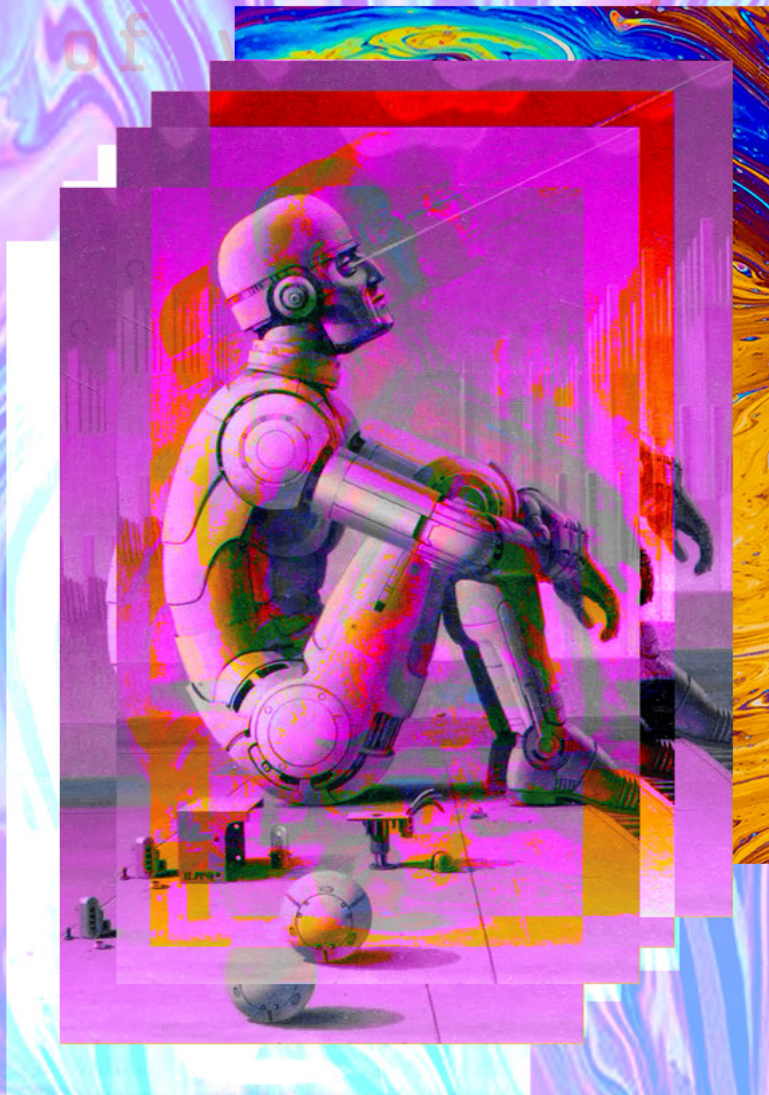


ALGORITHMS OF LATE-CAPITALISM
presents

[D/R]ECONSTRUCTING AI

dreams of visionary fiction
dreams of visionary fiction
dreams of visionary fiction
dreams of visionary fiction



ARS ELECTRONICA WORKSHOP
SEPT 2020

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Share • Distribute • Remix



[d/r]econstructing AI: dreams of visionary fiction

This zine is the result of a series of steps, instructions, and processes set out during an online workshop presented at the Ars Electronica festival 2020. It is, in a sense, the output of an algorithm. Yet, as in the cases of the algorithmic decision-making systems interrogated throughout this zine, the input processed as part of the workshop consisted of the thoughts, beliefs, perspectives, expertise, and experiences of the workshop participants themselves.

An interrogation of the non-technological structures behind

algorithmic decision-making systems that are so readily presented as neutrally non-human can be a powerful tool for imagining alternative futures and presents. The designs of these systems are normative rather than neutral and can consequently reproduce and reinforce structural discrimination in our society. Can we imagine radical design alternatives to create a more just and equitable digitally mediated world?



