

AI in Africa: Decolonisation, and the Problem with Ethics

Dr Rachel Adams, Research ICT Africa, Leverhulme Centre for the Future
of Intelligence, University of Cambridge

Navigating the **complexity** of AI

Background

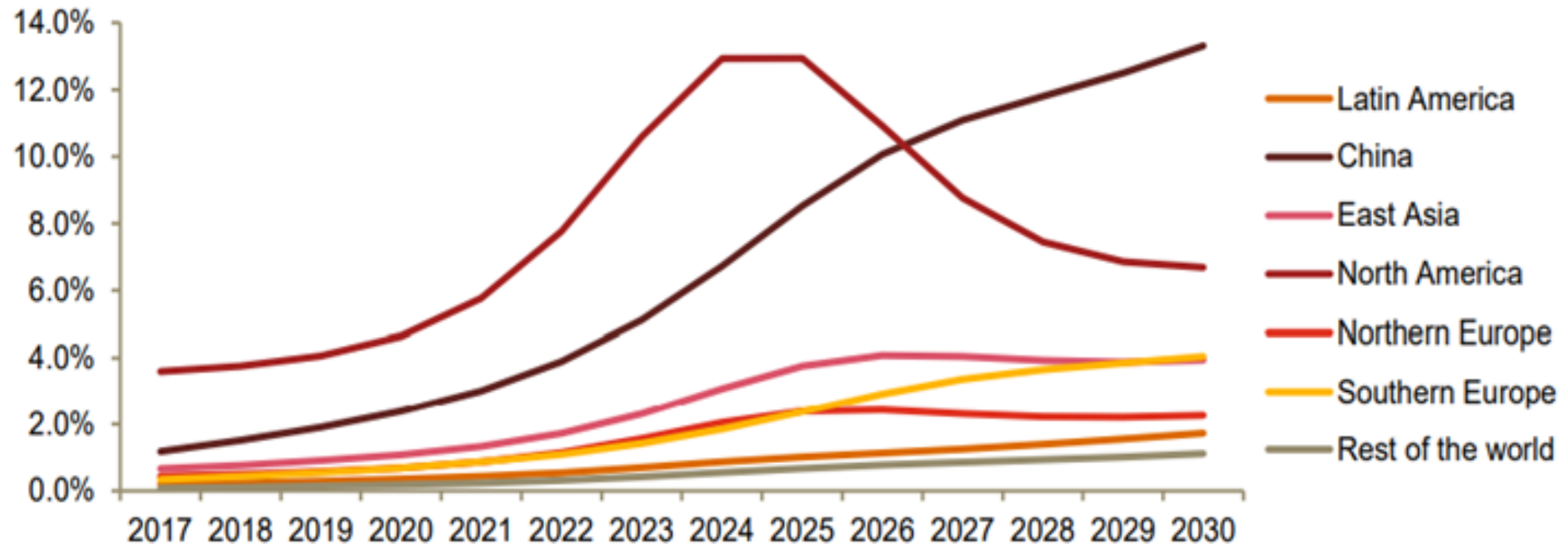
- Recent breakthroughs mean we are fast arriving at the existential and big ethical questions we thought were decades away
- AI is an elite technology available online to those with the resources to use it.
- AI was promised as being a powerful tool to "solve the worlds' problems", but is instead being used to drive corporate interests and distract people.
- AI now comes with major risks, on various different levels (analytical framework)
- These risks are not equally distributed, either between or within nations.

Outline for Today

- Introduction to AI in Africa
- Overview of policy responses by Africa govts
- Decolonisation and decolonizing AI
- Toward an analytical framework for making sense of AI in Africa
- The problem of “ethics” in Africa

Figure 7.12 – GDP impact by geographical region over time (% of GDP) associated with productivity and product enhancements (2017-2030)

