The promises and perils of AI: taking chances to bridge the gap between policy makers and takers

The Democratic Challenges of Artificial Intelligence

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The perils

- Speed and scope of digital tools : Govs. slow in responding to the best interest of their citizens

- Fatalism : surrender or technological exhaustion of democracy.
    Elites control tech -> tools to enhanced their power- > growing imbalance erodes individual belief in their agency

- Mismatched incentives: use of technology to win elections vs ciitizens' representatives to use technology to learn about peoples' problems

- Power asymmetry between platforms and users continues

    - How owns the means of production as the best Hegel's student would say..

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The promises

- Empowerment: individuals can easily describe their wishes, views, hopes and fears directly (middlemen - information collectors- obsolescence)

- Distributed: less of a hierarchy of information privilege and more of an accountability system.

- Connectivity, transparency, traceability and accountability are capabilities supported -native- by design in the digital realm.

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The future

- At early stages of the Digital Transition: everything that can be digitized is being digitized.

- 2030 democracy: outwardly thriving, but inwardly failed
  People vote, but votes shaped by the commercial interests of the influencers and platform owners

- Numeric citizenship: reinvention of citizenship in a data-driven world where numeric values will be assigned to virtually everything we do. (social credit)

- Homophily Amplification (the tendency of people to gather among those with whom they share characteristics)
  AI works as an HA (Homophily Accelerator)

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The future

The future is here but is unevenly distributed (William Gibson)

- Neil Postman "Amusing Ourselves to Death" 2030 closer to Aldous Huxley's Brave New World (people oppressed by addiction to amusement), rather than by Orwell's work (people oppressed by state control)

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Complexity science

- Democratic instability is best understood with tools from complexity science.

- Democracy has a capacity unmatched in solving complex problems

    - Feedback channel: democracy-->extraordinary capacity to survive managed to do so by using pre-established institutions to change their rules and practices peacefully and consensually

    - Feedback channel is faulty (autocracy) or costly (dictatorship DDR 2% Stasi)

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Complexity science

- The more genetically diverse a bee hive, the higher is its survival probability

- Introduce diversity, heterogeneity and even NOISE in democratic institutions, not only on equality of opportunity or moral ground but on a technical basis (engineering robustness)

- Randomness: the collective performance can be improved by insertion of a few autonomous agents that behave randomly

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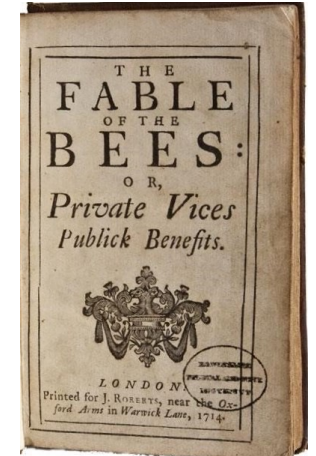
Complexity science

- DROPOUT method: computationally cheap and remarkably effective regularization method to reduce overfitting and improve generalization error
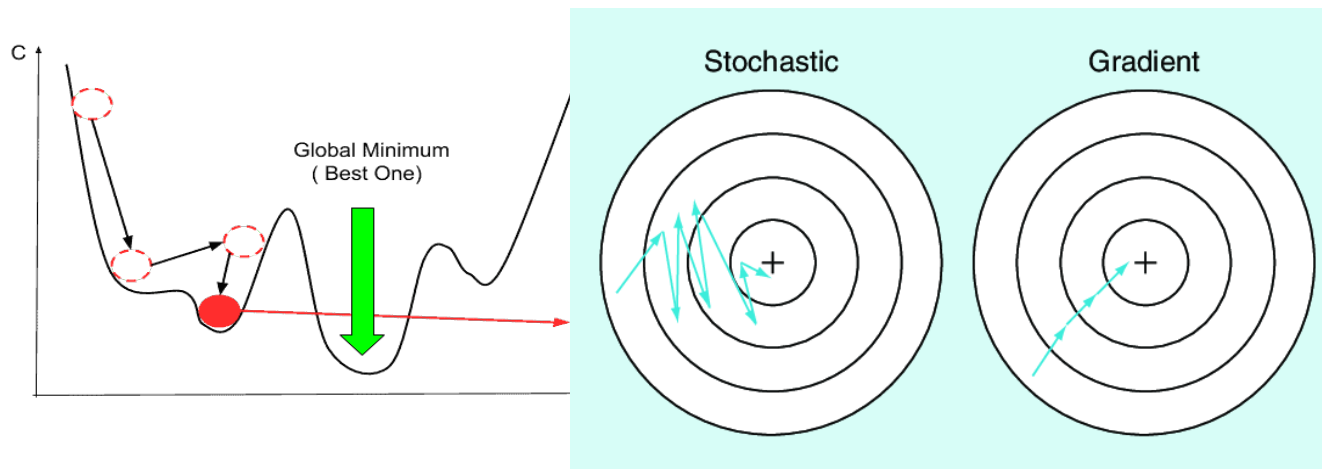
This time will not be that different

- Democracy is an evolving project under ongoing construction and that the currently model doesn't need to be the final one

- We cannot be "for" or "against" AI, it is already here to stay

- Question we now face is rather how to exist qua human beings, individually, socially, collectively, in a world governed in large measure by algorithms.

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Thank you