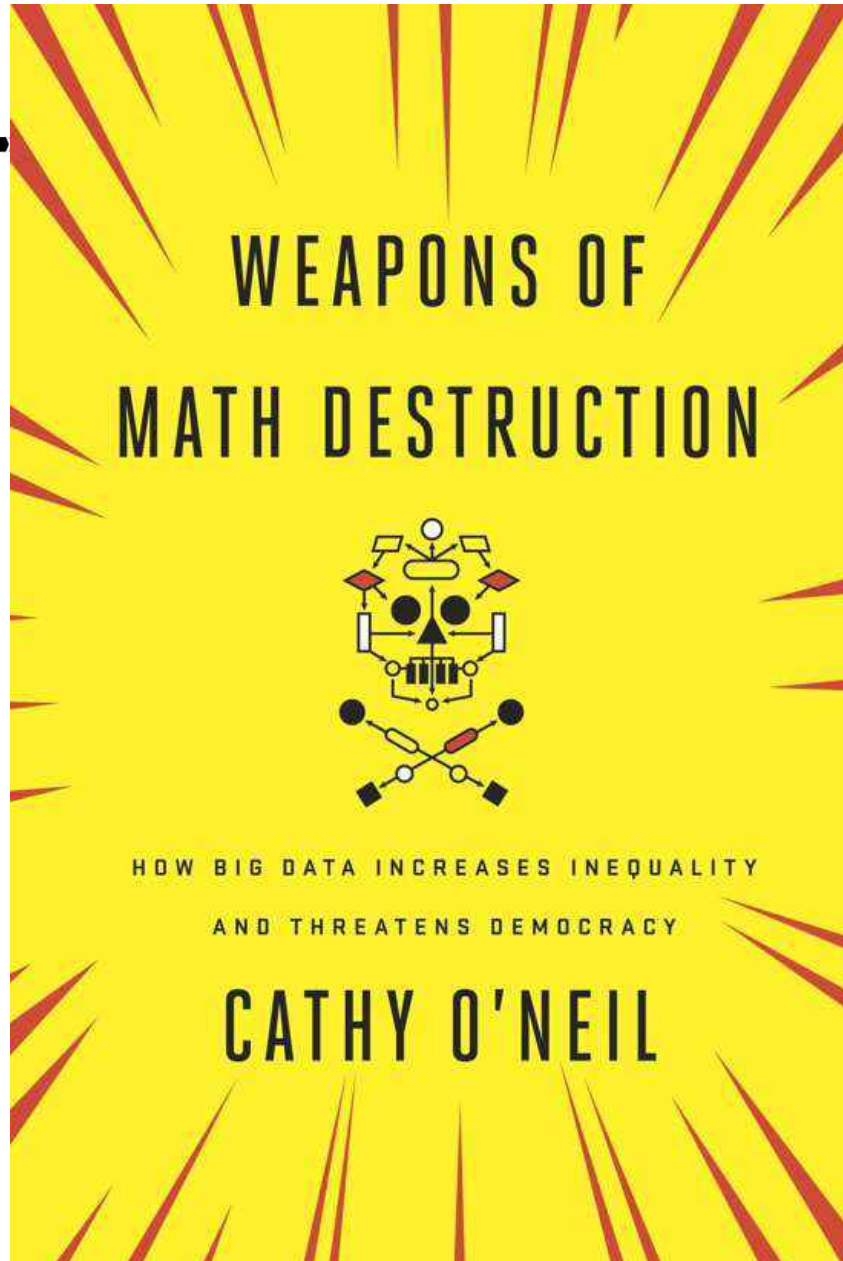


ETHIEK IN BIG DATA EN ALGORITMEN

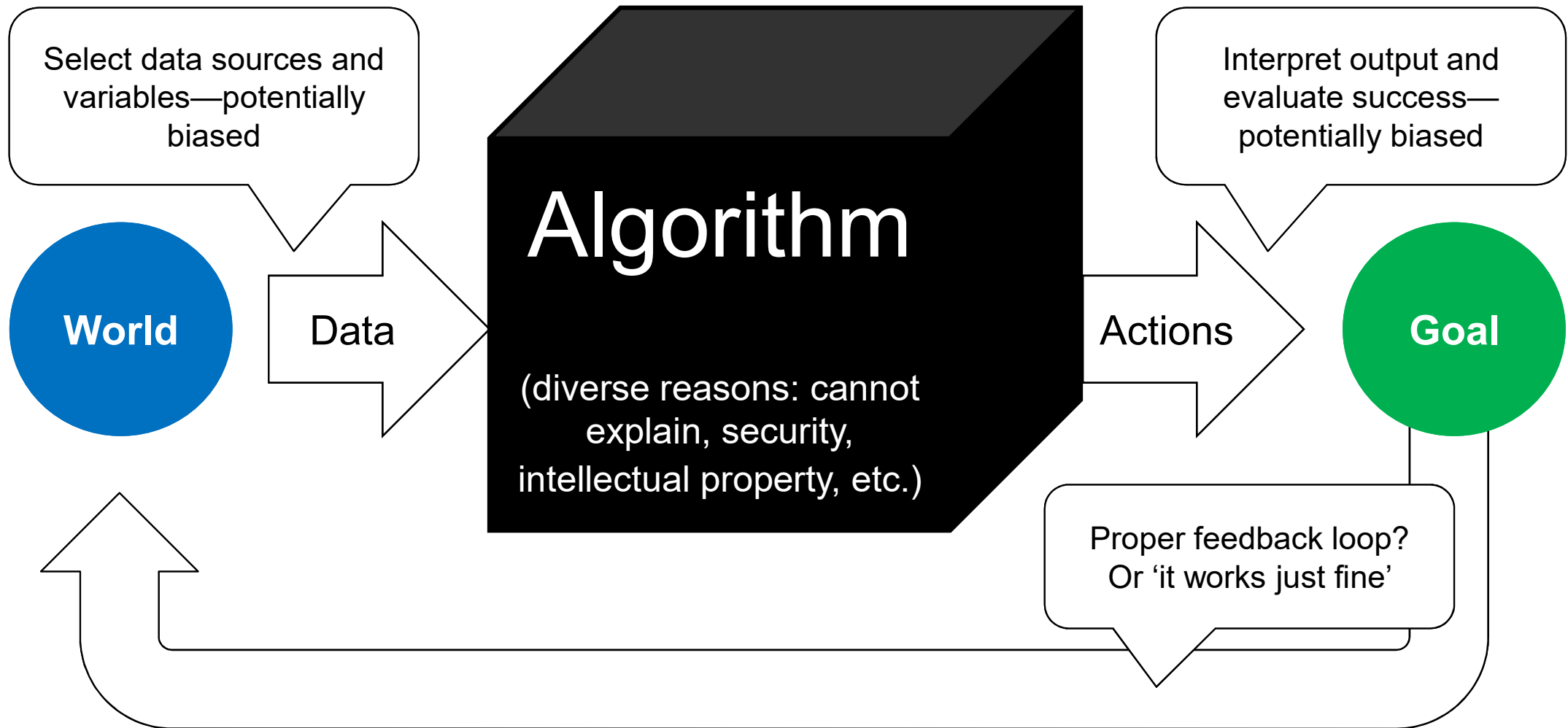
- › What could possibly go wrong?
- › Algoritmen: Black Box <> Transparantie
- › Responsible Data Innovation Matrix (VSD)
- › Ethiek gaat over het organiseren van *proces*
- › Tradities: plicht~; gevolg~; deugd~; zorg~





“O'Neil, a mathematician, analyses how the use of big data and algorithms in a variety of fields, including insurance, advertising, education, and policing, can lead to decisions that harm the poor, reinforce racism, and amplify inequality.”

https://en.wikipedia.org/wiki/Weapons_of_Math_Destruction



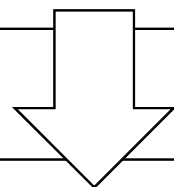
Transparency ('see through')