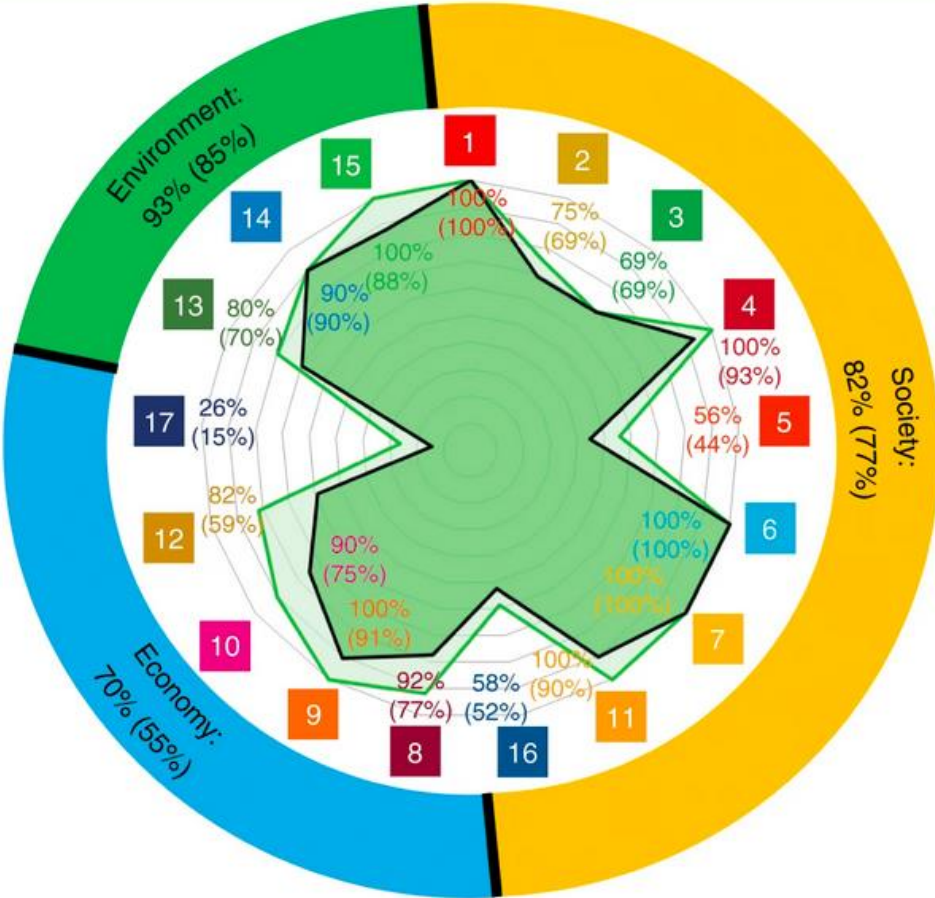
GDP impact associated with productivity



Impact of AI on SDGs

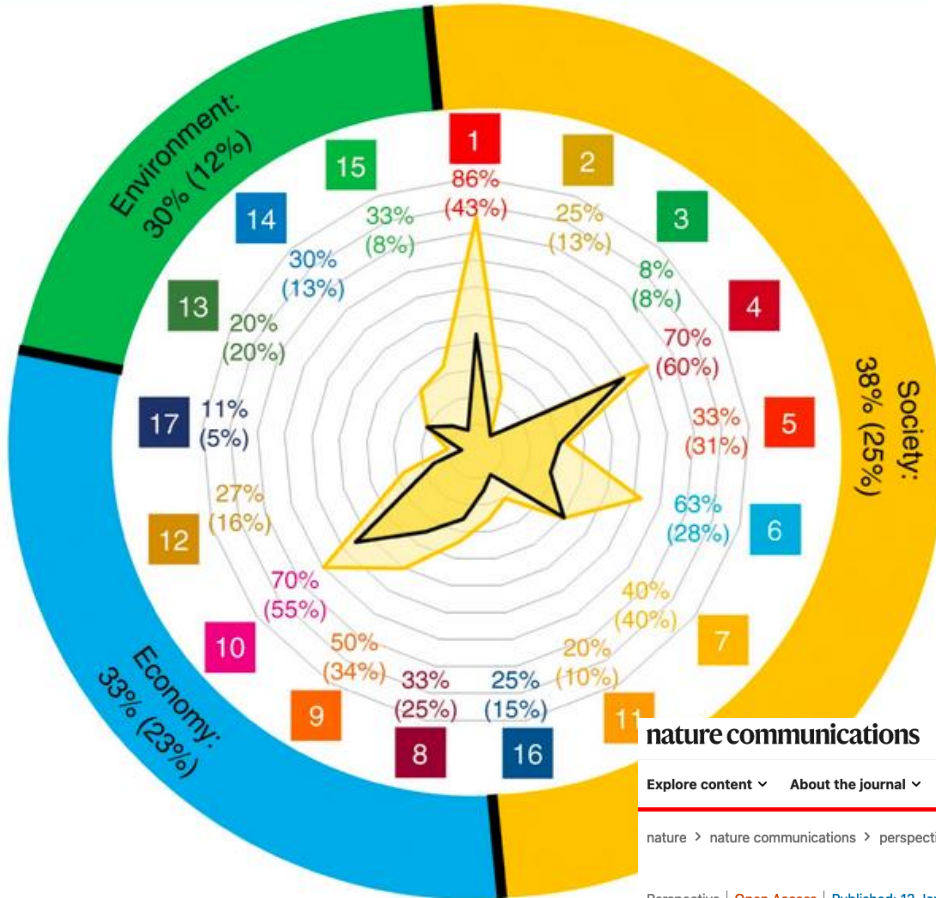
a

Positive impacts of AI: 79% (71%)



