Mapping changes in lived realities for today's youth

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Introduction

Generative Artifical Intelligence (genAI), a specific form of Artifical Intelligence harnessing the power of Large Language Models to *generate* new output based on vast and widely generalized data sources, is rapidly transforming our lives. Ranging from reshaping how we work (Joshi 2025) and how we learn (Perifanou and Economides 2025), to changing criminal behaviour (Ferrara 2024) and even influencing democratization (Cupać, Schopmans, and Tuncer-Ebetürk 2024).

Life in the age of genAI however, comes at a tremendous physical cost for our planet (Crawford 2021). The physical extraction of metals (e.g. lithium, coltan) for chips to enable the machines to run the models (Yang et al. 2024), the power consumption to drive the machines and then again for cooling Hotkar (n.d.) is outgrowing the planned construction of the power grid at a breakneck speed (Lin et al. 2024), outpacing policy and lawmakers.

As with all transformative technologies there is firstly a real oppurtunity, in the increased productivity and the access to tools . Secondly a real threat, in the form of misinformation, criminal activity, (Ferrara 2024) and the undermining of autonomy (Cupać, Schopmans, and Tuncer-Ebetürk 2024). Thirdly a challenge for the use of resources and electricity that needs new solutions at scale.

Technology is not just a neutral phenomenon with inherently positive outcomes.

Gap

We do not know how AI will reshape the future of our human development, but there are some guesses we can make and historical lessons we can take into account. In all the major jumps in technological advancement that brought about societal change: steam engine, electricity, communications, digital communication and now the more broadly available statistical models that "converse" with us through chat like ChatGPT, we have seen that regulation and

policy fueled by ideology has been the driver for the direction this advancement would take us (Johnson and Acemoglu 2023, 57).

Much of the research regarding AI has been focussing on improving models [], effects for legislation [], impact on education [], but not increasing agency and freedom what the UNDP describes as indicative of improving human development (UNDP 2025).

What is lacking then from scientific discourse is a systematic analysis of cases where GenAI (or AI in general) has had a positive impact on agency and human freedom to distill which factors are crucial for bringing about such change.

Hook

The belief that when technology improves our planet will become better are baseless and naive. We need to figure out ways where this powerful technology can become a force with guidance to a better world.

Research Questions

- How do we harness the accelerated changes GenAI is bringing to foster empowerment, freedom and increased human agency as opposed to oppression and machine driven decision-making?

Sub questions

- What challenges arise when deploying GenAI at world scale?
- What policies and laws have been instrumental in steering technologically driven societal transformation in the past and where has it failed?
- What opportunities are still open?

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