

Fukuoka (November 21st, 2019)

**Law, Ethics, and the Governance of
Emerging Technologies**

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On the normative challenges of “emerging technologies” & the AI hip



Institutional Activism in AI

- The 2016, the White House Office of Science and Technology Policy (OSTP) series of public workshops
- The Trump administration and the Pentagon's documents from early 2019
- China's ambition to become the AI world leader by 2030
- Putin's prediction on the AI 'ruler of the world'

What's going on at the EU level

- The European Parliament's Resolution from February 2017
- The Economic and Social Committee's Opinion on AI from May 2017
- The European Commission's AI Strategy and the Work of the High-Level Expert Groups on AI in 2019
- The work of the Council of Europe
- On 16 July 2019, the President-elect of the European Commission, Ursula von der Leyen released her own political guidelines. The third section is on 'A Europe fit for the digital age.'

Further Initiatives...

- The United Nations' 'AI for Good Global Summits'
- OECD Reports
- The Global Initiative on Ethics of Autonomous and Intelligent Systems of the Institute of Electrical and Electronics Engineers (IEEE)
- The Committee on Professional Ethics and Public Policy Council of the Association for Computing Machinery (ACM)
- The World Economic Forum's Centre for the Fourth Industrial Revolution
- The Future of Life Institute's Asilomar Principles
- OpenAI, the Partnership on AI, the Software and Information Industry Association (SIIS), and the work of the AI4People project (Floridi et al. 2018).

Popularity = Complexity



Complexity = Misunderstandings!

誤解

Piling Up Questions

Namely, on the challenges of e.g. AI/ET

(1) Ethics of AI/ET: What Ethics?

(2) The Laws of AI/ET: Which Ones?

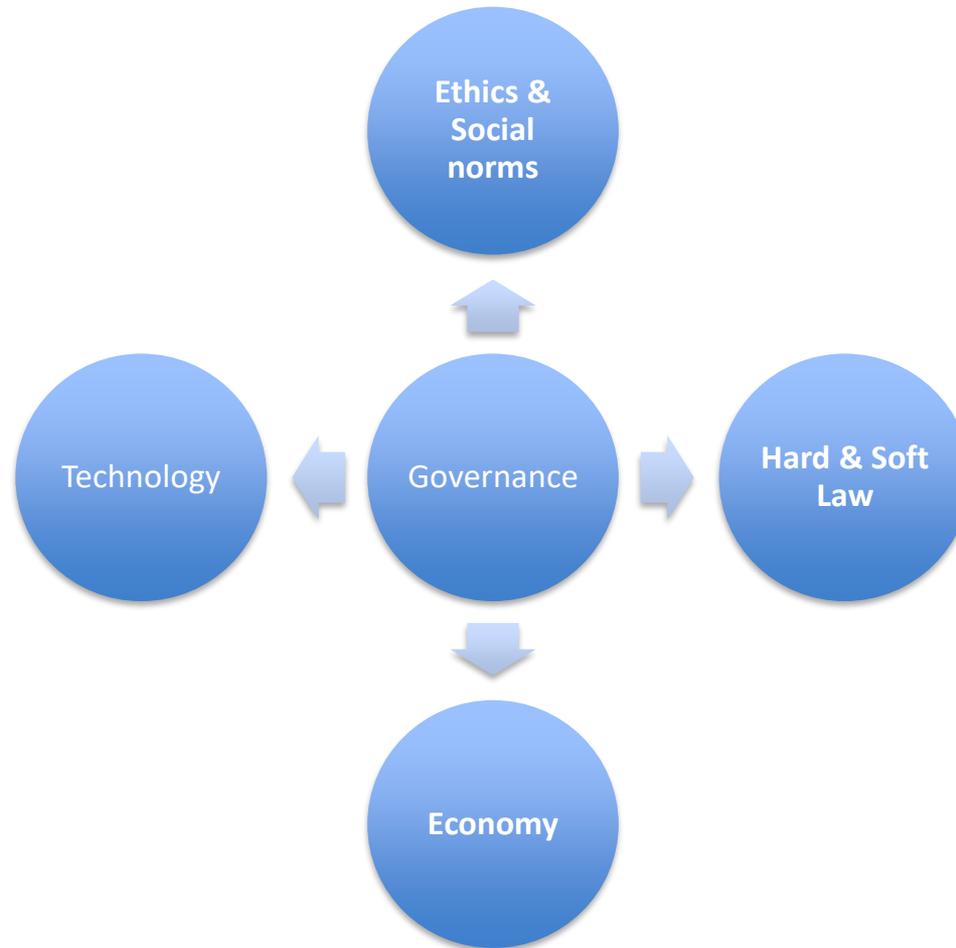
(3) What Governance?