b

Negative impacts of AI: 35% (23%)



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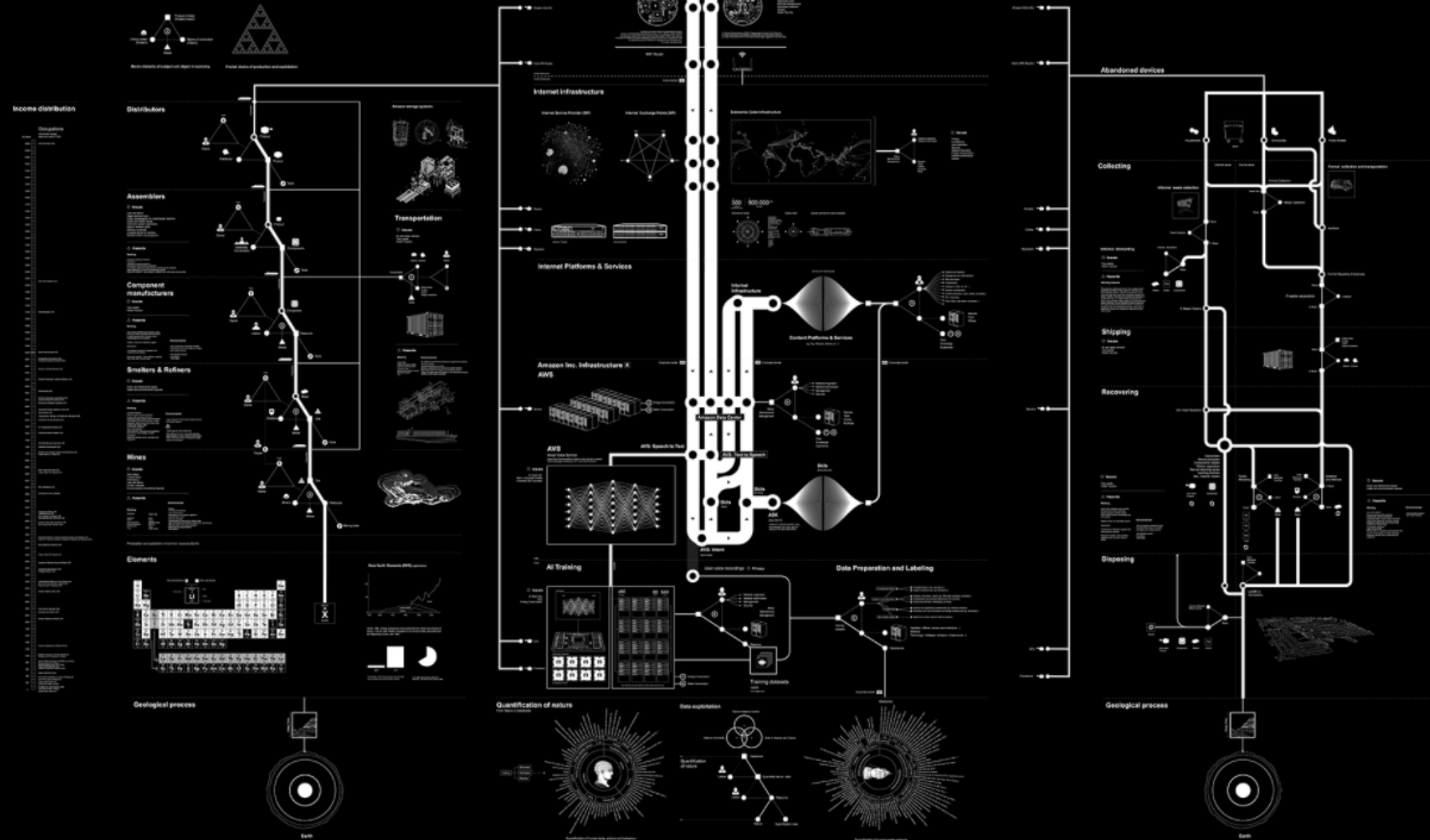
Perspective | Open Access | Published: 13 January 2020

