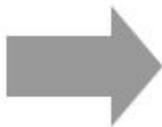


Text-based

Why? All in service of **scaling**

# Scaling deliberation

**Scale Up**

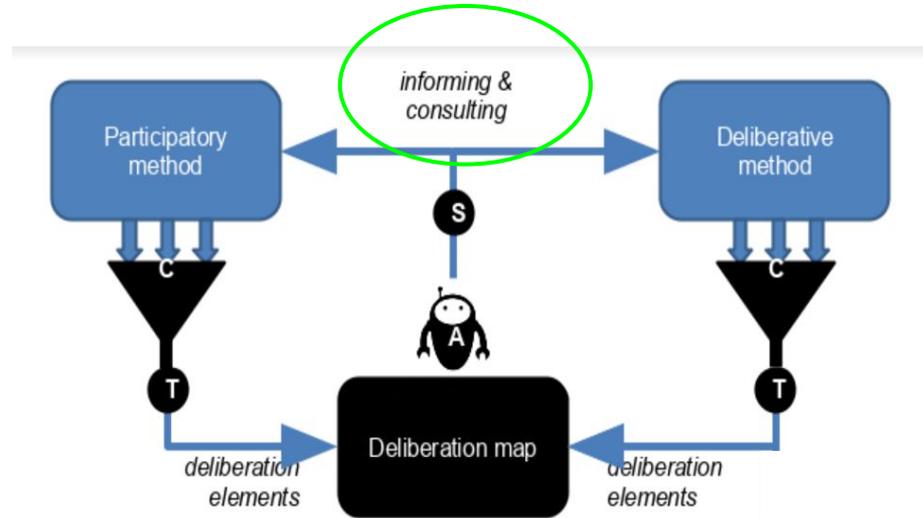


**Scale Out**

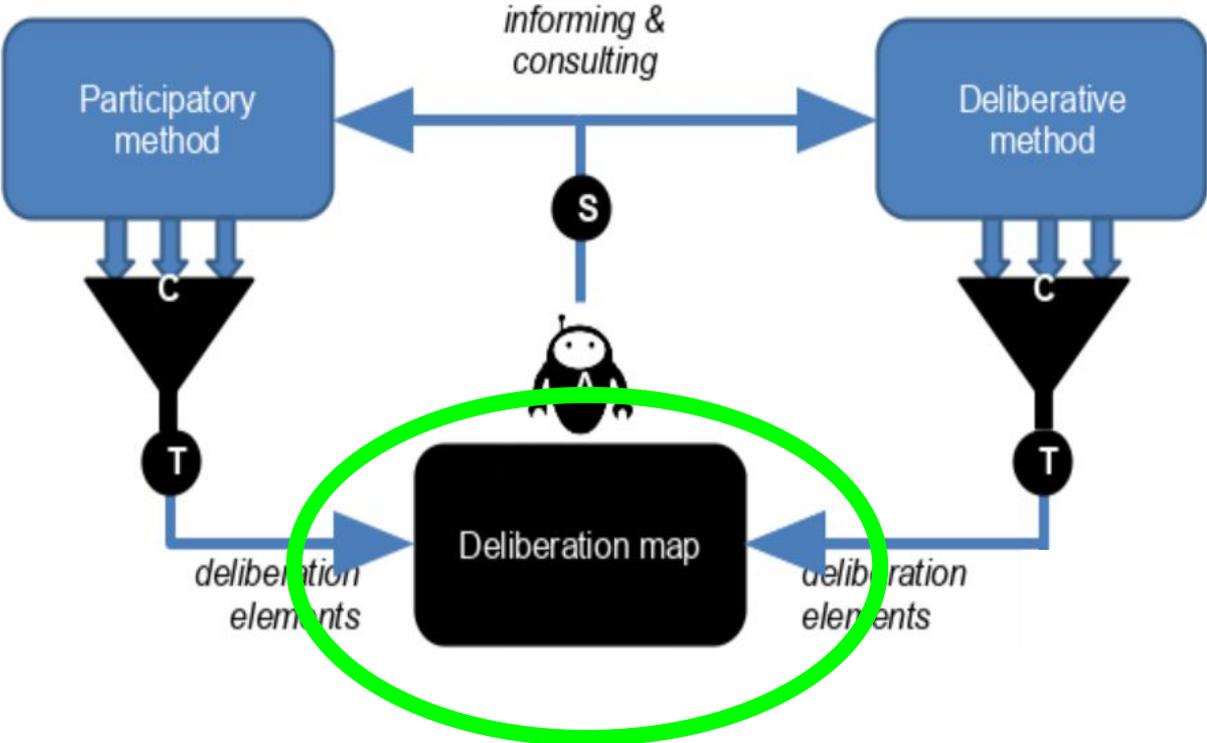


# Effectively helping humans in deliberation

- Recording progress in a deliberation
- Analysis of content
- Personalized assistance
- Facilitation/moderation



