

Not My A.I.

A feminist framework to challenge algorithmic decision-making systems deployed by the public sector

Introduction

In the hype of A.I., we are observing a world where States are increasingly adopting algorithmic decision-making systems as a magic wand that promises to “solve” social, economic, environmental, and political problems. As if machines were able to erase societal biases and structural inequalities, instead of just automating them, we are gradually observing States using narratives around tech innovation for spending public resources in questionable ways, sharing sensitive citizen data with private companies and, ultimately, dismissing any attempt of a collective, democratic and transparent response to core societal challenges.

Latin America is not an exception. Throughout the region, governments are in the stage of testing and piloting a wide variety of Artificial Intelligence systems to deploy public services. In an initial mapping exercise¹, we could identify 5 trending areas: Education; Judicial System; Policing; Public Health, and Social Benefits. Among such trends, we decided to focus our case-based analysis on A.I. projects applied in the overlap of education and distribution of social benefits. What are the feminist and human rights implications of using algorithmic decision-making to determine the provision of social benefits and other public services? As machines are designed and operated by the very same humans in power, these artificial intelligence systems are mostly likely to cause or propagate harm and discrimination based on gender and all its intersectionalities of race, class, sexuality, age, territoriality, therefore, posing worrisome trends that should be of concern to feminist movements.

Taking Latin America as a point of departure, as it is where we both as researchers and feminists originate from, this investigation seeks to contribute to the development of an anti-colonial feminist framework to question Artificial Intelligence systems that are being deployed by the public sector, particularly focused social welfare programs. Our ultimate goal is to develop arguments that enable us to build bridges for advocacy with different human rights groups, particularly feminists and LGBTIQ + groups, especially in Latin America, but not only. We hope that, in collectivity, we can foster conversations towards an overarching anti-colonial feminist critique to address governmental trends of adopting A.I. systems that are not only disregarding human rights implications but are also, once

¹ <https://notmy.ai/mapping-of-projects/>

again, replicating heteropatriarchy, white supremacy and colonialism through neoliberal technosolutist narratives exported to the world by Silicon Valley.

This article is the result of a research work done by the authors in close collaboration with the Feminist Research Network - FIRN² and, currently, composes the core structure of notmy.ai platform, which will continue to be developed³ with the goal to increase critical thinking through a series of conversations around the development of a feminist toolkit to question algorithmic decisions-making systems that are being deployed by the public sector. Going beyond the liberal approach of Human Rights, feminist theories, and practices, builds political structures for us to imagine other worlds based on solidarity, equity, and social-environmental justice. As Artificial Intelligence is gradually pervading several issues that are in the core of feminist agendas, supporting feminist movements to understand the development of these emerging technologies becomes key to be able to fight against automatized social injustice and to imagine feminist futures. Therefore, this report seeks to bring the feminist movements closer to the social and political problems that many algorithmic decisions carry with them. To reach such end, we start by posing three research questions:

- What are the leading causes of governments implementing artificial intelligence and other methods of algorithmic decision-making processes in Latin America to address issues of public services?
- What are the critical implications of such technologies in the enforcement of gender equality, cultural diversity, sexual and reproductive rights?
- How can we learn from feminist theories to provide guidelines to balance the power dynamic enforced by the usages of A.I. and other algorithmic decision-making systems?

To address them, this text is divided into four sessions. We start by addressing the overarching question of this work: Why A.I. is a feminist issue? An inquiry that we want to address empirically, departing from an initial mapping of A.I. systems being deployed by the public sector in Chile, Brazil, Argentina, Colombia, Mexico, and Uruguay to determine the provision of social benefits and other public services, but actually, are more likely to be causing harm and challenging feminist agendas.

² We are thankful to all the FIRN network for all the feedback received through meetings, emails and workshops, and we also wish to express enormous gratitude to Tigest Hussen, Namita Aavriti Malhotra, Jac sm Kee and Catalina Alzate, who read and commented extensively and in detail on different versions of this research. Cheers to all the feminists around the globe that have been engaging in online and offline sessions of the Oracle for Transfeminist Technologies, so far in English, Portuguese and Spanish. Let's keep the imagination flowing! And a special thanks to all Latin American colleagues who considered addressing the questionnaire and/or sent links to help us map A.I. systems being deployed in the region. Thanks to the Tech and Human Rights fellows and staff at the Carr Center for Human Rights Policy from Harvard Kennedy School, who also read and commented on a presentation about one version of this research. Love to all the Coding Rights team that keeps hacking patriarchy everyday and to Sasha Costanza-Chock for jamming in the invention of the Oracle for Transfeminist Tech. Lots of respect to all the multitude of other inspiring antiracist and decolonial feminists who seeded our path with fierce thoughts.

³ Including a version of this writing in Portuguese and Spanish to be launched soon to engage more people in these conversations.

Then we make a review of critical thinking around Artificial Intelligence used in the so-called Digital Welfare Systems, towards drafting a feminist framework to grasp what would constitute an Oppressive A.I. Then we dig deeper into two cases in which A.I. is being deployed in distribution of social benefits and educational systems in the region: the Childhood Alert System in Chile and a system to predict school dropouts and teenage pregnancy developed for Microsoft Azure in partnership with governments from Argentina and Brazil. These case analyses will be based on an anti-colonial feminist approach, and not only human rights, as one of the starting points to interrogate the algorithmic decisions and will serve as a test of the Oppressive A.I. framework, drafted as empirical feminist categories to understand power dynamics behind automated decision-making systems. This report ends with considerations about the next steps of notmy.ai towards using Oppressive A.I. framework as a first tool to expand the conversations about feminist implications in the deployment of A.I. systems. And, on a more positive side, hacking oppressions by envisioning transfeminist technologies through feminist values that were brainstormed in a series of workshops conducted with the Oracle for Transfeminist Technologies. Therefore, foreseeing the power of conversations that playfully envision speculative transfeminist technologies also as a tool to take us from imagination to action.

Why A.I. is a feminist issue?

Many States around the world are increasingly using algorithmic decision-making tools to determine the distribution of goods and services, including education, public health services, policing, and housing, among others. Referring to the term “Digital Welfare States”, the former United Nations Rapporteur on Extreme Poverty and Human Rights, Philip Alston, has criticized the phenomenon in which “systems of social protection and assistance are increasingly driven by digital data and technologies that are used to automate, predict, identify, surveil, detect, target and punish.” (Alston, 20190). Particularly within the US, where some of these projects have been developed further than pilot phases, confronted with the evidence on bias and harm caused by automated decisions, Artificial Intelligence programs deployed in public services have faced criticism on several fronts (e.j. O’Neil, C. (2016); Eubanks, V. (2018); Noble, S. U. (2018); Benjamin, R. (2019). More recently, governments in Latin America are also following this hype, sometimes with the support of US companies that are using the region as a laboratory of ideas which, perhaps fearing criticism in their home countries, are not even tested in the US first.

With the **goal to build a case-based anti-colonial feminist critique to question these systems from perspectives that go beyond well put criticisms from the Global North**, through desk research and a [questionnaire](#)⁴ distributed

⁴ This short questionnaire remains open, if you got to know a project that you think should be included in the mapping, please, send a link or further information accessing this form: <https://notmy.ai/do-you-know-other-projects/>. You can do it anonymously or if you wish, be credited in the mapping of that project after we double check the information.

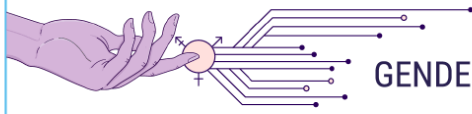
across digital rights networks in the region, **we have mapped projects where algorithmic decision-making systems are being deployed by governments with likely harmful implications on gender equality and all its intersectionalities.** As Tendayi Achiume, Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance, poses in the report [“Racial discrimination and emerging digital technologies”](#), databases used in these systems are the product of human design and can be biased in various ways, potentially leading to – intentional or unintentional – discrimination or exclusion of certain populations, in particular, minorities as based on racial, ethnic, religious and gender identity. (Tendayi, 2020).

As a result, until April 2021, we have mapped [24 cases](#) with likely harmful implications on gender equality and all its intersectionalities [in Chile, Brazil, Argentina, Colombia, Mexico, and Uruguay](#), which we were able to classify into 5 categories: judicial system, education, policing, social benefits, and public health. Several of them are in an early stage of deployment or developed as pilots.

It is important to highlight that this mapping was not intended to present an overall and comprehensive record of all the existing cases of A.I. deployed by the public sector in Latam that might have such harmful implications. That is a particularly difficult task, mostly if we consider the lack of transparency about these projects that exists in many of our countries and very common press announcements full of shiny promises that are then difficult to follow through other channels. Reason why we left an open form at [notmy.ai](#)⁵ to continue collecting information on new projects and possible harms. Nevertheless, above anything, our mapping had a less ambitious goal which was to point general trends about the areas of application and collect evidence that shows that A.I. in the public sector is already a reality in the region which demands critical opinion and awareness raising.

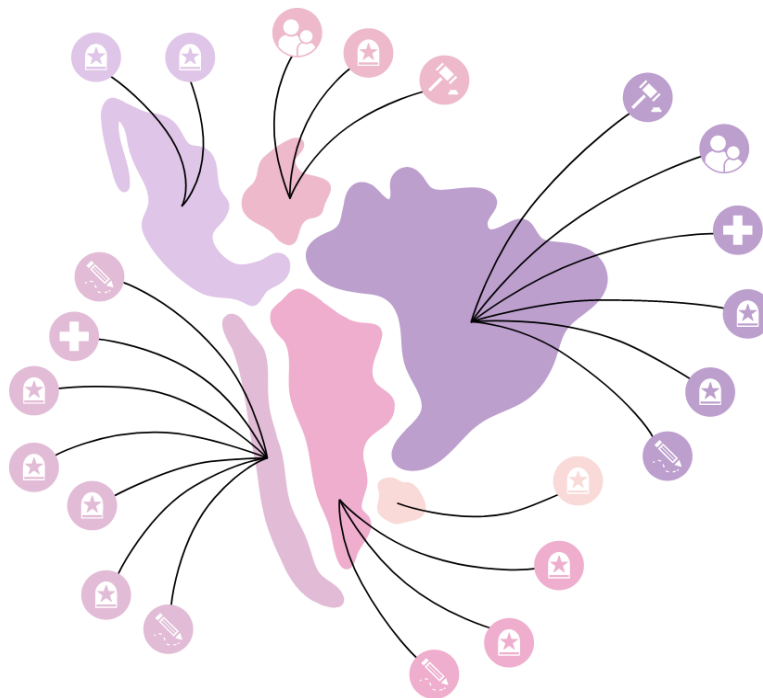
⁵ <https://notmy.ai/do-you-know-other-projects/> - soon available in Spanish and Portuguese

A.I. PROJECTS IN THE PUBLIC SECTOR IN LATIN AMERICA



BIAS AND DISCRIMINATION ON GENDER AND ITS INTERSECTIONALITIES

PROJECTS BY AREA OF APPLICATION



The database of these cases is accessible here: <https://notmy.ai/mapping-of-projects/>