The role of artificial intelligence in achieving the Sustainable Development Goals

Ricardo Vinuesa, Hossein Azizpour, Iolanda Leite, Madeline Balaam, Virginia Dignum, Sami Domisch, Anna Felländer, Simone Daniela Langhans, Max Tegmark & Francesco Fusco Nerini

Anatomy of an AI system

An anatomical case study of the Amazon echo as a artificial intelligence system made of human labor



Global supply chain of AI

- Extraction of minerals
- Extraction of data
- Cheap labour in the production of computers and communications infrastructure
- Digital labour needed to label data

Refugees help power machine learning advances at Microsoft, Facebook, and Amazon

Big tech relies on the victims of economic collapse.



from *Africa in Transition* and *Africa Program*

Why Cobalt Mining in the DRC Needs Urgent Attention

Blog Post by Guest Blogger for John Campbell

October 29, 2020 10:34 am (EST)



An artisanal miner carries raw ore at Tilwizembe, a former industrial copper-cobalt mine, outside of Kolwezi, the capital city of Lualaba Province in the south of the Democratic Republic of the Congo, June 11, 2016 *Kenny Katombe / REUTERS*

Corpus ID: 203458749

Digital Colonialism: The 21st Century Scramble for Africa through the Extraction and Control of User Data and the Limitations of Data Protection Laws

Daniel Coleman • Published 2019 • Sociology • Michigan Journal of Race & Law

As Western technology companies increasingly rely on user data globally, extensive data protection laws and regulations emerged to ensure ethical use of that data. These same protections, however, do not exist uniformly in the resource-rich, infrastructure-poor African countries, where Western tech seeks to establish its presence. These conditions provide an ideal landscape for digital colonialism. Digital colonialism refers to a modern-day "Scramble for Africa" where largescale tech companies... [Expand](#)

Why Cobalt Mining in the DRC Needs Urgent Attention <https://www.cfr.org/blog/why-cobalt-mining-drc-needs-urgent-attention>

Digital Colonialism: The 21st Century Scramble for Africa through the Extraction and Control of User Data and the Limitations of Data Protection Laws

<https://repository.law.umich.edu/mjrl/vol24/iss2/6/>

Refugees help power machine learning for Facebook, Google and Amazon [Refugees help power machine learning advances at Microsoft, Facebook, and Amazon - Rest of World](#)