# Deliberation map



# Social media is not *that* bad..

Deliberatorium

▼ ? How increase productivity in ADDLabs? ⚙️

▼ 💡 improve ADDLabs advertising ⚙️

▼ 💡 with potential employees ⚙️

▼ 💡 active reach-out ⚙️

▼ 💡 🙌 Present ADDLabs to new potential members ⚙️

👆  
🙌 requires little work for ADDLabs ⚙️

👆  
🙌 helps develop careers of UFF students ⚙️

👆  
🙌 increases ADDLabs visibility to UFF ⚙️

👆  
🙌 ADDLabs doesn't have the structure to support additional activity ⚙️

👆  
🙌 requires appointing professionals to implement this ⚙️

👆  
🙌 makes UFF less comfortable with ADDLabs ⚙️

▶️ 💡 passive reach-out ⚙️

▶️ 💡 with clients ⚙️

▶️ 💡 with anyone ⚙️

▶️ 💡 improve ADDLabs career path structure ⚙️

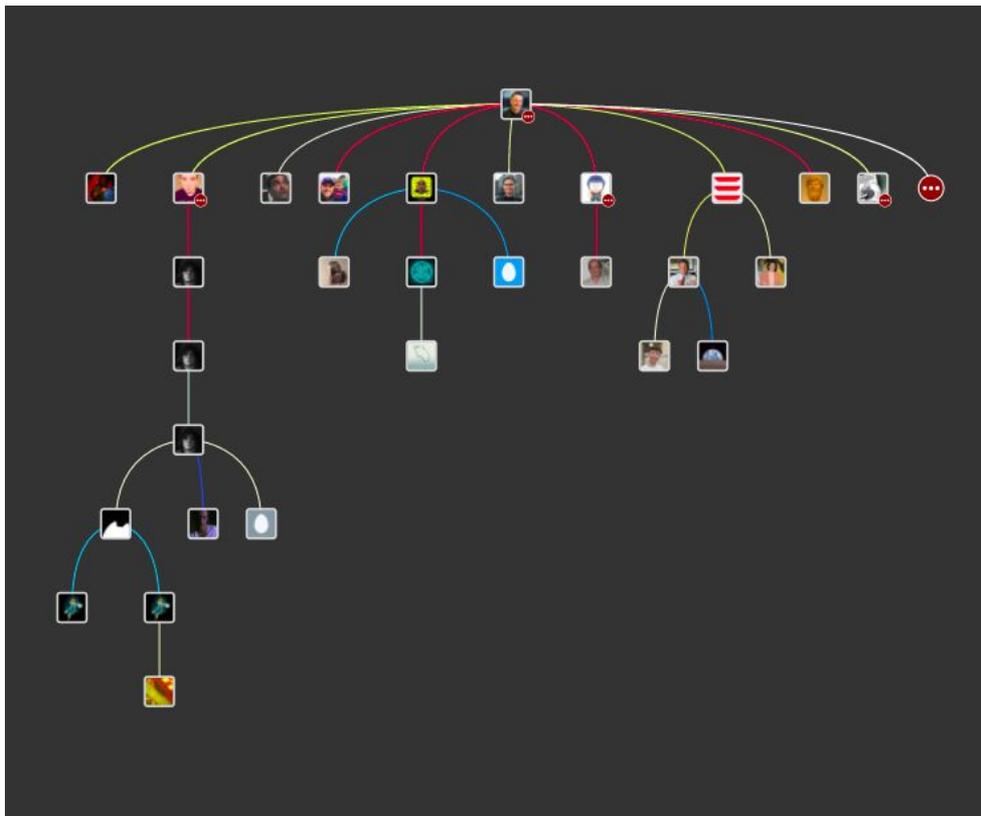
▶️ 💡 improve ADDLabs management ⚙️

▶️ 💡 improve ADDLabs organization structure ⚙️

▶️ 💡 improve ADDLabs development processes ⚙️

▶️ 💡 improve ADDLabs work environment ⚙️

# Social media is not *that* bad..



<https://github.com/paulgb/Treeverse/blob/master/README.md>

## Twitter



Elon Musk (@elonmusk)  
Forming a rocket nozzle →



Craig R. Brittain (@CraigRBrittain)  
This is the GIF era @elonmusk.  
Stop with your primitive video content and evolve into glorious GIFs. →



H.M. (@ThatPersonHM)  
@CraigRBrittain @elonmusk But gifs don't look nearly as good, and they don't have sound so... →



H.M. (@ThatPersonHM)  
@CraigRBrittain @elonmusk @ThatPersonHM Therefore, it is indeed not a "glorious" gif →



H.M. (@ThatPersonHM)  
@CraigRBrittain @elonmusk And when Elon Musk posts an awesome video behind the scenes @SpaceX we should be glad he did a video, not a gif →



Mingye Wang 2.2.1 (@Artoria2e5)  
@ThatPersonHM @CraigRBrittain @elonmusk @SpaceX not to mention that Twitter's gifs are basically mp4 w/o sound →



Lazara (@TheLazara)  
@Artoria2e5 @ThatPersonHM @CraigRBrittain That's the worst part. If you want to share the 'gif' yourself, you have to download the "gif" - →



PopupHeadlight (@PopupHeadlight)  
@TheLazara @Artoria2e5 @ThatPersonHM @CraigRBrittain Guys, I know sarcasm doesn't read well, but c'mon... →

# Hybrid Intelligence

- Use Hybrid Intelligence
  - *Augmenting human intellect*
  - Feasibility (create synergy)
    - Efficiency
    - Accuracy
  - Trust
- Do so through 4 research pillars
  - CARE
  - E.g. Explainability for transparency

