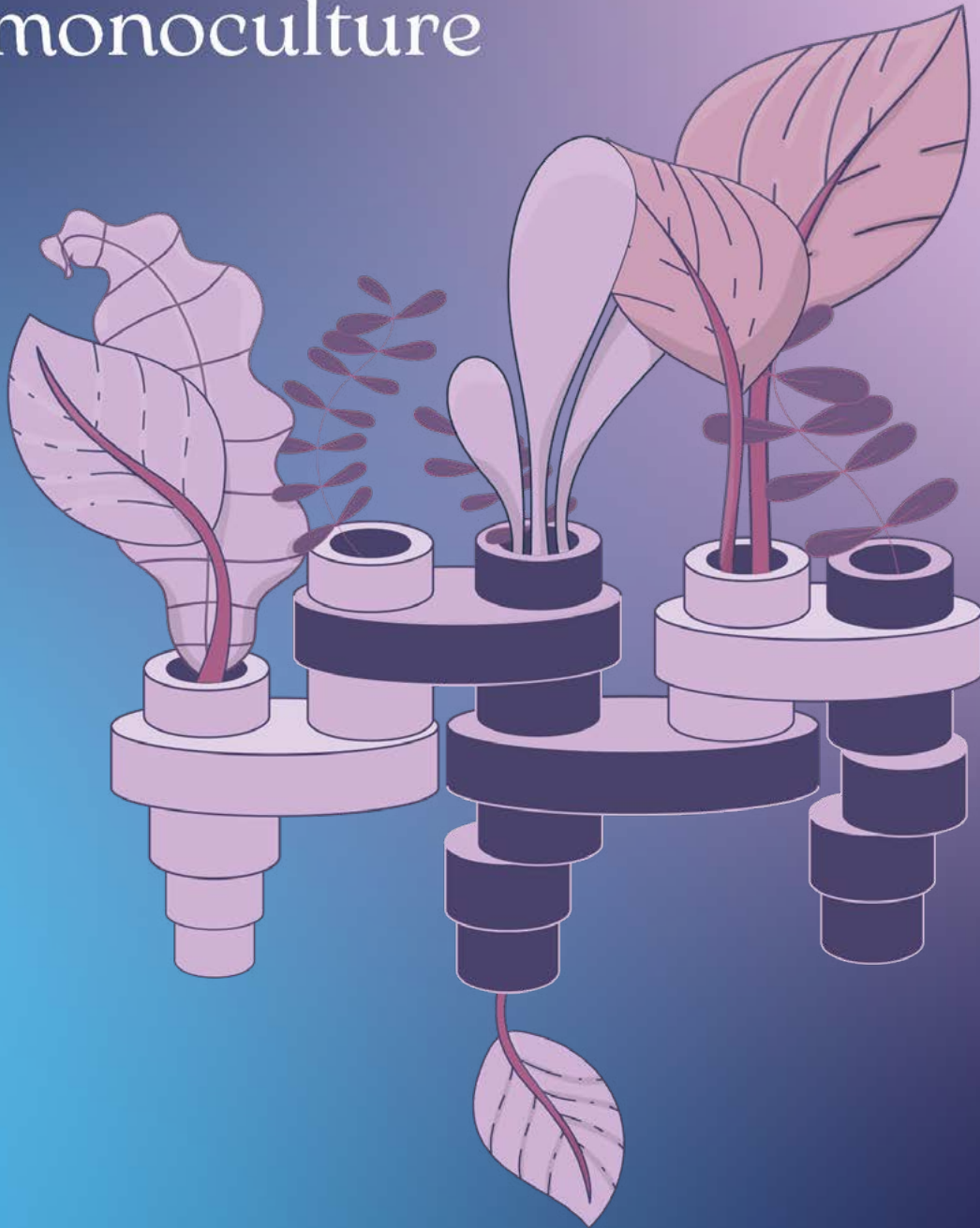


AI Commons: nourishing alternatives to Big Tech monoculture



Co-Authors

Joana Varon Sasha Costanza Chock Mariana Tamari
Berhan Taye Vanessa Koetz



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Mariana Tamari
Berhan Taye
Vanessa Koetz

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Coding Rights is a feminist organization that contributes to the debates about the development, implementation and regulation of technologies from a collective, transfeminist, decolonial, and antiracist perspective of human rights. For more information, visit: www.codingrights.org

Authors

Joana Varon
Sasha Costanza-Chock
Mariana Tamari
Berhan Taye
Vanessa Koetz

Design

Bruna Souza

Communications

Juliana Mastrascusa
Eryl Guedes

Published by

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contato@codingrights.org

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Executive Summary

‘Artificial Intelligence’ (AI) has become a buzzword all around the globe, with tech companies, research institutions, and governments all vying to define and shape its future. How can we escape the current context of AI development where certain power forces are pushing for models that, ultimately, automate inequalities and threaten socio-environmental diversities? What if we could redefine AI? What if we could shift its production from a capitalist model to a more disruptive, inclusive, and decentralized one? Can we imagine and foster an AI Commons ecosystem that challenges the current dominant neoliberal logic of an AI arms race? An ecosystem encompassing researchers, developers, and activists who are thinking about AI from **decolonial, transfeminist, antiracist, indigenous, decentralized, post-capitalist and/or socio-environmental justice perspectives?**

This research is a field scan in which we aimed to understand the (possibly) emerging “AI Commons” ecosystem. Although AI Commons is an umbrella term we use for post-capitalist alternatives to AI development, we found multiple, sometimes overlapping, sometimes competing, communities of practice and prominent individuals that are focused on critiquing, safeguarding, improving, imagining, and/or developing alternatives to the current ‘default settings’ of AI as a tool to advance the matrix of domination (capitalism, white supremacy, patriarchy, and settler colonialism).

This field scan focused on key entities (organizations, cooperatives and collectives, networks, companies, projects, and others) from Africa, the Americas, and Europe¹ that are advancing alternative possible AI futures. We identified and mapped 234 entities that are, in one way or another, advancing the AI Commons ecosystem, even if not naming it as such. We further conducted desk research and categorized these organizations according

¹ We selected these regions as a starting point considering the origins of the researchers and the language barriers that other regions would impose.

to their visions and mandates. This exercise helped us identify some pillars needed to build and foster an alternative AI Commons ecosystem.

As a result, we found powerful communities of practice, groups, and organizations producing nuanced criticism of the Big Tech-driven AI development ecosystem and, most importantly, imagining, developing, and, at times, deploying an alternative AI technology that's informed and guided by the principles of decoloniality, feminism, antiracist, and post-capitalist AI systems. However, there's a chasm between imagining, criticizing, and developing alternative AI Systems. We see this as a window of opportunity. In a context where AI systems are developed through a pipeline of extraction of bodies, land, and data, we collectively map possible allies to envision alternatives. Therefore, this study shed light on a group of actors whose activities could be further connected and supported towards co-designing an alternative pipeline for AI development. It provides recommendations to envision what possible AI technologies developed prioritizing the ethos of "buen vivir," care of humans, of all living beings, and the environment towards enhancing collective good could potentially look like.

Introduction

Increased access to the internet enabled some anti-capitalist social movements to emerge also online and seize the opportunity to democratize communications. Networks and organizations like the Association for Progressive Communications (APC) and Indymedia leveraged the nascent internet to create a transnationally networked movement. These network movements were alternatives against the expansion of neoliberal capitalism and towards a world where many worlds fit. However, despite the initial opportunities to create innovative and alternative digital spaces, these movements have observed a shrinking space over the years. This reduction is largely due to the gradual establishment of **monopolies** by mainstream online platforms owned by **Big Tech companies**.

To make things even more critical, in contrast with the early years of the internet where alternative ecosystems were being nourished, the current AI boom is unfolding in a landscape dominated by a small number of tech companies, each with highly profitable extractive business models that operate through the logic of **surveillance capitalism**.² These tech corporations have long argued that data should be free to flow, more data is necessary for better user experience, and digital technologies and data are silver bullets to social problems such as poverty and climate change. Exploiting these narratives, tech companies have lobbied national governments and regional and international entities to restrict regulation as they expand their extractive business models to every corner of the world.

These misleading **technosolutionist narratives** facilitated the current unbalanced playing field for AI development. The few tech companies with widespread infrastructure capable of amassing and processing data took advantage of their position. Now they are the ones positioning themselves

² Zuboff, Shoshana. *The Age of Surveillance Capitalism*. Profile Books, 2019.

as developers of models and tools that are shared or sold to institutions that have the power to shape the rules in our societies. However, their models only understand binaries and fail to account for the diversity of people, communities, cultures, environments, and movements. Their ethos ignore the historical, political, and social-economic complexities of problems. As a result, this approach created a **monoculture of thought**, where the vision of the few tech companies with the biggest market share, infrastructure, and computing power became the leading path to tech development globally. The disconnect between tech companies' vision and most people's reality helps perpetuate inequality, racism, xenophobia, misogyny, heteronormativity, ableism, violence, and exclusion. These issues are often obscured by glammers and profitable narratives that present AI systems as magical and futuristic solutions. As a result we see an exponential growth in the wealth and power of a few, at the expense of the majority.³

In an attempt to keep technological power and wealth concentrated within the West, particularly away from China, Western industry moguls are also coordinating and promoting a narrative that 'AI will pose an extinction risk for humanity in the future,' almost equating it with nuclear weapons and the atomic bomb.⁴ This us-vs-them narrative suggests that these technologies should not be in the hands of "the enemy", driving countries and companies into an **AI Arms race**, an unrestrained competitive pursuit of new applications of artificial intelligence, fueled by an obsessive belief in the advantages that AI could provide for their wealth and power. This approach distracts us from addressing the real harms generated by AI systems and their daily impacts on millions of people⁵, while opening spaces for the development of systems such as lethal autonomous weapons. Let's never forget, technological development is a geopolitical issue.

