

GLOBAL AI (AND DATA) GOVERNANCE

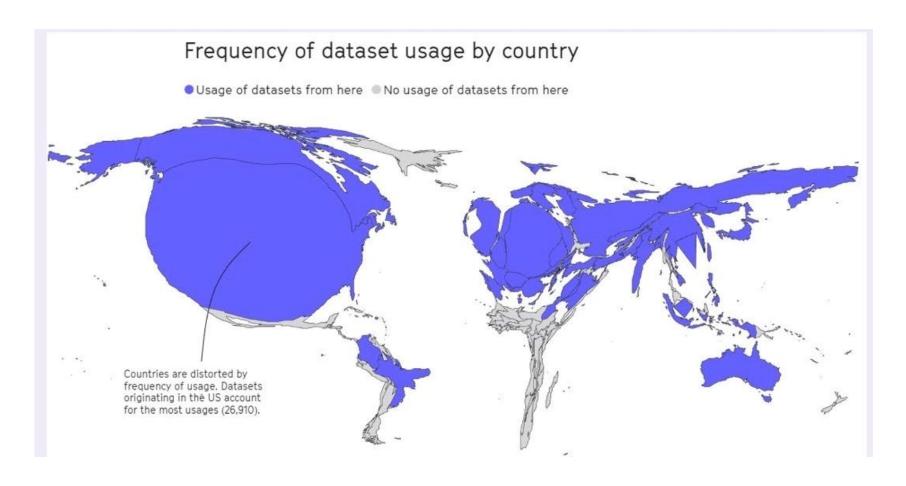
Prof. Dr. Virginia Dignum

Chair Responsible AI - Department of Computing Science

Email: virginia@cs.umu.se - Twitter: @vdignum



THE WORLD AS AI SEES IT





ALL DATA IS WRONG BUT SOME IS NEEDED

- Concentration of resources
 - In the previous slide, 50% of datasets are connected to 12 institutions
- Data divide and exclusion
 - WEIRD: Western, educated, industrialised, rich, democratic
- Representation divide
 - Observed vs Estimated



ALL DATA IS WRONG BUT SOME IS NEEDED

- Decision making is dependent on data
- Data is imperfect and incomplete
- Sustainability is core
 - Computational cost of AI
 - Human and social costs
 - Balancing detail and utility
- Risk Management is crucial

Data for development and development for data



ALL DATA IS WRONG BUT SOME IS GOVERNED

Data Governance Principles

- Privacy and Data Protection
- Data Quality and Integrity
- Transparency and Traceability
- Inclusion, Diversity and Fairness



GOVERNANCE - WHY? WHAT FOR?

Regulation as incentive for responsible innovation, sustainability, and fundamental human rights

Cars drive faster with brakes

In a game without rules, no one wins

introducing more regulation

Avoidance of an "arms race" narrative in AI regulation



GOVERNANCE IS NEEDED FOR INNOVATION!

- Responsible AI is not a choice!
- Data governance is not a choice!

- Regulation IS innovation
 - Technological innovation
 - Organisational innovation
 - Regulation innovation
 - Governance innovation
 - Social innovation



WHY GLOBAL AI GOVERNANCE?

Coordination

 international standards to mitigate risks and optimize opportunities.

Ethics

 Setting ethical guidelines ensuring respect for privacy, fairness, transparency, and human rights across all nations

Economic Impacts

 reduce economic disparities and prevent unfair competitive advantages among nations.





PRINCIPLES AND GUIDELINES

- UNESCO
- European Union
- OECD
- WEF
- Council of Europe
- IEEE Ethically Aligned Design
- National strategies

• ...

EU HLEG	OECD	IEEE EAD
 Human agency and oversight Technical robustness and safety Privacy and data governance Transparency Diversity, non-discrimination and fairness Societal and environmental wellbeing Accountability 	 benefit people and the planet respects the rule of law, human rights, democratic values and diversity, include appropriate safeguards (e.g. human intervention) to ensure a fair and just society. transparency and responsible disclosure robust, secure and safe Hold organisations and individuals accountable for proper functioning of AI 	 How can we ensure that A/IS do not infringe human rights? effect of A/IS technologies on human well-being. How can we assure that designers, manufacturers, owners and operators of A/IS are responsible and accountable? How can we ensure that A/IS are transparent? How can we extend the benefits and minimize the risks of AI/AS technology being misused?



https://ec.europa.eu/digitalsingle-market/en/high-levelexpert-group-artificialintelligence



https://ethicsinaction.i





https://www.oecd.org/g oingdigital/ai/principles/



https://www.unesco.org/en/artifici al-intelligence/recommendationethics



Available at www.un.org/ai-advisory-body

Guiding Principles proposed in the Interim Report

Interim Report:
Governing Al
for Humanity

To guide formation of new AI governance institutions



Al should be governed inclusively, by and for the benefit of all



Al must be governed in the public interest



Al governance should be built in step with data governance and the promotion of data commons



Al governance must be universal, networked and rooted in adaptive multistakeholder collaboration



Al governance should be anchored in the UN Charter, International Human Rights Law, and other agreed international commitments such as the Sustainable Development Goals

Al Governance Functions NORM ELABORATION, COMPLIANCE AND ACCOUNTABILITY INSTITUTIONAL "HARDNESS" REPORTING AND PEER REVIEW INTERNATIONAL COLLABORATION ON DATA, COMPUTE AND TALENT TO SOLVE SDGS FACILITATION OF DEVELOPMENT AND **USELIABILITY REGIMES, CROSS-BORDER** MODEL TRAINING AND TESTING MEDIATING STANDARDS, SAFETY AND RISK MANAGEMENT FRAMEWORKS INTEROPERABILITY (HORIZONTAL) AND ALIGNMENT (VERTICALLY) WITH NORMS **HORIZON SCANNING, BUILDING** SCIENTIFIC CONSENSUS



THANK YOU!

Virginia Dignum virginia@cs.umu.se