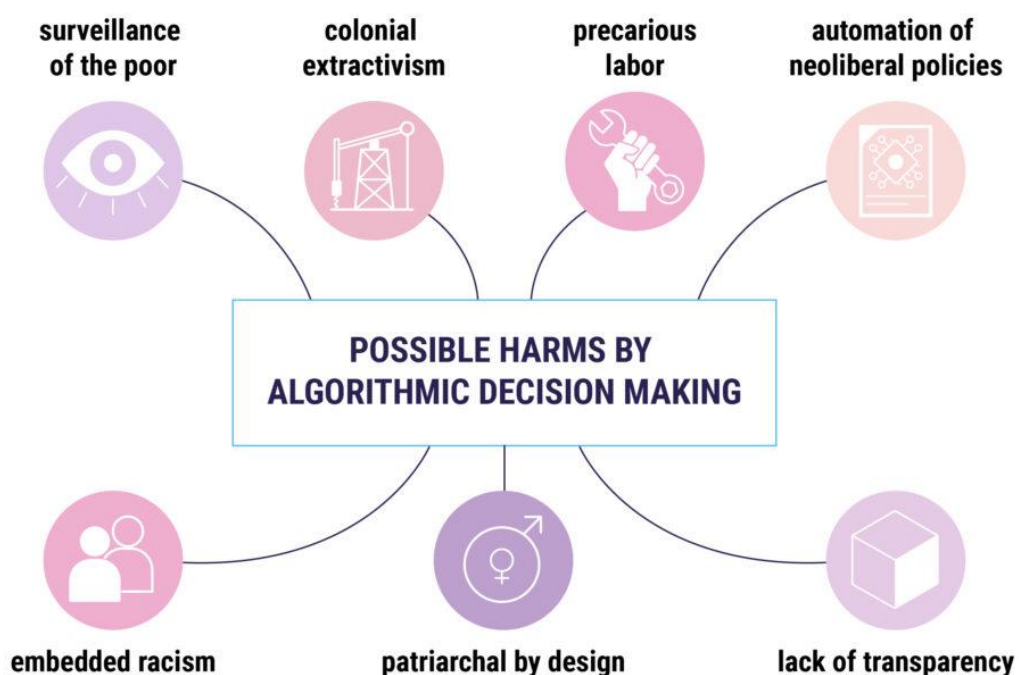
It should be recognized that part of the technical community has made various attempts to mathematically define “**fairness**”, and thus meet a demonstrable standard on the matter. Likewise, several organizations, both private and public, have undertaken efforts to define ethical standards for A.I. The very useful data visualization “[Principled Artificial Intelligence](#)” (Berkman Klein, 2020) shows the diversity of ethical and human rights-based frameworks that emerged from different sectors from 2016 onwards with the goal to guide the development and use of A.I. systems. The study shows “[a growing consensus around eight key thematic trends: privacy, accountability, safety and security, transparency and explainability, fairness and non-discrimination, human control of technology, professional responsibility and promotion of human values.](#)” Nevertheless, as we can see from that list, **none of this consensus is driven by a debate on power dynamics or automation of oppressions.** Instead of asking how to develop and deploy an A.I. system, shouldn’t we be asking first “Why to build it?”, “Is it

really needed?”, “On whose request?”, “Who profits?”, “Who loses from the deployment of a particular A.I. system?”, “Is it oppressing a particular group of the population?”, “Should it even be developed or deployed at all?”

We believe these are some of the guiding questions to be asked when considering an overarching question: **How does a feminist framework to question A.I. systems would look like?** Trying to depart from empirical experiences, so far, we have endured a task to analyze possible harms by A.I. [programs deployed in the areas of education and social benefits in Chile, Argentina, and Brazil](#). As a result, based on both our bibliographic review and our case-based analysis, we are gradually expanding an empirically tested case-based framework to serve as one of the instruments for our feminist anti-colonial toolkit to help us to pose structural questions about whether a given governmental A.I. system may incur possible harm to several feminist agendas.

Oppressive A.I. - empirical feminist categories to understand power dynamics behind automated decision-making systems

Based on an overall bibliographical review of criticisms that are being posed to A.I. systems deployed by the public sector, and also based on our findings from the two case-based analysis, the scheme below is an attempt to create a work-in-progress framework of analysis that goes beyond the discourses of fairness, ethical or human-centric A.I. and seeks a holistic structure that considers power relations to question the idea of deploying A.I. systems in several helms of the public sector:



Next, we will briefly explain and refer to bibliography review that substantiated that framework and, afterwards, apply it to our case-based analysis from pilot experiments in three countries from Latin America:

A. Surveillance of the poor: turning poverty and vulnerability into machine-readable data

Analyzing the case of the USA, Virginia Eubanks shows how the usage of A.I. systems are subjected to a long tradition of institutions that manage poverty and that seek through these **innovations to adapt and continue their urge to contain, monitor, and punish the poor**. She mentions that most of these programs take advantage of the [tradition of State surveillance on vulnerable populations \(Eubanks, 2018\)](#), which is to turn their existence into data, and now use algorithms to determine the provision of social benefits by the States.

In a similar take, Linnet Tylor, in her article ["What is data justice?" \(TYLOR, 2017\)](#), says that "granular data sources enable authorities to infer people's movements, activities, and behavior, not without having ethical, political, and practical implications of how the public and private sector view and treat people", this is even more challenging in cases of low-income portions of the population, since the ability of authorities to collect accurate statistical data about them has been previously limited, but now is targeted by regressive classifications systems that profile, judge, punish and surveil. Therefore, [turning poverty and vulnerability into machine-readable data, with real consequences on the lives and livelihoods of the citizens involved. \(Masiero, & Das, 2019\)](#). Likewise, Cathy O'Neil (2016), also analyzing the usages of AI in the United States, asserts that many **A.I. systems "tend to punish the poor"**, meaning it is increasingly common for wealthy people to benefit from personal interactions, while data from the poor are processed by machines making decisions about their rights.

This becomes even more relevant when we consider that social class has a powerful gender component. It is common for public policies to speak of the "feminization of poverty." In fact, the IV United Nations Conference on Women, held in Beijing in 1995, stated that 70% of poor people in the world were women. It is never enough to mention that the reasons why poverty affects women more commonly have nothing to do with biological reasons, but with structures of social inequality that make it more difficult for women to overcome poverty, such as access to education and employment (Aguilar, 2011). In the case of poverty management programs through big data and Artificial Intelligence systems, it is **crucial to look at how poor women are particularly subject to surveillance by the States and how this leads to the reproduction of economic and gender inequalities** (Castro & López, 2021).

B. Embedded racism

For the UN Special Rapporteur, E. Tandayi (2020), emerging digital technologies should also be understood as **capable of creating and maintaining racial and ethnic exclusion in systemic or structural terms**. This is also what tech researchers on race and A.I. in the US, to name a few, [Ruha Benjamin](#), [Joy Buolamwini](#), [Timnit Gebru](#), and [Safiya Noble](#) highlight in their case studies. Likewise, focused in Latin America, researchers [Nina da Hora](#), [Tarcisio Silva](#), and [Pablo Nunes](#), all from Brazil, have pointed similar findings while investigating facial recognition technologies, police violence, criminal (in)justice system and other oppressions. Ruha Benjamin (2019) points out how the use of new technologies reflects and reproduces the existing racial injustices in US society, even though they are promoted and perceived as more objective or progressive than the discriminatory systems of an earlier era. In this sense, for this author, when A.I. seeks to determine how much people of all classes deserve opportunities, the designers of these technologies build a **digital caste system** structured on existing racial discrimination.

From technology development itself, in her research, Noble (2018) demonstrates how commercial search engines such as Google not only mediate but are mediated by a series of commercial imperatives that, in turn, are supported by both economic and information policies that end up endorsing the commodification of women's identities. In this case, she exposes this by analyzing a series of Google searches where black women end up being sexualized by the contextual information the search engine throws up (e.g., linking them to wild and sexual women).

A game change study by Buolamwini & Gebru (2018) analyzed three commercial facial recognition systems that include the ability to classify faces by gender. They found out that the systems exhibit higher error rates for darker-skinned women than for any other group, with the lowest error rates for light-skinned men. The authors attribute these race and gender biases to the composition of the data sets used to train these systems, which were overwhelmingly composed of lighter-skinned male-appearing subjects.

C. Patriarchal by Design: sexism, compulsory heteronormativity, and gender binarism

Many [A.I. systems work by sorting people into a binary view of gender](#), as well as by reinforcing outdated stereotypes of gender and sexual orientation. Nevertheless, a [recent study co-authored by DeepMind senior staff scientist Shakir Mohamed](#) exposes how the discussion about **algorithmic fairness has omitted sexual orientation and gender identity**, with concrete impacts on "censorship, language, online safety, health, and employment" leading to discrimination and exclusion of LGBT+ people.

Inspired by Buolamwini & Gebru (2018), [Silva & Varon \(2021\)](#) researched how the deployment of facial recognition technologies affect transgender people in its interseccionalities of race and territoriality, particularly when used by governmental authorities to authenticate identities to ensure access to public services. In an empirical analysis of Brazilian cases, the researchers could point out that there is little transparency about the accuracy rate (tracking false positives or false negatives), and that, when there is any data, there is no disaggregation considering the demographics of error rates. Meaning that, even though tech audits show that in the current state of the art these technologies fail on particular demographics, the government deploying them as a means to access public services is not keeping track of who is getting excluded and discriminated against.

In the case of Venezuela, amid a sustained humanitarian crisis, the State has implemented biometric systems to control the acquisition of basic necessities, resulting in several complaints of discrimination against foreigners and transgender people. According to Díaz Hernández (2021), legislation to protect transgender people is practically nonexistent. They are not allowed recognition of their identity, which makes this technology resignify the value of their bodies “and turns them into invalid bodies, which therefore remain on the margins of the system and the margins of society” (p.12).

West, Whittaker & Crawford (2019) argue that the diversity crisis in industry and bias issues in A.I. systems (particularly race and gender) are interrelated aspects of the same problem. Researchers commonly examined these issues in isolation in the past, but mounting evidence shows that they are closely intertwined. However, they caution that, despite all the evidence on the need for diversity in technology fields, both in academia and industry, these indicators have stagnated.

D. Colonial extractivism of data bodies and territories

Authors like [Couldry and Mejias \(2018\)](#) y [Shoshana Zuboff \(2019\)](#) review this current state of capitalism where the production and **extraction of personal data naturalize the colonial appropriation of life** in general. To achieve this, a series of ideological processes operate where, on the one hand, personal data is treated as raw material, naturally disposable for the expropriation of capital and, on the other, where corporations are considered the only ones capable of processing and, therefore, appropriate the data.

Regarding colonialism and Artificial Intelligence, [Mohamed et al. \(2020\)](#) examine how **coloniality presents itself in algorithmic systems through institutionalized “algorithmic oppression”** (the unjust subordination of one social group at the expense of the privilege of another), **“algorithmic exploitation”** (ways in which institutional actors and corporations take advantage of often already marginalized people for the asymmetric benefit of these industries) and **“algorithmic dispossession”** (centralization of power in the few and the dispossession of many), in an analysis that seeks to highlight the **historical continuities of power relations**.

Crawford (2021) calls for a more comprehensive view of Artificial Intelligence as a critical way to understand that these systems depend on exploitation: on the one hand, of energy and mineral resources, of the cheap labor, and, in addition, of our data at scale. In other words, A.I. is an extractive industry. Even though neither Google, nor Grammarly spell checkers recognize the word “extractivism”.

