

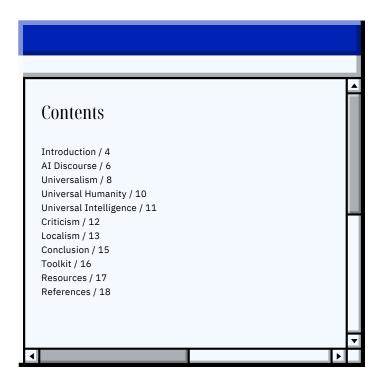
## Acknowledgements

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## A note to the reader

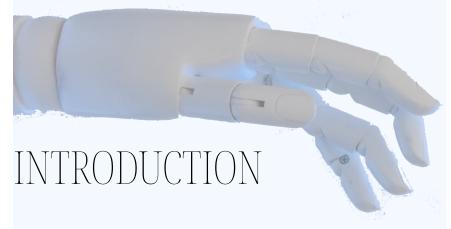
This zine is an attempt to package academic ideas into a more accessible format. If you would like to learn more about the topics being discussed you can take a look at the resources and references sections which will lead to external websites, academic articles and other helpful sources of information. My goal throughout this zine, however, will be to write in a way that is hopefully easier to read and digest.



Start

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Hello there! We will be taking a journey into AI discourse that will unfold over the course of this zine. So glad you could make it! Without any further ado, let's jump right in!



In recent years, particularly since the release of ChatGPT in November 2022, artificial intelligence (AI) has been enjoying seemingly unmitigated attention. Amidst all the hype, many false, misplaced and overblown hopes and fears have occupied much of our collective imagining. And, while silly and fantastical ideas about AI are nothing new, something peculiar happens when these fantasies blur with reality as tech moguls make bold promises that confound and amaze us. Although there are many pieces of this puzzle which I continue to be fascinated by and interested in investigating further, for now I will turn my attention to one particular set of pesky ideas. Which can simply be called universalism. Now, don't worry, we will get to that shortly. But first, let's set the stage shall we?

Artificial intelligence is the fancy and somewhat misleading name, formally introduced in the 1950s, that describes a machine's ability to perform tasks that previously required human intelligence [1]. Under this umbrella term exists both general AI and narrow AI. General AI is the AI of fantasy. It's the artificial general intelligence or super-intelligences which are the goal of most AI companies and researchers. Meanwhile, narrow AI is what we actually have, and it is purely mathematical [2]. Some common examples include, voice assistants (like Alexa and Siri), chatbots, language translation, and more. Currently, an extremely popular type of AI is generative AI. Essentially, these are just models which learn patterns from input training data and then generate new content based on this. Although these models may seem intelligent it is important to understand that they are not. They are simply producing impressive outputs based on the inputs they are fed, which often involves a significant amount of human labour. For example, large language models (LLMs), a type of generative AI, typically requires hundreds of human annotators and data quality people who train and reinforce the model. This is important to keep in mind. Not only are these models fed massive data sets that scrape the internet and elsewhere, they are also continually taught by teams of writers and coders, who can drastically influence the outputs.



**Fun Fact:** During my time working in AI data quality, I was able to witness in real time how my annotations were impacting the model.

Alright, now that that's out of the way, let's get into it...





## Let's talk about how we talk about AI

With all this in mind, let's pivot to look at how AI is often represented and discussed. Now, if you were to search "AI" in google images you would likely see a slew of stock images either depicting humanoid robots or an aestheticized, often floating, blue brain. What quickly becomes evident, is that AI is consistently depicted as humanlike, in both visual as well as textual representations, disregarding the actual technological limitations.

While in some ways these representations can be helpful for visualizing AI, they also have their issues. In fact, we must consider the assumptions about AI that are perpetrated by such imagery. For example, images of a blue brain suggest that AI actually functions like a human brain, although as we know, this is not the case [3].

The strong tendency to imagine AI in humanoid form also leads to other troubling implications. For example, in both fiction and non-fiction, humanoid robots are often depicted as white (either in colour or ethnicity), which troublingly reinforces racist ideas about whiteness and intelligence [4].

