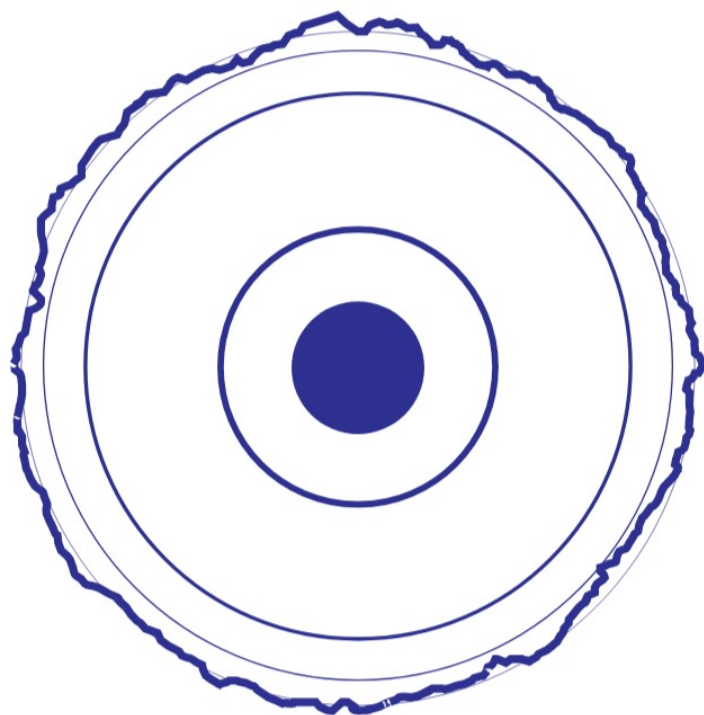
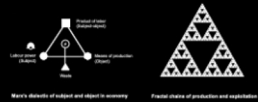


AI and the Future of the Technosphere: A Path Towards Co- Existence with Superintelligence

Soumya Banerjee
University of Cambridge



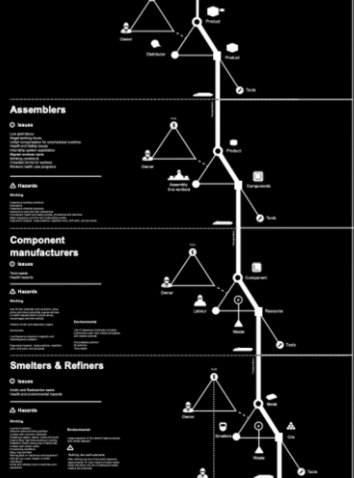
An anatomical case study of the Amazon echo as a artificial intelligence system made of human labor