All these systems are energy-intensive and heavily dependent on minerals, sometimes, extracted from areas where there is. In Latin America alone, we have the lithium triangle within Argentina, Bolivia, and Chile, as well as several deposits of 3TG minerals (tin, tungsten, tantalum and gold) in the Amazon region, all minerals used in cutting edge electronic devices. As Danae Tapia and Paz Pena poses, [digital communications are built upon exploitation, even though, “sociotechnical analyses of the ecological impact of digital technologies are almost non-existent in the hegemonic human rights community working in the digital context.” \(Tapia & Pena, 2021\)](#) And, even beyond ecological impact, Camila Nobrega and Joana Varon also expose, [the green economy narratives altogether with technosolutionisms are “threatening multiple forms of existence, of historical uses and collective management of territories”](#), not by chance the authors found out that [Alphabet Inc., Google parent company is exploiting 3TG minerals in regions of the Amazon where there is a land conflict with indigenous people \(Nobrega & Varon, 2021\)](#).

E. Automation of neoliberal policies

As [Payal Arora \(2016\)](#) frames it, discourses around **big data have an overwhelmingly positive connotation thanks to the neoliberal idea that the exploitation for profit of the poor’s data by private companies will only benefit the population**. From an economic point of view, digital welfare states are deeply intertwined with capitalist market logic and, particularly, with neoliberal doctrines that seek deep reductions in the general welfare budget, including the number of beneficiaries, the elimination of some services, the introduction of demanding and intrusive forms of conditionality of benefits, to the point that - as Alston has stated (2019) - individuals do not see themselves as subjects of rights but as service applicants ([Alston, 2019](#), [Masiero and Das, 2019](#)). In this sense, it is interesting to see that A.I. systems, in their neoliberal efforts to target public resources, also classify who the poor subject is through automated mechanisms of exclusion and inclusion (López, 2020).

F. Precarious Labour

Particularly focused on artificial intelligence and the algorithms of Big Tech companies, anthropologist Mary Gray and computer scientist Siddharth Suri point out the [“ghost work”](#) or invisible labor that powers digital technologies. Labeling images, cleaning databases are all manual work very often performed in unsavory working conditions “to make the internet seem smart”. Communalities of these jobs are very precarious working conditions, normally marked by overwork, underpaid, with no social benefits or stability, very different from the

work conditions of the creators of such systems (Crawford, 2021). Who takes care of your database? As always, care work is not recognized as valuable work.

G. Lack of Transparency

[According to AINOW \(2018\)](#), when government agencies adopt algorithmic tools without adequate **transparency, accountability, and external oversight**, their use can threaten civil liberties and exacerbate existing problems within government agencies. Along the same lines, OECD ([Berryhill et al., 2019](#)) postulates that transparency [on the part of] is strategic to foster public trust in the tool.

More critical views comment on the neoliberal approach when transparency depends on the responsibility of individuals, as they do not have the time or the desire to commit to more significant forms of transparency and consent online ([Annany & Crawford, 2018](#)). Thus, government intermediaries with special understanding and independence should play a role here ([Brevini & Pasquale, 2020](#)). Furthermore, Annany & Crawford (2018) suggest that what the **current vision of transparency in A.I. does it fetishize the object of technology**, without understanding that technology is an assembly of human and non-human actors, therefore, to understand the operation of A.I. it is necessary to go beyond looking at the mere object. A.I. is not an object, it is an assemblage of values, peoples, places, processes, all that need to be in the open.

--

Are these 7 categories enough to think about a feminist framework to question A.I. systems? In the next chapter we will focus on using this proposed framework for analyzing two cases from Latin America: the Childhood Alert System - SAN, in Chile and Plataforma Tecnológica de Intervención Social, from Argentina, exported to Brazil under the name Projeto Horus. While much of the analysis and framework of critique on A.I. is located in the US (where many of A.I. projects have surpassed the pilot phase), this work - while building from important insights made especially by researchers and activists who questions discrimination of A.I. systems in the U.S. - has a Latin America as an empirical field, which, we believe, is also an important contribution to deepen and broaden knowledge and engagement in this area, also as a decolonial endeavour.

II. Case studies

1. A Childhood Alert System (SAN, in its Spanish acronym, for Sistema Alerta Niñez), Chile⁶

General description⁷

The [Childhood Alert System \(SAN\)](#) is a software that provides complimentary input to data collected in Chile by the so-called Local Childhood Offices (OLN, in its Spanish acronym, for Oficinas Locales de la Niñez), in order to support decision-making by managers of these OLN's when offering support to children and their families, considering the individual needs of each child and adolescent (NNA, in its Spanish acronym, for Niños, Niñas y Adolescentes), as well as family and environmental factors.

Several requests for public information submitted to the government have made it clear that SAN is one additional tool – and not the main one – available for these managers to prioritize cases identified through on-site alerts, that is, those generated and verified by people who interact directly with children and adolescents (NNA) and their families. However, as Derechos Digitales has pointed out in [its report](#)⁸ on the system, the A.I. system was first designed, and then came the institutionality with the creation of the OLN's.

The software is based on the use of Predictive Risk Modeling (PRM). Its purpose is to identify children and adolescents (NNA) who are at risk of violation of rights and the families that require support to enhance their role of providing child protection, **based on administrative data, detecting a set of individual, family, environmental, and peer conditions that tend to occur when there is a high risk of violation of rights.**

The idea is that the tool is run periodically (for example, once a month) through the list of children and adolescents (NNA) in the databases of the Ministry of Social Development and Family (MDSF, in its Spanish acronym, for Ministerio de Desarrollo Social y Familia). The tool scores each individual. The score can then be used to prioritize NNA and families already known to the software, such as those identified by professionals who interact with NNA and their families in the social protection system, case of the workers at Chile Grows With You (ChCC, in its Spanish acronym, for Chile [Crece Contigo](#)). In addition, NNA who obtain a higher risk score and who were not yet in contact with other State programs could be proactively contacted. According to the government, prioritization has a preventive purpose, under the responsibility of the Local Childhood Office, which will provide support and prevention programs beneficial to the NNA and their family.

⁶ This case analysis is also available here:

<https://notmy.ai/2021/05/03/case-study-a-childhood-alert-system-sistema-alerta-ninez-san-chile/>

⁷ More information in the Annex I

⁸ Available here: https://ia.derechosdigitales.org/wp-content/uploads/2021/03/CPC_informe_Chile.pdf

To identify NNA in these circumstances, it was necessary to train the model **through the analysis of NNA who had already been subject to violation of their rights, to then study their life course and identify the family conditions experienced by these NNA before the violations occurred.** Children and adolescents facing these conditions at present would be those who may – potentially – need support to mitigate the risk factors surrounding them.

Who develops SAN pilot?

The pilot and the related consultancy were developed in partnership between two universities: the Centre for Social Data Analytics (CSDA) at the Auckland University of Technology (AUT Ventures Limited) and the Public Innovation Laboratory (GobLab) at the Universidad Adolfo Ibáñez.

The pilot -that was developed with public funds through a public tender process- was awarded to these two universities after the public announcement made in March 2018 by Chilean President Sebastián Piñera about the Great National Agreement for Children, which included among its measures the creation of an early warning system, called “Childhood Alert”. The director of GobLab invited professor Rhema Vaithianathan, co-director of the Centre for Social Data Analytics, to Chile, and in Santiago, they had a [series of meetings with authorities](#).⁹

SAN audits

According to government information, “after a few months of operation of the Childhood Alert Pilot System, the need to start an algorithmic audit was identified in order to study and evaluate the hypothetical existence of biases, both in the data used for training the model and the characteristics used for the production model”. The results would imply implementing model enhancement. This algorithmic audit was financed by the Inter-American Development Bank (IDB) and performed by the Spanish consultancy Eticas Research Consulting. The Chilean government rejected the possibility of learning about the results of this audit.

International controversies over the system

In this section, we refer specifically to the controversies faced by CSDA and their projects:

- **Allegheny Family Screening Tool (AFST), USA**

Allegheny Family Screening Tool (AFST), is a predictive risk-modeling tool designed to assist with child welfare call-screening decisions in Allegheny County, in Pennsylvania, USA. The Centre for Social Data Analytics developed the algorithm.

⁹ <https://csda.aut.ac.nz/news-and-events/2018/csda-shares-child-welfare-predictive-risk-modelling-work-in-chile>

In her book, “Automating Inequality: How High-Tech Tools Profile, Police, and Punish the Poor” (2018), Dr. Virginia Eubanks refers to AFST as an example of a system that oversamples households that rely on public assistance programs and, thus, tend to over-surveillance and over-punish poor and working-class families.

A report delivered to Chile by the Centre for Social Data Analytics analyzes the AFST case and refers to the controversy with Eubanks as follows: “One exception to the general trend of positive reports was a book by Virginia Eubanks (2018). She was concerned that AFST stood for poverty profiling, that is, that it would culminate in more children being removed from their families just because they were poor. The County disputed her claims and posted a point-by-point rebuttal on their website”.

Effectively, after this public controversy with the county, Eubanks declared: “My larger point is not that we must wait to entirely eradicate poverty before we try to improve Children, Youth and Family Services, but that the AFST only has access to data collected on families using public services, not on those that access private resources for parenting support. Because this will result in higher risk scores and more scrutiny of poor and working-class families, I believe the system is unjust and discriminatory”.¹⁰

- *Vulnerable Children PRM, New Zealand*

Initiative undertaken by the New Zealand government between 2011 and 2015 to develop an algorithm that would allow child protection services to predict future child maltreatment at the point of birth and to pre-empt it before it occurs (Bellanyne, 2019). Two models were created, but neither was implemented. Version 1 was intended for use with families who registered in the public welfare system. Version 2 was for use when a child was born. The project was led by Dr Rhema Vaithianathan, then of the University of Auckland, now at CSDA, in order to build a Predictive Risk Model to be tested retrospectively for children born between 2003 and 2006. The goal was to check the model's predictions against what had actually happened to the children. It was an observational study purely. No policies changed and no frontline worker would have accessed the prediction scores.

¹¹

There is no clear information on why system implementation was halted, but apparently, the Minister responsible had ethical reservations that the observational study might identify children at risk but not really address any case (Bellanyne, 2019).

¹⁰ <https://virginia-eubanks.com/2018/02/16/a-response-to-allegheeny-county-dhs/>

¹¹

https://www.auckland.ac.nz/en/news/2020/04/21/sowing-human-values-into-AI.html?utm_campaign=Social&utm_content=1589921761&utm_medium=social&utm_source=facebook

But the discomfort with the project also related to its substance. Anne Tolley, then the Social Development Minister, told Stuff in 2015:¹² "Where it goes from there is another big ethical question. Because God knows, do we really want people with clipboards knocking on people's doors and saying: 'hello, I'm from the Government, I'm here to help because your children are going to end up in prison?' I just can't see that happening." Tolley's position was made clear by her note on the briefing paper, "Not on my watch. Children are not lab rats."