 **ARS ELECTRONICA**

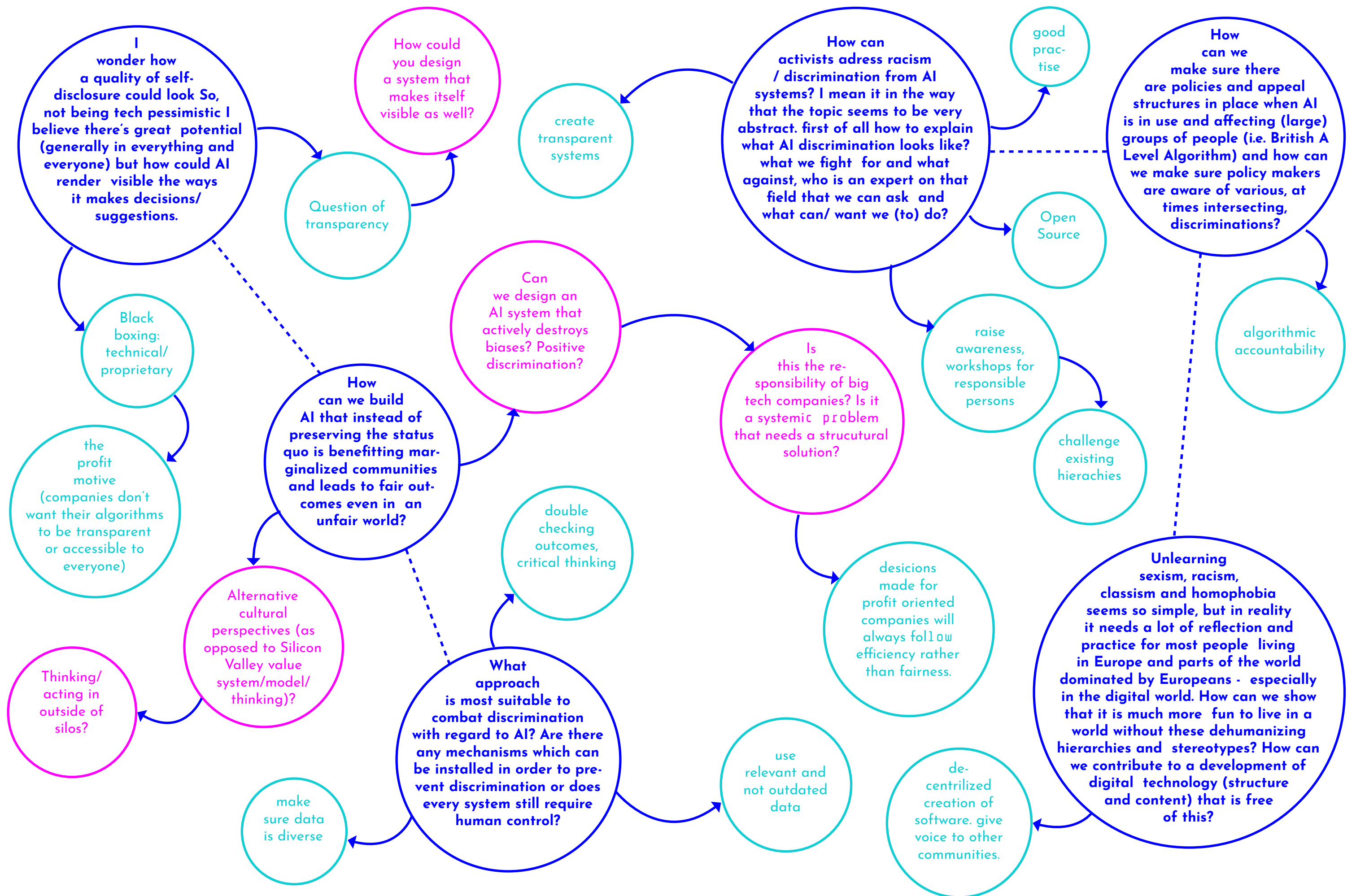
This special edition of *Algorithms of Late-Capitalism* was created by Nushin Isabelle Yazdani and internet teapot (Karla Zavala and Adriaan Odendaal) and the participants of the workshop:

[d/r]econstructing AI - dreams of visionary fiction and zine-making
How to Become a High-Tech-Anti-Discrimination Activist Collective

Kepler's Garden - Ars Electronica, September 2020



Initial Questions on AI & discrimination and further questions



“technologies embody social relations (power). Through a design justice lens, we might say [that...] most of the time designers unintentionally reproduce the matrix of domination (white supremacist heteropatriarchy, capitalism, and settler colonialism).”

Sasha Costanza-Chock



Image: <https://twitter.com/schock>

Three cases of Machine Learning

Unemployment
Recruiting
Jurisdictional Risk Assessment

Case [1]

AMS Service Austria ("Classification of unemployed people")

The Public Employment Service Austria has been planning to employ an algorithmic decision-making system from this year on (it's been delayed due to COVID).



The system is supposed to classify unemployed people into three groups: high, medium and low, according to their chances of being reintegrated into the labour market.

The group classified as "high" does not need much support, the middle group has good chances and receives a lot of support, e.g. further training. The third group is considered to be difficult to reintegrate and does not receive as much support. This group has a low score.

What reduces the score: being a woman, being over 50, not having an EU passport, compulsory childcare, few days of employment.

See more details here:
<https://paolalopez.eu>

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= f ( 0,10
- 0,14 x GESCHLECHT_WEIBLICH
- 0,13 x ALTERSGRUPPE_30_49
- 0,70 x ALTERSGRUPPE_50_PLUS
+ 0,16 x STAATENGRUPPE_EU
- 0,05 x STAATENGRUPPE_DRITT
+ 0,28 x AUSBILDUNG_LEHRE
+ 0,01 x AUSBILDUNG_MATURA_PLUS
- 0,15 x BETREUUNGSPFLICHTIG
- 0,34 x RGS_TYP_2
- 0,18 x RGS_TYP_3
- 0,83 x RGS_TYP_4
- 0,82 x RGS_TYP_5
- 0,67 x BEEINTRÄCHTIGT
+ 0,17 x BERUFSGRUPPE_PRODUKTION
- 0,74 x BESCHÄFTIGUNGSTAGE_WENIG
+ 0,65 x FREQUENZ_GESCHÄFTSFALL_1
+ 1,19 x FREQUENZ_GESCHÄFTSFALL_2
+ 1,98 x FREQUENZ_GESCHÄFTSFALL_3_PLUS
- 0,80 x GESCHÄFTSFALL_LANG
- 0,57 x MN_TEILNAHME_1
- 0,21 x MN_TEILNAHME_2
- 0,43 x MN_TEILNAHME_3)
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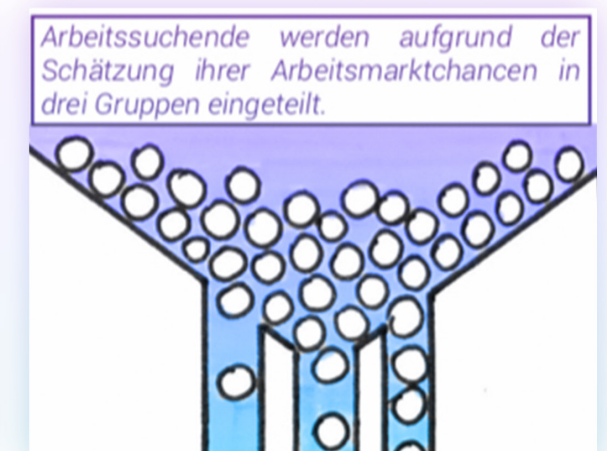
An excerpt from the AMS algorithm's documentation. (Src: Lopez, Paola - Reinforcing Intersectional Inequality via the AMS Algorithm in Austria / Holl, et. al., 2018, p. 11)