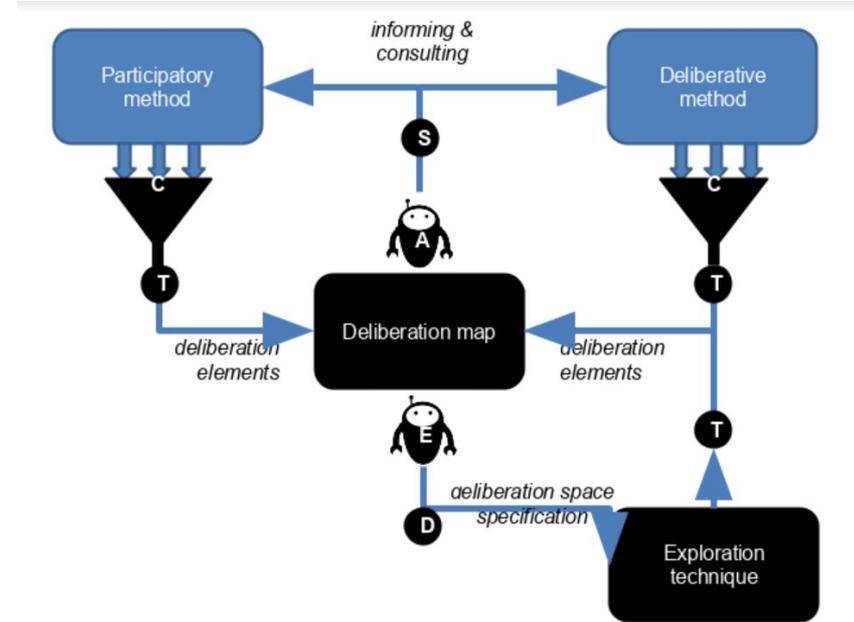
**Hi** Hybrid Intelligence



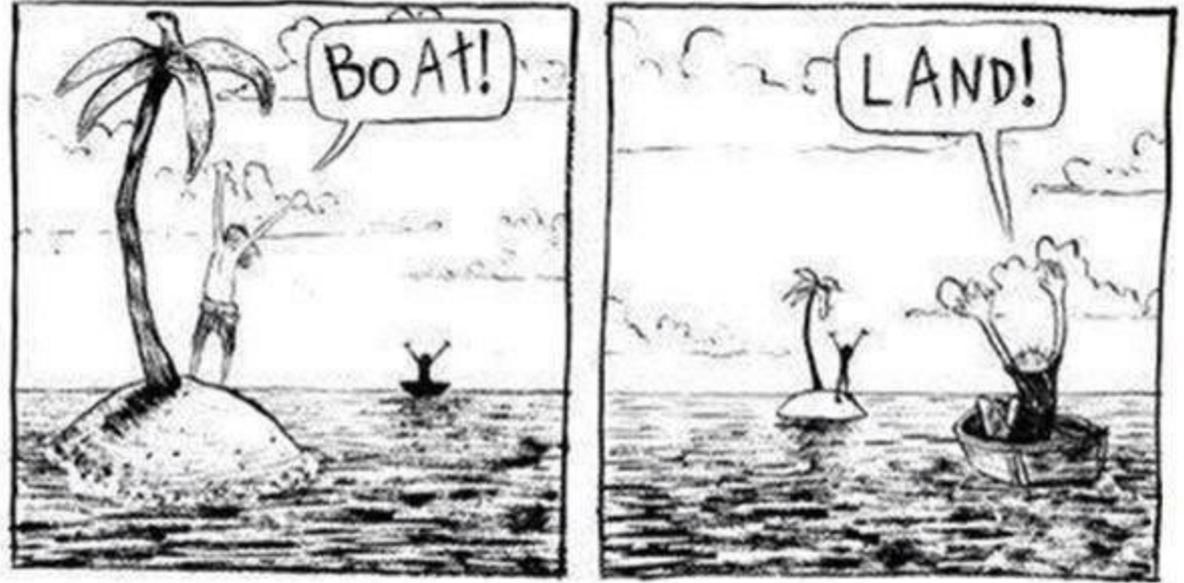
More info: <https://www.hybrid-intelligence-centre.nl/>

# Filling the deliberation map

- We've talked about some examples of what we'd like to do
- What to store in the deliberation map?
  - i. Perspectives
  - ii. Values
  - iii. ...



# Perspectives



- “*Perspective taking*” - actively contemplating other’s psychological experiences
  - Been shown to increase reciprocity
- Find problems, solutions, criteria we didn’t know about previously

# Perspectives - arguments

## Simple case

*I think that vaccinations are bad because X*

## Realistic case

“Any doctor who tells an individual patient that all vaccines are “safe and effective” is lazily parroting the CDC being coerced by health employer quotas and peer pressure, or is a believer of a philosophical construct of any means to reach an end, as the government’s own data on public databases clearly states that vaccines are neither safe nor effective when the commonly understood definitions are applied.”

# Perspectives - arguments

Simple case

*I think that vaccinations are bad because X*

Realistic case

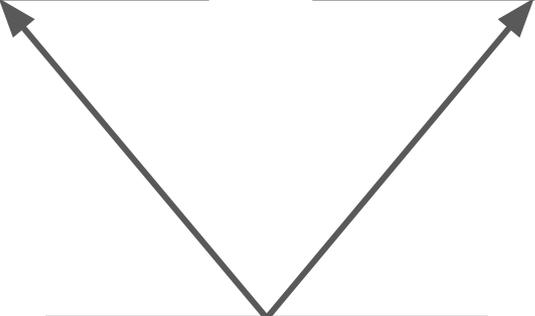
"Any doctor who tells an individual patient that all vaccines are "safe and effective" is lazily parroting the CDC being coerced by health employer quotas and peer pressure, or is a believer of a philosophical construct of any means to reach an end, as the government's own data on public databases clearly states that vaccines are neither safe nor effective when the commonly understood definitions are applied."