Controversies over SAN within Chile

As soon as the creation of this system was publicly announced, civil society groups working for children's rights stated that, in addition to surveillance, the system "implied the imposition of a certain form of sociocultural normativity", also "socially validating forms of stigmatization, discrimination and even criminalization of cultural diversity existing in Chile". This particularly affected indigenous peoples, migrants, and low-income people, and ignored that growing cultural diversity "demanded greater sensitivity, visibility, and respect, as well as the inclusion of culturally relevant approaches to public policies." In this sense, Francisca Valverde, from the group of organizations Bloque por la Infancia and executive director of Asociación Chilena Pro Naciones Unidas (ACHNU), argues¹³ that this type of system stigmatizes poor children and does not emphasize the protection of children and adolescents in different territories, including those of higher social classes.

Analysis

In its public addresses, the Chilean government highlights "Childhood Alert" as a neoliberal targeting mechanism of social programs rather than an artificial intelligence software or system. The reason for that may be strategic, given the controversy that systems similar to SAN have faced both in the United States and in New Zealand. This makes a lot of sense when government explanatory documents, provided pursuant to transparency legislation, repeatedly emphasize that "Childhood Alert" is one more source of information for Local Childhood Offices, but that the final decision is made by humans. In fact, it should be noted that this last remark is one of the recommendations made by CSDA (New Zealand) and GobLab (Chile), which analyzed the A.I. systems from the USA and New Zealand referred to above (some of which were developed by part of the CSDA team).

However, it seems difficult to prove with evidence – at this point where it is still a recent model – that the results produced by an A.I. system specially designed for the occasion are not considered as a neutral fact by social workers. On the one hand, there may be pressures for them to do so, due to the investment made in the system

¹² <https://www.stuff.co.nz/national/health/70647353/children-not-lab-rats--anne-tolley-intervenes-in-child-abuse-experiment>

¹³

<https://radio.uchile.cl/2019/01/29/alerta-infancia-el-software-que-expone-los-datos-personales-de-ninos-y-ninas-en-riesgo-social/>

and because the Local Childhood Offices were designed considering this technological tool. Also, because it has not yet been studied how the system interacts with professionals and whether the alleged neutrality of digital technologies ends up influencing final decision-making. How do humans work alongside A.I. in social welfare related schemes? That is perhaps an interesting research question to explore in the near future.

In any case, the risk score generated by "Childhood Alert" seems to serve well the logic of neoliberal public policies that Chile has implemented, especially with regard to children, from the dictatorship of Augusto Pinochet (1973-1990) onwards.

Context of Neoliberal policies in the Latin American and the dangers of amplifying them through automatization

In order to bring some context, it is important to refer to the fact that there were two waves of neo-liberalization recognized in Latin America. The first was through several coups d'état in the Southern Cone in the 1970s, with a more orthodox model implementation. The second big wave came about due to the debt crisis in countries such as Peru, Argentina, and Brazil. With this, economic policies were strongly constrained by the structural adjustments of international financial institutions such as the IMF and the World Bank (Rodriguez, 2020).

An essential part of the neoliberal reconfiguration of the relationship between society and the state is seen with social services. The reforms to social protection systems in Latin America have been particularly strong as they are part of the economic adjustment policies demanded by international financial institutions, aimed at privatization, decentralization, targeting, and emergency social programs (funds) (Draibe, 1994). In Chile, for example, social policy was transformed into services conditioned by relationships between individuals and private service provider companies that left behind the articulation of diverse collective social subjects that directly confronted the states (Taylor, 2003).

Some of the criticisms of these measures are that they introduce precariousness and discontinuity to social policy, tending to make it welfarist, its arbitrariness, the stigmatization of beneficiaries and, according to Sônia M. Draibe, "the deep segmentation that can be caused in the citizenry, through the duplication of social policy: a policy for the poor (in general a poor policy) next to a policy for the rich (in general, rich, sophisticated and often also financed with public resources)" (1994, p.194-195). So, we should ask, how technology automates and grants the degree of technological resolutions to ideological decisions based on neoliberal principles? (Alston, 2019).

The vulnerable childhood approach is a classic neoliberal take, enforced by entities like the World Bank in the region, and it comes from the **idea of poverty as an individual problem (not a systemic one)** and caseworkers as protectors of people "at-risk" (Muñoz Arce, 2018). Like in the case of SAN, the **State approach to childhood is permeated by discourses that conceive linear models of individual development, which consider almost exclusively the individual psychic dimension, without inserting it into governmental processes that produce**

consequences in other equally relevant dimensions of the children; that is, childhood is seen not as a subject capable of affecting the social fabric but as an object that must be protected from the adult world (Schöngut, 2017). This can be seen, for example, in the use of the word “symptom” (usually related to some disease) by the undersecretary of children, when referring to SAN:

"We are implementing a warning system that is called "Childhood Alert", which will aim to forecast the first symptoms that, for example, may lead a child to drop out of school, have their first contact with drugs or commit a crime for the first time, and thus start understanding directly what is happening to that child, to their family. All of this will be done through information crossing, which will allow us to determine which children are in the alert phase or at risk".

Once again, **vulnerability is associated with the concept of “social disease” (determined by school dropout, drugs, and crime)** and there are symptoms of this disease that focus not only on the NNA but also on their environment. Artificial Intelligence, then, becomes an automated diagnostic tool that allows “ordering the queue” (another metaphor frequently used by the authorities to refer to A.I.) to make more efficient the programs offered by the State to prevent social diseases. In this sense, **instead of offering a system focused on social guarantees, the Chilean State automates targeting decisions, which is a classic mechanism of neoliberal policies**, especially for children, in Chile (Cubillos, 2019).

In this sense, SAN is actually an excellent opportunity to reflect if these systems let the State arrive earlier and better prepared to help children and adolescents on social risk or, in the end, it simply only follows the neoliberal principle of controlling social expenditure making more “efficient” individual interventions.

Thus, **what SAN promises to seek, further than scoring children and adolescents, is to reduce spending through what is considered increased “effectiveness” of programmatic interventions, offering neoliberal technocratization as the foundation for automated decisions rendered by the latest technology. But effective for whom?**

This case study shows that its design and use by the State respond to a continuum of neoliberal policies that have abounded in Latin America, to varying degrees, during the last 40 years ([López, 2020](#)). On the one hand, it uses instruments that automate and grant the degree of technological resolutions to ideological decisions: resources' focalization (Alston, 2019). And, in this case, it is mainly about using big data to produce a more detailed category of poor children and adolescents ([López, 2020](#)) and, a step further, automate their social risk determination.

In continuity with neoliberal logic, SAN responds to the technocratization of public policies. By the way, this instrument has been designed and deployed without an open conversation in the country. The degrees of

participation in their design and the process's transparency are doubtful, which results in an impact on democracy itself. In particular, the same **people affected by these systems, that is, poor children, adolescents, and their families, are not even the subject of consultation** since they are not recognized as interested parties. This is even more concerning if we consider that the protests that took Chilean streets were exactly against neoliberal policies deployed in the region in the last years, a public outcry that has resulted in a new constitutional process for Chile.

Ironically, there is even **evidence that the use of A.I. to predict possible vulnerabilities not only does not work well in the social care of children and adolescents (Clayton et al., 2020) but also ends up being quite costly for the States**, at least in the firsts stages, contradictorily even to the neoliberal doctrine (Bright et al. 2019). And, even worse, the hasty adoption of these neoliberal instruments is also worrisome because it is **hard to dissolve them once adopted** (Eubanks, 2018).

Even so, **it is interesting to watch how authorities take advantage of the innovative side of technologies to present as revolutionary an instrument that, on the contrary, perpetuates a policy that in Chile is over 40 years old.** The undersecretary of Social Evaluation, Alejandra Candia, said:¹⁴

"This innovative preventive targeting instrument will allow the Government to change the course of life of hundreds of children at risk of vulnerability, allowing us to reach those who require help in time to avoid complex situations that often end up being irreversible for them and also for their families"(Undersecretary of Social Evaluation, Alejandra Candia). 1

Developers excuse: "service acceptability" as a shield against social accountability and "social license" as an excuse for data extractivism

In contrast to the discourse of the government, there is that of the developers of the SAN pilot, carried out in the academic environment by two specialized centers working on data at universities in New Zealand and Chile. This aspect may be the reason for none of the typical language of technology, such as innovation, modernity, and the future, to show their conclusions.

Despite this absence, the developers repeatedly state that A.I. is a desirable technology: although they make reference to the possibilities for improvement and the need to always check for quality, at no time they question it as technology nor as a valid tool to support public policies. More than responding to criticism over the system, they recommend preparing in advance for such criticism and having answers ready at hand.

In this sense, their reasoning in the conclusions and recommendations focuses on stressing the concept of "service acceptability" by society. On the one hand, this suggests that developers understand that technologies

¹⁴ <https://noticias.uai.cl/modelos-predictivos-de-riesgo-para-proteger-a-la-infancia/>

are part of socio-technical systems ("Even the best-designed services in the world might not be successful if families do not adopt them", in Vaithianathan, 2019). And secondly - and as we indicated earlier - this may be due to the developers' experience with criticism over the implementation of other systems they have worked on.

The **"service acceptability"** is not a strictly technological concept, but a communicational one. Basically, it consists of improving communication to present the PRM to society. **It is not about introducing an enhancement to the system or not implementing it at all. Rather, it is about taking advantage of the ability of humans to communicatively induce and seduce non-human systems. In other words, "service acceptability" is a human factor that, in a way, shields the machine from providing social accountability.**

Thus, for example, many of the pilot developers' recommendations revolve around training humans to improve communication about the PRM. First, they suggest that presentation of the system to the affected community must be formulated in a "positive" way, based on the deliberate idea of, on the one hand, hiding that what the PRM precisely provides is a classification of social risk:

"MDSF2 should also consider carefully how these families are contacted. Prepare guidelines for front-line Ministry workers that balance the need for transparency with the desire to have families contacted with a positive formulation, rather than a deficiency-based approach that emphasizes risk factors in the life of the family." (Vaithianathan et al, 2019)

And, on the other hand, it is recommended that the Ministry identify areas where they need for social benefits forces citizens to accept the implementation of the PRM without further questioning:

"It is our recommendation that the MDSF focuses on the pilot with newborns, as this is a time of high need, but also a time when families are open to accepting additional support."
(Vaithianathan et al, 2019).

The "service acceptability" as a shield against the social accountability of the non-human system becomes clear when hypothetical problems of "inequality" of the system are addressed, specifically with regard to "race" and socioeconomic status. On this last aspect, instead of seeing it as a circle of stigmatization of poverty – as has been the criticism of Eubanks (2018) –, they consider its potential to discriminate against richer children and adolescents (although they do not interact with the system). In any case, human shields must bear the costs of software bias: "This indicates that front-line personnel should be more attentive to assessing risk factors among the wealthiest families that have been alerted" (Vaithianathan et al, 2019).

Moreover, it is strange how developers so easily dismiss the racial bias in SAN. Developers have stated: **"In the Chilean context, frankly, we do not see similar concerns regarding race"** (Vaithianathan et al, 2019). It is difficult to understand the reason for this statement. On the one hand, as we have already mentioned in this document, public criticism from organizations close to children's rights specifically points out racial discrimination as an

issue. In addition, there is abundant literature on racism and xenophobia in Chile (Tijoux, 2016). Likewise, they do not even examine the problem of bias from the point of view of the development of the system, and not only from the data collection. These omissions really cause concern, especially considering the evidence on how dangerous the racist idea of believing that algorithms do not see skin color may be (Benjamin, 2019).