The physical forms are also often gendered. Think of the T-800 Terminator's noticeably male and muscular form or the hypersexualization of conventionally attractive female robots like that of Ava in Ex Machina [5]. But beyond just this, we might also consider how much of what we talk about when it comes to AI is largely influenced by overblown hopes and promises or sci-fi inspired fears. In fact, most popular portrayals of AI tend to either be extremely optimistic or extremely pessimistic.



Alicia Vikander as Ava in *Ex Machina*. Source: Youtube.

These extreme hopes include AI solving disease and ageing, relieving the burden of work, gratifying our desires, and more. On the other hand, we are told to fear AI making humans obsolete and even perhaps destroying humanity altogether. In fact, the fear of robots rebelling against humans is such a staple, that these are the stories that have offered the most iconic and recognizable portrayals of intelligent machines [6]. Think of the Terminator film franchise. Blade Runner, or the more recent Westworld TV series.



Why does it matter that we represent AI like this? Well, most of us do not possess advanced technical knowledge and thus our perceptions and expectations are heavily influenced by these narratives. However, it should now be evident that what we imagine AI to be and what it actually is are often, for better or worse, not the same thing.

# the universalism imaginary

and its myths of 'universals'

As we have discovered, the way we talk about and imagine AI is heavily influenced by myths. In light of this, let's turn our attention toward a particular myth, or what I will be calling the universalism imaginary. Before I describe what I want us to consider and even criticize, we should first take a look at some examples, paying particular attention to the presence of assumptions about universals. Below are screenshots from the websites of major tech companies, including OpenAI (ChatGPT) and Google DeepMind (Gemini).

Our mission is to ensure that artificial general intelligence—Al systems that are generally smarter than humans—benefits all of humanity.

We're excited by the amazing possibilities of a world responsibly empowered by AI — a future of innovation that will enhance creativity, extend knowledge, advance science and transform the way billions of people live and work around the world.

We believe that the future of humanity should be determined by humanity, and that it's important to share information about progress with the public.

That's what excites me: the chance to make AI helpful for everyone, everywhere in the world.

In these examples, and elsewhere, we can see how universalism operates as a powerful imaginary. (An imaginary just describes the visions and ideas that people have about something).

For more on imaginaries, see Sheila Jasanoff's concept of sociotechnical imaginaries [7].



At this point you may be wondering ...

# but what is universalism?

Let me explain! The term 'universal' can be defined as the quality of being used, applied, or understood by all. Similarly, universalism implies that something (norms, values, concepts) can be applied to all people and cultures, regardless of the contexts in which they are located [8]. For example, we might think of the UN's Universal Declaration of Human Rights which establishes certain rights for all humans regardless of culture or nationality [9].

Now, this may sound wonderful, and it can be, but when we take a look at how this operates in the context of technology, it takes a turn for the worse.

This is what communications scholar Anita Say Chan identifies in her book *Networking Peripheries*. Chan describes that the myth of digital universalism assumes that a single technologically-enhanced future awaits us all [10]. This myth imagines a universal future, but it's a future that is designed by particular Western technological experts (often white and male) based in Silicon Valley or other 'centres' of innovation [11]. Therefore, what is actually offered is a pretty exclusionary vision of technologies and possible futures.

The use of universals and ideas that assume universalism can be found troublingly throughout AI discourse. However, to make our investigation more manageable, I will break the overarching idea of the universalism imaginary down into two ways that this manifests: universal humanity and universal intelligence.



## universal humanity

The idea of a universal human or humanity can be found throughout AI discourse, whether that's in film, marketing or even discussions of ethics. This can be seen in the earlier excerpts, but here are a few more examples:

Sam Altman, OpenAI:

We want AGI to empower humanity to maximally flourish in the universe.

Cohere In

Our mission: Do whatever it takes to scale intelligence to serve humanity

As can be witnessed, this idea seems to assume that humanity is a universal category. However, ideas about the universal human are nothing new. In fact, these ideas can be troublingly linked back to Enlightenment era notions of the human in which the universality of the white male able-bodied European depended upon the denial

of the humanity of racialized, gendered and disabled others [12]. Indeed, a wide range of intersectional feminist work has criticized what the concept of the universal human actually refers to, arguing that often, if not always, the default human is conceived as male [13]. In light of this, it's clear that the human is neither a neutral nor universal category, and it has certainly not been applied equally throughout history.