Gender and AI

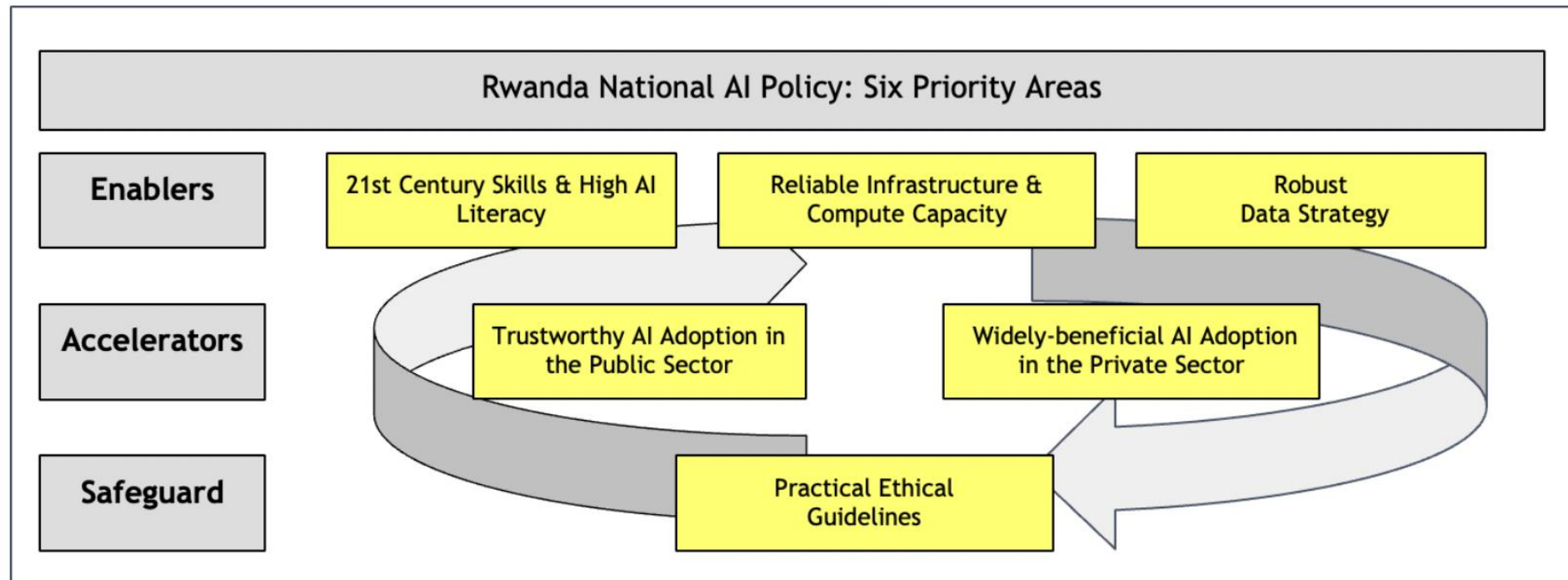
- Gendered impact of job loss
- Gendered impact of upskilling programmes
- Gendered AI technology, such as Siri and Alexa
- Access to digital technologies and digital divide
- Gender bias in AI systems
- Representation of women in STEM

The fourth industrial revolution risks leaving women behind

August 5, 2019 4.01pm SAST



Rwanda National AI Policy (2021)



Source: <https://digicenter.rw/how-rwandas-ai-policy-helps-to-shape-the-evolving-ai-ecosystem/>

Egypt National AI Strategy (2021)

The strategy consists of the following four pillars



1. AI for Government: The rapid adoption of AI technologies through the automation of government processes and embedding AI into the decision-making cycle to increase efficiency and transparency.



2. AI for Development: Apply AI in different economic sectors based on a phased approach, with the aim of realizing efficiencies, achieving higher economic growth and better competitiveness. Key projects will be identified and implemented through domestic and international partnerships, and will always include a capacity building element, to foster technology and knowledge transfer, and help grow the local ecosystem. Priority sectors for phase 1 include: Agriculture/ Environment/ Water Management - Healthcare - Arabic Natural Language Processing (NLP) - Economic Planning and Development - Manufacturing and Smart Infrastructure Management.



3. Capacity Building: Prepare the Egyptian population for the age of AI at all levels, from general awareness to school, university and equivalent education, to professional training for technical and non-technical disciplines.



4. International Activities: Play a key role in fostering cooperation on the regional and international levels by championing relevant initiatives, representing African and Arab positions, and actively participating in AI-related discussions and international projects.

Supporting the four pillars are the following four enablers



1. Governance: including ethics, laws and regulations, tracking and monitoring



2. Data: including collection, management and monetization strategies



3. Ecosystem: including private sector, research and academia, and civil society



4. Infrastructure: including fair access to compute, storage, networking, and other assets

What are some of the ethical challenges posed by AI?

