The future of research communication and evaluation:
An interactive thought experiment

Marino van Zelst (Twitter, GitHub, Email)
Dept. of Organization Studies, Tilburg University

Redesigning the publication system

- Themes of today's Metascience workshops:

  Funding practices, open science, reproducibility, replication

- All of these issues are linked through:
- 1) how we communicate research
- 2) how we evaluate research(ers)

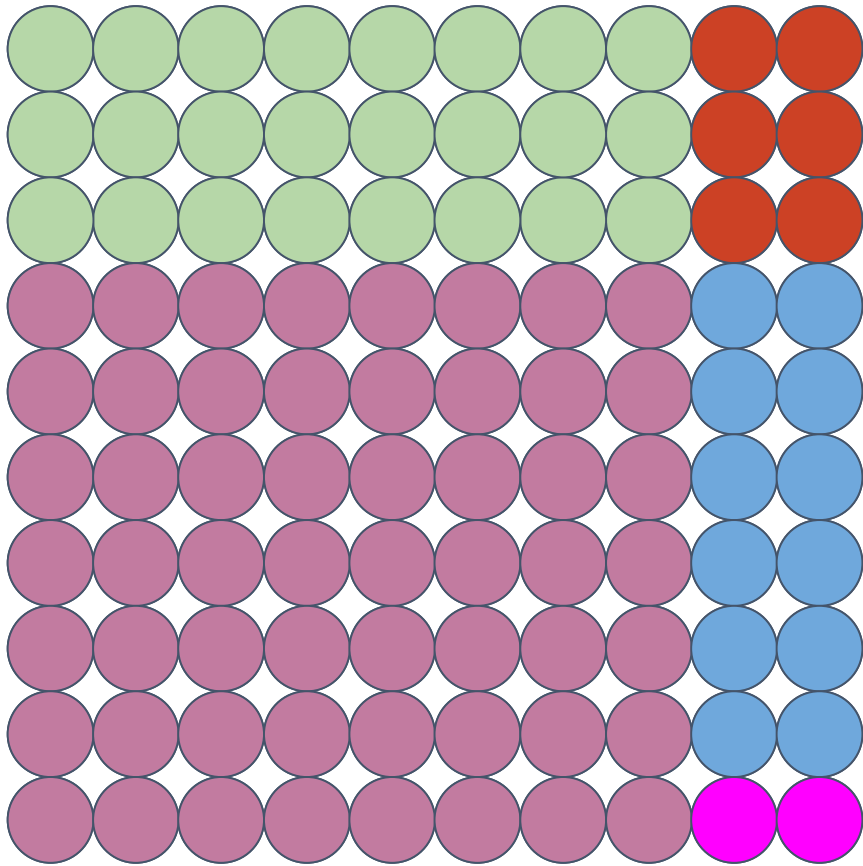- Goal of today: develop critical thinking of how we 'science'

Functions of the current publication system

Function
Registration
Certification
Awareness
Archiving
Rewarding

Adapted from Hartgerink (2018)