In vielen europäischen Ländern wurden in den letzten Jahren immer mehr Algorithmen eingesetzt, um Erwerbslosigkeit zu organisieren. Diese Algorithmen übernehmen unterschiedliche Aufgaben: Zum Beispiel analysieren sie das Online-Verhalten bei der Arbeitssuche, ordnen Stellenangebote, Interviews und Schulungen zu, sollen Arbeitssuchende mit Firmen die Arbeiter*innen suchen passend zusammenbringen. Mitunter entscheiden Algorithmen sogar über Arbeitslosenhilfe und Unterstützungsleistungen.



So wird zum Beispiel in Österreich, seit Januar 2020, vom Arbeitsmarktservice (AMS) ein Algorithmus eingesetzt, der die Chancen auf dem Arbeitsmarkt vorhersagen soll.



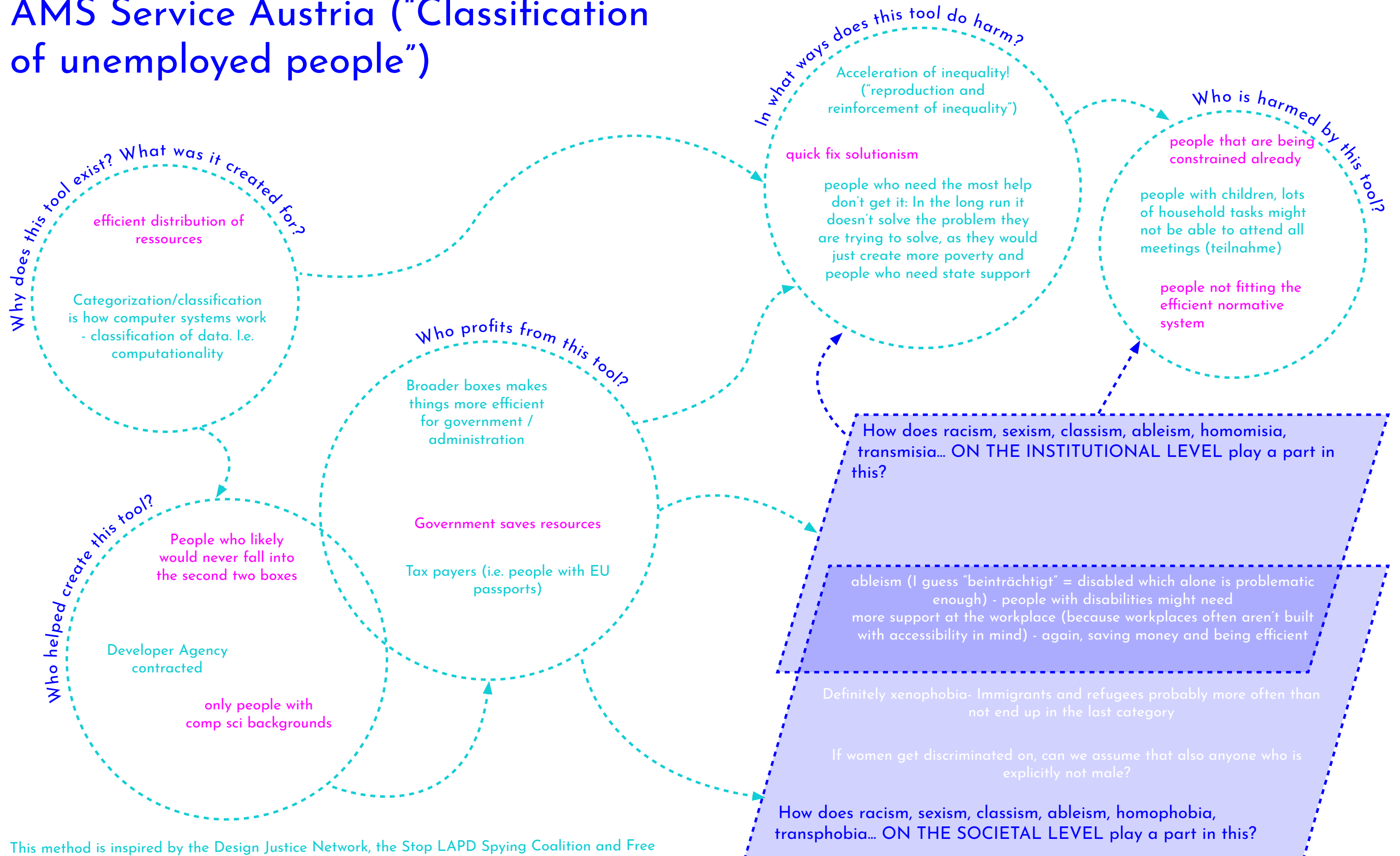
Arbeitssuchende werden aufgrund der Schätzung ihrer Arbeitsmarktchancen in drei Gruppen eingeteilt.