Decolonisation

decolonisation di:kɒlənɪ'zeɪʃ(ə)n

(noun): *the search for freedom, human dignity and re-communitisation marred by colonial enterprises and their afterlives.*

The work of decolonisation contains a double imperative:

- 1) to make intelligible and abolish the continued operations of coloniality, which includes systems of patriarchal and racial oppression; and
- 2) to collectively reimagine a multifarious world space and a new form of democracy of (all) the world, centred on the radical idea of true human equality.

Decolonising AI ...

To deliver humanity from the myopia of the Western imaginary, we must find new explanations and symbols of intelligence, look elsewhere for the answers to the major ethical questions facing the field, and gather together alternate histories of AI.

- Africa representations of non-human intelligence and animate objects/automata
- e.g. history of statistics in colonialism
- draw on African philosophical thought for principles of AI ethics.

African philosophical history of technology...

Symbolic order of craft, innovation and technology in central and West African histories, told by Mbembe (2021), was transomorphic, creating new worlds and realities through new material and symbolic relations that were always fluid and changing, not fixed. They were not hegemonic, nor served hegemony.

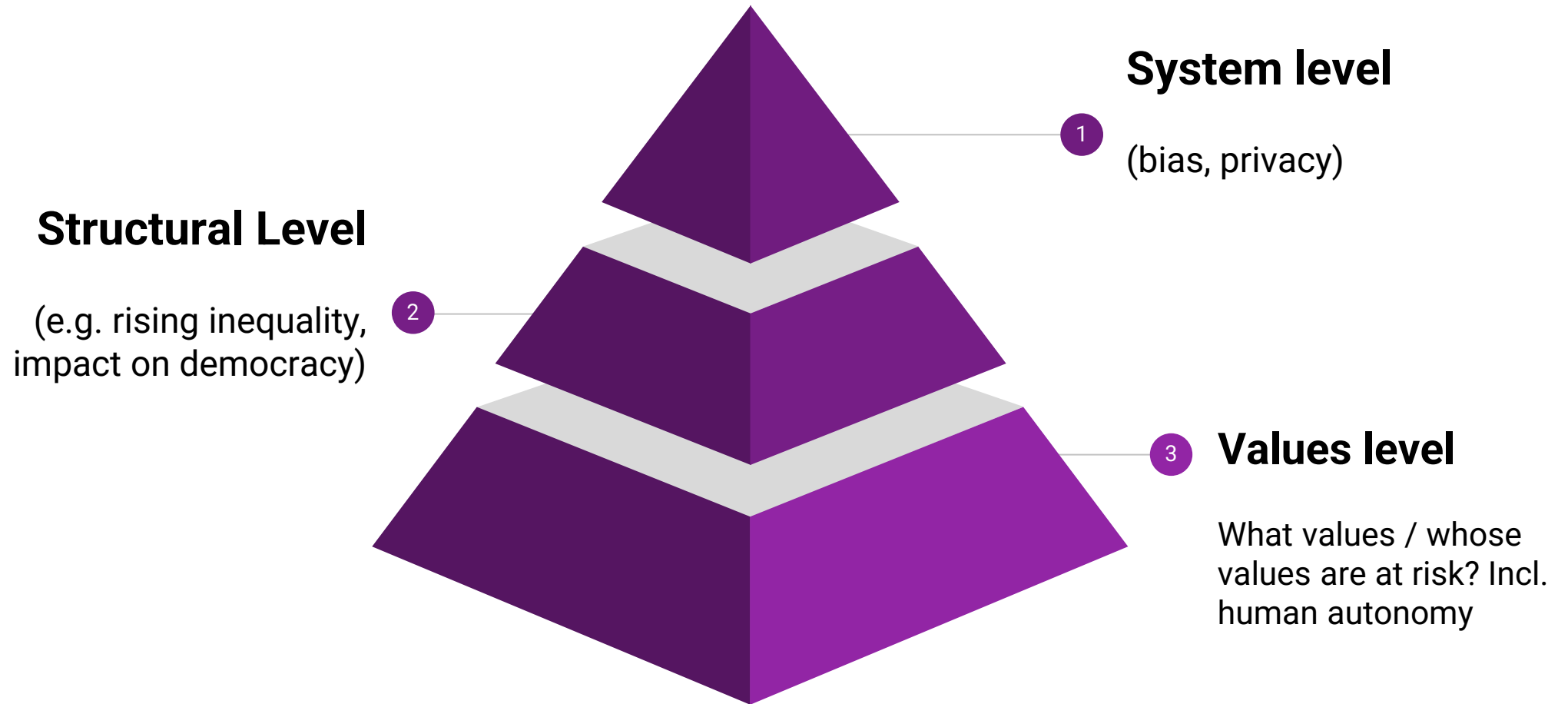
Cyclical ideas about knowledge, wisdom and intelligence, which serve as a counterpoint to the notion of the relentless path of progress.