So, when we see companies promising that their AI will serve all humanity, or when AI ethicists seek to set out 'universal human values,' or when AI claims it can stand-in for a 'universal' human, we must ask what this actually means. This because, the universal human is actually, more often than not, just a particular human that has been problematically understood as the universal default.



# universal intelligence

Superhuman artificial intelligence that is smarter than anyone on Earth could exist next year, Elon Musk has said [14]

Journalists, futurists and tech moguls (like Elon Musk) continue to promise that artificial general intelligence (AGI) is not only possible but imminent. It's a compelling myth, particularly because while it may be hard to prove true it's nearly impossible to prove false [15]. However, in addition to questioning the validity of these claims we must also investigate the assumptions surrounding knowledge and intelligence that are woven into the idea of a single 'super-intelligent' AI.

What is general intelligence? Whose views, perspectives and knowledges would it account for? And, when it is being built by select teams of Western technologists, how can it possibly reflect the entirety of the world's knowledge?

These are important questions. Leading some to argue that there is no such thing as AGI because human intelligence is not at all general.

For example, most natural language processing (NLP) technologies, including chatbots, translation tools and more, are built primarily to serve Western languages. In fact, studies have shown that many Indigenous and African languages are disregarded or not well recognized [16].

In light of this, what might it mean to continue to promote the AI produced by particular people in particular places as one that could reflect all of human knowledge. As we will see, these claims threaten to reproduce a dark history, namely that of colonization. Let's get into it.

## **CRITICISM TIME**

#### who does this benefit? who does it harm?

It's time to get critical! Why does universalism matter? What do myths about universals actually do? Let's take a look:

As the development and deployment of AI has continued to intensify, many troubling cases of violent and exclusionary AI have come to light. Some examples of this include large language models that exclusively prioritize Western languages [17], AI softwares that discriminate (often making Black faces hyper visible to law enforcement or selectively working for white bodies) [18], AI images (using programs like Midjourney) that continue to depict bias, stereotypes, and reductionism [19] and many more similar cases. It should be worrisome, then, that Western companies continually claim to develop AI that will 'universally' benefit all of 'humanity'. It would seem that the track record says otherwise.

What is also really important to involve in this discussion is the concept of coloniality, which was first described by sociologist Aníbal Quijano. Coloniality explains the perpetuation of colonial relations, logics, and power dynamics [20]. Essentially, it is the residue of colonization and the colonial experience which continues in the contemporary present [21]. It is coloniality, and its set of attitudes and values, that serves to rationalize and sustain the dominance of the West. And, this is often asserted through the imposition of universal ways of being, knowing, feeling, and living [22].

Therefore, we might understand the myth of universalism as contributing to coloniality, producing what some have begun to call 'AI Colonialism' [23].

It is the power imbalance sustained through coloniality that allows economically powerful Western countries to dictate AI development and discourse. In other words, this is what allows Silicon Valley tech giants to call their AI universal.



Instead we might turn to

# advocating for localism

In his book *All Data are Local*, digital media scholar Yanni Loukissas argues that we must approach data sets with an awareness that they are created by people, at a specific time and place, using specific instruments and made for particular audiences. In fact, Loukissas suggests that looking at the local conditions of data can help us resist the ideology of digital universalism and the erasure of myriad data cultures that it gives rise to [24]. He demonstrates that data has complex attachments to place and that algorithms are inextricably entangled with the meaning-making power of the local [25].

I want to suggest that this is the way we might think about AI as well.

Localism refers to an idea or outlook that prioritizes the local and thus promotes local history, culture and identity [26]. This is perhaps what we need to centre in our discussions of AI. If we advocate for and insist upon AI's locality, not only may we reject the pernicious myth of universalism, but we may instead produce better, non-exclusionary, culturally enriched, and diverse AI.



Not yet convinced? Here are just a few examples ...