Excerpt from the AMS comic by Anna Kraher, created during the "Data Justice" class by Nushin Yazdani and Jasmin Grimm at Humboldt University, 2020.

Case[1]

AMS Service Austria ("Classification of unemployed people")



This method is inspired by the Design Justice Network, the Stop LAPD Spying Coalition and Free Radicals, by Patricia Hill Collins and Kimberlé Crenshaw

Case[2]

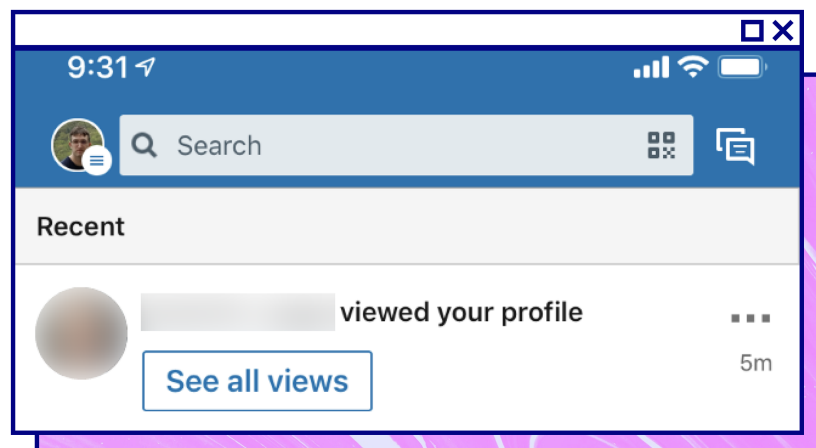
Predicting a worker's mindset – with one click on their LinkedIn

The Berlin start up bunch.ai promised to assess people based on their LinkedIn profile - with only 1 click.

“Meet Emma, an A.I. that’s able to predict a person’s mindset, motivations, and working style based on 100 indicators in their public



profile. Emma combines information like past employers and roles with more subtle indicators like the language candidates use to describe their work, the posts they share publicly, and the way colleagues talk about them.

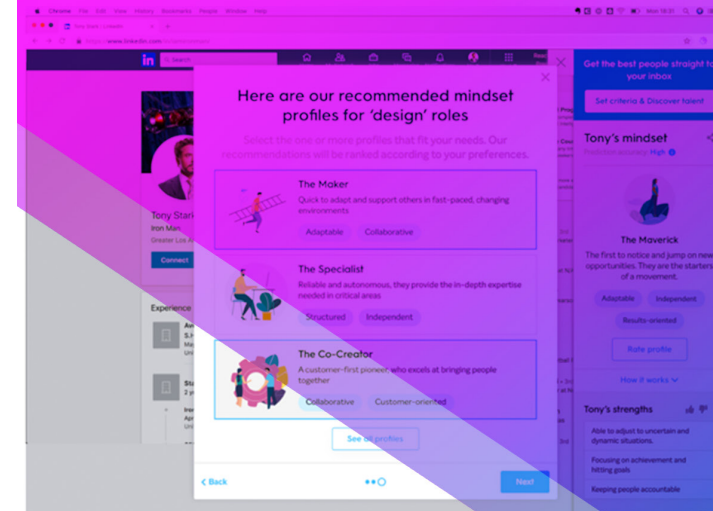
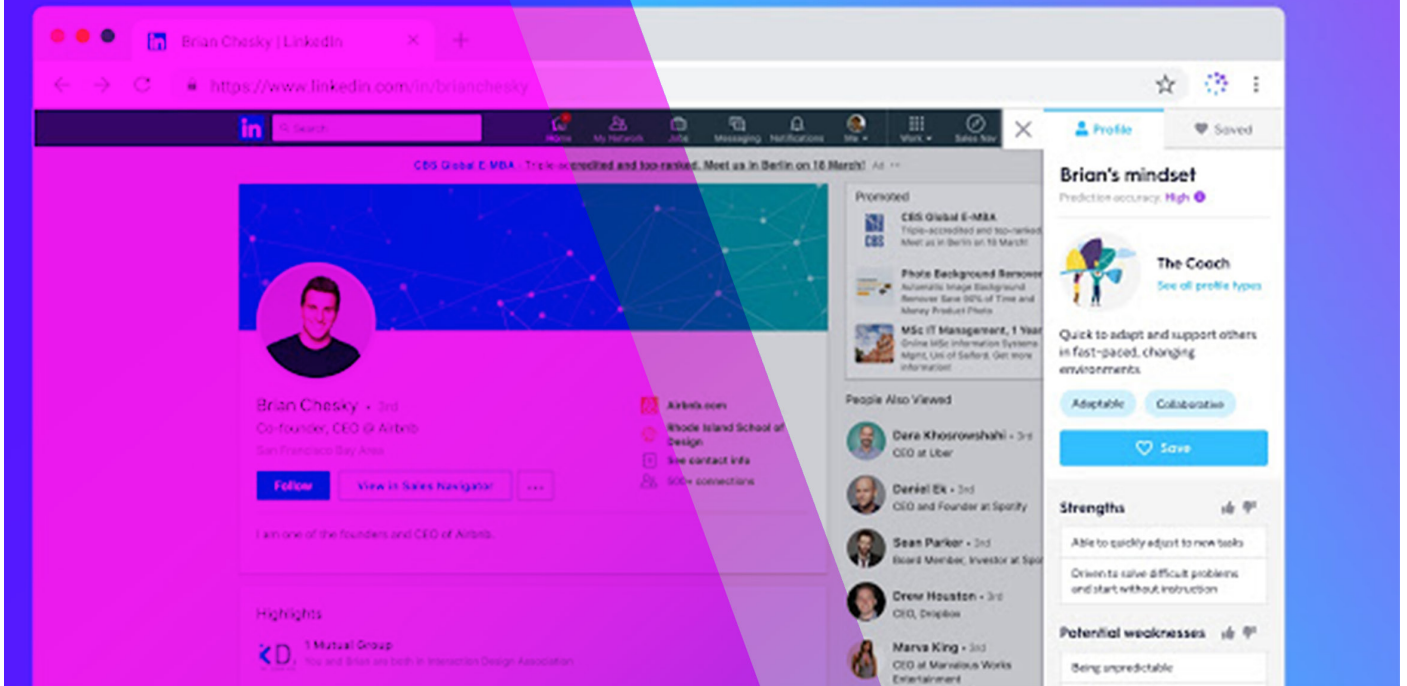