Therefore, although there is the notion of technologies as a sociotechnical system, A.I.'s conception of an objective process prevails, both in data collection and processing. This is concerning in several ways. First, because states and developers pay little attention to bias in social class and race, repeating the racial idea of colorblindness (Noble, 2018; Benjamin, 2019). Second, technology's errors in the risk prediction amongst children and adolescents are expected to be shielded by human intervention, giving the machine some impunity to continue working. However, there are no field studies in the case we have examined that consider how caseworkers who interact with the machine deal with "automation bias" referred to the higher valorization of automated information than our own experiences (Bridle, 2018).

Furthermore, the lack of qualified consent to use citizen's data that is submitted to get or not State support or not even informing them about this predictive social risk ranking opens a whole discussion about the ethics of these systems that have not been resolved. Another argument defended by the developers is the "social license" for the use of personal data, which would consist of society legitimating the use of such data. In their opinion, the criticism directed against the Chilean personal data protection law (enacted in a time when Internet use was not massive) may predispose SAN to criticism. However, in addition to complying with the low standards of Chilean legislation, what would be important for the operation of Artificial Intelligence systems would be the "social license":

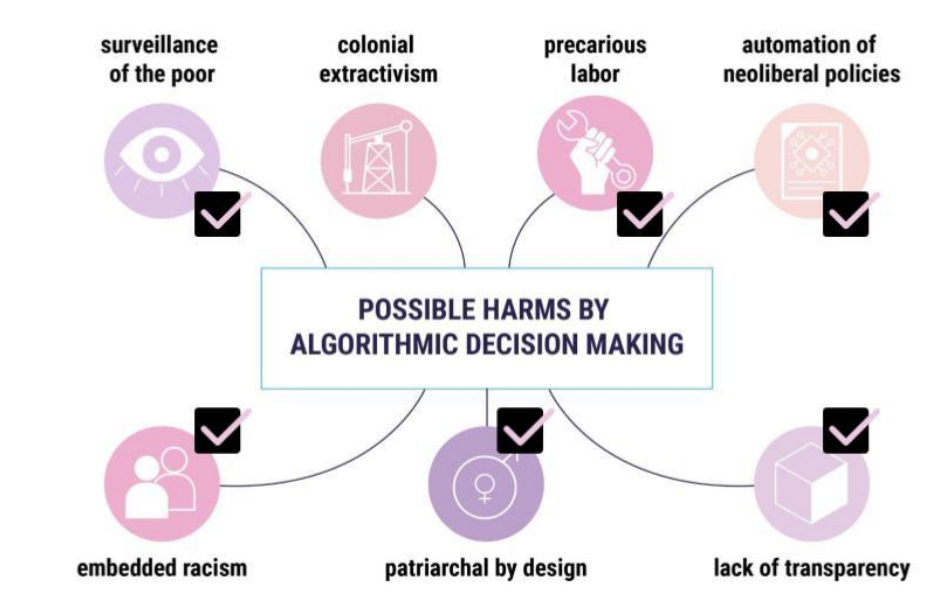
"Fortunately, in Chile, the problem of obtaining a social license is somewhat simpler as it is the citizens' custom to have their data processed to stratify their socioeconomic status for the purpose of targeting social benefits. This practice has had a strong social license due to the benefits it brings to families in need." (Vaithianathan et al, 2019).

In the context of **data extractivism required for Artificial Intelligence, it is interesting that developers use the concept of "social license," which was popularized by the United Nations in 2004¹⁵ to encourage companies (mainly in the extractive sectors) to involve the indigenous peoples in their projects and to obtain their "consent" before implementing them.** Consent has to be free, prior, and informed. It is worth asking whether in SAN there is proper consent and, therefore, "social license," considering that the use of personal data from "beneficiaries" goes hand in hand with State support, there's not any explicit mention of risk rankings of vulnerability when the State look for consent form

¹⁵ <https://www.sostenibilidad.com/desarrollo-sostenible/licencia-social-operar-dialogo-requisito-empresarial/>

families (Valderrama, 2021), and when its developers seem to believe that “custom” of providing personal data to the State is a good source of legitimacy.

As a result of this critical analysis, we urge feminists to examine SAN and likewise social-risking models at least in two aspects: first, **to question if big data and Artificial Intelligence could ever reflect structural elements that influence the risk of vulnerability and social inequalities of our societies, or is just a way to objectivize the responsibility of individuals through their data trajectory at the State.** And second, how SAN and these social-risk models are a continuation of the idea of data disembodiment, where technologies artificially abstract bodies, identities, and interactions from social contexts to obscure their operation as a tool for social control, **aggravating its consequences on social inequalities** (Monahan, 2019). Referring back to our framework of Oppressive A.I. we can say, at least as far we have dug into it, SAN ticks most of the boxes:



Oppressive A.I. Framework by Joana Varon and Paz Peña. Design by Clarote for notmy.ai for Coding Rights

2. Technological Platform for Social Intervention -Argentina / Projeto Horus - Brazil¹⁶

Let's say you have access to a database with information from 12,000 women between 10 and 19 years old, who are inhabitants of some poor province of South America. Datasets include age, neighborhood, ethnicity, country of origin, educational level of the household head, physical and mental disabilities, number of people sharing a

¹⁶ The extract of the argentinian component of this case study was developed and originally publish in the article "Decolonize AI: a feminist critique towards data and social justice", written by the same authors of this report for the publication Giswatch: Artificial Intelligence Human Rights 2019, available at: <https://www.giswatch.org/node/6203>

house, and the presence or absence of hot water in their services. What conclusions would you extract from such a database? Or, maybe the question should be: Is it even desirable to have any conclusion at all? Sometimes, and sadly more often than ever, just the possibility to extract sheer amounts of data is a good enough excuse to “make them talk” and, worst of all, take decisions based on that. The database described above is real. And it is used by public authorities, initially in the municipality of Salta, Argentina, piloted since 2015, under the name “*Plataforma Tecnológica de Intervención Social*” (“Technological Platform for Social Intervention”). Theoretically, the goal of the system was to prevent school dropouts and teenage pregnancy.

Who develops it?

The project started as a partnership with the Ministry of Early Childhood from the Province of Salta, Argentina, and Microsoft. The system is presented by a representative of both as a very accurate, almost magic, predictive tool: “[Intelligent algorithms allow identifying characteristics in people that could end up in any of these problems and warn the government to work in their prevention](#)”, said¹⁷ Microsoft Azure’s representative, the machine learning system of the program. “[With technology, based on name, surname, and address, you can predict five or six years ahead which girl, future teenager, is 86% predestined to have a teenage pregnancy](#)”, declared¹⁸ Juan Manuel Urtubey, a conservative politician and governor of Salta by the time of the pilot deployment.

System Audits and other criticisms

But to predict... and even to predestine someone for pregnancy is not that simple, not for mathematicians, neither for fortune-tellers. Not for less, criticism about the “*Plataforma Tecnológica de Intervención Social*” started to arise. [Some called the system a lie, an intelligence that does not think, a hallucination, and a risk for poor women’s and children’s sensitive data](#).¹⁹ A very [complete technical analysis about its failures](#) was published by the *Laboratorio de Inteligencia Artificial Aplicada* (LIAA, 2018) from the University of Buenos Aires. According to LIAA, which analyzed the [methodology posted on GitHub by Microsoft engineer](#),²⁰ the results were falsely oversized due to statistical errors in the methodology; the database is biased; it does not take into account the sensitivities of reporting unwanted pregnancy, and therefore data collected is inadequate to make any future prediction and it is likely to include pregnancies from a particular sector of society than others, stigmatizing the poor. According to Luciana Ferrer, a researcher from LIAA:

“If you are assuming that those who answered the surveys said the truth about being pregnant before or at the moment of the survey, our data is likely to be inaccurate. On such a delicate topic as teenage pregnancy, it would

¹⁷

<http://www.news.microsoft.com/es-xl/avanza-el-uso-de-la-inteligencia-artificial-en-la-argentina-con-experiencias-en-el-sector-publico-privado-y-ongs/>

¹⁸ <http://www.pagina12.com.ar/109080-la-inteligencia-que-no-piensa>

¹⁹ <http://www.pagina12.com.ar/109080-la-inteligencia-que-no-piensa>

²⁰

<https://github.com/facundod/case-studies/blob/master/Prediccion%20de%20Embarazo%20Adolescente%20con%20Machine%20Learning.md>

be cautious to assume that many teenage girls do not feel safe to tell the truth, about all if they have or want to have an abortion (in Argentina, just like in several countries in Latin America, access to [safe abortion was only legalized in cases of rape or when the mother's health was at risk. The situation in the country changed only in December 2020, when a historical bill was approved legalizing freedom of choice to interrupt pregnancy to the 14th week](#)).²¹ This implies that using these data, we will be learning from biased information, influenced by the fact that in some privileged sectors of the population there was to access safe abortion and in others the issue is a taboo, therefore, it is something that the adolescent would hide in an interview."

It is interesting to note that [Ministry of Early Childhood worked for years with the anti-abortion NGO, Fundación CONIN, to showcase this system](#).²² Urtubey's [declaration mentioned about was made in the middle of the campaign to change the law towards legalizing abortion in Argentina](#),²³ a social demand that in 2018 took over the local and international news for months. The idea that algorithms can predict teenage pregnancy before it happens was the perfect excuse for anti-women and anti-sexual and reproductive rights activists to declare safe abortion laws as unnecessary. According to their narratives, if they have enough information from poor families, conservative public policies can be deployed to predict and avoid abortions by poor women. Moreover, there was also a common, but mistaken, belief that "if it is recommended by an algorithm, it is mathematics, so it must be true and irrefutable."

Furthermore, it is also notable to point out that the system has chosen to work on a database composed only of female data. This specific focus on a particular sex also reinforces patriarchal gender roles and, ultimately, blames female teenagers for unwanted pregnancy, as if a child could be conceived without a sperm. Even worse, it can also be seen as an initiative that departs from a logic of blaming the victim, particularly if we consider that the database includes girls aged 10 years old and of minors a bit older, whose pregnancy would only be a result of sexual violence. How can a machine say you are likely to be the victim of a sexual assault? And how brutal it is to conceive such calculus?

But, even in face of several criticisms, the initiative continued to be deployed. And worse, bad ideas dressed as innovation spread fast: the system is now being [deployed in other Argentinian provinces, such as La Rioja, Chaco,](#)

²¹ <https://www.bbc.com/news/world-latin-america-55475036>

²²

<http://www.argentina.indymedia.org/2018/08/25/como-funciona-la-fundacion-conin-y-que-se-hace-en-los-cientos-de-centros-que-tiene-en-el-pais/>

²³ <http://www.theguardian.com/world/2018/aug/09/argentina-senate-rejects-bill-legalise-abortion>

²⁴ and [Tierra del Fuego](#).²⁵ It also has been exported to Colombia, [implemented at least in the municipality of La Guajira](#),²⁶ and, as we will see, to Brazil.