(4) How Are They Related?

(5) Is there Anything Specific to e.g. AI?

(...)

A readapted Aristotelian model



Let's start then with...



Today's State of the Art in Ethics

- Montreal Declaration for Responsible AI, available at: https://docs.wixstatic.com/ugd/ebc3a3_c5c1c196fc164756afb92466c081d7ae.pdf
- Tenets of the Partnership on AI, available at: <https://www.partnershiponai.org/tenets/>
- AI HLEG's *Ethics Guidelines for Trustworthy AI*, available at: <https://ec.europa.eu/digital-single-market/en/news/ethics-guidelines-trustworthy-ai>
- OECD Principles on AI, available at: <https://www.oecd.org/going-digital/ai/principles/>
- (...)
- The AI4People's *An Ethical Framework for a Good AI Society*, available at <https://link.springer.com/article/10.1007/s11023-018-9482-5>

But how about the law?



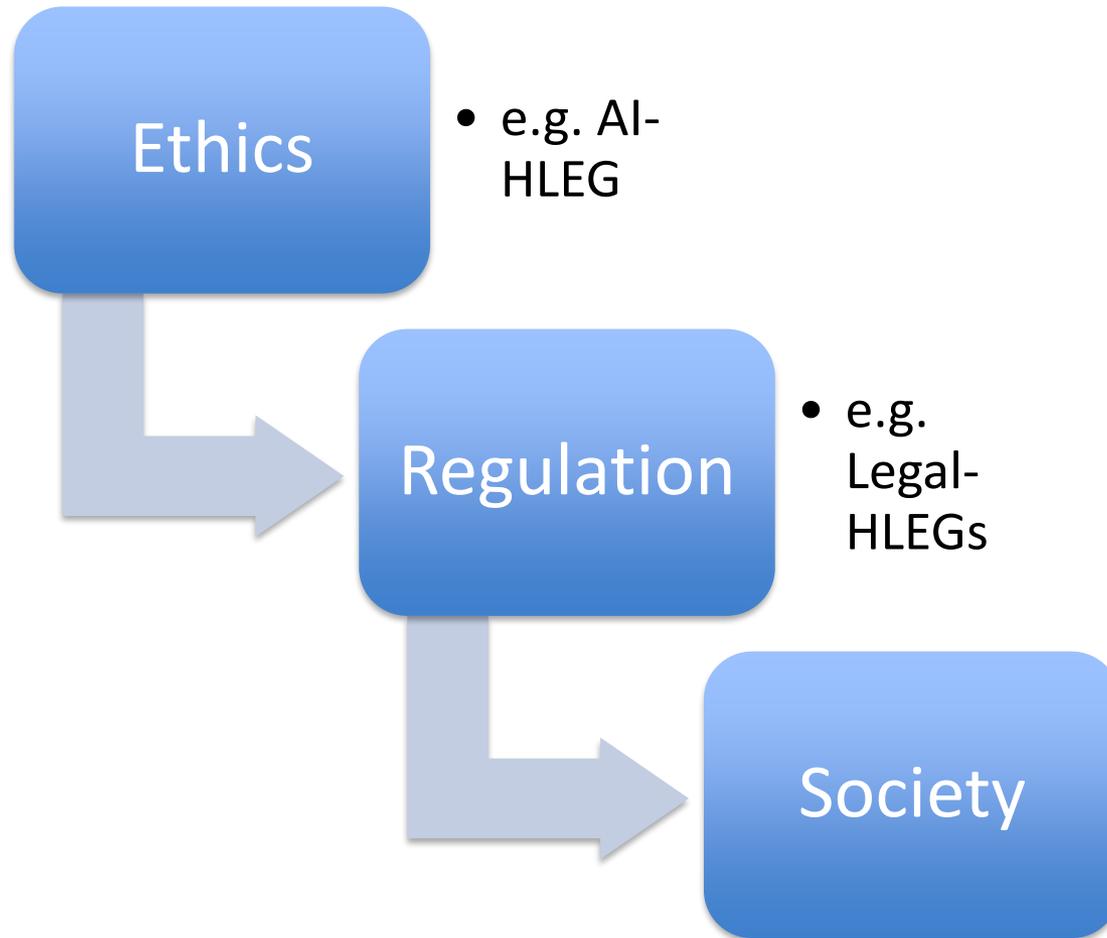
Three Options at hand

The interaction between ethics and the law, which is at stake with e.g. current work of HLEGs in Europe, can be grasped in 3 different ways:

- (a) Hard ethics;
- (b) Soft ethics;
- (c) Indifference.