Reposition human relationality with technology, as part of participatory ecosystems in which the world was not an object to be conquered, but a reserve of potentials, and in which there was no pure and absolute power but that which was the source of life and of fecundity". (Mbembe, 2021)

Imperialism and AI - Situating this work

- Data colonialism (Couldry and Mejias, 2019)
- Digital extractivism (Pollicy, 2021; Iyer, 2022)
- Digital colonialism (Kwet, 2021, 2022)
- Indigenous AI (Indigenous AI Protocol, 2020; Edward Lewis)
- Decolonial computing, decolonizing AI (Syed Mustapha Ali; Mohamed, Isaac, Png, 2020; Adams, 2021)
- Cloud Empires (Lehdonvirta, 2022)

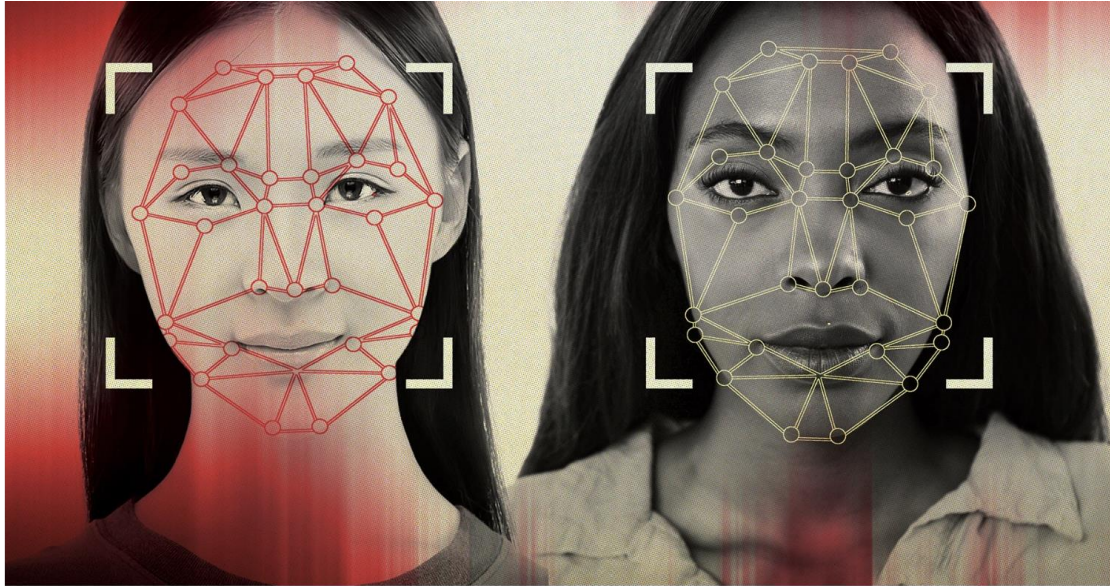
Toward an Analytical Framework for Making Sense of AI in Africa



Algorithmic
(non-)censorship



Data Colonialism and the Ethics of Making “Ethical” AI



(Xuanyu Han/Getty Images/iStock photo/Foreign Policy illustration)

ARGUMENT

Beijing's Big Brother Tech Needs African Faces

Zimbabwe is signing up for China's surveillance state, but its citizens will pay the price.