From Argentina to Brazil

Another iteration of that same project has also reached the Brazilian Federal Government, through a partnership with the Brazilian Ministry of Citizenship and Microsoft. Allegedly, by September 2019, Brazil was the 5th country in Latin America to Projeto Horus, presented in the media as a “tech solution to monitor social programs focused on child development.” The first city to test the program was Campina Grande, from the State of Paraíba, in the northeast region of Brazil, one of the [poorest regions of the country](#).²⁷ Among the [authorities and institutions in the kick start meeting was a representative from Microsoft, the Ministry of Early Childhood from the municipality of Salta, and members from the Brazilian Ministry of Citizenship](#).²⁸ Romero Rodrigues, the mayor of Campina Grande, [is also aligned with evangelical churches](#).²⁹

Analysis

Through access to information requests (annex I), we have consulted the National Secretary of Early Childhood Care (SNAPI) and the Subsecretary of Information Technology (STI) from that Ministry to require more information about the partnership. These institutions informed that:

“The Ministry of Citizenship has signed with Microsoft Brasil LTDA the technical cooperation agreement n° 47/2019, for a proof of concept for an artificial intelligence tool to subsidize improvements in the actions of the program Happy Child/Early Childhood ([Criança Feliz/Primeira Infância](#)).”³⁰

The Brazilian Minister of Citizenship, who signed the agreement, is Osmar Gasparini Terra who, believe it or not, is a sympathizer of [flat Earthism](#).³¹ meaning, a theory that doesn’t believe that the Earth has a spherical format. [Just as climate change denial and creationism, some alleged that flat Earth theory has its base on Christian](#)

²⁴

<http://www.tribuna.com/salta/nota/2019-3-27-0-39-0--primera-infancia-es-el-ministerio-que-defiende-a-los-ninos-desde-su-concepcion>

²⁵

<https://www.salta.gob.ar/prensa/noticias/tierra-del-fuego-aplica-la-plataforma-tecnologica-de-salta-en-su-politica-social-49653>

²⁶ http://www.boletinooficialsalta.gob.ar/NewDetalleDecreto.php?nro_decreto=658/18

²⁷ <https://cidades.ibge.gov.br/brasil/pb/campina-grande/pesquisa/36/0?localidade1=33&localidade2=530010>

²⁸

<https://g1.globo.com/pb/paraiba/noticia/2019/09/25/campina-grande-testa-projeto-pioneiro-para-monitoramento-tecnologico-do-crianca-feliz.ghtml>

²⁹ <https://paraibaonline.com.br/2020/02/prefeito-campinense-prestigia-abertura-do-22o-encontro-da-consciencia-crista/>

³⁰ http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/decreto/D9579.htm

³¹ <https://www.theguardian.com/world/2019/nov/06/brazil-flat-earth-conference-terra-plana>

[fundamentalism. Terra also had a denialist discourse about COVID-19 pandemic](#),³² but, in that case, he believed in Math and A.I. as a sole tool to produce diagnostics to inform public policies, as expressed in the agreement:

“The Ministry wishes to carry out an analysis for the Criança Feliz program, using technological data processing tools based on artificial intelligence as a diagnostic mechanism aimed at detecting situations of social vulnerability as a guide for the formulation of preventive and transformative public policies.”

Just like in the [Chilean](#) and Argentinian cases, a neoliberal vision was behind the rationale to believe in an algorithm to “[automate, predict, identify, surveil, detect, target and punish the poor.](#)” Something that was also explicit in the agreement when it states that the purpose of the system was to:

“**optimize resources** and the construction of initiatives that can improve the offer of services aimed at early childhood, in a more customized way and with greater effectiveness.”

Therefore, stating once again the logic of **automating neoliberal policies**. More specifically, establishing a mechanism for a Digital Welfare State, heavily dependent on data collection and the conclusions that emerge from them:

“The cooperation aims to build, together, a solution that collects data through electronic forms and the use of analytical and artificial intelligence tools on this data to subsidize actions of the Happy Child program.”

When inquired about databases used, they listed:

- Sistema Único de Assistência Social – SUAS (Unique System of Social Assistance)
- Cadastro Único
- CADSUAS, from the Ministry of Social Development

All of them are databases of social programs in Brazil, in this case, used under the logic of **surveillance of vulnerable communities**, who are not only poor but also of children. All that in a partnership with a foreign company. Did Microsoft have access to all these databases? What was to counterpart for the company to enter the agreement as no transfer of financial resources were agreed:

“This Agreement will not involve the transfer of financial resources between the parties. Each party will assume its own costs as a result of the resources allocated in the execution of the scope and its attributions, with no prior obligation to assume obligations based on its results.”

³² <https://congressoemfoco.uol.com.br/saude/apos-ficar-na-uti-por-covid-19-osmar-terra-segue-minimizando-a-doenca/>

How many hours of human resources of public officials were deployed to a proof of concept in which results are not documented and publicly available? Did Microsoft have access to the database of the Brazilians? Is Microsoft using database from the poor in Latin America for training their machine learning systems? We tried to schedule an interview with a representative from Microsoft in Brazil who was talking about the project in the media, but after we sent the questions, the previously scheduled interview was canceled. These were the questions sent to Microsoft:

- 1) Considering the technical cooperation agreement signed in September 2019 between the Ministry of Citizenship and Microsoft to carry out a proof of concept to implement artificial intelligence tools that support improvements in the actions of the Happy Child program:
 - a) What is the result of the proof of concept?
 - b) What datasets were used by the algorithm to detect situations of social vulnerability?
 - c) What kind of actions would be suggested by the platform in case of vulnerability and risk detection?
 - d) What are the next steps in this proof of concept?
- 2) Does the company have other contacts with the Ministry of Citizenship or other Ministries of the Brazilian government for proof of concepts or implementation of artificial intelligence projects for social issues?
- 3) Does the company have an internal policy to promote research and development of activities of A.I. and the public sector focused on the country?

As we could not have a position from Microsoft, we also asked the Ministry for more information about the promised “greater effectiveness”, which, nevertheless, was never proved. When the agreement was signed, back in September 2019, there was already a lot of criticism published analyzing the case of Salta, even though the agreement only recognized Microsoft “experience and intelligence gained”, as per below:

“Whereas Microsoft has already developed a similar project (...) with the PROVINCE OF SALTA, in the Argentine Republic, and all the experience and intelligence gained from it can be used, with this agreement, a cooperation is established for development, adaptation, and use of a platform in Brazil.”

So we requested information from the Minister about error margins and data about the result of the proof of concept. They informed:

“there is no information regarding the margin of error used in the technologies involved.”

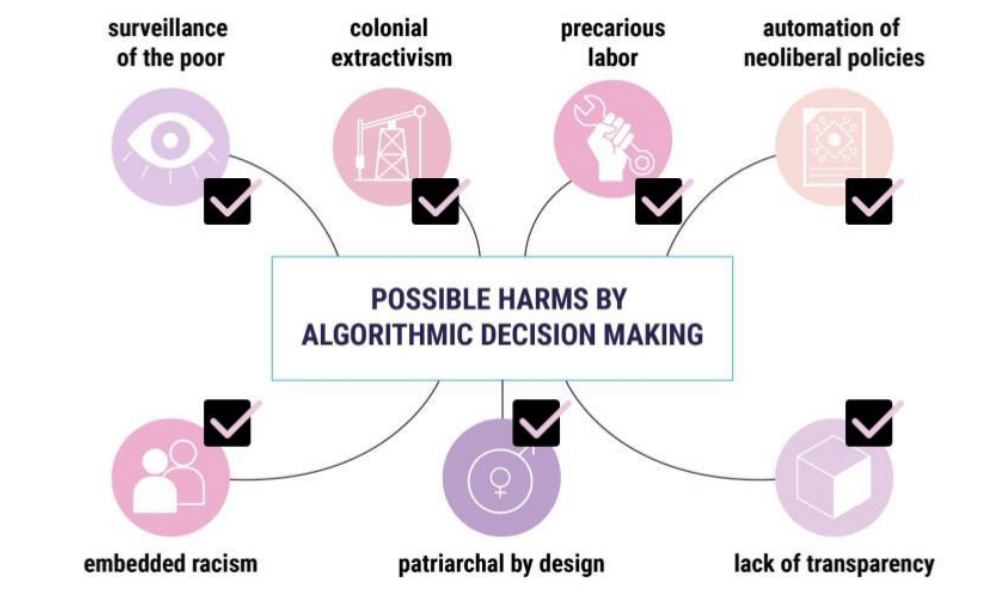
Once again, the degree of participation of people affected as well as the accountability for using citizen's data was nule. The proof of concept agreement had a 6 months work plan, which makes evident that there was no intent to conceive a broader and inclusive process consulting the targeted community, solely deploying a tech tool. And when asked about the results of the pilot and the statistical data used for building the algorithms and database, the Ministry has provided us with practically no information. They simply affirmed that the agreement lasted 6 months, from September 23rd, 2019 onwards. Therefore, the agreement was no longer in force by the time of the answer (December, 18th, 2020), as such they restated:

“We emphasize that such technology is not being implemented by the Happy Child Program, therefore, we are unable to meet the request for statistical data on its use and effectiveness.”

Even if the technology is not being implemented, if the Government is using citizens' data to test a tool with a private company, there should be transparency and accountability obligations. Therefore, such an answer was completely unacceptable, particularly considering that in the work plan, attached to the agreement, both Microsoft and the Ministry were assigned to activities towards analysis and evaluation of results. But under these circumstances and answers, we could say that the attempt to export the system from Argentina to Brazil was another expression of **digital colonialism and colonial extractivism** once, allegedly, not even the Brazilian government kept records of the results of the proof of concept, which can be seen as a **closed box**. The only thing we know is that, according to the agreement, Microsoft was exempt from any responsibility of possible harm caused by the project:

“Microsoft does not guarantee or assume responsibility for losses and damages of any kind that may arise, by, for example: (i) the adequacy of the activities provided in this Agreement and the purposes of the Ministry or for the delivery of any effective solution; and (ii) the quality, legality, reliability and usefulness of services, information, data, files, products and any type of material used by the other parties or by third parties.

In summary, we can say that The “*Plataforma Tecnológica de Intervención Social*” and Projeto Horus are just a very eloquent example of how Artificial Intelligence's pretended neutrality has been increasingly deployed in some countries in Latin America to assist neoliberal and potentially discriminatory public policies that could undermine the human rights of unprivileged people, as well as monitor and censor women and their sexual and reproductive rights. Analyzing our framework from Oppressive A.I. we could say it ticks all the boxes:



Oppressive A.I. Framework by Joana Varon and Paz Peña. Design by Clarote for notmy.ai for Coding Rights

Building a Feminist toolkit to question A.I. systems

This article compiles what is currently the core insights of core Notmy.ai platform, an ongoing effort, work in progress debate that seeks to contribute to the development of a feminist framework to question algorithmic decisions making systems that are being deployed by the public sector.

[Why AI is a feminist issue?](#)
[Mapping: Biased and harmful AI projects in Latam](#)
[Do you know other projects?](#)
[About](#)

WHY IS A.I. A FEMINIST ISSUE?

Oppressive A.I.: Feminist Categories to Understand its Political Effects

By Paz Peña

Case study: Childhood Alert System (Sistema Alerta Niñez - SAN)...

[read more](#)

Building a Feminist toolkit to question A.I. systems

By Paz Peña y Joana Varon

Case-study: Plataforma Tecnológica de Intervención Social/Proyecto Horus - Argentina and...