### Let's let AI be LOCAL...

Since AI is always already local (and by this I mean produced by particular people in particular places) would it not be better to just let it be local? In fact, the locality of AI projects only really becomes troublesome when we are promised they can be applied universally. Instead, advocating for localism might interrupt some of the powerful myths about universalism that are found throughout AI discourse. Furthermore, if we were instead to design and create particular, situated and local AI, that does not claim to be universal, we might avoid some of the problems that have been discussed. To explore this, let's take a look at some community-centred projects which seek to do just this.



Papa Reo, developed by a Maori community, is a multilingual language platform grounded in Indigenous knowledge and ways of thinking [27]. It's part of an Indigenous innovation movement that foregrounds decolonial values through cultural and linguistic diversity, while prioritizing communitarian governance, and data stewardship principles [28].



The "Incubating Feminist AI" project by the A+ Alliance is working to create feminist AI that is developed by and for the Global South [29]. There are also many other projects that embody feminist and intersectional values in design and accountability, such as the "Not my AI" project.



Deep Learning Indaba hopes to strengthen Machine Learning and AI in Africa, working towards the goal of Africans being active shapers and owners of these technologies [30]. This group, as well as Black in AI, and Queer in AI work to support underrepresented AI practitioners.



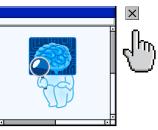
## conclusion

As we have discovered, AI is not universal, and nor should we want it to be. Indeed, the myth of universalism threatens to impose particular ways of knowing and being as well as exclusionary ideas about humanity and intelligence on us all. Not only is this a violent imposition, but it also risks flattening, homogenizing, neglecting and misunderstanding a whole wide world of beautiful locality.

As can be seen in alternative projects, there is a vast array of AI development out there and it stretches beyond the tech giants of Silicon Valley, it's built elsewhere, by other people, and not only is this wonderful, it's also really important.

Although AI can be exciting, and with that often comes a desire to move forwards without delay, there is immense value in being thoughtful and critical. We must continue to be wary of what we are told and sold and cautious of the fantastical, but often troublesome, ideas that pollute our understanding. If nothing else, I hope that it has become clear that the way we talk about and imagine AI matters. It really truly does.

# Navigating AI Discourse



What narrative is being told?
Who and what benefits? Who and

Is this a metaphor? What does it mean? What does it lead us to believe? What are the implications?

what is obscured, neglected, left out?

What is not being accounted for?

What is being promised? Why this? Why now? Do we actually want this? Who does this serve?

What histories are involved? What ideologies underpin this idea? What context might be important to understand?

After coming along with me on this journey, there is one more thing I want to offer: a toolkit that might be applied to situations similar to those explored in this zine. Pesky myths and misconceptions about AI are prominent in discourse, luckily we can arm ourselves with the tools to decipher and critique such ideas.

Delete the desire to see AI as human-like. Trash the blue brain and the white humanoid robots.



Ignore

- Hype and empty promises.
- Misleading metaphors.
- · Sci-fi fantasies.
- What technocrats tells us we should want.

Pay attention to power. Only then may we uncover why certain things are said by whom, for whose benefit, and whose detriment.

Yes

Ok



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## **Additional Resources**

THE ORACLE FOR TRANSFEMINIST TECHNOLOGIES https://www.transfeministech.codingrights.org/

A downloadable digital card deck that is designed to help us envision and share ideas about future technologies designed by those who are often excluded from or targeted by the technologies of today.

ANITA SAY CHAN: NETWORKING PERIPHERIES https://www.youtube.com/watch?v=iav6uxkdjHE

A recorded lecture given by Dr. Chan, about her book *Networking Peripheries*, which was part of the Digital Futures Lecture Series at the University of Michigan.

NOT MY AI https://notmy.ai

A project by Coding Rights and Paz Peña that seeks to develop a feminist toolkit that helps us push back against AI hype and hone our critical thinking, particularly to question algorithmic decision making systems.



