

# Precarious youth and the spectre of algorithmic stereotyping<sup>1</sup>

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## *The narrative of digital innovation and technological entrepreneurship: the shining 'lights'*

During the last ten years, we have witnessed a rise of the new narrative of digital innovation and technological entrepreneurship. It was promoted as one of the main opportunities that would free individual talent, with little or no resources, creating new jobs, new opportunities, and a new economy. “Zuckerberg created Facebook in dormitory room of his Harvard University”; “Amazon was founded in the garage of Bezos’ rented home in Washington”; “Page and Brin started Google in a garage rented by them—along with three other rooms—while they were still living at the dorms of Stanford University”; “Jobs built his Apple empire in the garage of his parents’ house”; “Gates and Allen developed Microsoft in Seattle’s Albuquerque two-car garage”; are only some examples that constituted this narrative. Zuckerberg, Bezos, Brin, Page, Gates, Jobs, etc. were (and continue to be) the main icon-characters of the narrative. In other words they are the ‘lights’ that shine in each headline.

*Young talented men built technological empires in humble garages and dormitory rooms*; this inspiring story is turned into a myth. This myth is, however, problematic at two levels: firstly, at the level of ethno-cultural particularities, it advances a dominant role of the (white) men; and secondly, at the level of (economic) equality, it reproduces social inequality and reproduction.

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### **Reproduction of inequalities**

The narrative of digital innovation and technological entrepreneurship reproduces inequalities and other forms of oppression in society in various ways, and is based on the inequalities in terms of access to education, funding and ethno-cultural belonging.

#### *Access to (elite) education*

The first one we should look at is *the access to elite education*. Mark Zuckerberg studied at the prestigious Harvard University; Jeff Bezos graduated in 1986 at Princeton University; Google's Sergey Brin and Larry Page met in 1995 at Stanford University while they were working in Ph.D research. Majority of young people, particularly those who come from marginalized backgrounds and contexts have no access to such an education or even *any* education at all. Young people without employment, concerned about their livelihoods, rent payments or looming student debt, have little 'free time' to innovate in garages. These are questions that one should ask when faced with the myth of Silicon Valley's wonderland of bright visionaries who may save the world.



#### *Access to (seed) funding*

The second principle behind the narrative is *the access to (seed) funding*. In order to start-up a project idea, despite modest it may be, one still needs resources to cover various expenditures such as rent a

space (unless your parents, relatives, carers, etc. own one), buy office materials, invest in machines (computers, servers, etc.) or simply to cover the time you're working on your start-up - you still need to live. For example, when Jeff Bezos started up the Amazon project he had access to his family's own capital, which was useful in his first days of Amazon. However, the narratives of success presented to us ignore the realities of young people in a different context. For a young person who lives in a country with poor socio-economic indicators, a country with experiences of the armed conflict and (neo)colonial exploitation of its resources, deep-rooted social inequalities create a multitude of barriers which make it almost impossible for them to have access to the needed funding to start-up their company.

It is important to realize that the success of Silicon Valley and other tech giants elsewhere, who mostly belong to the rich countries, cannot be isolated and reduced in a simplistic narrative, but rather need to be connected with broader historical context, including the past and present extraction of human and natural resources, and geo-political realities which continue to impact all aspects of countries' development: from economic growth to quality of education.

#### *Ethno-cultural particularities*

Lastly, the (co-)founders of the biggest tech companies belong to the same ethno-cultural particularity. Even for those young people who live in the developed countries, the access to elite education funding and opportunities is linked with belonging to the privileged ethno-cultural group, in terms of race, gender and socio-economic background.

#### ***The risks of AI: reproducing narratives and inequalities in the digital sphere***

Although there is an assumption (and another myth) that the digital world, algorithms and AI offer a new ground for a bias-free interaction and decision-making, the socio-economic, cultural and political privileges, inequalities and lack of opportunities discussed above are also reproduced within the digital realm, which raises a number of concerns and ethical questions for society and for the youth sector.