JULY 24, 2018, 10:39 AM



The problem with ethics...

Critical history of “ethics” and its usage within AI ethics discourse today, which is centered on Eurocentric ideas of morality, legality/governance and individual personhood.

“Ethics” as the key differentiator (that which defines difference) in colonial times:

‘Colonialism came with a bifurcation of [...] the sacred and the profane: if it was not considered civil by the colonisers, it was uncivil, savage, profane and repulsive; if it was approved by the colonial powers, then it was modern, civil, morally good and sacred’ (Akanle et al, 2021, Decolonising the Human)

“Ethics” is situated as a value supreme of Europe, proselytised on the Global south, which in turn and in relation to the “ethical West”, positioned as what Achille Mbembe has called ‘pre-ethical’.

Europe then comes to “help” its colonies on a civilizing mission, which does two things:

1. Justifies colonialism as Western benevolence;
2. In rendering the colonies ‘pre-ethical’, the West could use these places as laboratories for scientific progress without guilt, where the collateral damage of scientific advancement could be safely imbibed in places and by people considered expendable

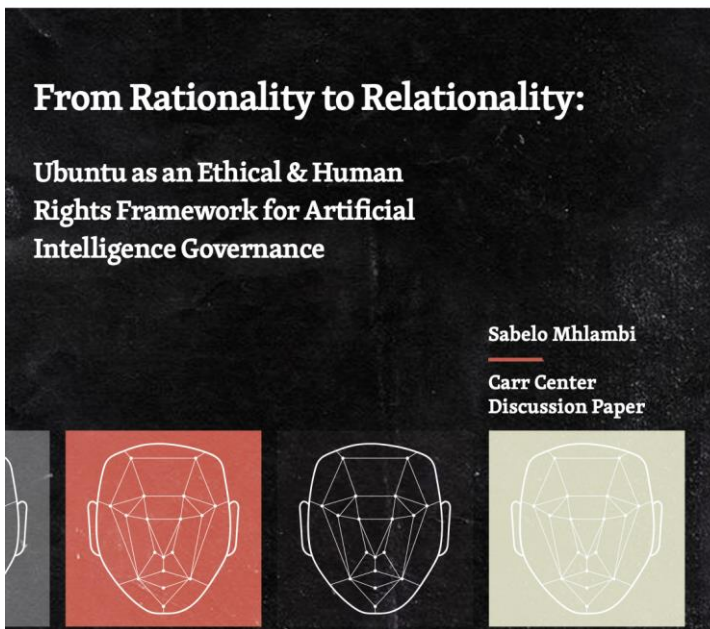
AI Ethics

- Who is AI serving?
- Does the benefits of AI come at the costs of the risks to others? (Munn, 2022 – The Uselessness of AI Ethics)
- Who is AI ethics serving and at what costs to which other groups?
- Whose values are at risk from AI? (Western fears of tech embedded with Chinese values)
- If AI operates globally and some kind of global regulation is required, how can we find more pluralistic forms of AI ethics upon which to base these frameworks?
- How can we broaden AI Ethics to address the questions of the supply chain and value chain of the production of AI?

Toward Alternate AI Ethics Governance

Intercultural ethics, emphasizing the limitations and coloniality of universal ethics, and focuses on pluralism and local design.

Mohamed, Png and Isaac (2020)



Ethnic profiling must be addressed in African AI ethics frameworks (E.Belay & G.Mengesha 2023)

ARTICLE 19

All peoples shall be equal; they shall enjoy the same respect and shall have the same rights. Nothing shall justify the domination of a people by another.

ARTICLE 20

1. All peoples shall have right to existence. They shall have the unquestionable and inalienable right to self-determination. They shall freely determine their political status and shall pursue their economic and social development according to the policy they have freely chosen.

2. Colonized or oppressed peoples shall have the right to free themselves from the bonds of domination by resorting to any means recognized by the international community.

3. All peoples shall have the right to the assistance of the States Parties to the present Charter in their liberation struggle against foreign domination, be it political, economic or cultural.

“Freedom ethics” – Thompson Chengeta

Thank you

Twitter: racheladamsward@gmail.com

Email: radams@researchictafrica.net