3 A brief literature review and a framework about possible harms of oppressive AI systems is available at: <https://notmy.ai/news/oppressive-a-i-feminist-categories-to-understand-its-political-effects/>

4 Dylan Matthews. "AI is supposedly the new nuclear weapon — but how similar are they, really? What the history of nuclear arms can — and can't — tell us about the future of AI." Vox, Jun 29, 2023. Available at: <https://www.vox.com/future-perfect/2023/6/29/23762219/ai-artificial-intelligence-new-nuclear-weapons-future>

5 Open letter to News Media and Policy Makers re: Tech Experts from the Global Majority, published in May, 2023: https://www.freepress.net/sites/default/files/2023-05/global_coalition_open_letter_to_news_media_and_policymakers.pdf

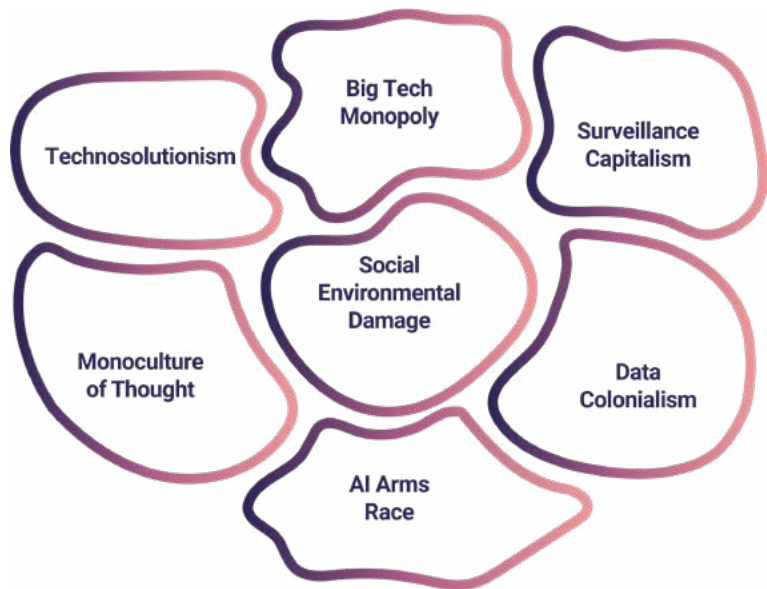
Moreover, even if one builds a different AI cognizant of the geopolitics and the diversity of cultures, this technology, as author and researcher Kate Crawford reminds us, “ is born from the salt lakes of Bolivia and the mines of the Congo.”⁶ Proponents building an alternative tech development ecosystem or those fighting for a regenerative, ecological economy must consider the social-environmental cost of AI systems. Tech development, particularly artificial intelligence, is an extractive industry. “[...] Rare earth minerals, water, coal and oil: the tech sector carves out the earth to fuel its highly energy-intensive infrastructure. [...] The opacity of the larger supply chain for computation in general, and AI in particular, is part of a long-established business model of **extracting value from the commons and avoiding restitution for the lasting damage.**”⁷ **Colonization** has found a home in digitalization and, more significantly, in AI development, where countries from the Global Majority supply minerals and serve as the laboratories for companies that run AI pilots and collect data from vulnerable communities, taking advantage of the absence or lack of enforcement of regulations.⁸

6 Crawford, Kate. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*, New Haven: Yale University Press, 2021 - pg 217-218. <https://doi.org/10.12987/9780300252392>

7 Idem

8 A few cases have been analyzed by Joana Varon and Paz Pena at the project Notmy.ai, like the heavily criticized system conceived to predict teenage pregnancy implemented by Microsoft in Salta, Argentina, and later on in municipalities in Brazil and Colombia: https://carrcenter.hks.harvard.edu/files/cchr/files/22_varon.pdf

AI is being developed in this **context:**



Under these conditions of globalized corporate domination of the internet, surveillance capitalism, technosolutionism, data colonialism, and ecological extractivism, how might we attempt to imagine a different path for AI development? **Is it possible to imagine a world where communities with values other than neoliberal extractivism develop, deploy, and govern these powerful tools? Who is already thinking about advancing an alternative possible development and use of AI? Are there groups working and connecting to develop AI system from decolonial, transfeminist, antiracist, indigenous and post-capitalist perspectives?**

As Kate Crawford also mentions, “AI began as a major public project of the twentieth century and was relentlessly privatized to produce enormous financial gains for the tiny minority at the top of the extraction pyramid.”⁹ She refers to how the AI industry has been “publicly subsidized: from defense funding and federal research agencies to public utilities and tax breaks to the data and unpaid labor taken from all who use search engines or post images online.” Perhaps with this context, the idea of AI development outside of for-profit private companies is not such a stretch.

9 Crawford, Kate. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*, New Haven: Yale University Press, 2021 - p. 216. <https://doi.org/10.12987/9780300252392>

Going even further, if we consider, as our co-author Sasha Costanza-Chock argues, that these systems are “trained upon vast datasets of centuries of human creative and intellectual work, shouldn’t they **belong to the commons**, to all humanity, rather than to a handful of powerful for-profit corporations?”.¹⁰ **Would it be possible to conceive an AI Commons infrastructure? Is it possible to build an ecosystem in which, instead of for-profit and surveillance-oriented, AI is decentralized and developed to prioritize values of care, “buen vivir,”¹¹ “sumak kawsay”,¹² “ubuntu,”¹³ towards enhancing collective good? If so, who are the key actors within a possibly emerging “AI Commons” ecosystem?**

10 Costanza-Chock, Sasha [@schock]. (2023, March 23). Generative AI systems are trained upon vast datasets of centuries of human creative and intellectual work. They should thus belong to the commons, to all humanity, rather than to a handful of powerful for-profit corporations [Tweet]. Twitter. <https://x.com/schock/status/1640024767704227840>

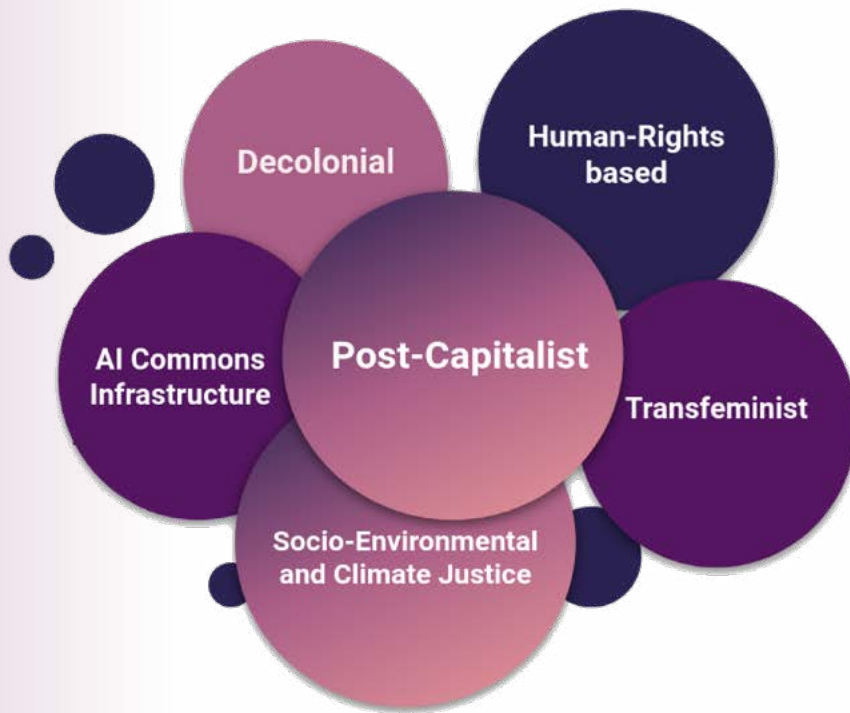
11 “Buen vivir” literal translation would be good way of living, but its meaning is much broader, as it is a philosophy and cosmovision from the Andean Region that inspires movements in Latin America. It is a way of doing things that is community-centric, in connection with indigenous belief systems that understand that humans are not owners of nature or its resources, they are part of nature and should live in harmony with it. As such, small-scale production is beautiful, as it is more connected to local. “Buen vivir” is a philosophy that privileges the sense of collectivity, instead of the capitalist individuality.

12 Sumak Kawsay would be the Quetchua expression for “buen vivir”, more on “Elementos para a busca do bem viver (sumak kawsay) para todos e sempre”, by Paulo Suess, published by CIMI: <https://cimi.org.br/2010/12/elementos-para-a-busca-do-bem-viver-sumak-kawsay-para-todos-e-sempre/>

13 Ubuntu has many definitions across different ethnic groups in Africa, but, like “buen vivir”, it is also a political philosophy that centers the community and “the interconnectedness among individuals and the environment.

Everybody wanna talk about AI!

But can we foster an alternative ecosystem to develop AI based on different approaches?



Methodology

Framing

Research for this publication was carried out between July 2023 and December 2023 and consisted of a **desk research and a field scan of entities working on AI** from the private sector, social movements, academia, civil society, government, labor, cooperative and philanthropic sector, located in Africa, the Americas (North America, Latin America, and the Caribbean) and Europe that could be possible allies to conceive an alternative AI Commons ecosystem.

The concept **“AI Commons”** was not treated here as a single and closed term. In our study for entities that could compose an AI Commons ecosystem, we have considered multiple compatible frameworks such as decolonial, transfeminism, antiracist, indigenous and post-capitalist perspectives.¹⁴ Collectively, these terms capture some aspect of what an AI Commons could look like. We believe there is an opportunity for many groups and communities to define and expand on this term collectively.

Methodology

Using the above framing as our filter, we first wanted to identify the actors, groups, communities, organizations, cooperatives, collectives, and others building towards our broad definition of the AI commons and its ecosystem. To identify these entities, we looked into:

- *Our Network of Trust - we looked into networks Coding Rights, and our partners in the Global Majority are part of and those that are critical networks advancing an alternative AI development

¹⁴ A full list of the terms searched for this field scan can be found in the Appendix.

ecosystem,¹⁵

- * Networks and groups that address AI as their main issue: ¹⁶
- * Similar field scans conducted by other organizations, such as the Algorithmic Justice League’s AI Auditors Field Scan, People Powered Digital Participation Resources,¹⁷ The Collective Intelligence Project’s AI Ecosystem Map, and other similar initiatives and the Civic Tech Field Guide.¹⁸
- * We also attempted to use ChatGPT, with not very accurate results, as further described in the appendix.¹⁹

After selecting entities, we further did desk research about them to understand their work and activities, as well as their political approach in debating AI. We further categorized the entities and organizations to identify a subset that exemplifies the emerging potential infrastructure for an AI Commons ecosystem. We shortlisted the organizations, entities, collectives, groups, and others who were aligned with the concept of a just transition to a regenerative democratic economy, had a strong commitment to justice and decolonization, developed and supported shared infrastructure for tech development, and investment and research in non-extractive and post-capitalist AI, among others.

While conducting this field scan, we realized that even our conception of AI Commons, which is an alternative to the current extractive and surveillance-prone practice, is still overshadowed by Big Tech. Their monopolistic position gives Big Tech the unfair advantage to test models, deploy tools,

¹⁵ The full list of the networks can be found in the Appendix.

¹⁶ The full list of the networks and groups can be found in the Appendix.

¹⁷ <https://www.peoplepowered.org/digital-participation>

¹⁸ <https://directory.civictech.guide/>

¹⁹ As a side note, we also explored ChatGPT responses to questions about relevant organizations. ChatGPT responses were, in short, more trouble than they were worth, as they correctly identified just a few organizations that we already knew about, some that did not exactly fit into our filters, but mostly ‘hallucinated’ (generated fake) organizations that were not on our lists.

and define and develop the field. This makes it impossible to imagine an alternative system without acknowledging Big Tech’s detrimental role in determining the AI playing field. Therefore, we shortlisted 15 Big Tech companies and included these in our field scan to be seen as actors to consider if we wish to leverage the playing field. To identify these tech companies, we looked at companies that are members of the Partnership on AI network. Then, we expanded and searched for tech companies that include “AI for Good” projects and narratives. Lastly, we looked into tech companies mentioned in the Time Magazine “The 100 Most Influential People in AI 2023.”²⁰ **The Big Tech companies included in this study should be reviewed based on their role in defining the AI development space rather than their proximity to the AI Commons.**

Limitations

Be it a buzzword or a trending topic, AI has been gradually incorporated into the mission of entities operating in the technology field and beyond. This brings some challenges in finding those with a common or compatible political view and approach to the topic.