Studies conducted

Published = statistically significant + consistent

Not pub = statistically significant + inconsistent

Not pub = statistically nonsignificant + consistent

Not pub = statistically nonsignificant + inconsistent

Not pub = genuine design mistake

Functions of the current publication system

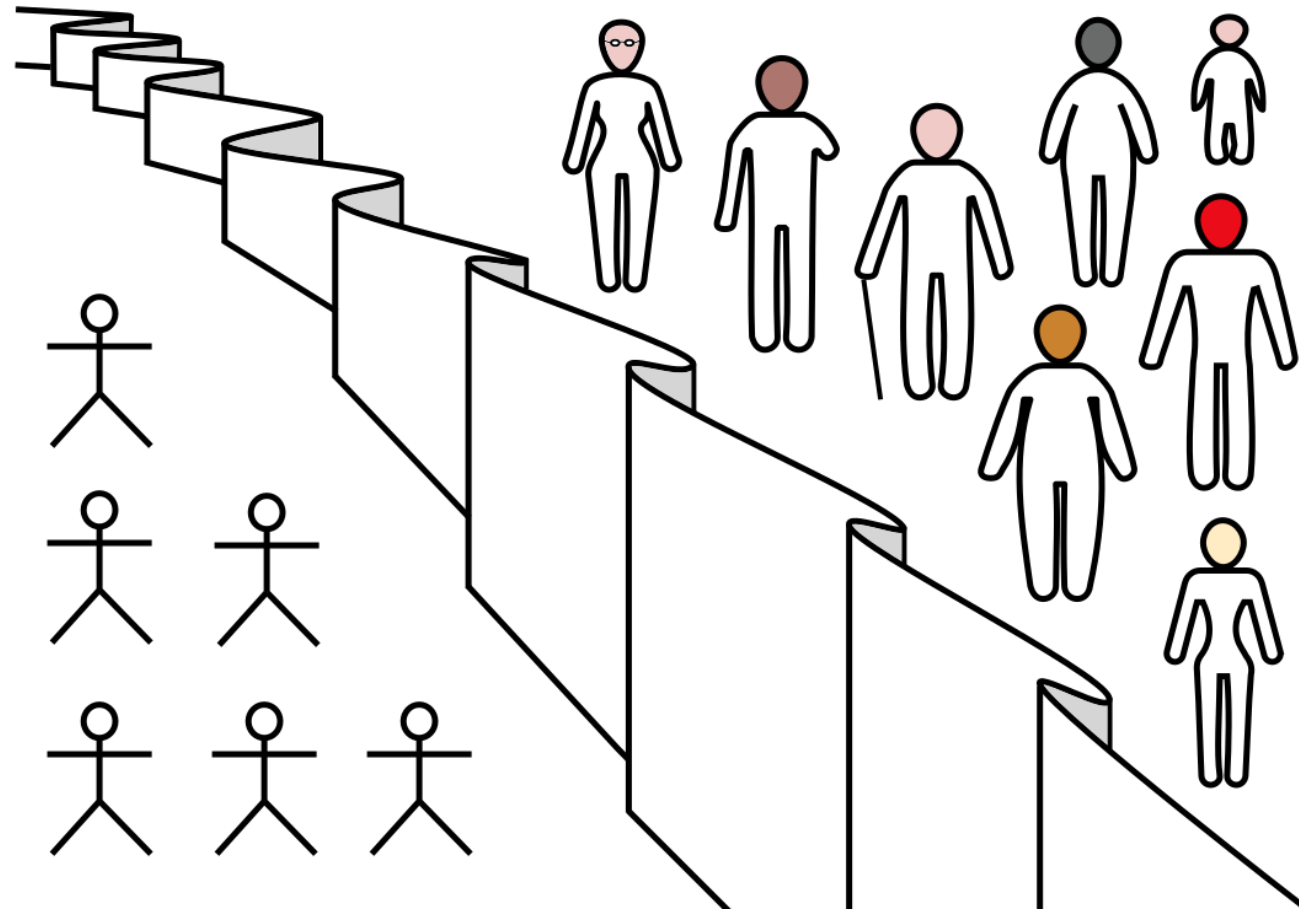| Function	Narrow vision (current)
Registration	Select works are registered
Certification	Peer judgment (including bias)
Awareness	Some can access outputs
Archiving	Dark archives
Rewarding	Perverse incentives

Adapted from Hartgerink (2018)

A Theory of Justice (John Rawls, 1971)

- In '*the original position*', the parties select principles that will determine the basic structure of the society they will live in.

- Structure: distribution of skills, positions, and resources

A Theory of Justice (John Rawls, 1971)

- In '*the original position*', the parties select principles that will determine the basic structure of the society they will live in.

- Structure: distribution of skills, positions, and resources

- Parties select principles with a 'veil of ignorance'

'Veil of ignorance'

A Theory of Justice (John Rawls, 1971)

- In '*the original position*', the parties select principles that will determine the basic structure of the society they will live in.

- Structure: distribution of skills, positions, and resources

- Parties select principles with a 'veil of ignorance'

- Rawls conclusion: Leads to adoption of 'maximin rule' as design principle

Redesigning research communication and research evaluation

- And consequentially, the entirety of academia?

- The rest of this workshop is about designing research communication and research evaluation using 'the original position' as a starting point

Principles of the redesign

- You want to participate in the 'academic society'

- You want to contribute to better science

- You are <u>completely unaware</u> of your scientific skills

- Rewards and resources need to be distributed in some way

Assignment

- How do we communicate how we 'scienced'?

- How do we evaluate research(ers)?

- Keep in mind:
  - You have no clue what your own skills are, but you want to 'survive'
  - The five functions of a publication system

A [future](#) of the publication system?

[Function](#)	Narrow vision (current)	Wider vision
Registration	Select works are registered	All research outputs are registered
Certification	Peer judgment (including bias)	Process + peer judgment (minus bias)
Awareness	Some can access outputs	All can access outputs
Archiving	Dark archives	Live archives
Rewarding	Perverse incentives	Incentives promote rigorous results

Adapted from [Hartgerink (2018)](#)

PUBLIC DOMAIN