## DIGITAL SUSTAINABLE FUTURE?: A CHAT WITH SCIENTISTS

#### GÖZEL SHAKERI

## Scene

Scientist arguing amongst themselves about climate change. A student overhears them talking, and joins their discussion (the rhythm of the poem is based on Billie Eilish's "Your Power" [6]). **Scientist** Student Scientist 4 5 "Science, science is power" [13] 6 So much "violence done in its name" [4] 7 "Try not to abuse your power" [6] But how to stop climate change? 10 "In the name of reason and humanism: 11 technological advancements, progress: they help!" [2] 12 "Technologies end suffering." [15] 13 "Societies and politics, 14 technologies change them!" [15] 15 I am a believer! 16 17 Stop "throwing 18 technology 19 at problems to 'fix' the issues!" [4] "Time and 20 time again we have seen technologies 21 22 reify 'xisting power, 23 white supremacy and mysogyny." [1] 24 "A comic faith in technofixes," [8] 25 having it's so strange. 26 27 "Everything from racism to climate change - " 28 "Technologies ameliorate!" [15] Try optimism. "Digitalisation can help women partake in democracy." [7] 31 "Educating girls reduces vulnerabilities - (to natural disasters)." [16] Enough. "This techno-utopic 35 worldview where technology is seen to emancipate rather than oppress -" [1] 37

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39 40	If anything then "climate change abatement! Educating girls
41	impacts family planning,
42	reduces overpopulation." [9, 14]
43	
44	Digitalisation and education
45	as a means to population control? That's power.
46	
47	"Too controversial" for you? [10]
48	It remains to be mentioned that
49	"the perceived neutrality
50	and universality of tech
51	renders its
52	own unsus-
53	tainability invisible." [18]
54	All these unsatisfactory endings
55	"Ev'rything is connected to
56	ev'rything else." [3] "Nature knows best." [3]
57	"Ev'rything has a cost." [3]
58 59	What to do?
60	How to strike balance?
61	TO WE SHARE CHARLES.
62	No to "(m)anthropogenic climate change!" [11, 12]
63	We need "alternative ways of thinking." We need -
64	"R'jection of technology!" [5]
65	feminism.
66	Of science!
67	We need a new narrative:
68	"Life in the ruins of capitalism." [17]
69	
70	Future
71	through ruins?
72	"A crisis created by lack of respect for
73	nature, nature
74	
75	will most likely not solve the problem." [19]
76	But how to stop climate change?
77	"Science, science is power" [13]
78	but having it's so strange.
79	The quotes originate from the cited references. However the quotes are taken to fit the above parretive and may not
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## MESSAGE

This poem highlights many issues:

- Lines 6-7: the (un)intended harm done in the name of progress / science;
- Lines 8: researchers' (designers') lack of questioning own positionality and the creation of potential dual research;
- Lines 12-14: the notion that technological advancement is a necessity for humanity and humanity's survival; linear growth is the only mode forward; and that therefore, our current mode of action is 'technological solutionism' which is a rejection of non-Western sciences / knowledges / etymologies;
- Lines 15-16: the concept that technologies allow us to change societies and politics fast;
- Lines 18-26: the strange / absurd idea we hold that technology will come to our rescue to solve problems that were created by technologies in the first place;
- Lines 18-26: technologies highlight problems in our society and amplify them;
- Lines 29-32: digitalisation emancipates and educates; education helps farmer women to reduce their risks to natural disasters:
- Lines 34-37: dangers of a techno-utopic/optimistic worldview as it continues to allow for the centering of whiteness and white identity; through digitalisation and globalisation, 'technological solutionism' exports Western ideologies and etymologies;
- Lines 39-42: digitalisation (i.e. education) can be used to reduce population growth in the Global South:
- Lines 44-45: colonial thinking that allows Western societies to 'population control' the Global South through digitalisation rather than reduce their own carbon footprint;
- Lines 48-53: invisibility of technology's impact on the planet; technologies are perceived as 'neutral' in their physical carbon footprint and their impact on societies;
- Lines 56-58: necessity for a steady-state economy e.g. circular economy;
- Lines 62-63: current way of thinking and operating has lead to the climate crisis; alternative solutions / etymologies are required;
- Lines 64, 66: rejection of Western science i.e. 'mechanical reduction' as well as rejection of the necessity for technological progress and advancement to solve complex problems;
- Lines 65, 67: historically, feminism has offered new and alternative lenses;
- Line 68: linear growth beyond planetary boundaries is not feasible; end to capitalism is required;
- Lines 70-71: fear of the unknown which leads to inaction;
- Lines 72-75: disrespect for nature, an attempt at dominating nature; nature cannot recover from this by itself;
- Lines 76-end: confusion on the modus operandi; human intervention is required?