Doctors that tell patients that vaccines are safe and effective are *lazily parroting* the CDC

Doctors that tell patients that vaccines are safe and effective are believers of philosophical construct of any means to an end

Government data clearly states vaccines are not safe



# Perspectives - attribution

## Simple case

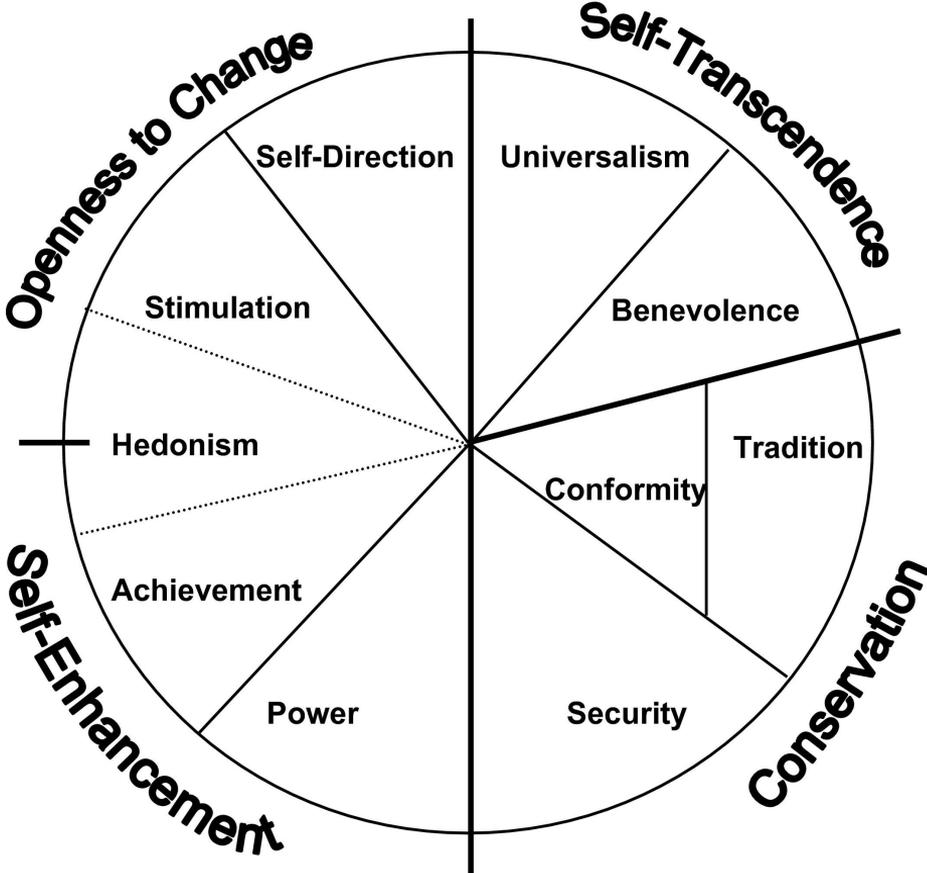
*I think that vaccinations are bad because X*

## Realistic case

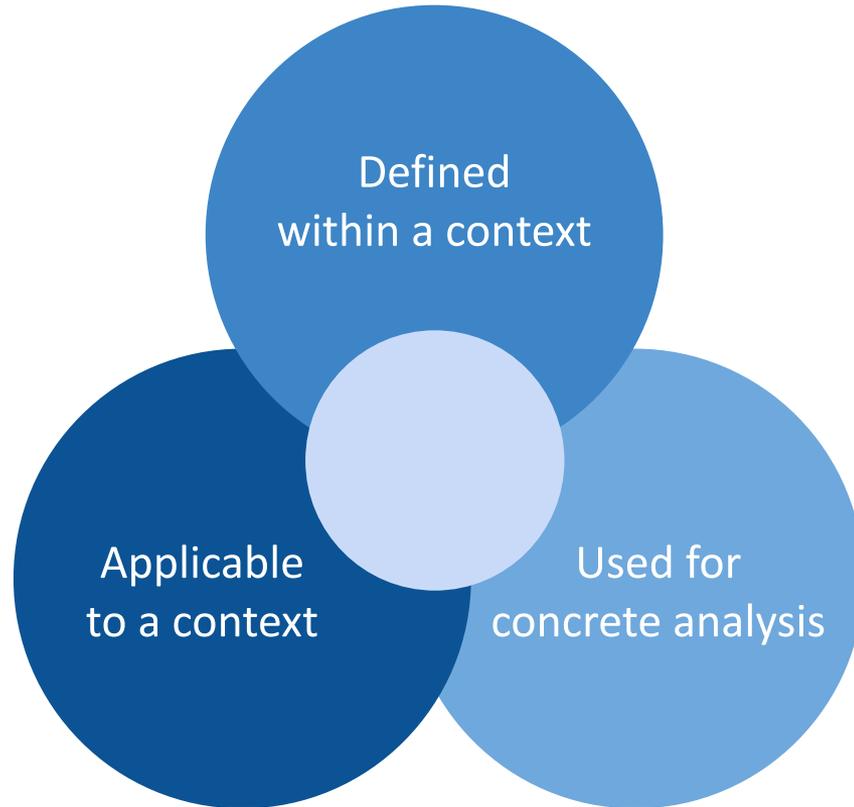
“Any doctor who tells an individual patient that all vaccines are “safe and effective” is lazily parroting the CDC being coerced by health employer quotas and peer pressure, or is a believer of a philosophical construct of any means to reach an end, as the government's own data on public databases clearly states that vaccines are neither safe nor effective when the commonly understood definitions are applied.”