The result? A more holistic picture of a person's priorities - and potential fit for the role - with 1 click.”

Status Quo: LinkedIn asked Bunch.ai to make several changes to their software, and Bunch.ai had to abandon their service - for good? Who knows.

See more details here: <https://bunch.ai/blog/meet-emma-ai/>

Get to know anyone with just one click



Find people with the right attitude

Based on your settings we will recommend you mindsets of people that are likely to thrive in your open position. However, you're always free to choose a mindset on your own.

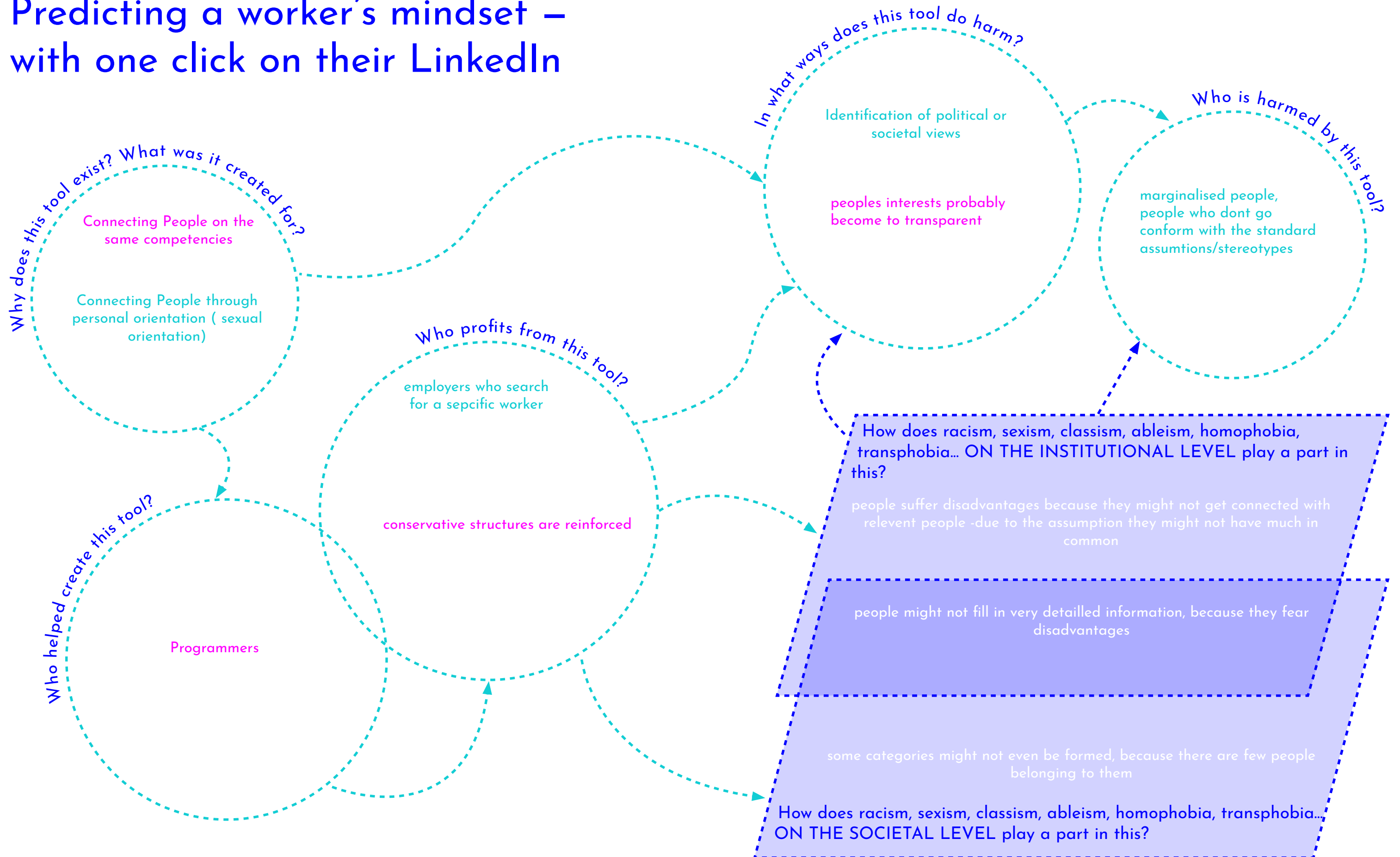
After you set your preferences and desired mindset we will find the best matching people and rank them accordingly.