# **SHORT BIOGRAPHY**

I am a post-doctoral research associate in Human-Computer Interaction at the Carl Ossietzky University Oldenburg, Germany. My research interests focus on Sustainable Human-Computer Interaction (HCI), using behaviour change intervention science to create interfaces that support online shoppers in purchasing sustainable products. My work has a strong experimental focus, applying multidisciplinary evidence to create rich, natural, and sustainable interaction between human and technology.

Previously, I was a post-doctoral research associate at the School of Computing Science, University of Glasgow where I worked on the RadioMe project. I defended my Ph.D. thesis successfully in spring 2020.

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## REFERENCES

- [1] Ruha Benjamin. 2019. Race after technology: Abolitionist tools for the new jim code. Social forces (2019).
- [2] Santiago Castro-Gómez. 2019. The Social Sciences, Epistemic Violence, and the Problem of the "Invention of the Other". In Unbecoming Modern. Routledge, 211–227.
- [3] Barry Commoner. 2020. The closing circle: nature, man, and technology. Courier Dover Publications.
- [4] Julia R DeCook. 2021. A [White] Cyborg's Manifesto: the overwhelmingly Western ideology driving technofeminist theory. Media, Culture & Society 43, 6 (2021), 1158–1167. https://doi.org/10.1177/0163443720957891 arXiv:https://doi.org/10.1177/0163443720957891
- [5] Steve Easterbrook. 2014. From computational thinking to systems thinking. In <u>The 2nd international conference ICT</u> for Sustainability (ICT4S), Stockholm.
- [6] Billie Eilish. 2021. Your Power. https://www.youtube.com/watch?v=fzeWc3zh01g
- [7] Asha Gupta. 2019. Towards Participatory Democracy: Can Digitalisation Help Women in India? <u>Indian Journal of Public Administration</u> 65, 4 (2019), 897–915. <a href="https://doi.org/10.1177/0019556119881842">https://doi.org/10.1177/0019556119881842</a>
- [8] Donna J Haraway. 2016. Staying with the Trouble. Duke University Press.
- [9] Paul Hawken. 2017. Drawdown: The most comprehensive plan ever proposed to reverse global warming. Penguin.
- [10] Michael Huesemann and Joyce Huesemann. 2011. <u>Techno-fix: why technology won't save us or the environment.</u> New Society Publishers.
- [11] Tarn Rodgers Johns. 2017. <u>Rebranding eco-feminism for the digital era.</u> https://trodgersjohns.medium.com/why-arent-feminists-engaging-with-climate-change-8285096858e6
- [12] Sherilyn MacGregor. 2021. Making matter great again? Ecofeminism, new materialism and the everyday turn in environmental politics. <u>Environmental Politics</u> 30, 1-2 (2021), 41–60. https://doi.org/10.1080/09644016.2020.1846954 arXiv:https://doi.org/10.1080/09644016.2020.1846954
- [13] MIKE MICHAEL. 1989. Science as Power: Discourse and Ideology in Modern Society.
- [14] Dan Sarewitz. 2015. Sustainable Development Goal 5 Achieve gender equality and empower all women and girls. https://sdgs.un.org/goals/goal5
- [15] Dan Sarewitz. 2021. Climate Activism featuring Dan Sarewitz. https://shobitap.org/the-received-wisdom/2019/9/23/episode-1-climate-activism-featuring-dan-sarewitz#commenting=
- [16] Erich Striessnig, Wolfgang Lutz, and Anthony G Patt. 2013. Effects of educational attainment on climate risk vulnerability. Ecology and Society 18, 1 (2013).
- [17] Anna Lowenhaupt Tsing. 2015. The Mushroom at the End of the World. Princeton University Press.
- [18] Maja van der Velden. 2018. ICT and sustainability: looking beyond the anthropocene. In <u>IFIP International Conference</u> on Human Choice and Computers. Springer, 166–180.
- [19] Wikipedia. 2022. Speeches of Greta Thunberg. https://en.wikipedia.org/wiki/Speeches\_of\_Greta\_Thunberg