Among civil society organizations that operate in the field of artificial intelligence, we identified three broad categories:

- a.** We found recently formed organizations whose primary focus and objective revolved specifically around artificial intelligence. Compared to other regions, these kinds of entities are more predominant in the North, particularly in the USA;
- b.** Organizations with a long history of work in the field of human rights and technology that are now increasingly incorporating artificial intelligence in their areas of work;

²⁰ Time. “The 100 most influential People in AI 2023.” Accessed May 26, 2024. <https://time.com/collection/time100-ai/>

C. Organizations that previously worked on policy and technology issues that are now starting to focus on AI due to numerous policy and legislative debates about AI. This is evident in the European Union and Brazil, where governments consider numerous AI legislations. **Therefore, in order not to inflate our dataset with entities from these territories and whose mandates is specifically focused on legislative debates, we have decided only to include organizations that are engaging in the AI debate beyond legislative processes and with a political approach that is either explicitly feminist, anti-capitalist, antiracist and/or decolonial.**

The context is different for companies. Due to the marketing hype around AI, companies are increasingly incorporating AI into their websites. This makes it difficult to discern if they have meaningful work on AI or if it is just a marketing tactic. Within Academia, there are an increasing number of labs, research centers and groups investigating and working with AI. This makes mapping the landscape a very challenging and extensive task. Therefore, similar to our approach with civil society organizations, we focused specifically on those that were clearly aligned with our political filters.

Our sources to analyze entities were limited to materials available online or our prior knowledge of these actors' work. As this research was mostly desk research, it depended on information available online, including websites, social media, and other online resources. Consequently, if the information was unavailable online, organizations' websites were under maintenance, had little information, or lacked an online presence, we could not include them in this field scan. In addition, similarly, as we mainly depended on desk research, we relied on the self-declared information of organizations. Organizations sometimes present an "attractive narrative" (often as self-promotion) that usually does not clearly and objectively present the issue areas and the activities. Interviews and direct engagement with entities would be recommended as a second verification step of this field scan. Therefore, **it is important to consider this report as a brief field scan that primarily maps trends and gaps in envisioning an alternative AI ecosystem, rather than an extensive and comprehensive survey that covers all**

organizations in the field, which was never the goal.

We were also constrained geographically, as this research focused solely, and with the previous limitations, on Africa, the Americas (North America, South America, and the Caribbean) and Europe. It intentionally excludes entities from Asia Pacific and the Middle East because we lack the expertise, skills and lived experiences to effectively scan these regions. This includes challenges ranging from language barriers to political knowledge and historical context, aspects that were already very challenging for scanning entities from the African countries. It is important to recognize that countries like India, China, Taiwan, Korea, Japan, among other, play a significant role in defining the mainstream development of the AI field and have communities that cherish different cosmologies from West, while also being tech-savvy, aspects that could offer an interesting mix of perspectives for envisioning alternative approaches. Therefore, a specific field scan would be recommended to understand the narratives from these regions and entities.

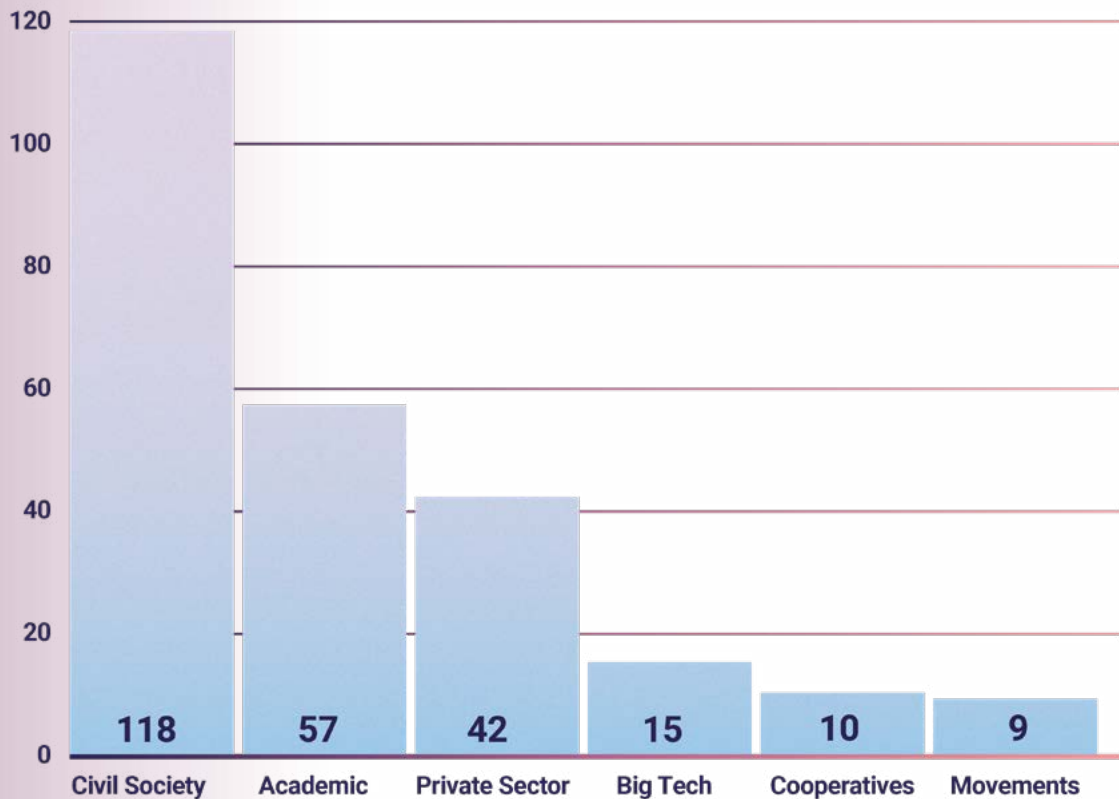
Findings

Entities building towards an AI Commons Ecosystem

Our field scan identified 234 entities from Africa, Europe, Latin America and the Caribbean, and North America.²¹ Among these, we found 118 civil society organizations, 57 academic institutions supporting and advancing an alternative AI development ecosystem away from surveillance and towards the commons. We also gathered 42 private sector entities ranging from community initiatives to startups and entities that offer services for the market. Apart from these private sector entities, we also identified 15 Big Tech players. It's important to note that Big Tech is listed here not for its direct role in developing the AI commons but for the significant influence its power and resources wield over key aspects of AI development. It's important to note that, in some cases, entities were classified in more than one sector. The graphic below shows the number of entities from each specific sector:

²¹ It's important to note that this is not an exhaustive list of all entities. These were ones that were referred and had an online presence that allowed us to assess that they had some coherence with the scope of this report and our assessment criterion.

Number of entities per Sector



Our research also revealed the significant role of academic research centers in the AI landscape. These centers are actively involved in developing work, conducting research, monitoring and assessment, and even deploying AI systems. In fact, out of the total mapped entities, a substantial 57 were classified as academia.

We identified 42 private sector entities. The very nature of private sector entities seeking profit tends to exclude many of these entities from the filters. However, there are interesting companies that, in pursuit of sustainability, sell services and develop AI systems that might be repurposed towards an AI Commons.

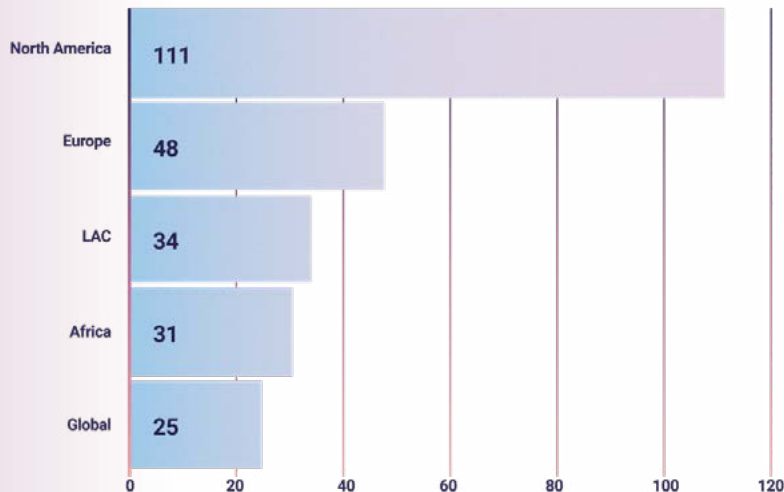
Our research found very few movements (9) and cooperatives (10) working on fields related to AI, and this is a telling sign that AI system development is still limited to entities with access to material resources, such as large funding or sources of profit from the commercialization of AI services or products. Broader, more complex, and often more diverse and democratic social groups, such as social movements, worker cooperatives, larger collectives, and even unions, have more difficulty accessing this debate, or even do not consider it as a high priority.

It's important to note that in some cases, entities were classified in more than one sector. That is the case of networks, such as "Partnership on AI," as they convene organizations from different sectors (Academic, Private Sector, Civil Society, Media Channel/Publication). Some organizations also might have more than one function or distinct activities, such as "AI Commons" (Academic, Private Sector, Civil Society) or "Tierra Comun" (Academic, Movement), among others, that have one branch providing services and another having a more social or research-oriented role.

Our research mapped each entity to its respective region. Out of the 234 entities we identified, a staggering 47% are located in North America, and the majority operate in the United States.²² This data includes 15 Big Tech companies, 14 located in the United States. Even when compared to Europe, which has the second highest number of entities, the difference is still significant: North America holds more than double the number of entities.

²² 44% of entities located in North America excludes events.

Number of entities per Region



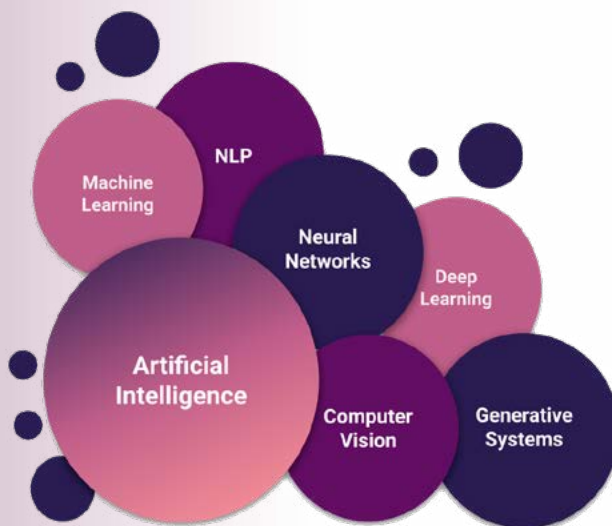
The concentration of these entities in North America, especially in the United States, shows a huge geopolitical gap in the field and demonstrates the importance of fostering organizations, movements, and even companies from other regions to break this territorial concentration.