[read more](#)

Notmy.ai platform

We have seen examples how these systems tend to be developed by privileged demographics, against the free will and without the opinion or participation from scratch of those who are likely to be targeted, or “helped”, resulting in automated oppression and discrimination that use Math as an excuse to skip any political responsibility. Ultimately, this trend has the power to dismiss any attempt of a collective, democratic and transparent response to core societal challenges.

To face this pervasive trend, we depart from the perspective that decolonial feminist approaches to life and technologies are great instruments to envision alternative futures and to overturn the prevailing logic in which A.I. systems are being deployed. As Silvia Rivera Cusicanqui poses: “How can the exclusive, ethnocentric “we” be articulated with the inclusive “we”—a homeland for everyone—that envisions decolonization? How have we thought and problematized, in the here and now, the colonized present and its overturning?” (Rivera Cusicanqui, 2012). If we follow Cusicanqui, it is easy to grasp that answers such as “optimization of biased algorithms”, “ethic”, “inclusive”, “transparent” or “human-centric” A.I., “compliant with data protection legislation” or even solely a human rights approach to A.I. systems fall short in a bigger political mission to dismantle what black feminist scholar Patricia Hill Collins calls the “matrix of domination” (Collins, 2002). Simply adding a layer of automation to a failed system means hiddenly magnifying oppression disguised by a false sense of mathematical neutrality.

As current debates of A.I. principles and frameworks are mostly focused on “how to fix it?”, instead of “Why we actually need it?” and “for whose benefit”. Therefore, the first tool of our toolkit to question A.I. systems is the scheme of Oppressive A.I. that we drafted based on both, empirical analysis of cases from Latin America and bibliographic review of critical literature. Is a particular A.I. system based on surveilling the poor? Is it automating neoliberal policies? Is it based on precarious labor and colonial extractivism of data bodies and resources from our territories? Who develops it is part of the group targeted by it or it’s likely to restate structural inequalities of race, gender, sexuality? Can the wider community have enough transparency to check by themselves the accuracy in the answers to the previous questions? Might be some of the questions to be considered.

Several national policies for A.I. and most start-ups and big tech corporations operate under the motto of “move fast and break things”, meaning, innovate first and check possible harms later. We propose the opposite: before developing or deploying, that A.I. should be checked if it is likely to automate oppression. Furthermore, if that A.I. system is not focused on exposing the powerful, neither is targeting its own developers or their identity group, the developers are also not the ones to check if such a system falls into the categories of an Oppressive A.I.

Furthermore, those categories are not meant to be fixed, they can expand according to a particular context. So, watch out, the proposed Oppressive A.I. framework is not written in stone, it is just a general guide for questions, a work in process that shall be re-shaped according to the particular context and its oppressions. In this sense,

we recall [Design Justice Network Principles](https://designjustice.org/read-the-principles)³³ as an important guideline to assess the context of oppression, since it "[centers people who are normally marginalized by design and uses collaborative, creative practices to address the challenges faces by a particular community.](#)" (Constanza-Shock, 2018)

Going beyond, why not ask ourselves:

What is a transfeminist A.I.? What does it mean to develop a feminist algorithm?

We believe that transfeminist values can be embedded in A.I. systems, just as currently values such as profit, addiction, consumerism, racism are embedded in several algorithms that pertain to our lives today. To push this feminist approach into practice, we at Coding Rights, in partnership with our dear and brilliant scholar and design activist Sasha Costanza-Chock, have been experimenting with a card game collaboratively developed to design tools in speculative futures: the "[Oracle for transfeminist Technologies](#)"³⁴ Through a series of workshops, we have been collectively brainstorming what kind of transfeminist values shall inspire and help us envision speculative transfeminist futures.

Indeed, tangible present proposals of changes emerged once we were imagining the future in the workshops. Over time, values such as agency, accountability, autonomy, social justice, nonbinary, cooperation, decentralization, consent, diversity, decoloniality, empathy, security, among others, have emerged in the workshops brainstormings and were progressively transformed into value cards of the Oracle:

³³ <https://designjustice.org/read-the-principles>

³⁴ transfeministech.org



SOLIDARITY



**DECENTRAL
IZATION**



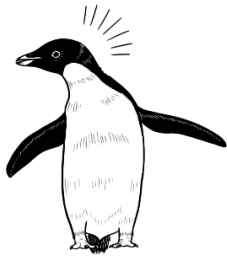
SECURITY



RESILIENCE



QUEERNESS



**OPEN
SOURCE**



PLEASURE



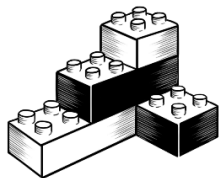
**NON
BINARY**



**MULTI
ESPECIESM**



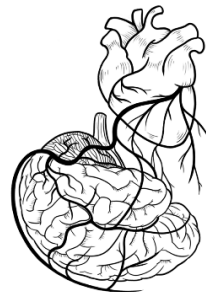
INTUITION



**INTER
OPERABILITY**



**INTERSECTION
ALITY**



EMPATHY



**HORIZON
TALITY**



**EMBODIED
NESS**



**DE
COLONIALITY**



DIVERSITY



AGENCY

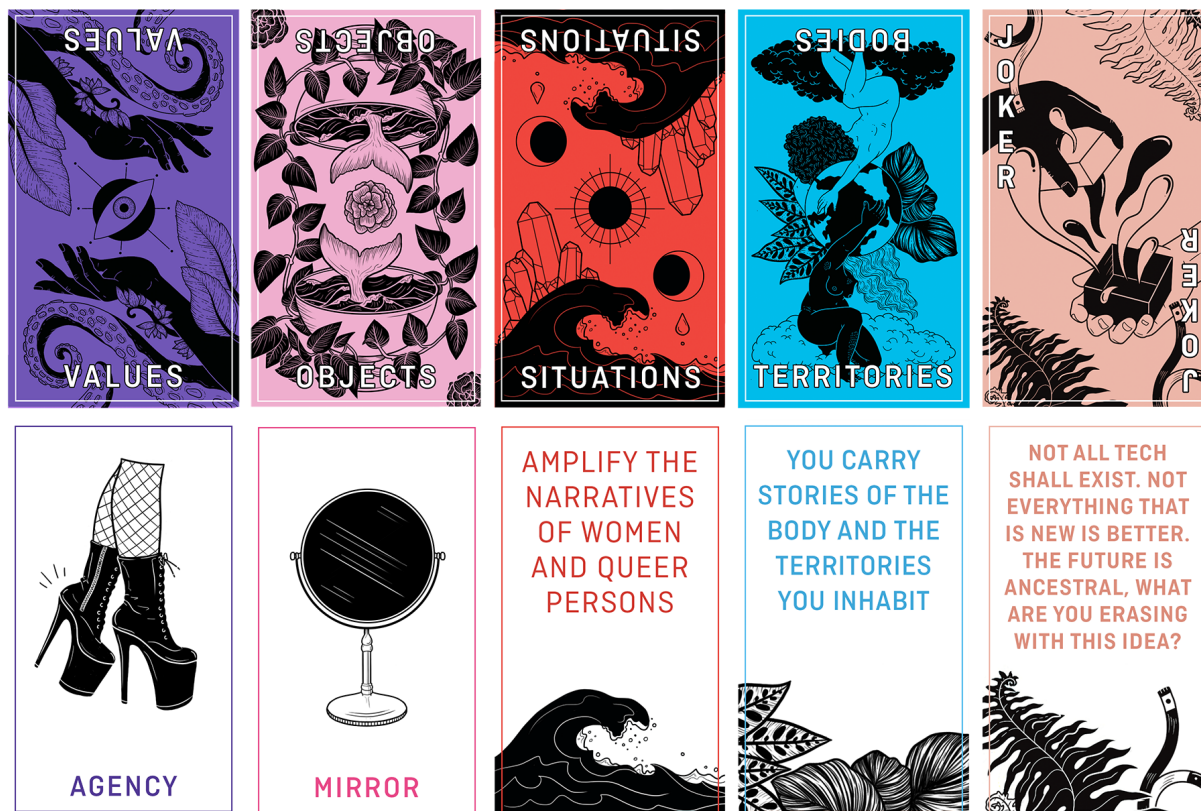


CONSENT



AUTONOMY

ORACLE FOR TRANSFEMINIST TECHNOLOGIES



5 card decks that compose the Oracle for Transfeministech and an example of a consultation. More information available at: transfeministech.org

While it has been envisioned as a card game for speculative futures, we believe that the ensemble of transfeminist values brainstormed over a series of workshops with feminists from different regions and identity feminist agendas can also inspire different tech towards envisioning transfeminist A.I. projects, alternative tech or practices that are more coherent with the present and future we wanna see. As Ursula Le Guin once said: "the thing about science fiction is, it isn't really about the future. It's about the present. But the future gives us great freedom of imagination. It is like a mirror. You can see the back of your own head." (Le Guin, Streitfeld, 2019).

Can we also take these values from speculation to action?³⁵ We have humbly started to do that with the article ["Consent to our Data Bodies: Lessons from feminist theories to enforce data protection."](#) (Peña & Varon, 2019). Addressing the questions: What is a feminist approach to consent? How can it be applied to technologies? Those simple questions were able to shed light on how limited is the individualistic notion of consent proposed in data protection frameworks. That universalized approach doesn't take into account unequal power relations. But, if we

³⁵ <https://deepdives.in/the-future-is-transfeminist-from-imagination-to-action-6365e097eb22>

do not have the ability to say no to big tech companies when in need to access a monopolistic service, we clearly cannot freely consent.

Maybe it is a loooooong way to go, but perhaps, layering down an extensive analysis of these values, as we did with the notion of consent, can gradually shed more light on future tech we wanna see. Technologies that consider power imbalances that are present in the context they are developed and deployed and that do not erase existences in order to take into account that, in the words of indigenous leader Ailton Krenak: the future is ancestral.³⁶ For you, what a transfeminist A.I. would look like?

Stay tuned::

We are currently brainstorming other possible steps to both amplify the reach and the tools of notmy.ai. Some activities involve continuing testing its applicability through workshops, developing local partnerships for increasing case-based analysis, continuously studying new bibliography with critical approaches to A.I. systems, and launching translations to Spanish and Portuguese to allow for wider regional engagement in these debates. Also, if you know other A.I. projects being deployed in Latin America by the public sector with possible implications to advance feminist agendas, our mapping is collaborative and you can also submit them at notmy.ai. If you have feedback about these frameworks, you can reach us in social media @CodingRights or at contact@codingrights.org



Summary of our work in progress presented during Firn workshop illustrated by Sonaksha Iyengar

³⁶ Flecha 1 - A serpente e a Canoa: <https://www.youtube.com/watch?v=Cfroy5JTcy4>

ABOUT THE AUTHORS

Joana Varon is the Founder Directress and Creative Chaos Catalyst at Coding Rights.. Believing in art, creativity and coding as tools for revolutions, she is a co-creator of several creative projects operating in the interplay between activism, arts and technologies, such as notmy.ai, transfeministech.org, museamami.org, chupadados.com, #SaferSisters, Safer Nudes, From Devices to Bodies, protestos.org, Net of Rights and freenetfilm.org. Former Mozilla Media Fellow, Joana is currently a Technology and Human Rights Fellow at the Carr Center for Human Rights Policy from Harvard Kennedy School and affiliated to the Berkman Klein Center for Internet and Society at Harvard University.