Get to know anyone in 1 click.

Meet Emma, our new AI-powered Chrome extension gives you instant behavioral insights on LinkedIn for prospective hires, sales prospects, and teammates.

Case[2]

Predicting a worker's mindset – with one click on their LinkedIn



Case[3]

Jurisdictional risk assessment - Likely to re-offend?

The jurisdiction in many of the US states relies on algorithms to support decisions during every stage of the criminal justice system. These risk assessment tools are used to predict a defendant's likelihood to reoffend. The resulting score from low to high risk effects decisions regarding probations, bond amounts and even the length of jail time in criminal sentencing.

In 2016, the US nonprofit newsroom ProPublica assessed one of the most widely used commercial risk assessment tools, called COMPAS (developed by the forprofit company Northpointe, now Equivant).

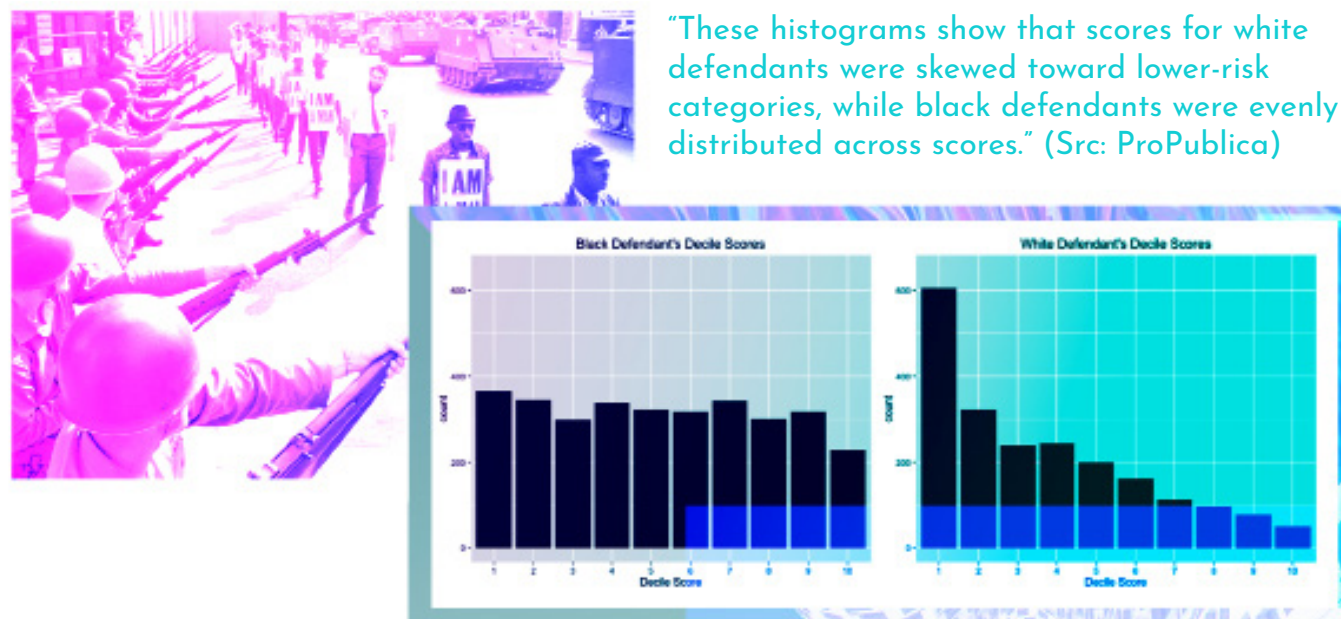
ProPublica found that Black defendants were more likely to be misclassified as higher risk while white defendants were more often misclassified as low risk. Black folks were

inaccurately identified as future criminals at almost twice the rate as white defendants.

When comparing the "Risk of Violent Recidivism" scores to the actual recidivism rates of defendants, they found the prognoses to be "remarkably unreliable" - only 20% of the people predicted to commit violent crimes actually did.

How does COMPAS work? An important part of it is a questionnaire consisting of 137 questions that are either answered by the defendant or drawn from their criminal record. The questions are not only directly related to risk but also comprise the topics "criminal personality," "social isolation," "substance abuse" and "residence/stability," where defendants are each ranked low, medium or high risk.

"These histograms show that scores for white defendants were skewed toward lower-risk categories, while black defendants were evenly distributed across scores." (Src: ProPublica)



"Race" is not one of the categories. Instead, questions such as "Was one of your parents ever sent to jail or prison?", "How many of your friends/acquaintances are taking drugs illegally?", "How often do you have contact with your family?", "How often have you moved in the last twelve months?", "Do you have an alias (do you sometimes call yourself by another name)?", "How many times did you skip classes while in school?", "How often did you get in fights while at school?" and "How hard is it for you to find a job above minimum wage compared to others?" are asked.

An interesting factor is the change of use: COMPAS was originally developed to provide judges with an understanding of

the defendant's rehabilitation needs. For instance, it should help them decide on how much mental health counseling they have to offer if the defendant is put on probation - or if it is likely that they are "unsuitable" for treatment.

Question to think about: How likely is it for the judge to decide against the recommendation of the tool?