Finally, it is important to note that many are considered global as they operate on different continents. Thus, there is a difference between the total number of entities mapped (234) and the sum of entities by region, as many claim to operate in more than one continent and were classified accordingly.

Challenges

AI is more of a narrative frame than a specific technology

AI as a term and concept comprises several technologies and usages, making it complex to determine whether those claiming to work on AI tools are developing, deploying, or auditing less complex systems, such as pre-structured chatbots with closed and predefined answers, or more nuanced AI components like machine learning, natural language processing, computer vision, affective computing, and others. Be it one kind or another, due to the hype of the word, several entities would all say they work on AI.



What is AI?

Artificial intelligence is, therefore, not a specific technology; it is a broad term, a loaded narrative that has taken on a specific shape in terms of the future imaginaries it implies. These are often oriented by a single, universalized notion of progress and intelligence, which carries significant political consequences. When someone mentions that an organization works in AI within the current moment of capitalism, it is often assumed that the organization is aligned with what is considered modern and futuristic. But what is the impact of this proposed vision of a possible future?

As Kate Crawford also framed: “Artificial intelligence, then, is an idea, an infrastructure, an industry, a form of exercising power, and a way of seeing; it’s also a manifestation of highly organized capital backed by vast systems of extraction and logistics, with supply chains that wrap around the entire planet. All these things are part of what artificial intelligence is - a two-word phrase onto which is mapped to a complex set of expectations, ideologies, desires, and fears.”²³ All these meanings of the term might lead us even to question if AI is a good terminology to use for those seeking feminist and post-capitalist usages of technology, as it is loaded with characteristics that are contradictory to these goals and visions for the future. **Perhaps focusing on the different tools under the AI umbrella would be more technically precise and politically coherent.** For instance, instead of broadly saying AI in medicine, we can specifically talk about computer vision being used to help humans detect cancer cells or natural language processing systems that make a book accessible for visually impaired people. This kind of language would be more precise in terms of both technical components and actors involved, instead of generally using the term AI just to connect to a narrative hype.

Big tech has formed powerful alliances and lobbying networks

The private sector, mostly Big Tech AI companies, has created various spaces, alliances, and networks for coordination. While some are exclusively for the private sector, others, such as Global Network Initiatives (GNI),²⁴ Partnership on AI, and Business for Social Responsibility, involve civil society groups. However, these civil society initiatives and alliances are mostly funded by the same Big Tech companies that are members of these groups,²⁵

²³ Crawford, Kate. *Atlas of AI: Power, Politics, and the Planetary Costs of Artificial Intelligence*, New Haven: Yale University Press, 2021 - pg 216. <https://doi.org/10.12987/9780300252392>

²⁴ GNI publishes assessments at: <https://globalnetworkinitiative.org/wp-content/uploads/2020/04/2018-2019-PAR.pdf>

²⁵ Partnership on AI. “Partnership on AI Annual Report 2021.” Accessed May 26, 2024, <https://partnershiponai.org/wp-content/uploads/2022/02/PAI-annual-report-2021.pdf> <https://globalnetworkinitiative.org/team/financials/>

and some are funded by philanthropy, foundations, and governments. The government funding for these sorts of initiatives comes mostly from the US, a country interested in the growth of American companies in the sector and whose foreign policy is historically intertwined with the narratives and demands of Big Tech.

Perhaps this is a strategic choice made by Big Tech companies to hold multistakeholder engagements and coordination similar to tech policy spaces. For instance, while reviewing AI-related panels, events, and workshops where the debate has a human rights or public good perspective, we observed that civil society tends to attend multistakeholder panels and dialogues composed of Big Tech representatives and not smaller businesses with different visions. That is the case of conferences like Rightscon, frequently funded by corporations such as Microsoft, Verizon, Reddit, Google, Apple, Vodafone, Cisco, Meta, Twitter, Zoom, and Discord.

In addition to multistakeholder engagements, Big Tech also funds several civil society organizations and academic work on technology and human rights. On top of that, some civil society organizations often serve as a revolving door for these actors, with Big Tech commonly hiring former NGO members. This allows Big Tech to gain access to the person's network of relationships within civil society members, as well as their knowledge about the weakness and challenges of that sector. Discussing how much this funding and the close relationship with Big Tech actors affects the field and limits civil society organizations' work, political vision and criticism of Big Tech remains taboo that need to be broken within civil society and academic networks.

Less but not least, recent public letters released by industry moguls,²⁶ particularly the one on AI existential risk, and a series of meetings with political authorities that followed, indicate a lot of political coordination among Western companies to lobby for a regulation that misses the point of the harms

²⁶ This concerns were expressed in the "Open letter to News Media and Policy Makers re: Tech Experts from the Global Majority", published in May, 8th, 2023, in response to the letters and interviews on the narrative of existential risks which were more extensively promoted by the industry moguls by mid-2023 onwards, and is available at: https://www.freepress.net/sites/default/files/2023-05/global_coalition_open_letter_to_news_media_and_policymakers.pdf

posed by their monopolies. We fear initiatives like the recently formed UN High-Level Advisory Body on Artificial Intelligence²⁷ could follow this path.

Tricky narratives

AI “for good” as a market tool

Big Tech companies have initiatives such as Microsoft’s “AI for Good Lab”²⁸, IBM’s “Data and AI for Social Impact” program²⁹, and Google’s “AI for Social Good” projects³⁰, and Meta’s “Data for Good” program³¹, which are usually embedded in their Corporate Social Responsibility areas. Other companies, like Open AI³² and Anthropic³³, have “responsible AI” or “system security” as their central narrative. However, it’s important to note that all the major technology companies and conglomerates we listed, to some extent, incorporate the narrative of responsible and ethical AI development as values or missions.

Corporate Social Responsibility has become an essential element for business success in general, not only as society raises awareness of its rights, but especially due to the climate and humanitarian crisis we are facing - and in which AI is playing an important narrative role. Stimulated by the valorization of the concept of social

27 <https://www.un.org/techenvoy/ai-advisory-body>

28 Microsoft. “AI for Good Research Lab”. Accessed May 29, 2024. <https://www.microsoft.com/en-us/research/group/ai-for-good-research-lab/>

29 IBM. “Data and AI for Social Impact”. Accessed May 29, 2024. <https://www.ibm.com/watson/social-impact>

30 Google. “Social Good”. Accessed May 29, 2024. <https://ai.google/responsibility/social-good/>

31 Meta. “Data for Good”. Accessed May 29, 2024. <https://dataforgood.facebook.com/>

32 OpenAI. “Safety”. Accessed May 29, 2024. <https://openai.com/safety/>

33 Anthropic. Accessed May 29, 2024. <https://www.anthropic.com/>

responsibility as a new business mentality, and also by a consumer behavior, more and more companies are changing their marketing practices, giving it new contours towards a more “ethical” attitude. Corporate Social Responsibility policies are not only highly effective marketing tools, but also an asset to control the narrative and social impacts of AI. The Brazilian author Raquel Giffoni Pinto has pointed out the “social risk” for extractivist corporations, which is equivalent to civil societies’ pressure over these corporate investments, and how it has become one of the sector’s biggest challenges. Giffoni deepens the comprehension of corporate social responsibility policies as “technologies” that neutralize social critics and stabilize the political terrain.³⁴ And even though her analysis was on the extractivist sector, the reasons why Big Techs are also investing high in it seem to be the same. To be seen as a company that develops “good” technology rather than a threat to human jobs, creativity and even life in the future is definitely easier to sell. And therefore, more profitable.

AI for development

AI for Development (AI4D) replaces the old, contested term Information Communication Technology for Development (ICT4D). For many, ICT4D is a technosolutionist approach enshrined in white savior ideology. Global Minority countries and development banks such as the World Bank dispersed billions of dollars to advance ICT4D. These initiatives ultimately opened up Global Majority markets to Big tech corporations and were unlikely to address social change. Furthermore, this approach has historically allowed tech corporations to use these locations to test and deploy technologies they normally would not deploy in their own countries due to fear of regulation or social unrest in their backyard. One such case

34 See Acselrad, Henri & Giffoni Pinto, Raquel. “A gestão empresarial do “risco social “ e a neutralização da crítica”. Revista Praia Vermelha. 2009. https://www.researchgate.net/publication/281188481_A_gestao_empresarial_do_risco_social_e_a_neutralizacao_da_critica

is Microsoft testing a heavily criticized system to predict teenage pregnancy in several Latin American countries, including Argentina, Brazil, and Colombia.³⁵

In our field scan, we observed many companies working under the framework of AI4D, also plugging into the UN terminology of SDGs, particularly in African countries, in areas such as agriculture and access to banking. Many of these projects did not make it to our field scan because the organizations did not align with our AI Commons framing. Nevertheless, it is a growing field that needs to be further understood.

AI for Climate Change

Unlike other fields of technology, many civil society organizations, particularly feminist organizations from Latin America, explicitly address artificial intelligence’s environmental implications. These organizations have a long history of questioning the logic of the subaltern, producing decolonial theories, and considering the politics of bodies and territories in their fights.

Likewise, but for different purposes and goals, it is common to see AI and climate change-related projects in companies and start-ups, sometimes with a technosolutionist approach. That was particularly prominent in African countries and Latin America — once again, it’s critical to ask if these are regions being used as testing grounds for these tools. Is valuable data from these territories also being extracted without the awareness and consent of local communities? Are these initiatives truly addressing climate change issues? Are they connected to land defenders and indigenous rights movements? More nuanced research is needed to understand this further.

³⁵ Peña, Paz, and Joana Varon. “Teenage pregnancy addressed through data colonialism in a system patriarchal by design.” Accessed May 28, 2024. <https://notmy.ai/news/case-study-plataforma-tecnologica-de-intervencion-social-argentina-and-brazi/>

Opportunities

From criticizing to deploying systems

While many civil society organizations and research centers are very specialized in critical thinking and analyzing the implementation of different branches of artificial intelligence technologies, it is less common that those organizations are developing, testing, and implementing machine learning, natural language processing models, computer visions and other tools that are commonly understood as AI systems. Nevertheless, if our goal is to promote the usage of these tools for social change towards social and environmental justice and aim to work towards conceiving something like a “Commons AI” ecosystem, it would be important to understand the current AI pipeline and all the moments in which civil society and social movements can play an important role, beyond the already existing initiatives that have a critical approach through activities such as bias studies, auditing, and advocacy to regulate risk mitigation.