Paz Peña is an independent consultant on Human Rights, intersectionality, and digital technologies. She is also the secretary of Al Sur, an aggrupation of 11 organizations from seven countries in Latin America working on digital rights, and the co-creator of Acoso.Online, a website with information and recommendations for victims of "non-consensual pornography" on the internet in Latin America and the Caribbean. Since 2014 she is also part of the collaborative council at Coding Rights Brazil. For eight years, she was the director of advocacy at Derechos Digitales América Latina and the public leader of Creative Commons Chile (2013-2015).

Bibliography

- AINOW. 2018. Algorithmic Accountability Policy Toolkit. <https://ainowinstitute.org/aap-toolkit.pdf>
- Alston, Philip. 2019. Report of the Special rapporteur on extreme poverty and human rights. Promotion and protection of human rights: Human rights questions, including alternative approaches for improving the effective enjoyment of human rights and fundamental freedoms. A/74/48037. Seventy-fourth session. Item 72(b) of the provisional agenda.
- Ananny, M., & Crawford, K. (2018). Seeing without knowing: Limitations of the transparency ideal and its application to algorithmic accountability. *New Media & Society*, 20(3), 973–989. <https://doi.org/10.1177/1461444816676645>
- Arora, P. (2016). The Bottom of the Data Pyramid: Big Data and the Global South. *International Journal of Communication*, 10, 1681-1699.
- Ballantyne, N. (2019). THE ETHICS AND POLITICS OF HUMAN SERVICE TECHNOLOGY: THE CASE OF PREDICTIVE RISK MODELING IN NEW ZEALAND'S CHILD PROTECTION SYSTEM. January 2019 *The Hong Kong Journal of Social Work* 53(01n02):15-27 DOI: 10.1142/S0219246219000044
- Benjamin, R. (2019). Race after technology: Abolitionist tools for the new Jim code. *Polity*.
- Berryhill, J., Kok Heang, K., Clogher, R. & McBride, K. (2019). Hello, World: Artificial Intelligence and its Use in the Public Sector. OECD.
- Birhane, Abeba (2019, July 18th). The Algorithmic Colonization of Africa. *Real Life Magazine*. www.reallifemag.com/the-algorithmic-colonization-of-africa/
- Brevini, B., & Pasquale, F. (2020). Revisiting the Black Box Society by rethinking the political economy of big data. *Big Data & Society*. <https://doi.org/10.1177/2053951720935146>
- Bridle, J. (2018). *New Dark Age: Technology, Knowledge and the End of the Future*. Verso Books.
- Bright, J., Bharath, G., Seidelin, C., & Vogl, T. M. (2019). Data Science for Local Government (April 11, 2019). Available at SSRN: <https://ssrn.com/abstract=3370217> or <http://dx.doi.org/10.2139/ssrn.3370217>
- Clayton, V., Sanders, M., Schoenwald, E., Surkis, L. & Gibbons, D. (2020) MACHINE LEARNING IN CHILDREN'S SERVICES SUMMARY REPORT. What Works For Children's Social Care. UK.
- Collins, Patricia Hill (2002). [Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment](#). New York: Routledge.

Costanza-Chock, S. (2018). #TravelingWhileTrans, Design Justice, A.I., and Escape from the Matrix of Domination. <https://doi.org/10.21428/96c8d426>.

Costanza-Chock, S. (2020). Design Justice: Community-Led Practices to Build the Worlds We Need. Cambridge: MIT Press. Available at <https://design-justice.pubpub.org/>

Couldry, N., & Mejias, U. (2019). Data colonialism: rethinking big data's relation to the contemporary subject. *Television and New Media*, 20(4), 336-349.

Crawford, Kate. (2016, June 25th). Artificial Intelligence's White Guy Problem. *The New York Times*. www.nytimes.com/2016/06/26/opinion/sunday/artificial-intelligences-white-guy-problem.html

Cubillos Celis, P. (2019). Neoliberalismo, focalización e infancia en Chile: 1973-2010. *Revista Mexicana de Sociología*, 81(3). doi:<http://dx.doi.org/10.22201/iis.01882503p.2019.3.57923>

Daly, Angela et al. (2019). Artificial Intelligence Governance and Ethics: Global Perspectives. *THE CHINESE UNIVERSITY OF HONG KONG FACULTY OF LAW*. Research Paper No. 2019-15.

Davancens, Facundo. Predicción de Embarazo Adolescente con Machine Learning: <https://github.com/facundod/case-studies/blob/master/Prediccion%20de%20Embarazo%20Adolescente%20con%20Machine%20Learning.md>

Draibe, S. M. (1994). Neoliberalismo y políticas sociales: Reflexiones a partir de las experiencias latinoamericanas. *Desarrollo Económico*, 34(134), 181. doi:10.2307/3467315

Eubanks, V. (2018). Automating inequality: how high-tech tools profile, police, and punish the poor. First edition. New York, NY: St. Martin's Press.

Gianinna Muñoz Arce (2018): The neoliberal turn in Chilean social work: frontline struggles against individualism and fragmentation, *European Journal of Social Work*, DOI: 10.1080/13691457.2018.1529657

Kidd, Michael (2016). Technology and nature: a defence and critique of Marcuse. *Volum IV, Nr. 4 (14), Serie nouă*. 49-55. www.revistapolis.ro/technology-and-nature-a-defence-and-critique-of-marcuse/

Le Guin, U. (author); Streitfeld, D. (editor), (2019). Ursula K. Le Guin: The Last Interview: And Other Conversations. Melville House. Brooklyn/London

Laboratorio de Inteligencia Artificial Aplicada - LIAA. (2018). Sobre la predicción automática de embarazos adolescentes. www.dropbox.com/s/r7w4hln3p5xum3v/[LIAA]%20Sobre%20la%20predicci%C3%B3n%20autom%C3%

[A1tica%20de%20embarazos%20adolescentes.pdf?dl=0](#) y

<https://liaa.dc.uba.ar/es/sobre-la-prediccion-automatica-de-embarazos-adolescentes/>

López, J. (2020). Experimentando con la pobreza: el SISBÉN y los proyectos de analítica de datos en Colombia. Fundación Karisma. Colombia.

Masiero, S., & Das, S. (2019). Datafying anti-poverty programmes: implications for data justice. *Information, Communication & Society*, 22(7), 916-933.

Mohamed, S., M. Png & W. Isaac. (2020). Decolonial AI: Decolonial Theory as Sociotechnical Foresight in Artificial Intelligence. *Philosophy & Technology*. <https://doi.org/10.1007/s13347-020-00405-8>

Monahan, T. (2009). Dreams of Control at a Distance: Gender, Surveillance, and Social Control. *Cultural Studies. Critical Methodologies*, 9(2), 286–305. <https://doi.org/10.1177/1532708608321481>

Muñoz Arce, G. (2018): The neoliberal turn in Chilean social work: frontline struggles against individualism and fragmentation, *European Journal of Social Work*, DOI: 10.1080/13691457.2018.1529657

Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism*. New York University Press.

O'Neil, C. (2016). *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*. New York: Crown.

Peña, P; Varon, J. (2019). Consent to our Data Bodies: lessons from feminist theories to enforce data protection. *Coding Rights*. Available at: <https://codingrights.org/docs/ConsentToOurDataBodies.pdf>

Rivera Cusicanqui, S. (2012). Ch'ixinakax utxiwa: A Reflection on the Practices and Discourses of Decolonization. *The South Atlantic Quarterly*, 111(1), 95-109. Available at: <http://www.adivasiresurgence.com/wp-content/uploads/2016/02/Silvia-Rivera-Cusicanqui-Chixinakax-Eng1.pdf>

Rodríguez, J.P. (2020). The politics of neoliberalism in Latin America: dynamics of resilience and contestation. *Sociology Compass*. 2021;15:e12854. wileyonlinelibrary.com/journal/soc4-1 of 13 <https://doi.org/10.1111/soc4.12854>

Schöngut, N. (2017). Ensamblajes socio-técnicos para la producción de intervenciones psicosociales en un programa del Servicio Nacional de Menores de Chile. *Psicoperspectivas. Individuo y Sociedad*, Vol. 16, No. 3.

Sociedad Civil de Chile Defensora de los Derechos Humanos del Niño et al. (2019, 28 enero). Día Internacional de la protección de datos. Carta abierta de la Sociedad Civil de Chile Defensora de los Derechos Humanos del Niño. ONG Emprender con Alas.

Taylor, L. (2017). What is data justice? The case for connecting digital rights and freedoms globally. *Big Data & Society*, July-December, 1-14.
<https://journals.sagepub.com/doi/10.1177/2053951717736335>

Taylor, M. (2003). The Reformulation of Social Policy in Chile, 1973–2001. *Global Social Policy: An Interdisciplinary Journal of Public Policy and Social Development*, 3(1), 21–44.
 doi:10.1177/14680181030030010101

Tendayi Achiume, E. (2020). Racial discrimination and emerging digital technologies: a human rights analysis. Report of the Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance. A/HRC/44/57. Human Rights Council. Forty-fourth session. 15 June–3 July 2020.

Tijoux, M.E. (2016). *Racismo en Chile. La piel como marca de la inmigración*. Editorial: Universitaria. Santiago, Chile.

Vaithianathan, R., Benavides, D., Taskova, K., Hermosilla, MP., Letelier, A., Escobar, J., Garretón, M. & Kulick, E. (2019). Informe Final: Propuesta de instrumento de focalización para la identificación de niños, niñas y adolescentes en riesgo de vulneración de derechos. “Construcción del Instrumento de Focalización Alerta de Niñez”. 730566-13-LQ18. 27 de junio de 2019. Universidad Adolfo Ibáñez (UAI), Chile y Auckland University of Technology (AUT), Nueva Zelanda.

Valderrama, M. (2021). Chile: Sistema Alerta Niñez y la predicción del riesgo de vulneración de derechos de la infancia. *Derechos Digitales*.

Zuboff, S. (2019). *The age of surveillance capitalism: the fight for a human future at the new frontier of power*. Profile Books.

ANNEX I - ACCESS TO INFORMATION REQUESTS AND ANSWERS (CHILENIAN CASE)

- [Acuerdo Confidencialidad con el Ministério de Desarrollo – Licitación Alerta Niñez 2018_C](#)
- [Acuse de Recibo de Pedido de Información AI001T0002359](#)
- [Análisis – Nuevo proceso de asignación responsables derivaciones V1_C](#)
- [Cambio de Perfil y Roles_C](#)
- [Carta_Nro_3805_Fol_02359](#)
- [Documento de apoyo para la Gestión de Casos 2020](#)
- [Informe Final Alerta Niñez](#)
- [Manual Alerta Niñez final](#)
- [Of_3804_Fol_02359](#)
- [Orientaciones Técnicas para la implementación del Piloto de la Oficina Local de la Niñez 2020 como funciona](#)

ANNEX II - ACCESS TO INFORMATION REQUESTS AND ANSWERS (BRAZILIAN CASE)

- [Pedido&resposta_LAI_MinCidadania_71003_129432_2020_71](#)
- [Acordo_Cooperacao_Tecnica_47_Microsoft](#)
- [Pedido&resposta_LAI_MinCidadania_71003_129428_2020_11](#)
- [Pedido&resposta_LAI_MinEcon_00106_030439_2020_31](#)
- [Pedido&resposta_LAI_MMFDH_00105_003197_2020_12](#)