ChatGPT
and a possible new online world

A Digital Humanism lecture

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ChatGPT: Some basic facts

- LLM with both unsupervised training and reinforced learning
- Data used: Wikipedia, book corpora, web pages, …
- Statistical probability "chooses" words/phrases to follow
- Dialogue system creating illusion of conversing with a human
- No understanding of questions, answers or facts. No reasoning

Potential "good" uses

- Augmenting human capabilities
- Legal briefs, translation, programming, chip design, drug design and more
- Education and Training
- Unforeseen innovative uses
- Productivity gains and new business opportunities

Potential "bad" uses and risks

- Industrial level production of scam e-mails
- Automatization of disinformation campaigns.
- Fast, efficient production of new breeds of customized malware code
- Risk of use by young people during cognitive development?
- Concentration of political and economic power compounded by the control of prioritization of future AI R&D directions in the hands of Big Tech is a threat to liberal democracy
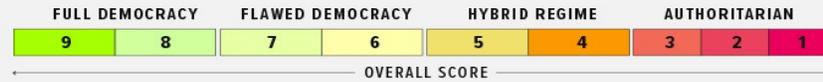
Democracy, ChatGPT and Regulation

- 16th straight year of "backsliding" of democracy worldwide
- Economic inequalities, globalization effects and constitutional fault lines intertwined with the role played by Big Tech and their platforms are among most cited causes.
- ....

THE STATE OF
DEMOCRACY
AROUND THE WORLD

Source: EIU.com

The Democracy Index provides a snapshot of the state of democracy around the world since 2006. This year's report reveals that democracy is failing worldwide due to the negative impact of covid-19 pandemic on democracy and freedom.
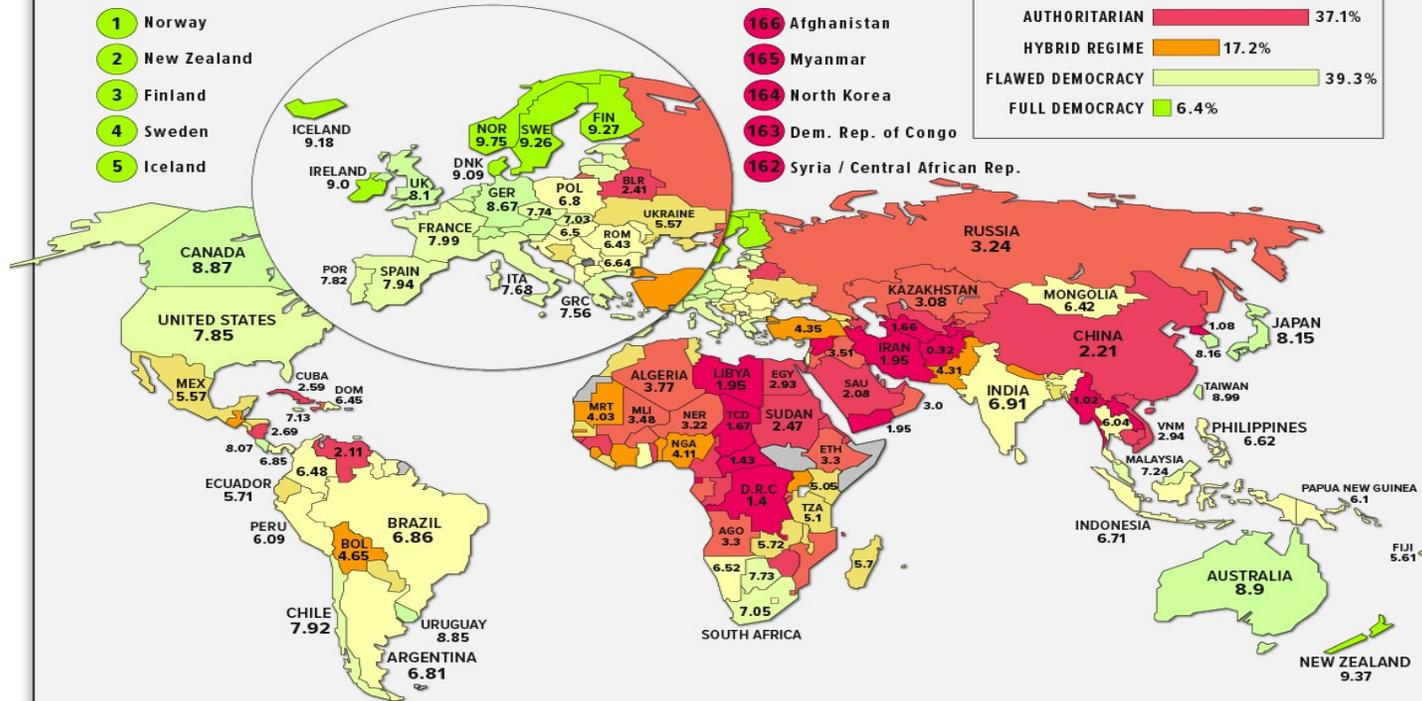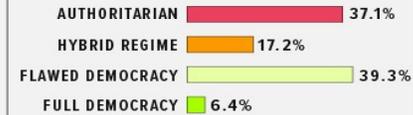
FULL DEMOCRACY		FLAWED DEMOCRACY		HYBRID REGIME		AUTHORITARIAN		
9	8	7	6	5	4	3	2	1