Most entities developing language models and other machine-learning technologies we found are in the private sector. The academic centers and researchers’ networks developing AI were also commonly more focused on industry connections, positioning themselves as innovation hubs for industry. In addition to funding multistakeholder conferences and civil society organizations, Big Tech companies also fund academia. The mainstream AI industry is investing significant amounts of resources into academia, particularly in computer science programs, among others. Creating a revolving door or even a direct flow from academia to industry. A recent study on “the growing influence of industry in AI research”³⁶ assessed that “roughly 70% of individuals with a PhD in artificial intelligence get jobs in private industry

36 Ahmed, Nur, Wahed, Muntasir, and Neil C. Thompson. “The growing influence of industry in AI research.” *Science* 379, (2023): 884-886. DOI: <https://www.science.org/doi/10.1126/science.ade2420>

today, compared with 20% two decades ago.”³⁷ The studies also show that “the largest AI models developed in any given year now come from industry 96% of the time. Leading benchmarks or models used to measure progress in different areas of AI come from industry 91% of the time, while the number of published papers with industry co-authors has nearly doubled since 2000.”³⁸ The study argues that this shift in the independence of academia in research and development might lead to a scarcity of research on AI focused on public interest and not on profit. Therefore, public funding for research and development, as well as models for shared infrastructure for technological developments, are important aspects to address in terms of public policies aimed at promoting alternative ecosystems for AI development that prioritize values other than profit and competition.

Current AI Pipeline vs. Collective Vision for an AI Commons Ecosystem

Critical resources, including data and people, needed to develop machine learning tools and other instruments framed under the AI umbrella are concentrated within the AI industry. Social movements have much to discuss this concentration of resources and the AI production pipeline. However, the remaining notion that AI is either magical or very technical keeps movements away from engaging in this issue meaningfully.

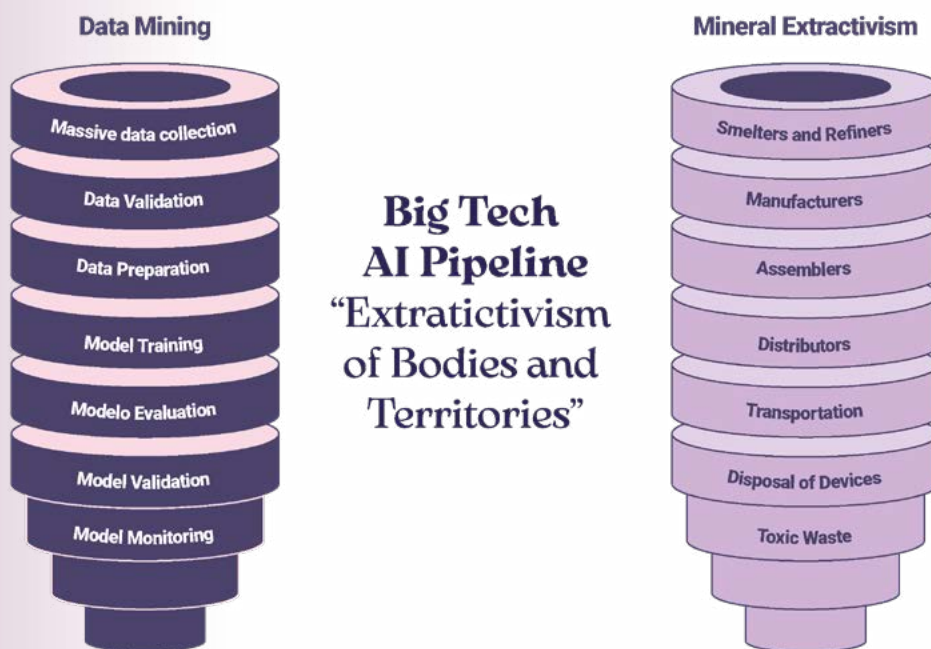
Looking at the proposed structure in the Anatomy of an AI System ³⁹ and in several AI pipeline flowcharts from the industry, we find two layers of extraction in the current pipeline of AI development: extraction of mineral resources and extraction of data. This extractivism has toxic consequences for both the environment and our mental health, while also represents a

37 Idem

38 Idem

39 Crawford, Kate, Joler, Vladan. “Anatomy of an AI System: The Amazon Echo As An Anatomical Map of Human Labor, Data and Planetary Resources,” AI Now Institute and Share Lab, (September 7, 2018) <https://anatomyof.ai/img/ai-anatomy-map.pdf>

continuum of colonialism in digital environments and tech development.⁴⁰ Juxtaposing these together, we find an AI pipeline that looks like this:



Looking at that sketch of the AI pipeline and the extraction layers, there are several points of extraction where movements are actively fighting these forms of extraction or where they have a lot of nuanced experiences and experience addressing these issues differently. For instance, indigenous rights, land defenders, environmentalists, and other movements focusing on socio-environmental justice have a long trajectory of debating and advocating for other models fighting illegal and destructive mining and disposal of toxic electronic waste. Labor rights movements could share lessons with the workers on the manufacturing and assembling line of electronics and those labeling, cleaning, and training the models. However, these movements are disconnected from these debates and the AI development landscape.

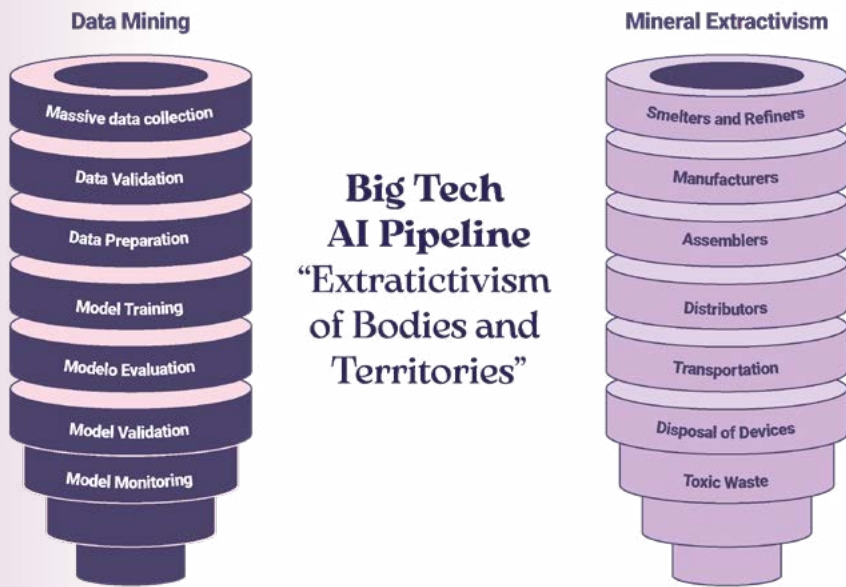
40 For all these systems to work they are also likely plugged to the internet. To envision other layers of geopolitical dimensions of the internet, we recommend assessing the platform Tech Cartographies (cartografiasdainet.org), developed by Coding Rights, which aims to materialize the narrative of "the cloud." This materialization allows us to envision current practices of digital colonialism, so we can connect the debates about technology development to discussions about illegal mining, protection of indigenous territories, promotion of water and other resources as commons, labor rights, sexual and reproductive rights, anti-racism, LGBTQIA rights, among others.

In our mapping, we found social movements, civil society, and academia working and focusing on the end of the AI pipeline or at the start of data collection. Where models are deployed, they criticize and audit the bias and discrimination produced by these models or at the point of data collection, where they call for more data protections and restrictions.

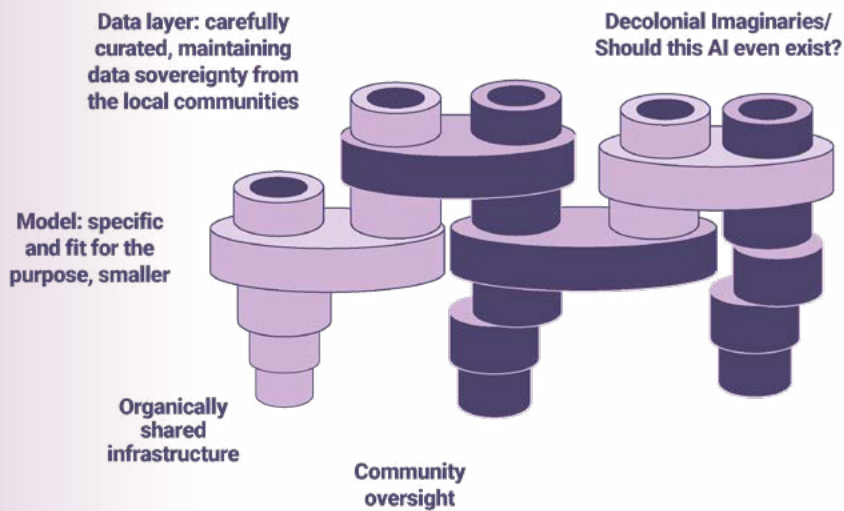
Most recently, and very promisingly, content moderators in Kenya have been mobilizing to form a union, but it is unclear to what extent this also includes workers training AI models beyond social media platforms. Feminists and socio-environmental journalists, particularly in Latin America, where the lithium triangle and the Amazon are located, are criticizing the consequences of mining for tech industries in these territories. More work should be done to promote knowledge sharing and conversations among these resistances.

Movements and academia have ample potential to produce criticism and resistance at all stages of the AI pipeline while also promoting alternatives to the dominant model, which is based on predatory extractivism.

What if these conversations could lead to the development of an alternative ecosystem where decolonial imaginaries inspire the path of AI development? Where, rather than Big Data, we prioritize small dataset carefully curated, maintaining data sovereignty for local communities. Models not meant to be designed for universal applicability in a global market, but tailored to specific local needs. Infrastructure is organically shared among those engaged in compatible projects, fostering collaboration. Moreover, what if there was ample technopolitical debates within the communities proposing and using these models so they could take ownership of the projects, ensuring community oversight? These are just a few ideas that could be facilitated through more exercises aimed at collectively envisioning alternative AI pipelines, or an AI Commons Ecosystem.



AI Commons Ecosystem



Potential Allies for an “AI Commons” Pipeline

Further researching the 234 entities we mapped, our field scan identified a series of possible allies with significant and diverse expertise and trajectories that could be connected in an attempt to collectively envision and co-design an alternative AI pipeline that, instead of being profit and

surveillance-oriented, departs from values such as decentralization, “buen vivir” and care of people and the environment towards enhancing collective good. We have categorized these organizations and collectives into the following groups, providing a few insights and highlights about each:

Data cooperatives are a potentially interesting component

Among the alternative models, the proposal of organizing data as data cooperatives has gained force since the context of the COVID-19 pandemic. It refers to data management systems in which cooperative members decide how to limit or govern the collection and processing of data from their communities. It changes the paradigm of individual data protection, where data owners currently have little say over how their data is used and lack the power to refuse consent if they rely on the service provided by those requesting their data.⁴¹ Data cooperatives shift this logic, towards the notion of collective rights, where data is protected according to the agreements and interests of a community.