Transparency

Understandability / Explainability

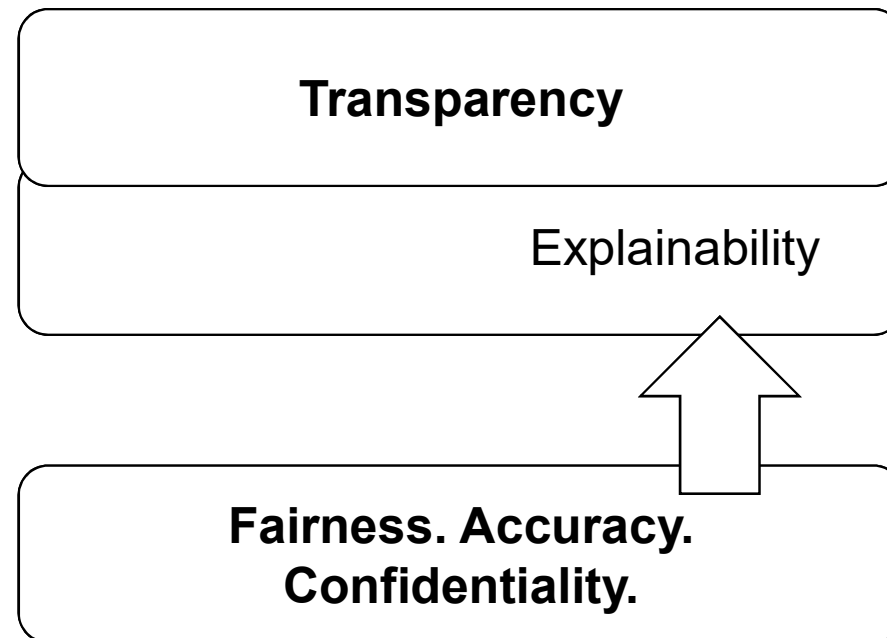
Transparency

Understandability



**Fairness. Accuracy.
Confidentiality.**

Understand how the algorithm works, and the ways in which it is (not) fair, accurate, etc.



Explain how the algorithm works and the ways in which it is (not) fair, accurate etc.

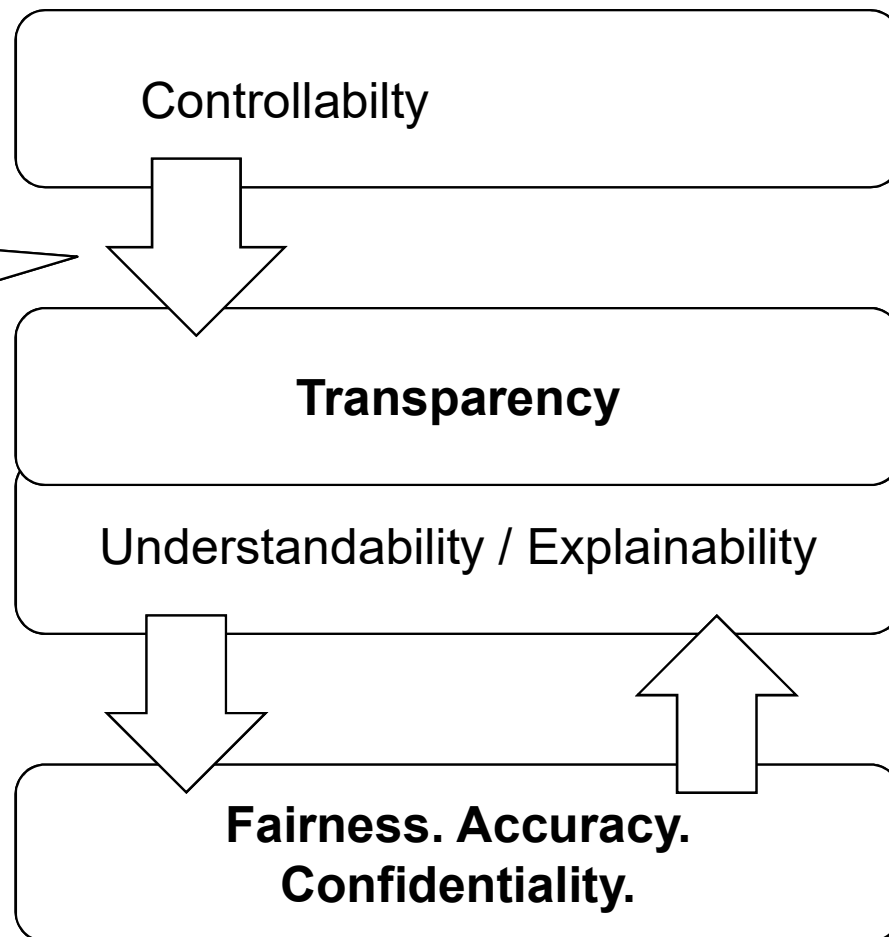
Meaningful human
control; human in the
loop; 'trustworthy'; etc.