#### *AI is not intelligent*

AI is applied machine learning, a kind of computing that 'learns' from being given lots of labelled examples as training data. AI translates human questions ('which job candidate is worth inviting for an interview?') into mathematical calculations that optimise a numerical output. However, while AI is now driving cars and beating professional players at Go, it is fundamentally a huge leap to extend the

statistical probabilistic predictions for solving messy social issues, particularly as AI is not a super-intelligent system with its own consciousness, but rather a sum of (biased) data we have inserted into the system. The system reduces people to data points, making simplified assumptions about their lives.



With the COVID-19 pandemic, and associated lockdowns, the AI-run machines and platforms have colonised our homes, producing passivity and social isolation. The post-pandemic society will likely praise these social norms, creating an increased dependency on physical separation mediated by digital tools. For young people, but also others, this means precarity combined with algorithmic stereotyping.

### *The risk of thoughtlessness*

The danger for social agencies like youth services is not that AI will replace them, but that adding AI will intensify underlying problems of equity and justice. While there is now an established understanding that AI is biased, due to biased data, it can also not be asked to explain or be accountable for its recommendations, which creates a risk of increasing thoughtlessness: when people can't meaningfully question decisions, they stop reflecting on consequences and choose to believe rather than continue questioning.

### *Netflix of/for public services*

AI applied to youth services and social agencies is a *machinic* judgement about who is deserving and who is not. It is computational morality assigned via statistical metrics. AI is seen as a solution to the problems of austerity in the public sector, and its takeover will be accelerated by the challenges of the Covid-19 pandemic. It offers a data-driven triage of social support, justified by 'smart' targeting. One in three local authorities in the UK are using algorithms to help them make decisions about benefit claims. Sunderland council paid £50m to Palantir, a US tech firm with military and intelligence links, to target local 'Troubled Families'. The global push to smart services has justified the Silicon Valley myths that the government should be more like Amazon, Netflix and Spotify. But AI discovers individual correlations, not social causation, and actually tells us little about the best ways to intervene.

### *Automated stigma*

Meanwhile, on the ground, AI services will drive stigma. Its algorithms can't work without classifying people as part of similar groups, so computational classification becomes an inference about social identity and value. It's a logic of statistical segregation which will manifest as actual stereotyping, as we can already see via Facebook's 'ethnic affinity' and in the algorithmic ranking of visa applications. In New Zealand, the Department of Work and Income's Youth Service uses an algorithm to help identify school leavers who may be at greater risk of long-term unemployment, While the intentions are well meaning, it sorts individual young people into stigmatising categories through "risk indicator ratings" based on a statistical similarity to a cohort, rather than a young person's unique circumstances.

### ***Reconstructing the use of AI for the benefit of youth sector***

#### *People's Councils on AI for Young People*

Both the history of youth work and the broader heritage of social radicalism offer a model for reforming AI by introducing the popular assembly or People's Council. People's Councils are bottom-up, directly democratic assemblies, in which everyone has an equal say about the matter being decided. They counter separation and passivity through direct relationships and consensus decision making. Applied to the problems of AI, People's Councils become a form of critical pedagogy, a way of collectively questioning the reasoning of the machine. They reintroduce situated knowledge as a counterweight to generalising abstractions. People's Councils on AI for young people would, first and foremost, give a voice to excluded or marginalised groups of young people. Horizontal structures like these are the preconditions for a politics of care, that is, for solidarity.

The conflicts identified above are particularly acute for those on the margins who are already the subject of the most data gathering by youth services and others. Instead of allowing AI to deepen injustice we should reconstruct the idea of AI, not as a matter of intelligence but as a matter of care. Care is a concern about exclusions and boundaries; rather than focusing on numbers above everything, it is attentive to the burdens of neglect. An AI of care incorporates the perspective of those who might be harmed but would otherwise have no way to voice their concern. We need mechanisms that can generate a counter project to the algorithmic production of carelessness.



The potential of a People's Council on AI is the reversal of statistical reductiveness through a commitment to the possible over the probable. For young people, this is their unique future potential instead of barriers computed from the past behaviours of 'people like them'. If we don't want preemptive structuring but prefigurative openness, our ways of organising right now need to embody the better society we want to live in. In the same way that young people are leading the way on climate change, there is the potential for youth work to become the site for a new and more hopeful approach to using AI for wider social good.

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