OVERALL SCORE

In 2020, 49.4% of the world population lived in some sort of democracy. This has dropped substantially to 45.7% in 2021 and 37.1% of the world population live in "authoritarian regimes".

AUTHORITARIAN	37.1%
HYBRID REGIME	17.2%
FLAWED DEMOCRACY	39.3%
FULL DEMOCRACY	6.4%

Top 5 Ranked Countries

1 Norway
2 New Zealand
3 Finland
4 Sweden
5 Iceland

Bottom 5 Ranked Countries

166 Afghanistan
165 Myanmar
164 North Korea
163 Dem. Rep. of Congo
162 Syria / Central African Rep.

ICELAND 9.18
NOR 9.75
SWE 9.26
FIN 9.27
IRELAND 9.0
DNK 9.09
UK 8.1
GER 8.67
POL 6.8
BLR 2.41
UKRAINE 5.57
FRANCE 7.99
7.74
7.03
ROM 6.43
6.5
6.64
POR 7.82
SPAIN 7.94
ITA 7.68
GRC 7.56

CANADA 8.87
UNITED STATES 7.85
MEX 5.57
CUBA 2.59
DOM 6.45
7.13
2.69
8.07
6.85
2.11
6.48
ECUADOR 5.71
PERU 6.09
BOL 4.65
BRAZIL 6.86
CHILE 7.92
URUGUAY 8.85
ARGENTINA 6.81

RUSSIA 3.24
KAZAKHSTAN 3.08
MONGOLIA 6.42
1.08
8.16
JAPAN 8.15
1.66
IRAN 1.95
0.32
CHINA 2.21
4.35
3.51
4.31
INDIA 6.91
1.02
TAIWAN 8.99
ALGERIA 3.77
LIBYA 1.95
EGY 2.93
SAU 2.08
3.0
6.04
VNM 2.94
PHILIPPINES 6.62
MRT 4.03
MLI 3.48
NER 3.22
TCD 1.67
SUDAN 2.47
1.95
MALAYSIA 7.24
NGA 4.11
1.43
ETH 3.3
D.R.C 1.4
5.05
PAPUA NEW GUINEA 6.1
TZA 5.1
AGO 3.3
5.72
5.7
INDONESIA 6.71
6.52
7.73
FIJI 5.61
7.05
SOUTH AFRICA
AUSTRALIA 8.9
NEW ZEALAND 9.37

THE DEMOCRACY INDEX IS BASED ON FIVE CATEGORIES:

Electoral Process + Pluralism | Functioning of Government | Political Participation | Political Culture | Civil Liberties

Threats to Liberal Democracy

- Unprecedented concentration of economic and political power

- Power to influence/manipulate public opinion/elections

- Surveillance, filtering, nudging, herding, polarization

- Erosion of the public sphere: a threat to an open democratic society

Regulating the Information Ecosystem

- **AIMS**
- Ensure a pluralistic AI R&D landscape where it is feasible for academia and industry to develop diverse AI tools that serve human needs.
- Prevent another "winner takes it all" development
- AI as a public good, democratically governed must be a priority

- **MEANS**
- GDPR, DMA, DSA, Data Act, AI Act and …
- New anti-trust approaches (DMA in the EU, anti-trust suits in US)
- Precautionary Regulatory principle for AI

EU-US Trade and Technology Council (TTC)
Seeking a "values based digital transformation"

- *"The European Union and the United States acknowledge that AI technologies yield powerful advances but also can threaten our shared values and fundamental freedoms if they are not developed and deployed responsibly or if they are misused. The European Union and the United States affirm their willingness and intention to develop and implement AI systems that are innovative and trustworthy and that respect universal human rights and shared democratic values"*

- Facilitate cooperation on regulatory policy and enforcement cooperation and ,where possible convergence

What needs to be done

- Regulation: Effectively implemented and dynamically updated
- Keep public and policy makers informed of opportunities and risks
- Future directions of AI R&D to be driven by human-centered concerns
- Commit to apply the Digital Humanism approach to AI R&D as generative AI technology, its uses and our understanding evolve