Let me explain the limits of (a) and (c), so as to further analyze the merits of (b).

The Limits of “(a)”



The Limits of “(c)”



Would economic operators, social partners, non-governmental organisations and associations determine their own moral values, so that such values could go hand-in-hand with the moral principles of guidelines and declarations?

Welcome to “(b)”

The discussions of ethical HLEGs are not about what should or should not be done against current legislation, or despite it. Rather, the guidelines revolve around how to complement and strengthen the existing regulation. In the phrasing of the *Ethics Guidelines for Trustworthy AI* from April 2019, ‘trustworthy AI should respect all applicable laws and regulations, as well as a series of requirements.’

The two sides of “(b)”

Current work of HLEGs and today’s debate on AI ethics has thus to reflect on:

- (i) Principles and recommendations for the moral issues that are unique to AI;
- (ii) The ways in which we should complement and strengthen current legal regulation.

Let’s deepen such topics separately, as a matter of law and governance.

The Law of Emerging Technologies



The Vertical Impact of Technology

- Criminal Law (including LAW)
 - Tortuous Law (e.g. EU Commission's HLEG)
 - EU Administrative Law (on automation)
 - Contract Law (e.g. IP rights by AI)
 - Constitutional Law (e.g. personhood)
 - Procedural Law (e.g. fair trial)
- (...)

The Legal Impact of Technology -- 2.0

“Horizontally,”

- Data Protection and Right to Privacy
- Surveillance Law
- Communications Law
- Anti-discrimination Law
- IP Law
- Environmental Law

(...)

Context-dependency

Drones



AVs



E.g. UAVs vs. AVs

Context-dependent legal frameworks, e.g. today's EU laws for drones and self-driving cars, pose not only different moral problems of applied ethics. These differences eventually increase by comparing multiple legal systems, e.g. US & EU law.



New Legal Approaches

In addition to the basket of legal tools seen so far, that is,

- (i) Hard/Top-down Norms of Legal Regulation
- (ii) Soft Law (e.g. EASA for EU drones)

We should consider:

- (iii) Secondary, rather than primary legal rules, such as the secondary rules of change and of legal experimentation.

Legal Experimentation

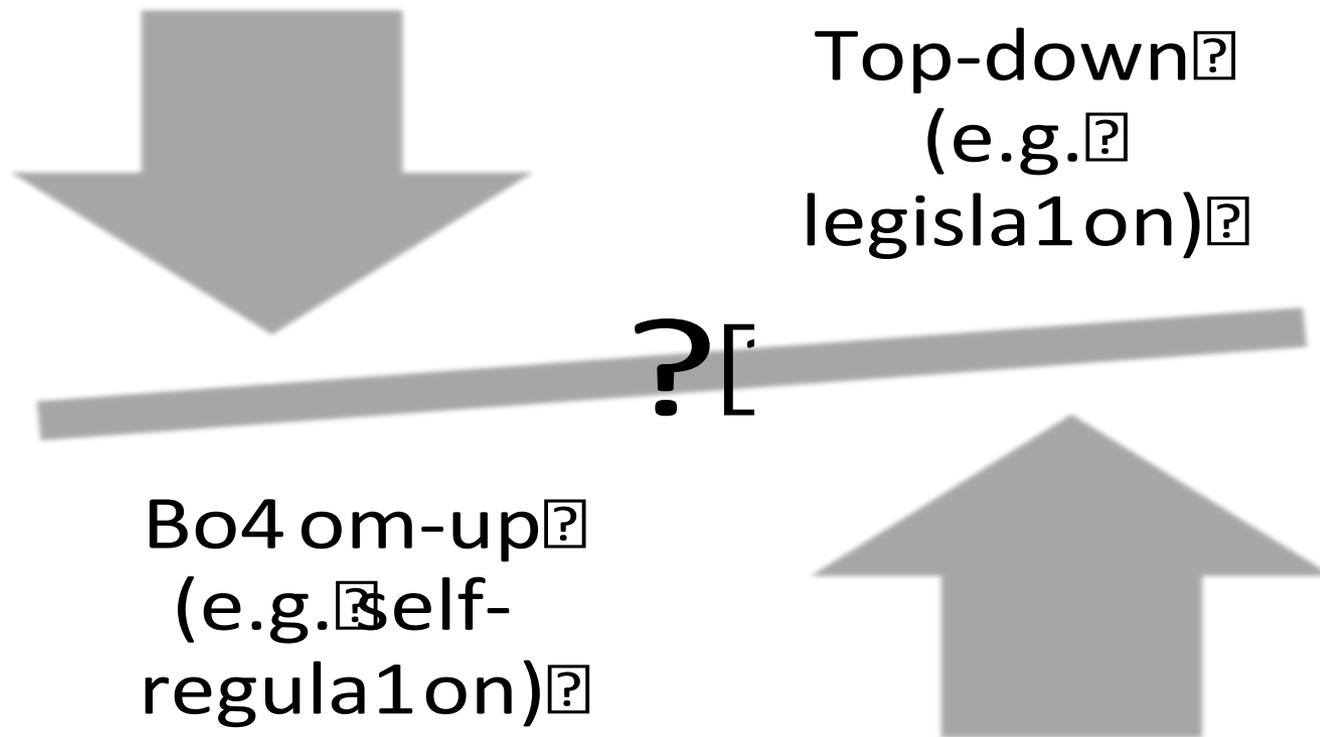
- Sandboxes in the financial sector
 - Special zones (Tokku) in Japan
 - Use and test of self-driving cars
 - Special zones for drones
 - Platform-to-Business (P2B) trading models
 - Sandboxes for environmental law
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And its Limits!!!