Data cooperatives could be seen as part of cooperative digital economies and have a great potential to compose cooperative or common digital infrastructures for AI development. The Brazilian research lab Digilabour has identified the following cases as examples of data cooperatives:⁴² Salus⁴³ and MiData,⁴⁴ cooperatives focused on health data; Driver’s Seat,⁴⁵ coop for rideshare and delivery drivers; LBRY,⁴⁶ community-led and open source

41 Pena, Paz; Varon, Joana. Consent to our Data Bodies lessons from feminist theories to enforce data protection. Coding Rights. March, 2019. Available at: <https://codingrights.org/docs/ConsentToOurDataBodies.pdf>

42 Scholz, Trebor, Calzada, Igor. “Cooperativas de dados para tempos pandêmicos”. Accessed May 26, 2024. <https://digilabour.com.br/cooperativas-de-dados-para-tempos-pandemicos/>

43 Salus Coop. Accessed May 28, 2024. <https://www.salus.coop>

44 Midata. Accessed May 28, 2024. <http://midata.coop/>

45 Driver’s Seat. Accessed May 28, 2024. <https://www.driversseat.co/>

46 LBRY. Accessed May 28, 2024. <https://lbry.com/faq/what-is-lbry>

protocol hosting media resources; dOrg.tech,⁴⁷ working on decentralized Web3; and Mnemotix⁴⁸ and Gooddata⁴⁹, previously working on ownership of browser data.⁵⁰ These are just a few examples and it's important to inquire what the challenges are for these kinds of initiatives to flourish. What are the learning experiences they can bring to the table for building alternative pipelines for data management and processing in alternative systems?

Engaging with collectives from Free/Libre Open Source Software and Open Science is key.

There is a growing community of open-source AI practitioners. The French-American Hugging Face is one example. Fundación Vía Libre, from Argentina, which is part of the Latin American hub of the Feminist AI Research Network, has been developing its prototype entitled EDIA (Stereotypes and Discrimination in Artificial Intelligence)⁵¹ using Hugging Face's computational model.⁵² Mozilla.ai⁵³ is also a promising open source community initiative.

EleutherAI⁵⁴ was also another open-source community that we found in the field scan. It grew from a Discord server for talking about GPT-3 and became a non-profit research lab. Their web page mentions that their "work has historically focused on providing access to cutting-edge AI technologies by training and releasing models, and promoting open science norms in Natural Language Processing."⁵⁵ Beyond Open Source Software, a few other organizations also mentioned Open Science practices in their mission and methods. That was the

47 Dorg. Accessed May 28, 2024. <http://dorg.tech/>

48 Mnemotix. Accessed May 28, 2024. <https://www.mnemotix.com/>

49 The Good Data. Accessed May 28, 2024. <https://www.thegooddata.org/>

50 Mnemonic and Gooddata are currently dissolved.

51 Estereotipos y Discriminación en Inteligencia Artificial

52 EDIA: Estereotipos y Discriminación en Inteligencia Artificial. Accessed May 28, 2024. <https://huggingface.co/spaces/vialibre/edia>

53 Accessed May 28, 2024. <https://www.mozilla.ai/>

54 EleutherAI. "About". Accessed May 28, 2024. <https://www.eleuther.ai/about>

55 Idem

case for AQAI⁵⁶, Cohere AI⁵⁷, EPOS⁵⁸, Fundación Via Libre⁵⁹, MatchImpulsa⁶⁰, Observatório de Cooperativismo de Plataforma⁶¹, and Open Climate Fix⁶².

Nevertheless, while making the field scan, it was common to find collectives and networks from free software movement that provide infrastructure and open source services for civil society organizations but are not involved, or at least did not mention artificial intelligence, machine learning, or other kinds of automated decision making systems in their services/agendas. Considering the long trajectory of open software communities, it is key to foster deeper links between Free/Libre Open Source Software communities and entities thinking about alternative ecosystems to develop AI tools.

However, it is important to pay attention to some examples where Big Tech seems to be appropriating the practice of open and free software initiatives. For instance, machine learning models such as PyTorch⁶³ and TensorFlow⁶⁴, initially developed by Meta and Google, respectively, were released in open source for developers to use, which also feeds back the company monopoly. Researchers, practitioners, communities, and institutions that have historically focused on the benefits of open data and software development practices have experienced controversies because big corporations are appropriating these practices. More research and debate are needed to promote and renew communities' understandings of limits and best practices in cases where openness results in data colonization, big company appropriation of open knowledge or simply feeds surveillance capitalism.

56 Accessed May 28, 2024. <https://www.aqai.io/>

57 Accessed May 28, 2024. <https://cohere.com/>

58 Accessed May 28, 2024. <https://www.eposaudio.com>

59 Fundación Via Libre.

60 Accessed May 28, 2024. <https://matchimpulsa.barcelona/>

61 Accessed May 28, 2024. <https://cooperativismodeplataforma.com.br/en/home-english/>

62 Accessed May 28, 2024. <https://openclimatefix.org/>

63 PyTorch. Accessed May 29, 2024. <https://pytorch.org/>

64 TensorFlow. Accessed May 29, 2024. <https://www.tensorflow.org/>

Civic Tech and Open Data communities are slowly deploying AI to process data in participatory platforms

In addition to open source and open science communities, there is a lot of opportunity to engage with the Civic Tech and Open Data communities, as they are slowly also deploying AI tools. People's Powered,⁶⁵ a global hub for participatory democracy, recently did a research on digital participation platforms. They found out that many of these platforms and organizations use some sort of generative AI to gather opinions, propose questions for citizens, create consensus documents or proposals, and build insight from public participation processes at local, municipal, and, at times, national levels.⁶⁶ Others such as Kialo Edu are platforms that help readers follow the logical structure of a discussion and aim to facilitate thoughtful collaboration as a mapping and debate site.⁶⁷ Our brief field scan indicates that among the developer communities, civic tech entities are the ones most frequently announcing the development and testing of various machine learning and AI systems. Nevertheless, among this group of entities, there are some actors historically more prone to technosolutionist visions of social problems. How much do these initiatives diverge from or connect with the communities they are targeting? How much community oversight exists? Are some questions to be asked.

Another initiative we looked into is the Open for Good Alliance⁶⁸, a network composed of several research institutions and civil society organizations, as well as Unesco and the Canadian International Development Research Centre (IDRC)⁶⁹, operating under the secretariat of the German Development Cooperation initiative FAIR Forward – Artificial Intelligence for All⁷⁰.

65 People's Powered. Accessed May 28, 2024. <https://www.peoplepowered.org/digital-participation>

66 <https://www.insights.us/civic-engagement>; <https://www.konveio.com/why-konveio>; & <https://ethelo.com/>

67 Kialo Edu. Accessed May 28, 2024. <https://www.kialo-edu.com/>

68 Open For Good. Accessed May 28, 2024. <https://www.openforgood.info/#Start>

69 Accessed May 28, 2024. <https://idrc-crdi.ca/en>

70 Accessed May 28, 2024. <https://www.bmz-digital.global/en/overview-of-initiatives/fair-forward/>

It presents itself as an “Inclusive AI commons with localized data ” and focuses on localized AI training data in Africa and Asia. Considering these are initiatives of development agencies from the Global Minority targeting Global Majority countries, a deeper investigation is critical to understand how much these initiatives actually promote data stewardship and critical thinking about AI, besides operating under the framework of “commons”.

Networks of feminist and decolonial researchers are producing groundbreaking knowledge everywhere

Beyond NGOs and research centers, independent researchers often conduct groundbreaking or important research on AI. In this sense, fellowships, such as Mozilla Fellowship and AI Accountability Fellowships from the Pulitzer Center, and academic networks, such as the Feminist AI Research Network, have been important spaces for knowledge sharing in the field. The significance of such initiatives could be even greater if people were allowed to participate in speaking their local languages. However, this is quite rare, as English tends to be imposed as the primary language in AI fellowships, given that most of them are organized by entities from the Global North.

Particularly in the USA, in recent years we have seen prominent researchers, after gaining visibility from their groundbreaking academic work, go on to establish organizations specifically focused on AI. These organizations have become international references in producing critical thinking about these emerging technologies. That was the case of Kate Crawford (AI Now Institute), Safiya Noble (Center for Critical Internet Inquiry), Timnit Gebru (Distributed Artificial Intelligence Research Institute—DAIR), Joy Boulamwini (Algorithmic Justice League), among others inspiring thinkers.

In other regions, particularly in Latin America and some African countries, language barriers either prevent or add an extra burden for critical thinkers trying to expose their work both locally and internationally. This aspect hinders international visibility of these productions and, consequently, impoverishes international debates that could benefit from contributions in-

formed by a wider diversity of situated knowledge. Additionally, it poses challenges to the sustainability and continuity of the work.

In all the regions mapped, many prominent critical thinkers are affiliated with research centers at Universities, with varying levels of access to resources depending on the country. However, it is worth noting that they are less commonly affiliated with computer science schools. Fortunately, in some Universities this trend is slowly being reversed as certain computer science, mathematics, engineering and design schools, particularly inspired by their students and peers from the Global Majority, are increasingly recognizing the intersections of their field with ethics, politics and other social sciences. This is a synergy to be incentivized.

Indigenous epistemologies, cosmologies and practices towards decolonial intelligences and data sovereignty

Indigenous peoples, culturally much more acquainted with demanding collective rights and practicing communal ways of living, are leading examples of demanding data sovereignty. Data sovereignty initiatives are a first step for data cooperatives and a strategy to navigate openness without subjugation to data colonization. Some examples are the First Nations Principles of Ownership, Control, Access, and Possession (OCAP)⁷¹ in Canada and the Māori Data Sovereignty Network⁷², the Te Mana Raraunga.

Furthermore, indigenous communities in Aotearoa, Australia, North America, and the Pacific have developed position papers on Indigenous Protocols and Artificial Intelligence protocols centering on indigenous cosmologies and epistemologies.⁷³ Others, such as Amelia Winger-Bearskin, have developed the Wampum.Codes, an ethical framework for software development

71 FNIGC. "The First Nations Principles of OCAP" Accessed May 28, 2024. <https://fnigc.ca/>

72 Te Mana Raraunga. Accessed May 28, 2024. <https://www.temanararaunga.maori.nz/>

73 Indigenous AI. Accessed May 28, 2024. <https://www.indigenous-ai.net/position-paper/>; <https://www.indigenous-ai.net/>; <https://indigenoussinai.org/>

based on indigenous values of co-creation.

On the other hand, there are indigenous communities, particularly in the Amazon region, whose primary focus has been defending their lives and territories in a historical fight for survival against violent land grabbing. Now, Big Tech companies also play a role in the violent displacement of these communities. Investigative journalists have reported that gold illegally extracted from indigenous lands in Brazil have been used by Apple, Google, Microsoft and Amazon.⁷⁴ And more recently, Starlink antennas have been apprehended in zones of illegal mining in the Amazon.⁷⁵ What are the consequences of continuing a model of tech development that threatens the protection of indigenous people and lands? Over centuries, indigenous people have fought to maintain their lands, culture and knowledge systems⁷⁶, which today are also recognized as having a crucial role in combating climate change, as they are agents of environmental conservation.⁷⁷ For historical reparation and planetary regeneration, demands from indigenous movements should be centered and recognized as the core front in building future imaginaries. Therefore, there is a need to strengthen deeper alliances across movements to reverse the current trajectory of tech development, which is depleting and polluting the Earth and threatening the existence of historically vulnerabilized communities.