See more details here: <https://www.propublica.org/article/machine-bias-risk-assessments-in-criminal-sentencing>

<https://www.propublica.org/article/how-we-analyzed-the-compas-recidivism-algorithm>

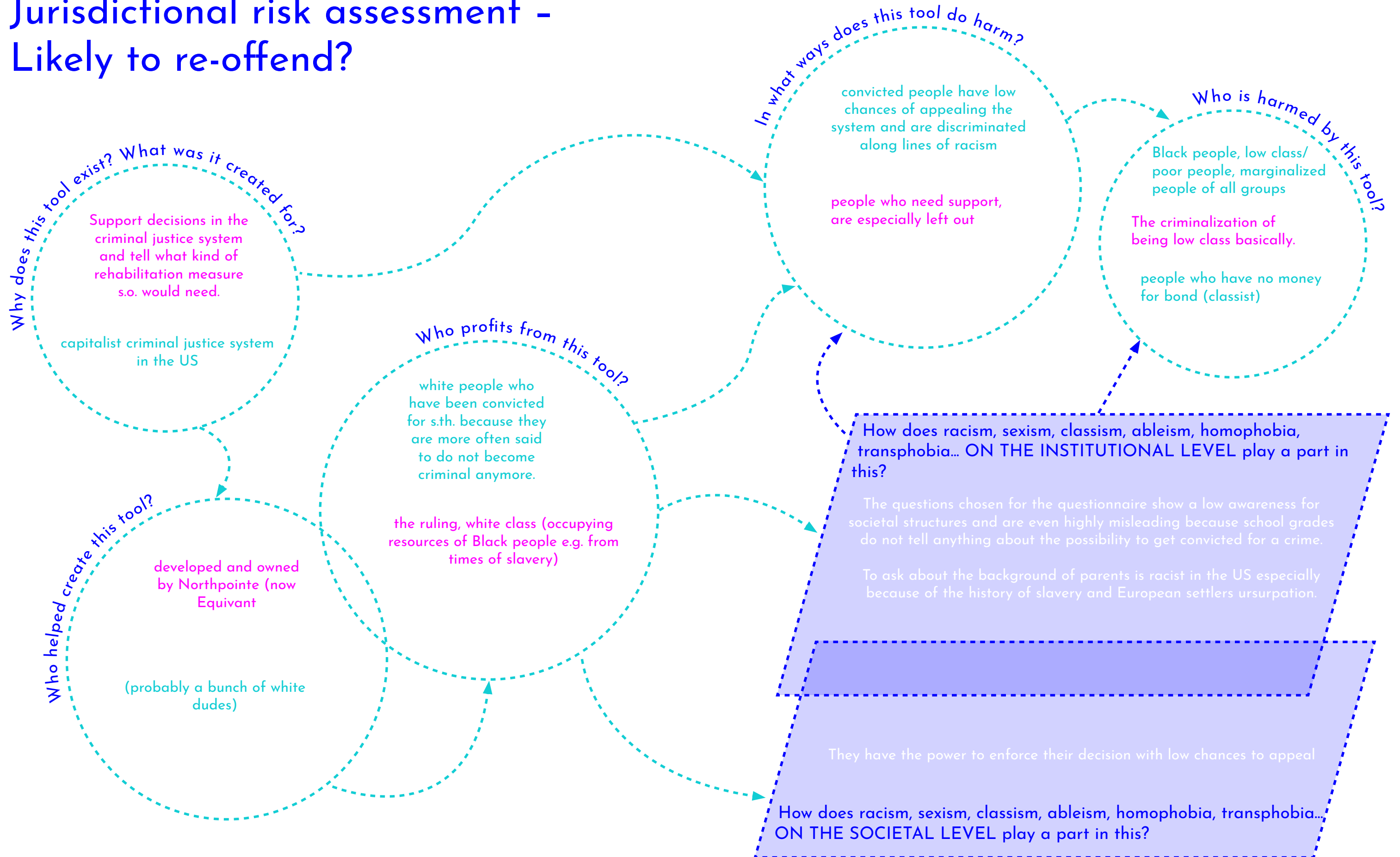
The screenshot displays the COMPAS assessment tool interface. It includes a questionnaire with questions such as "Did you ever get in fights while at school?" and "How often did you get in fights while at school?". Below the questionnaire is a "Criminogenic Need Scales" bar chart. The chart shows scores for various risk factors, including "Violent Recidivism Risk", "General Recidivism Risk", "Criminal Involvement", "Subsistence/Style", and "Personality/Values". The scores are represented by horizontal bars of different colors (red, green, blue, orange, yellow). The interface also includes a sidebar with navigation options like "Assessment", "Summary", "Recommendations", and "History".

Northpointe Suite's COMPAS Assessment Bar Chart

Excerpt of the Questionnaire (Src: <https://assets.documentcloud.org/documents/2702103/SampleRisk-AssessmentCOMPAScore.pdf>)

Case[3]

Jurisdictional risk assessment - Likely to re-offend?



“We have the gift and the responsibility to imagine. And yes, this is a dark age. And a darkness such as this is the perfect setting for our dreams. Visionary fiction is a way to shape dreams of justice - to understand that art is not neutral, that what we dream and create is a practice ground for the futures we need”

adrienne maree brown



Dreams of Visionary Fiction

Redefine
Remix
Reimagine

Who Inspires Us?

Who are the artists, academics, critics, thinkers, thinkers, technologists who we need to look to in order to understand our technological presents and change our technological futures?



