# THE ETHICS OF LAW AND THE LAWS OF ETHICS

Mireille Hildebrandt





What are the 5 ethical principles for

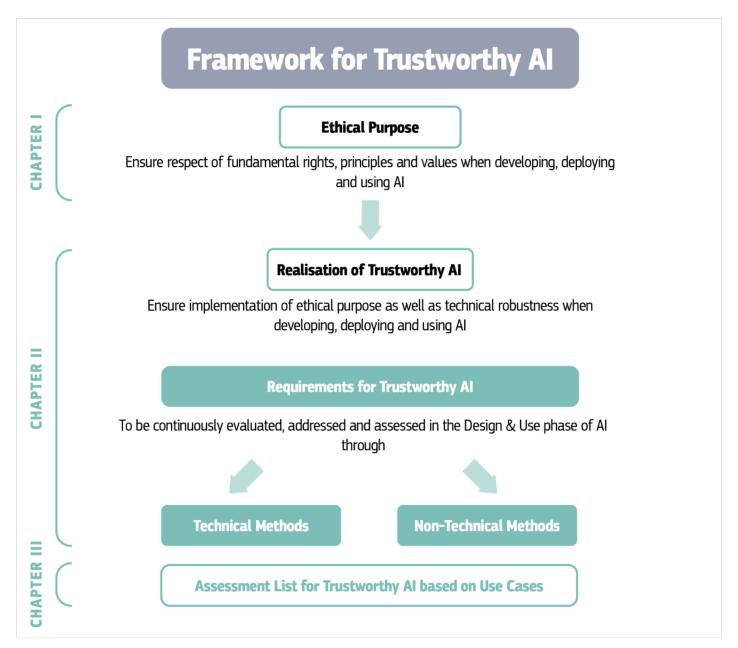
#ArtificialIntelligence? (2)

- 1 Do good
- 2 Do no harm
- 3 Keep human agency
- 4 Be fair
- 5 Operate transparently
- Contribute to the Draft Ethics guidelines for trustworthy #AI until 18 January ce.europa.eu/digital-single...

# DRAFT ETHICS GUIDELINES FOR TRUSTWORTHY AI

Working Document for stakeholders' consultation

Brussels, 18 December 2018



These Guidelines therefore set out a framework for Trustworthy AI:

- Chapter I deals with ensuring Al's ethical purpose, by setting out the fundamental rights, principles and values that it should comply with.
- From those principles, **Chapter II** derives **guidance on the realisation** of Trustworthy AI, tackling both ethical purpose and technical robustness. This is done by listing the requirements for Trustworthy AI and offering an overview of technical and non-technical methods that can be used for its implementation.
- **Chapter III** subsequently **operationalises** the requirements by providing a concrete but non-exhaustive assessment list for Trustworthy AI. This list is then adapted to specific use cases.

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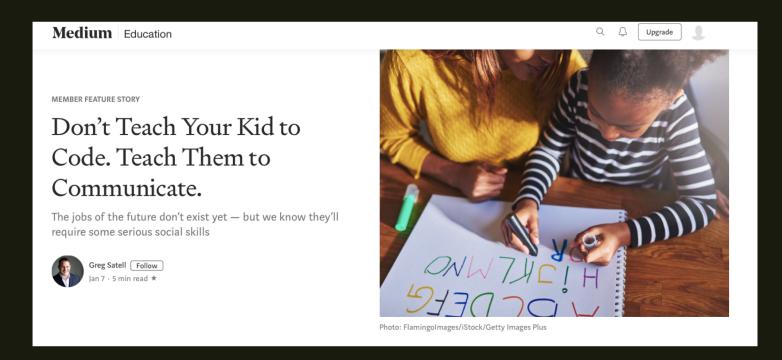
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"In the context of AI, respect for human dignity entails that all people are treated with respect due to them as individuals, rather than merely as data subjects."

OOPS

"Given that, on the whole, Al's benefits outweigh its risks, we must ensure to follow the road that maximises the benefits of Al while minimising its risks"

"In the final version of these Guidelines, a mechanism will be put forward to allow stakeholders to voluntarily endorse them." "(...) compliance with fundamental rights, principles and values entails that these are duly operationalised by implementing them throughout the AI technology's design, development, and deployment. Such implementation can be addressed both by technical and non-technical methods."



"The jobs of the future will not depend as much on knowing facts or crunching numbers as on humans collaborating with other humans to design work for machines. Collaboration will increasingly become a competitive advantage."