Beyond top-down or bottom-up approaches to institutional design



Examples

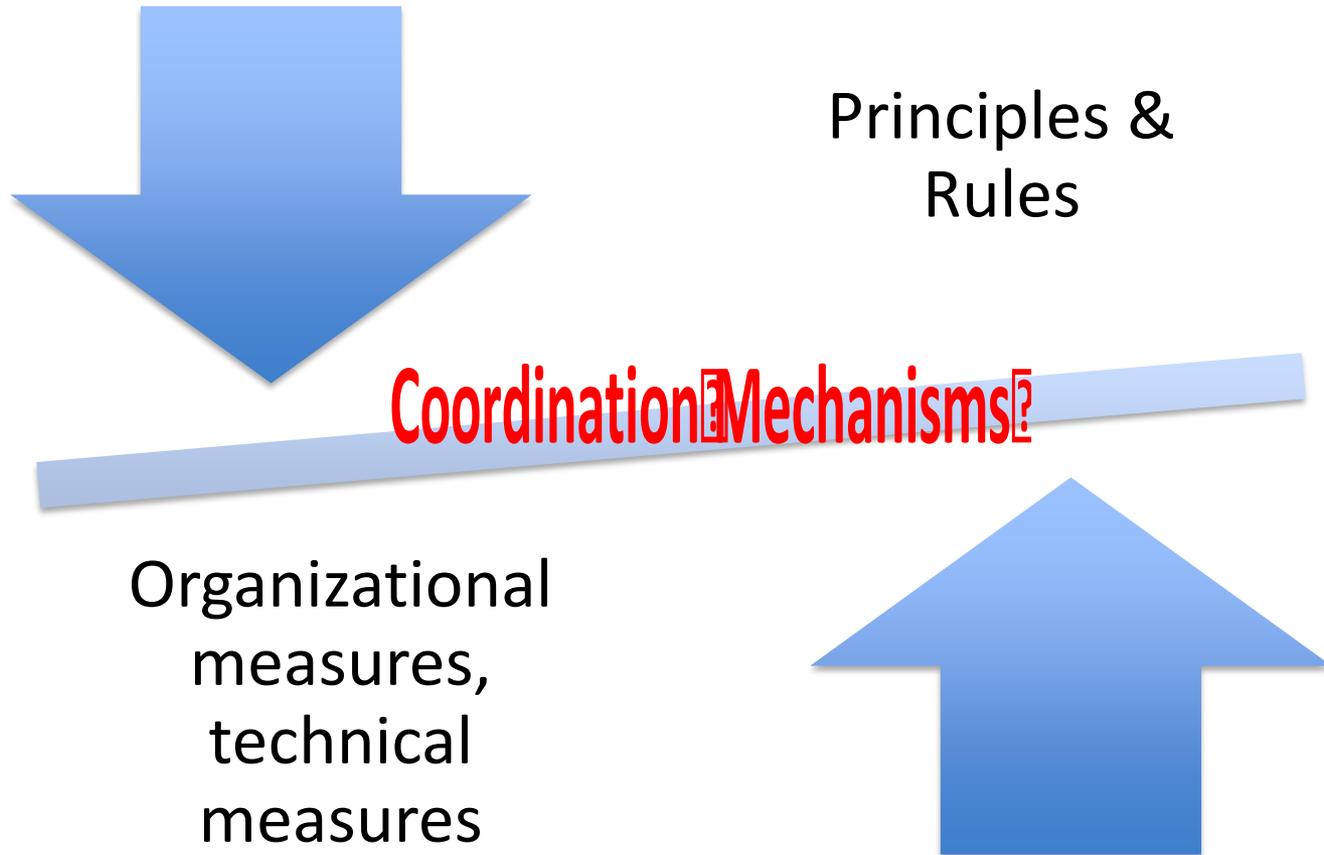
On models of EU governance, and its limits.