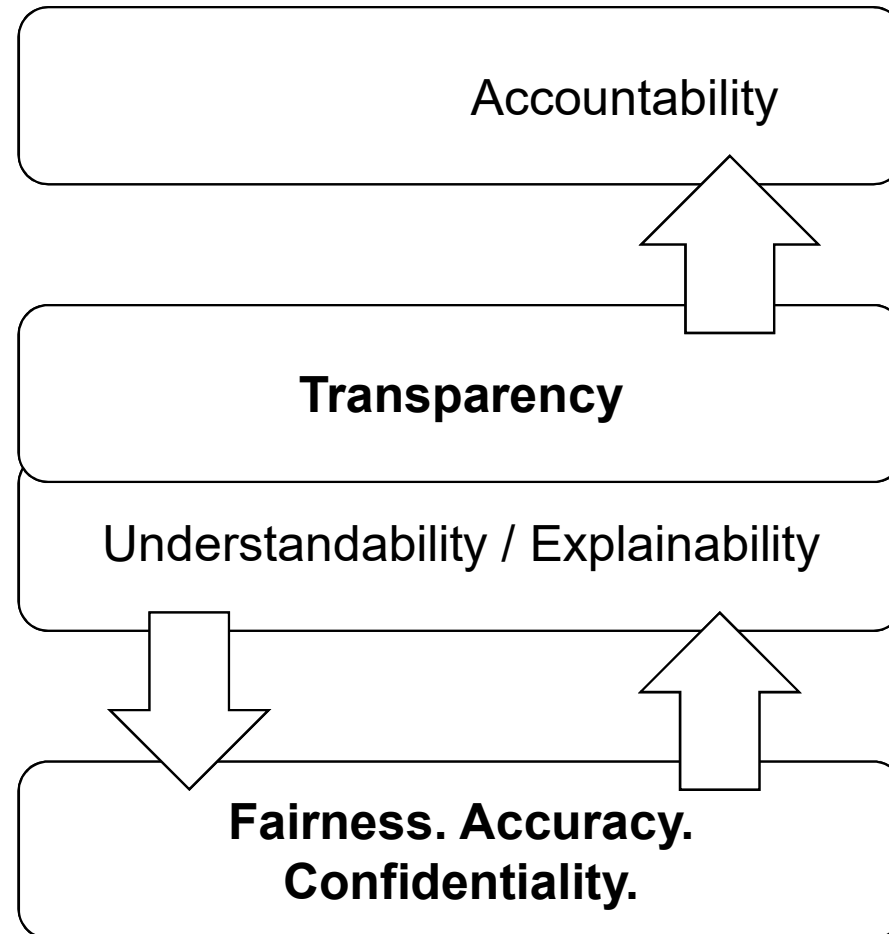
Controllability

Transparency

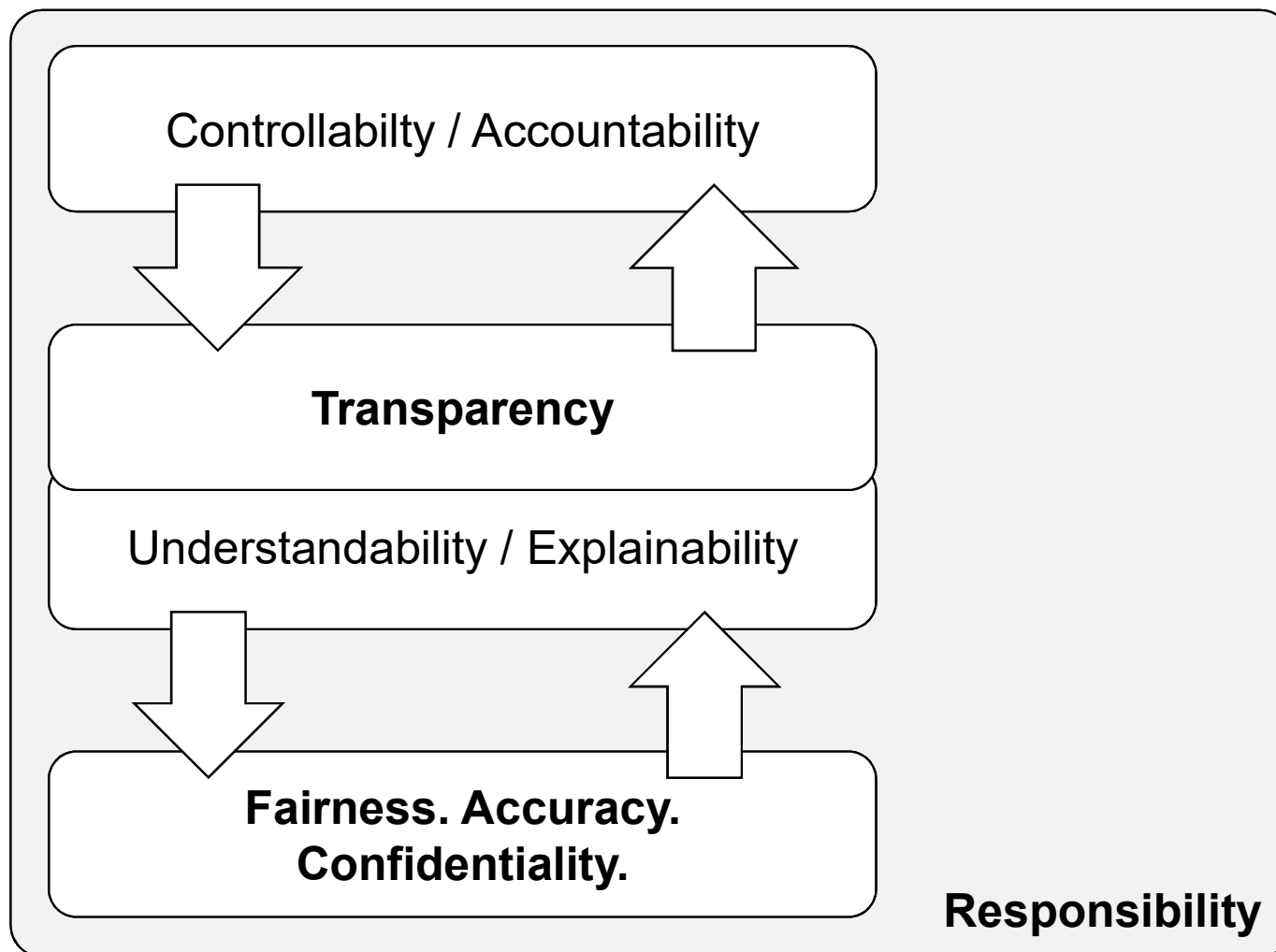
Understandability / Explainability

**Fairness. Accuracy.
Confidentiality.**





To provide an account (backward/passive; forward/active); agency and information are key



Transparency

Of the algorithm, and of the ***processes*** and the ***organization*** in which it is deployed.

And especially concerning the **'goal'** to which it optimizes (incl. feedback loop).

OPLOSSINGEN

	Autonomy and Freedom	Fairness and Equality	Accountability and transparency	Other Values ...
Data Selection and Collection	<i>E.g., proportionality</i>	<i>E.g., representation of different groups</i>	<i>E.g., informed consent</i>	<i>E.g., privacy</i>
Data Processing and Modelling	<i>E.g., understandability</i>	<i>E.g., algorithmic fairness</i>	<i>E.g., algorithmic accountability</i>	<i>E.g., solidarity</i>
Data Presentation and Action	<i>E.g., allocation of agency</i>	<i>E.g., accessibility of the application</i>	<i>E.g., interpretation</i>	<i>E.g., dignity</i>

tion

› <https://responsibledatainnovation.wordpress.com/2017/01/17/purpose-of-this-blog/>

Ethiek gaat niet over ‘goed/fout’ of oordelen, maar over het organiseren van een collaboratief en creatief proces:

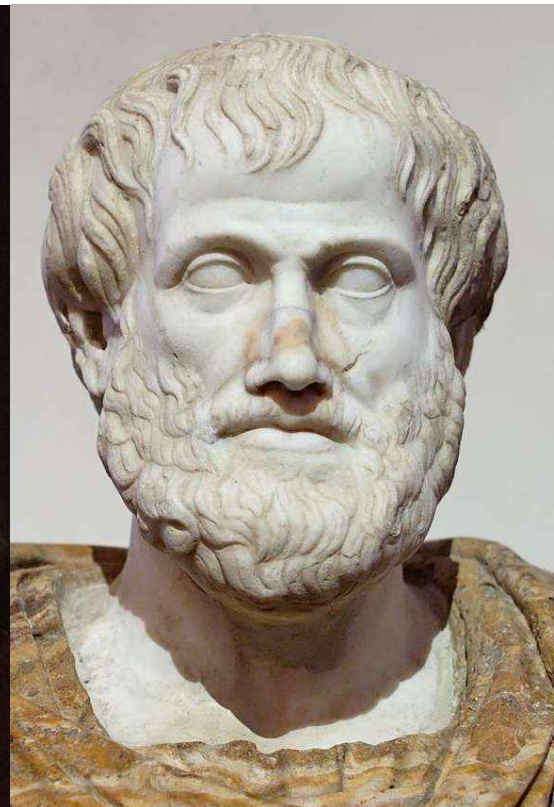
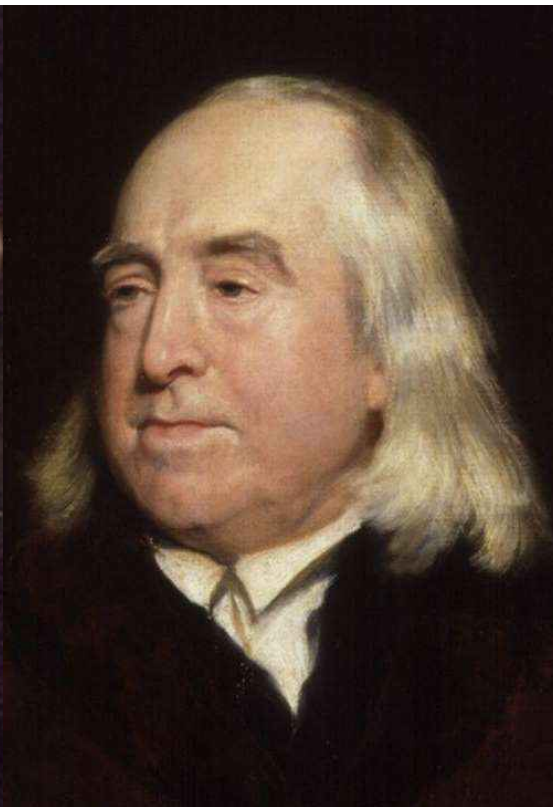
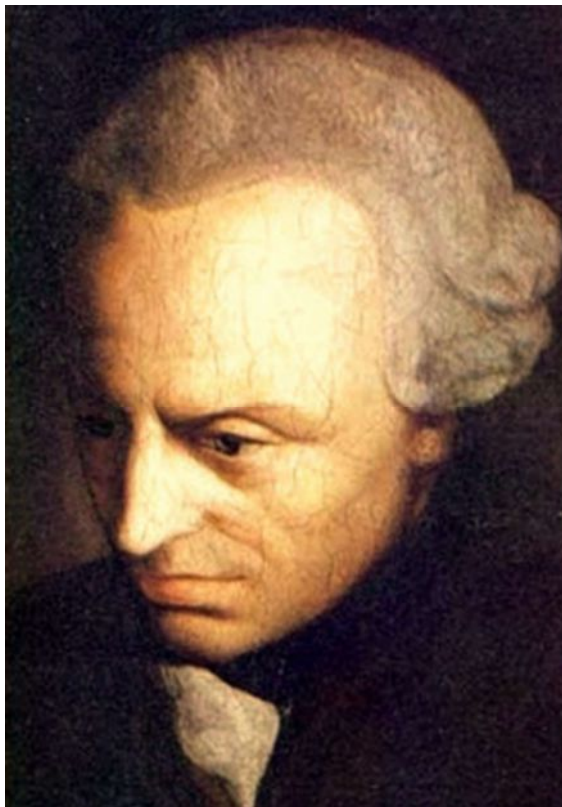
1. Stel (irritante) vragen, over effecten op maatschappij en waarden
2. Organiseer (lastige) dialogen met diverse actoren en stakeholders
3. Neem besluit, wees accountable (being able to provide an account)

Plichtethiek
(Kant)

Gevolgethiek
(Bentham)

Deugdethiek
(Aristoteles)

Zorgethiek
(Gilligan)



DANK VOOR UW AANDACHT

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- › marcsteen.nl

Meer info:

- › Responsible Data Innovation:
<https://responsibledatainnovation.wordpress.com/>
- › VWData:
<https://www.youtube.com/channel/UCV28qtBBi0V4K2ocVDDLDyw>