74 Daniel Camargos, "Exclusivo: Apple, Google, Microsoft e Amazon usaram ouro ilegal de terras indígenas brasileiras," Repórter Brasil, Jul 25, 2022, <https://reporterbrasil.org.br/2022/07/exclusivo-apple-google-microsoft-e-amazon-usaram-ouro-ilegal-de-terras-indigenas-brasileiras/>

75 André Duchiate, Carina Barbosa. "Starlink: Elon Musk's internet bring euphoria and fear to the Amazon." Sumauma. November, 2023. Available at: <https://sumauma.com/en/starlink-a-internet-de-elon-musk-leva-euforia-e-medo-para-a-amazonia/>

76 UN Climate Change. "How indigenous people enrich climate action". August, 2022. Available at <https://unfccc.int/news/how-indigenous-peoples-enrich-climate-action>

77 Unesco. "Local and Indigenous Knowledge Systems and Climate Change." December, 2023. Available at <https://www.unesco.org/en/climate-change/links>

Artists and journalists are creatively experimenting with alternative usages of AI systems

Other cosmovisions and Imagination are key for developing alternatives. In this sense, artists and journalists have also been experimenting with doing more hands-on work on AI. That trend has increased, particularly with the widespread use of tools available theoretically for free or at minimal cost, and the availability of processing power in tools such as Google Colab, which supports Python libraries.

In Brazil, Nucleo Jornalismo was the first media outlet to publish its policy on using AI systems in the newsroom. It states, “For Núcleo, artificial intelligence products are tools—like our laptops or pens—and should be used as such, not as substitutes for our professionals.”⁷⁸ They have been using AI as the subject of their investigations,⁷⁹ but also as tools to produce articles or analyze data.

There has also been increased experimentation with AI tools in art and creative fields, which eventually leads to valuable insights in practice and informs the agenda of social movements. That was the case of Joy Boulamwini⁸⁰, who, while working on an artistic project using facial recognition, discovered that the software did not recognize her face as a black woman. This moment became a starting point for her work on facial recognition and gender biases. Another example is Adam Harvey, who is currently working on VFrame, a project that “develops and deploys computer vision technologies for analyzing conflict zone media using neural networks powered by synthetic data.”⁸¹ Feminist organizations also use art to work in speculative futures, like the Oracle for

78 Spagnuolo, Sérgio. Núcleo publica política de uso de inteligência artificial. Núcleo. May 18, 2023. <https://nucleo.jor.br/institucional/2023-05-18-nucleo-politica-uso-inteligencia-artificial/>

79 Núcleo. Accessed May 28, 2024. <https://nucleo.jor.br/inteligencia-artificial/>

80 Her academic research on facial recognition and gender and race was actually kickstarted by an artistic project in which while playing with facial recognition masks she found out that her face isn't being recognized by the system due to the color of her skin.

81 VFRAME. Accessed May 28, 2024. <https://vframe.io>

Transfeminist Futures,⁸² and several initiatives inspired by Afrofuturism, like the Afrofeminist Data Future, a project by the NGO named Pollicy,⁸³ from Uganda. Fostering these experiments to test and deploy tools for artistic, investigative, and communications purposes, as well as exercises for envisioning speculative futures, might initially seem disconnected with political agendas, but are actually at the forefront of connecting tech policy debates with everyone's daily experiences and wishes for better futures.

Initiatives focused on including women, Latinas, LGBTQIA+ and black people in tech are starting to incorporate AI

The field scan also resulted in initiatives focused on including women, Latinas, and black and LGBTQIA+ people in tech; some specifically mention and give training on AI. Some examples were Queer in AI⁸⁴, Black in AI⁸⁵, Data 4 Black Lives⁸⁶, Women in Big Data⁸⁷, Pretalab,⁸⁸ Laboratoria⁸⁹. Big Tech companies, seeking to comply with diversity policies, also sponsor initiatives that sometimes could be seen as pink, black and queerwashing.

AI focused on people with disabilities

The only project we found that uses and develops AI for the inclusion of people with disabilities is Seeing AI, a Microsoft Corporation project designed for

82 The Oracle for Transfeminist Technologies. Accessed May 28, 2024. transfeministech.org

83 Pollicy. Accessed May 28, 2024. <https://pollicy.org/>

84 Queer in AI. Accessed May 29, 2024. <https://www.queerintai.com/>

85 Black in AI. Accessed May 29, 2024. <https://blackinai.github.io/>

86 Data for Black Lives. Accessed May 29, 2024. <https://d4bl.org/>

87 Women in Big Data. Accessed May 29, 2024. <https://www.womeninbigdata.org/>

88 <https://www.pretalab.com/>

89 Laboratoria. Accessed May 29, 2024. <https://www.laboratoria.la/br>

visually impaired individuals.⁹⁰ This application can be downloaded and used free of charge and offers support in several languages, including Italian, Turkish, Dutch, German, French, Japanese, and Spanish. In addition to describing texts and documents generally, it reads barcodes and recognizes currencies, identifies friends, and describes people around you, including their emotions. It also features an experimental function to describe the surrounding scene. Despite being developed by one of the largest Big Tech companies, we believe it is essential to underscore the significance of using AI to facilitate the inclusion of people with disabilities and that these systems should be distributed for free. We understand that these complex systems require significant resources and time for their development and access to large databases. Therefore, it is important to emphasize that there is a gap in the use of AI for including people with disabilities in all fields, even within the private sector, where we see the development of AI systems geared toward services.

AI “cleaners” or “ghost” workers are unionizing

Early in May 2023, we observed the establishment of the first Union of workers from AI systems. It happened in Kenya, where over 150 workers employed by third-party companies outsourcing services for AI tools used by Meta, Byte-dance, and OpenAI formed the African Content Moderators Union.⁹¹ In search of fair work conditions, initiatives like that should be fostered globally; otherwise, Big Tech companies would simply move their outsourcing contracts to other countries where labor is less protected and/or organized.

⁹⁰ Seeing AI. Accessed May 28, 2024. <https://www.microsoft.com/en-us/ai/seeing-ai>

⁹¹ Perrigo, Billy. “150 African Workers for ChatGPT, TikTok and Facebook Vote to Unionize at Landmark Nairobi Meeting”. Time. May 28, 2024. <https://time.com/6275995/chatgpt-facebook-african-workers-union/>

There is a growing AI audit sector that could benefit from community building and knowledge sharing

In our field scan, we found organizations specialized in auditing AI systems, including in the private sector, within government regulatory offices, specialized investigative journalist units, independent researchers, specific civil society organizations, and multi-stakeholder alliances. Below, is a list of organizations we mapped working on auditing AI systems that also fit into the lenses of this scan”.⁹²

⁹² The field scan by AJL has a wider list of auditors and is available here: <https://arxiv.org/pdf/2310.02521>

List of organizations that work on auditing AI systems

Entity	Sector	Region
AI Ethics Lab	Private Sector	North America
AI Media Africa	Private Sector	Africa
AI Risk and Vulnerability Alliance (ARVA/AVID)	Civil Society	North America
AI Transparency Institute	Civil Society	Europe
Algorithm Audit	Civil Society	Europe
Algorithmic Justice League	Civil Society	North America
Cantellus Group	Private Sector	North America
DataGénero	Civil Society	LAC (Latin America and the Caribbeans)
Distributed AI Research Institute - DAIR	Civil Society	North America
Eticas Consulting	Private Sector	Europe
For Humanity	Civil Society	North America
Partnership on AI	Academic; Private Sector; Civil Society; Media Channel/Publication	North America
Responsible Artificial Intelligence Institute (RAI Institute)	Academic; Gov; Private Sector	North America
ThoughtWorks	Private Sector	North America

Most are US-based, and some of them operate under open-source practices. It is the case of the AI Vulnerability Database (AVID), which presents itself as “the first open-source, extensible knowledge base of failures across the AI Ecosystem (e.g., data sets, models, systems).”⁹³ It is also important to mention the Algorithmic Justice League’s study “Who Audits the Auditors,” which underscores the lack of a shared understanding of what algorithmic audits mean “might actually exacerbate instead of mitigate bias or harm.”⁹⁴

Potential allies distributed into three initial pillars of an AI Commons pipeline

Analyzing the groups of potential allies, we discovered that these entities have different approaches that could be seen as complementary ways of advancing an alternative AI ecosystem. Bellow, we have grouped them according to three raw categories that we believe should be pillars of an initial exercise to envision the work of different actors into an AI Commons pipeline:

⁹³ AI Vulnerability Database. Accessed May 28, 2024. <https://avidml.org/>

⁹⁴ See Costanza-Chock, Sasha, Emma Harvey, Inioluwa Deborah Raji, Martha Czernuszenko, and Joy Buolamwini. “Who Audits the Auditors? Recommendations from a field scan of the algorithmic auditing ecosystem.” Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency. 2022. <https://arxiv.org/pdf/2310.02521.pdf>

Possible Allies for an “AI Commons” Pipeline

Tech Developers and Data Practitioners	Decolonial Imaginaries and Practices	AI Governance
Free and Open Source Software Movement	Feminists and Decolonial Thinkers and Practitioners	Digital Rights Organizations
Civic Tech and Open Data Communities	Indigenous and Decolonial Tech	Academics
Data and Platform Cooperatives	Women, Latines, LGBTQIA+, Black in Tech Communities	Auditors
Open Science Community	AI and People with Disabilities	AI “Cleaners” and Ghost Workers Unionizing
Artists and Journalists	Youth	

Analyzing the scheme, most of the groups whose work is related to decolonial imaginaries and practices around AI are collectives of the Global Majority (in pink). While groups whose main focus is on AI Governance, particularly the AI auditors, are mostly from the USA, except when the issue is labor rights or gender. There is a **need to build bridges and connect the visions of groups from the Global Majority with those who are working on AI governance**. Tech developers are more balanced in terms of north and south, but while groups listed from Latin America are typically collectives or single organizations, in the north there are bigger networks of free software communities. We need to build bridges across these communities of tech developers. We also need developers to connect with **the groups who work on decolonial imaginaries, who are also more likely to talk about the socio-environmental impacts of AI systems.**”

The most inspiring tech developer groups and organizations are advancing an AI Common, which has some regional balance and represents both Global Majority and Minority groups. While groups listed from Latin America are collectives or single organizations, we found bigger networks of free software communities, like Hugging Face and Mozilla.ai, based in the Global Minority. Once again, it's critical to build bridges across these communities of tech developers and also among the other groups, with a particular focus on leveraging the groups working on decolonial imaginaries, which are more likely to talk about AI considering also its socio-environmental issues, actually many of them are doing work on extractivism, like Cooperativa Sulá Batsú,⁹⁵ the project Tech Cartographies,⁹⁶ Tierra Comun Network,⁹⁷ Masakhane⁹⁸ and Indigenous Protocol and AI Working Group,⁹⁹ among others.