The GDPR model, and its limits

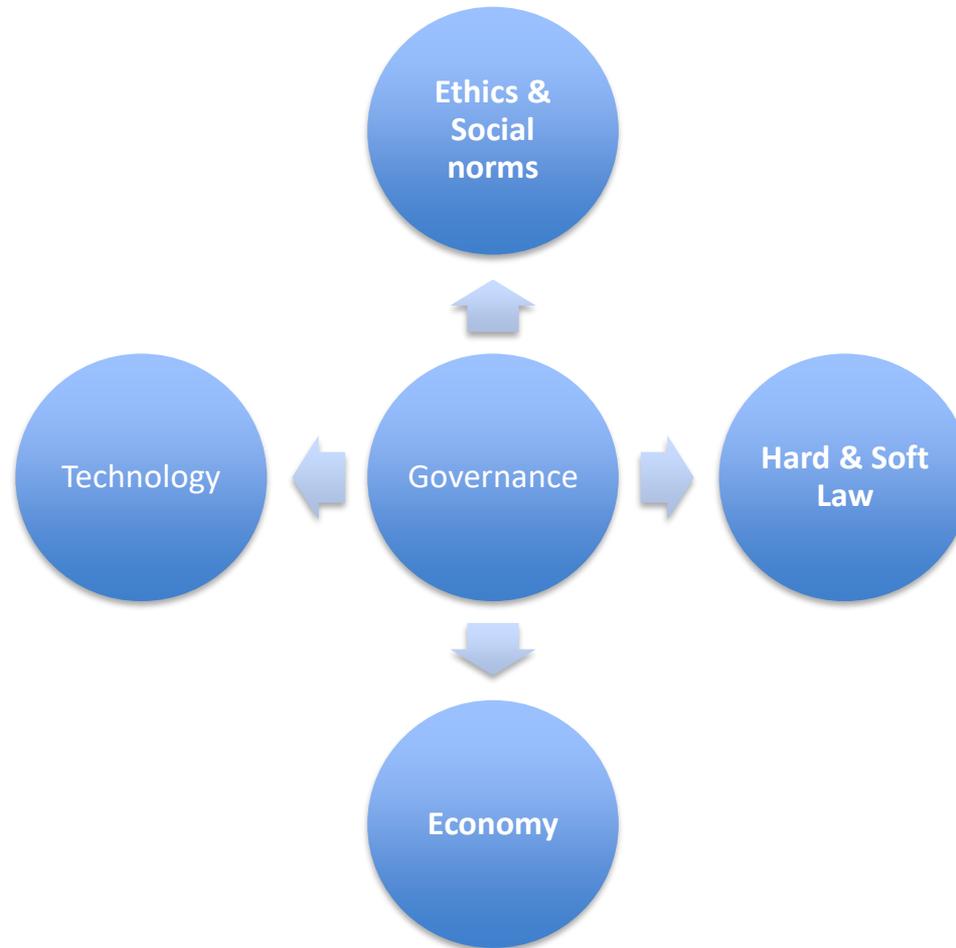


A new
approach

The Middle-out Approach



Back then to 'our' Aristotle



A Smart Model of Governance

The new model has to be S.M.A.R.T. = **Scalability**, **Modularity** and **Adaptability** of the approach should suitably be addressed by adding resources to the mechanisms set up for coordination, and complemented by further procedures of **Reflexivity**, i.e. sound scrutiny, assessment and evaluation of risks, and **Technological-savvy** oversight.

The Gist

- (i) Soft, rather than Hard Ethics;
- (ii) Both Hard & Soft Law in progress;
- (iii) A model of governance, i.e. middle-out;
- (iv) A model of smart coordination for e.g. AI.

The latter accommodates the uncertainties of innovation and yet, at the same time, captures expanding understanding with increasing regulatory granularity

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Thank you!

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