# What's next?

- 1. Al and the new 'choice architecture'
- 2. The laws of ethics
- 3. The ethics of law
- 4. Legal protection by design

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- 1. Code-driven (symbol manipulation & various types of logic) IFTTT deductive
- 2. Data-driven (machine learning, deep learning) inductive
- 3. Hybrids are the new black
- > Smart contracts and regulation (self-executing code, private enforcement)
- > Predictive targeting (pricing, insurance, policing, legal tech, fintech)

- Human agency combines:
  - Deduction (bias, presumptions, prior knowledge, innate, Vorurteil)
  - Induction (experience, feedback, testing, surprise, uncertainty)
  - Abduction (inferring new patterns, bias, assumptions, knowledge)
- Abductive reasoning = speculative reasoning
  - Natality
  - Lateral thinking
  - Play rather than game

A combination of deduction and induction is not abduction:

- ML and DL do not move beyond inductive inferences
- This entails a number of 'cognitive biases', such as
  - availability bias (low hanging fruit), clustering bias (spurious correlations), confirmation bias (overfitting), recency bias (low hanging fruit), survival bias (data is not reality), etc.

- There is no ability to detect such bias, because systems can only:
  - 'experience' the data it is 'fed' to them and
  - make inferences based on a constructed hypothesis space
  - no own experience, nothing is at stake, only if programmed

- Here we have mindless data- and code-driven agency:
  - deterministic or
  - emergent behaviours
- This mindless agency co-determines our choice architecture (CA)
  - What choices are enabled or precluded?
  - What types of choices are enabled or precluded?
    - For whom?
    - Depending on what?

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- 1. Utilitarian ethics (rule, act; methodological individualism)
  - Moral machines (MIT platform), ethics as a preference
- 2. Deontological ethics (autonomy; categorical imperative)
  - Respecting the dignity of AGI? Coding the CI?
- 3. Virtue ethics (perfectionism and the golden mean)
  - Practical wisdom of machines?





Taking the cogitas seriously (no cogito without a cogitas):

- Relational ethics based on a relational self
- **Ecological** ethics based on an ecological understanding of agency

Enhancing and protecting human agency:

- capability approach of Sen [agent oriented, but environment dependent]
  - Interpersonal environment
  - Institutional environment
  - Technological environment
- affordances approach of Gibson [environment oriented, but agent dependent]
  - What human agency does an oral society afford?
  - What human agency does a society of the script or the printing press afford?
  - What human agency does a data- or code-driven environment afford?

- 1. Utilitarian ethics:
  - What choice architecture (CA) enhances the ability to form preferences?
  - What CA the ability to exercise preferences?
- 2. Deontological ethics:
  - What CA respects human agency as autonomous?
  - Even when using others as instruments?
- 3. Virtue ethics:
  - What CA affords institutions and individuals
    - Practical wisdom?
    - Virtuous action?

#### CAs of/for:

- Users (individual persons)
- > Users (business or government agencies)
- > Retailers (selling software and/or hardware, IoT)
- > Those who put AI applications on the market
- > Those who develop AI applications

- > CAs redistribute risks
- > CAs redistribute types of choices
- > CAs redistribute the capability to exercise choices
- > CAs reduce or enhance the affordances of an environment

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- Governments should treat:
  - each individual person
  - with equal respect and concern.
- This underpins both:
  - Democracy ('1 person 1 vote')
  - > The Rule of Law (checks and balances, human rights)

- Governments should be transparent by default
- Citizens should be opaque by default
- Governments are bound to act from the perspective of the general interest
  - Legality principle (constitutional, administrative, criminal law)
- Citizens are free to act strategically, unless they harm others
  - Freedom to conduct a business (freedom to contract, transfer property)

- This has consequences for the CA that a law should present:
  - To big players
  - To individual citizens
- This has consequences for algorithmic governance:
  - Imposing a CA that makes behaviour 'legal by design', or
  - Developing and requiring a CA that provides 'legal protection by design'



9/1/19

# Advertising and academia are controlling our thoughts. Didn't you know? | George Monbiot

George Monbiot Mon 31 Dec 2018 06.00 GMT

By abetting the ad industry, universities are leading us into temptation, when they should be enlightening us

- Advertising companies try to develop a choice architecture:
  - to reduce the agency of consumers
- Supported by university departments of psychometrics that try to develop a scientific discipline to overcome e.g.
  - consumer scepticism,
  - resistance against fake news,
  - warning signs of addiction.

- What CA should law develop to prevent or divert a manipulative CA?
- Let's take the GDPR:
- > Prohibition of forced consent for additional processing
- > Withdrawal of consent as easy as provision
- > Data protection impact assessment
- Data protection by design
- Qualified prohibition automated decisions

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# Legal protection by design

- LPbD is NOT same as LbD
  - translation of legal norms into technical constraints (techno-regulation)
- LPbD is rather connected with 'values by design' and 'value-sensitive design'
  - but, it is about 'legal'
  - about rights and obligations
  - not values and principles

# Legal protection by design

- 1. The scope of LPbD should be determined by way of
  - democratic participation, for instance in the context of
  - participatory technology assessement and
  - involvement of the democratic legislature.
- 2. Those subject to such LPbD should be able
  - to contest its application in a court of law.

# Legal protection by design

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