95 <https://sulabatsu.com/>

96 <https://www.cartografiasdainternet.org/>

97 <https://www.tierracomun.net/>

98 <https://www.masakhane.io/>

99 <https://www.indigenous-ai.net/>

Recommendations & Next Steps

1. Towards co-design and Development of AI Commons Ecosystem and Infrastructure

- *What would AI commons ecosystem and infrastructures look like? There is a need to collectively co-design elements of an AI commons infrastructure (from protocols and devices to data, development tools, models, workers, auditing, and evaluation) and envision how that could work so we can have a comprehensive approach to boost initiatives that would like to play a role on it.
- *Organize convening series to help foster communities of practice with value-aligned groups.
- *Foster conversations and initiatives within Open Source, Open Data and Open Science communities to help envision and support core infrastructure for an AI Commons ecosystem..
- *Support data cooperatives as well as emerging and existing AI workers' labor unions to flourish and coordinate with alike movements in other territories.

Imagining Decolonial Tech

Foster research and increase the visibility of initiatives that operate in the intersection of decolonial feminist practices, environmental justice and technologies.

Foster decolonial alliances between the fields of tech and human rights and indigenous rights.

Support and increase the outreach of initiatives surfacing alternative imaginaries on technology development.

Bridging gaps

Host fellowships for people from the Global Majority to develop their projects and attend convenings.

Towards Co-design and Development of AI Commons Infrastructure

- * Collectively **re-design the AI pipeline** from an extractives to a post-capitalism perspective.
- * Collectively **envision what an AI Commons infrastructure** would look like.
- * Support **convenings to increase a community of practice** with the most aligned organizations.
- * Support **groups** from the global majority who are imagining and building decolonial tech.
- * Support **data and platform cooperatives**.
- * Support the Unions of **AI workers**

Imagining Decolonial Tech

Amplify the visibility of intersectional initiatives on decolonial feminist practices, environmental technologies.

Foster alliances with indigenous movements.

Support initiatives on alternative imaginaries.

Bridging the Gaps

Host fellowships for people from the Global Majority to develop their project and attend convening.

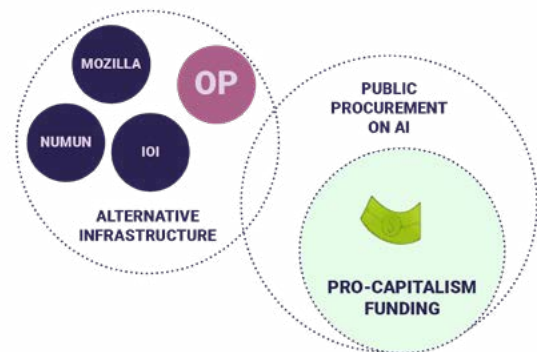
2. Funding Strategies

- * Advocate for public procurement for AI Commons infrastructure and require AI related public funding outcomes to be open and delivered back into the communities.
- * Foster conversations and exchange of empirical experiences about alternative feminist economies for building sustainable models of tech development that are not dependent on Big Tech funding and resources.
- * Funders supporting the public interest technology initiatives (and related approaches) should consider supporting the emergence of an AI Commons ecosystem.
- * Foster the outreach of research about the impact of Big Tech money in academia and civil society.

Funding Estrategies

- * Integrate support for AI Commons
- * Communicate with other funding initiatives that are focused on building alternative tech infrastructure
- * Advocate for public procurement for AI commons infrastructure MOZILLA and that distributed public funding requires outcomes to be open
- * Foster **exchange of experiences about alternative feminist 101 economies for building sustainable models of tech development**
- * Foster the outreach of **research about the impact of big tech money** in academia and civil society working on AI

Funding Tech Infrastructure



3. Tech and socio-environmental justice

- * Investigate where we are in terms of the development of electronics that are more sustainable and ecologic and foster research in that area.
- * Be careful in supporting projects working on the AI4D and AI for Climate Change framing, it is critical to ensure that these initiatives are not causing more harm to the communities and territories they are targeting than actually reaching solutions. Design Justice Principles could be a good filter for that.

Tech and Socio-Environmental Justice

Investigate and support the development stage of most **sustainable and ecological electronics**;

Be careful about supporting tricky narratives from projects working on the AI4D and AI for Climate Change, particularly ensuring they are not causing more harm to communities and territories

What are key future research areas?

This field scan opened a lot of room to think about future research areas to be explored. Here is a list of a few questions that could be addressed deeply:

Deep Dives on who is doing what?

- *Add interviews and other methods to deepen understanding beyond desk research, particularly in-depth interviews and research about indigenous people, feminist, antiracist, queer, and co-operative initiatives that are focused on AI.
- *Further, break down the AI pipeline and correlate it to the initiatives mapped to understand who is doing what and start collectively co-designing a vision of an AI common ecosystem.
- *Have a deeper understanding of the actors operating in specific fields, such as AI and Health and AI and Climate Change.

Who is missing?

- *This research also needs to be complemented with a field scan focused on Asia, which partially has a completely different history of access to technology and could provide new insights.
- *Understand from empirical experiences how to foster that more organizations from the Global Majority engage in the field.

Funding

- *A focused scan on what governments are doing at various levels (municipal, state, federal, intergovernmental).
- *Research focused on who is thinking and developing technologies and all the funding systems behind AI.

Sustainability

- *What are the limitations faced by groups working to redistribute infrastructure?
- *Are there people working on chemistry and materials science focused on developing ICTs that are less extractive, more organic, reusable and respectful to the environment?

Future Research Questions

WHO'S MISSING?	FUNDING	SUSTAINABILITY
<ul style="list-style-type: none">How to foster that more organizations from the Global Majority engage in the field?What would a field scan focused on Asia look like?How would in-depth interviews with a few local groups enhance our database?	<ul style="list-style-type: none">What are the limitations of the AI funding system and can we craft alternative models?What governments are doing at various levels towards digital sovereignty in AI?Support public interest infrastructure for training of foundational models	<ul style="list-style-type: none">What are the limitations faced by groups working to redistribute infrastructure?Who is working on materials science focused on developing technology that is less extractive, more organic, reusable and respectful to the environment tech?

Appendices

1. Methodological Description

We used desk research (internet search and review of relevant networks and associations of organizations), supplemented by our team’s extensive experience in the tech and human rights space. Key information sources are as follows:

Our networks of trust

We departed from reviewing participants from networks of civil society, academia and developers that we already knew were approaching AI from a perspective compatible with our field scan.

Analyzing other field scans:

- a) AJL’s AI Auditors Field Scan (189 entities)¹⁰⁰
- b) Digital Participation Platforms Research¹⁰¹ -

¹⁰⁰ Database available here: <https://arxiv.org/pdf/2310.02521>

¹⁰¹ Database available here: <https://www.peoplepowered.org/digital-participation>.

Analyzing the list of the global top 100 projects¹⁰² from the International Research Center on Artificial Intelligence under the auspices of UNESCO (IRCAI)

- * Since 2021, the IRCAI ranks 100 AI-based projects aimed to solve problems related to the 2030 United Nations Sustainable Development Goals (SDGs). The IRCAI Global Top 100 is a list based on a call of proposals in all continents, and in four evaluation criterias:
- * Scientific maturity and use of AI tools - including proof of concept or research paper showing its rarity and potential.
- * Impact on relevant UN SDGs.
- * Market readiness - market need, sustainability of the project and team characteristics.
- * Ethical impact and ramifications - alignment with transparency, privacy, accountability, or the AI technical and environmental sustainability.

For the 2022 rank, the Institute highlighted ethical and rights-based awareness of the applicants' in their AI projects. The results were classified in: Outstanding Projects (10 projects), Excellent Projects (20 projects), Promising Projects (21 projects) and Early Stage Projects (48 projects). In general, the 2022 IRCAI Top 100 Report highlights a resurgence of project clusters related to 'Biodiversity, Environmental Social Governance (ESG) and Impact Investment, and Policy and Regulation' (p. iii).

During the elaboration of the AI Commons Spreadsheet, Coding Rights' team analyzed the 2022 IRCAI Global Top 100. Out of the 100, we found 10

¹⁰² "IRCAI Global Top 100". IRCAI. Accessed May 28, 2024. <https://ircai.org/global-top-100-outstanding-projects/results/>

very interesting projects that were incorporated into the spreadsheet. Six of them were from Civil Society organizations, 4 were from the Academic sector, 4 were from the private sector, and one is a World Health Organization (WHO) project.

Analyzing the composition of participants in the networks of researchers and civil society organizations focused on AI

We also dug into some networks of researchers who are focused on AI, and then searched for the organizations they were connected to, particularly the FAIR Network.

Civic Tech Field Guide (209 organizations)

We analyzed all the organizations that appeared under the filter “artificial intelligence” in “All Categories”, in the following link:

<https://directory.civictech.guide/listing-category/artificial-intelligence>.

Consulting ChatGPT with the following prompts:

List 50 organizations, startups and companies that develop AI systems or applications for [X]:

Where X=

- *against police violence;
- *antiracist perspective;
- *bias and discrimination;
- *commons perspective;
- *decolonization;

- *environmental justice;
- *feminist perspective;
- *fight disinformation and/or misinformation;
- *for algorithmic transparency;
- *LGBTQIA+ rights;
- *post-capitalism;
- *social change

List 30 organizations, startups and companies from [Z] that [X]

Where Z=

- *Latin America and Caribbean
- *África

The active research on ChatGPT, although useful for identifying a few organizations that escaped the methodology mentioned in the items above, presented many inconsistencies. Firstly, many of the 'organizations' named by ChatGPT are not real organizations. Secondly, ChatGPT search results are stochastic, in other words the same search with the same terms or even with the same prompt, made twice just a few seconds apart, show different results. Also, the search for the term "commons" in the prompt has come out with very problematic results, as it mainly gathers Big Tech companies and projects. That attests for the use of such a term in a broader sense, and points to its use in a deviated narrative, usually embedded in corporate social responsibility projects, that are not within a post-capitalist or even progressive perspective. Therefore, ChatGPT came out with a lot of entities that ended up not being added to the scan. On the other hand, the search for

terms such as “post capitalism” and “decolonization” for instance, came out with interesting entities, with organizations with a very radical perspective of work in their fields, even related to tech, but almost none of them had any work on AI. ChatGPT’s answer to those searches were similar to that: “Developing AI systems or applications for ‘post-capitalism’ is a relatively niche area, and there may not be 50 organizations explicitly focused on this concept. However, you can find organizations that align with the principles of economic and social systems that may be associated with “post-capitalism.” Keep in mind that this list may include organizations with broader social or economic goals”.