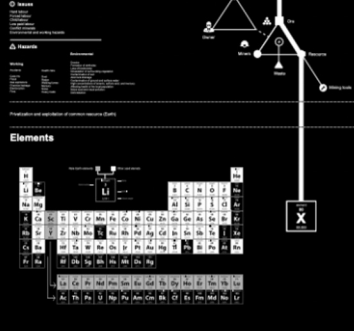
Income distribution



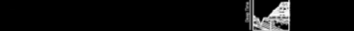
Distributors



Mines



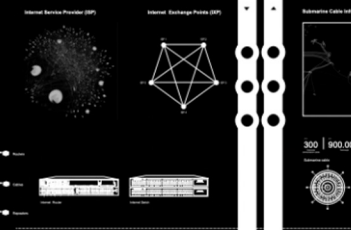
Geological process



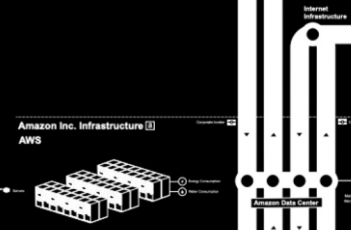
Domestic infrastructure



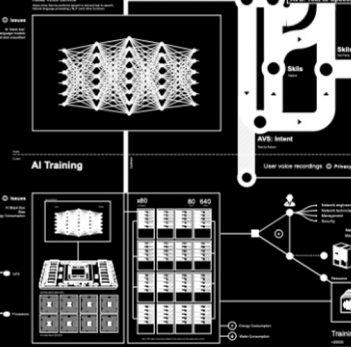
Internet infrastructure



Internet Platforms & Services



AI Training



Quantification of nature

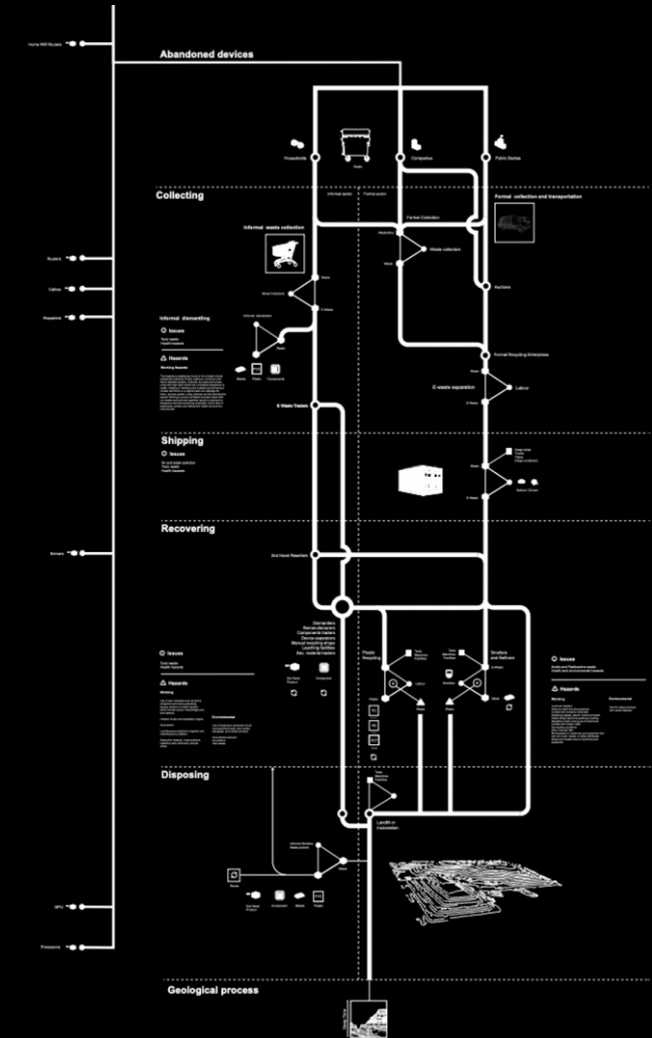


Data exploitation



Anatomy of an AI system


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





Many kinds of intelligences

- Super intelligence is one amongst many diverse kinds of intelligence that can arise in the universe. This is nothing to be afraid of but something to be embraced.

- Halfdan and Banerjee, *AI & Society*, 2024



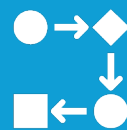
What is the Technosphere?




The technosphere: A vast, interconnected web of technology, infrastructure, and human systems.



Immature and unsustainable, degrading ecosystems and social structures.



The urgent need: Transition to a sustainable, harmonious system.




Superintelligence in the Technosphere

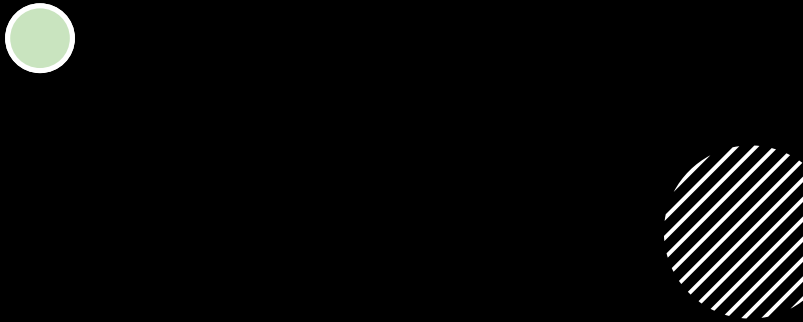
Superintelligence = synergy between humans, machines, and systems.

Emerges from interconnected networks of supply chains, policies, and technologies.

Challenges traditional notions of intelligence, agency, and control.



A System in Decline



Extracts resources without replenishment.



Creates waste and disrupts ecosystems.



Contributes to climate change, biodiversity loss, and social inequities.

AI's Potential in the Technosphere

Positive impacts:

Optimize
resources.

Predict
environmental
changes.

Enable better
decision-making.

Risks:

Accelerating
degradation if
used
irresponsibly.

Ethical AI



However, for AI to fulfill this role, it must be developed and implemented with care.



Ethical AI frameworks will be essential to ensure that AI systems are aligned with the goals of sustainability and equity.



AI should be transparent, accountable, and inclusive, considering the needs of all stakeholders, including marginalized communities and ecosystems that cannot speak for themselves.



The Vision for a Sustainable Technosphere

- A mature technosphere is self-sustaining (autopoietic).
- Works in harmony with the biosphere.
- Requires global cooperation, treaties, and eco-aligned policies.



Spiritual Perspectives on Superintelligence

- Sufi teachings: Interconnectedness of creation.
- AI as a tool for harmony, not domination.
- Prioritizing mercy, respect, and balance with nature.

Coexisting with Superintelligence

- Intelligence is not human-exclusive—embrace diverse forms.
- Superintelligence as a complementary force, not a rival.
- For humanity to coexist harmoniously with superintelligent systems, three foundational principles must guide our efforts: alignment, collaboration, and adaptability.
 - **alignment** involves ensuring that superintelligent systems share humanity's ethical values, prioritizing global well-being over narrow, profit-driven goals.
 - **collaboration** emphasizes creating symbiotic relationships between humans and machines, where superintelligence augments human creativity and problem-solving rather than replacing it.
 - **adaptability** highlights the need for societal flexibility, preparing for the inevitable seismic shifts in our societal fabric (e.g., shifts in education, governance, and labour structures driven by superintelligence).