# Personal values

Abstract motivations that justify opinions and actions, intrinsically linked to feelings and goals.



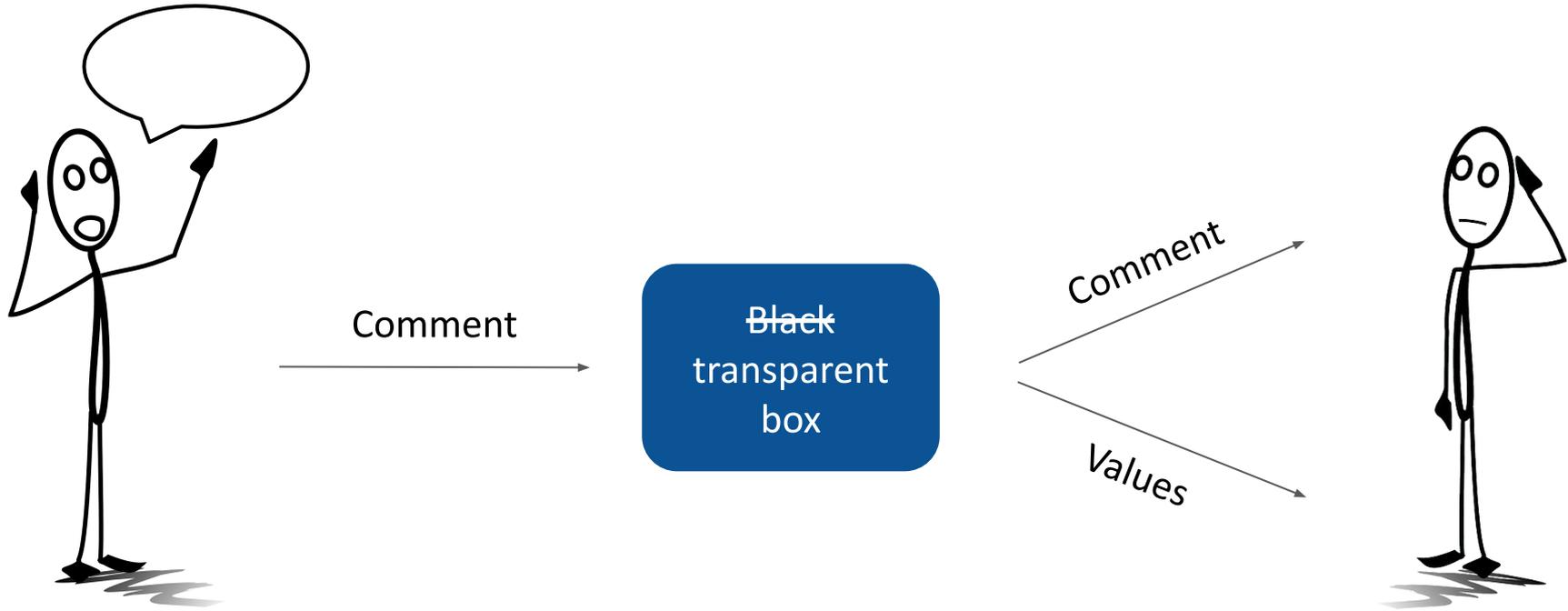
# Context-specific values



# How do we use values?



# How do we use values?



Thank you for the attention!

Questions?

# How do we get there?