## References

- [1] Diaz, M. (2024, March 25). What is AI? Everything to know about artificial intelligence. ZDNET. https://www.zdnet.com/article/what-is-ai-heres-everything-you-need-to-know-about-artificial-intelligence/
- [2] Broussard, M. (2018). Hello, Reader. In Artificial unintelligence: How computers misunderstand the world (pp. 3-12). MIT Press.
- [3] Wallenborn, Johanna T. (2022, May 17). AI as a flying blue brain? How metaphors influence our visions of AI. The Humboldt Institute for Internet and Society. https://www.hiig.de/en/ai-metaphors/
- [4] Cave, S. & Dihal, K. (2020). The whiteness of AI. *Philosophy & Technology, 33*, 685–703. https://doi.org/10.1007/s13347-020-00415-6
- [5] Cave, S., Craig, C., Dihal, K., Dillon, S., Montgomery, J., Singer, B. and Taylor, L., (2018). *Portrayals and perceptions of AI and why they matter*. The Royal Society. https://royalsociety.org/topics-policy/projects/ai-narratives/.
- [6] Cave et al. (2018).
- [7] Jasanoff, S. (2015). Future Imperfect: Science, Technology, and the Imaginations of Modernity. In S. Jasanoff & S.-H. Kim (Eds.), *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power* (pp. 1-33). University of Chicago Press.
- [8] Kohfeldt, D. & Grabe, S. (2014). Universalism. In T. Teo (Eds.) Encyclopedia of Critical Psychology. Springer. https://doi.org/10.1007/978-1-4614-5583-7\_545
- [9] Kohfeldt & Grabe (2014)
- [10] Chan, A. (2014). Networking peripheries: Technological futures and the myth of digital universalism. MIT Press.
- [11] Chan (2014)
- [12] Drage, E. (2021, September 3). Decoding digital prejudice: Al for real humans. The Institute of Art and Ideas. https://iai.tv/articles/decoding-digital-prejudice-auid-1878
- [13] Criado-Perez, C. (2019). Invisible women: Data bias in a world designed for men. Abrams Press.
- [14] Hern, A. (2024, April 9). Elon Musk predicts superhuman AI will be smarter than people next year. The Guardian. https://www.theguardian.com/technology/2024/apr/09/elon-musk-predicts-superhuman-ai-will-be-smarter-than-people-next-year

## References

Stock images and graphics throughout are courtesty of Canva.

[15] Siegel, E. (2023, April 10). Elon Musk Predicts Artificial General Intelligence In 2 Years. Here's Why That's Hype. Forbes. https://www.forbes.com/sites/ericsiegel/2024/04/10/artificial-general-intelligence-is-pure-hype/?sh=34821b0a73c5

[16] ElGhadban, Arwa. (2023, January 30). The return of East India companies: AI, Africa and the new (digital) colonialism. Data-Pop Alliance. https://datapopalliance.org/the-return-of-east-india-companies-ai-africa-and-the-new-digital-colonialism/
[17] ElGhadban (2023)

[18] Drage (2021)

[19] Turk, V. (2023, October 10). How AI reduces the world to stereotypes: Rest of World analyzed 3,000 AI images to see how image generators visualize different countries and cultures. Rest of World. https://restofworld.org/2023/ai-image-stereotypes/

[20] Quijano, A. (2000). Coloniality of Power, Eurocentrism, and Latin America. *Nepantla: Views from South*, 1(3), 533-580.

[21] ElGhadban (2023)

[22] Ricaurte, P. (2022 March 4). Artificial intelligence and the feminist decolonial imagination.

BotPopuli. https://botpopuli.net/artificial-intelligence-and-the-feminist-decolonial-imagination/

[23] ElGhadban (2023)

[24] Loukissas, Y. A. (2019). All data are local: Thinking critically in a data-driven society. The MIT

[25] Loukissas (2019)

[26] Mayhew, S. (2015). Localism. In *A Dictionary of Geography* (5th ed.). Oxford University Press. https://www.oxfordreference.com/display/10.1093/acref/9780199680856.001.0001/acref-9780199680856-e-3983

[27] Papa Reo. (n.d.). Enabling a sovereign digital future for indigenous languages. https://papareo.nz/

[28] Ricaurte (2022)

[29] A+ Alliance. (2022, April 5). Incubating Feminist AI: Call for Expression of Interest Q2 2022. https://aplusalliance.org/incubating-feminist-ai-call-for-expression-of-interest-q2-2022/

[30] Deep Learning Indaba. (n.d.). Our Mission. https://deeplearningindaba.com/about/our-mission/

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