Chela Sandoval wrote a book "Methodology of the oppressed" where she explains how we all can learn from theories and strategies developed by academics and activists what she calls "US third world feminism". The point is that we can use technologies and deconstruct them and resignify them and do meta-ideologizing by redefining their use along an orientation that she calls democratics. At one point she quotes **María Lugones** who said that love is a requisite for anti-racist feminism. Also **Audre Lorde** says that mutual love is a potential to overcome hierarchies.

Now there is the musician **Björk** who has made a great song "all is full of love" with a very great video showing two robots in really erotic loving interactions. For one time these robots are not fighting machines or machines for profit maximation but for inspiring loving interaction on a quite non hierarchical plane. Computer science classes and video games might inspire more for such loving interaction, if social meanings and ethical values are discussed.



WENDY LIU

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The problem of Silicon Valley is it's relationship with capital. It's the profit motive. It's the fact that a very small minority of people control the industry.

PRATYUSHA KALLURI

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Don't ask if artificial intelligence is good or fair, ask how it shifts power.



MUTALE NKONDE

AI FOR THE PEOPLE

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In order to create a truly equitable future, public interest technologists should be critical of the asymmetrical power systems that lead to the weaponization of technological systems against vulnerable communities.

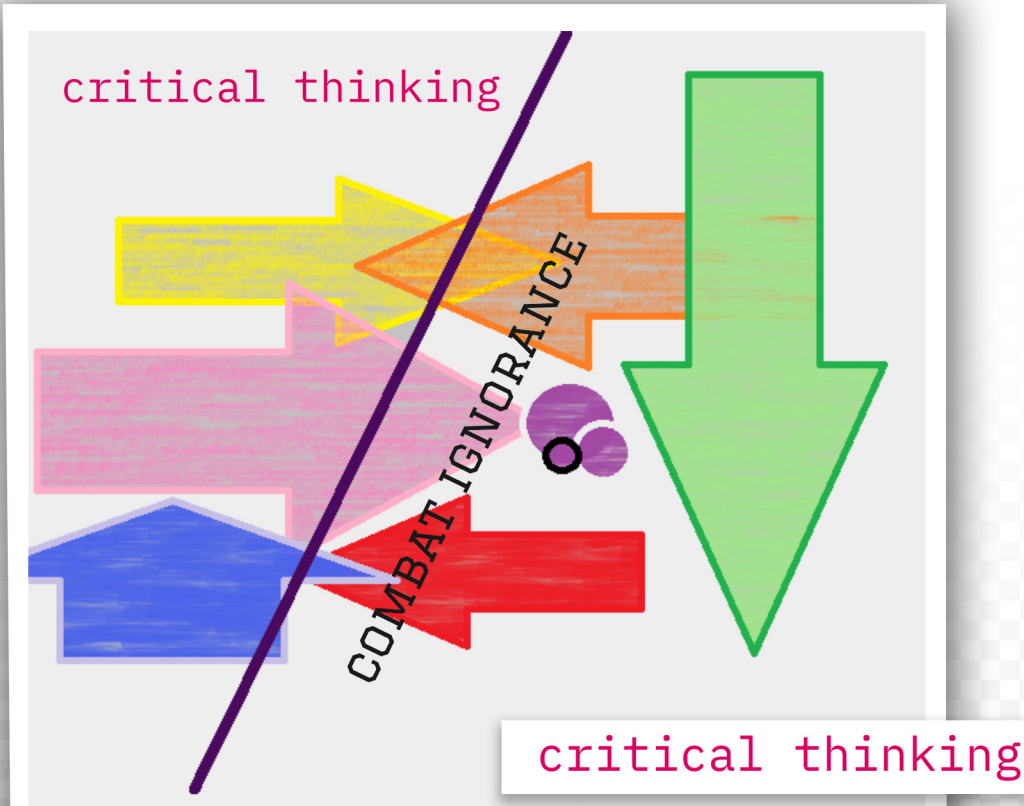


HOW WE RESIST

We aren't powerless subjects of technology as in dystopian science-fiction. We can resist, remake, and reclaim our technological futures.

Sources of Resistance:

- Appropriation
- Artistic intervention
- Boycotts
- Civil disobedience
- Counter-culture
- Decolonialization
- Design Justice
- Détournement
- Feminism
- Hacktivism
- Indigenous knowledge
- Innovation
- Ludditism
- Public mobilization
- Revolution
- Reform
- Social activism
- Tactical Media



accept help
help others

layers

diversity

community

unintentional but responsibility

humanity

acceptance
over
ignorance

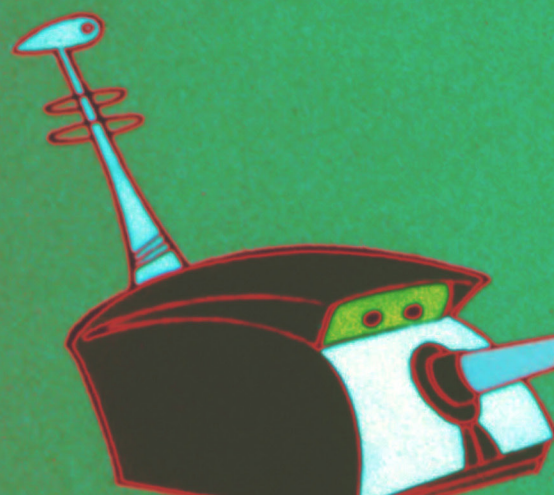


**"You live in a world where human beings
and robots work side-by-side, doing the
jobs they <3"**

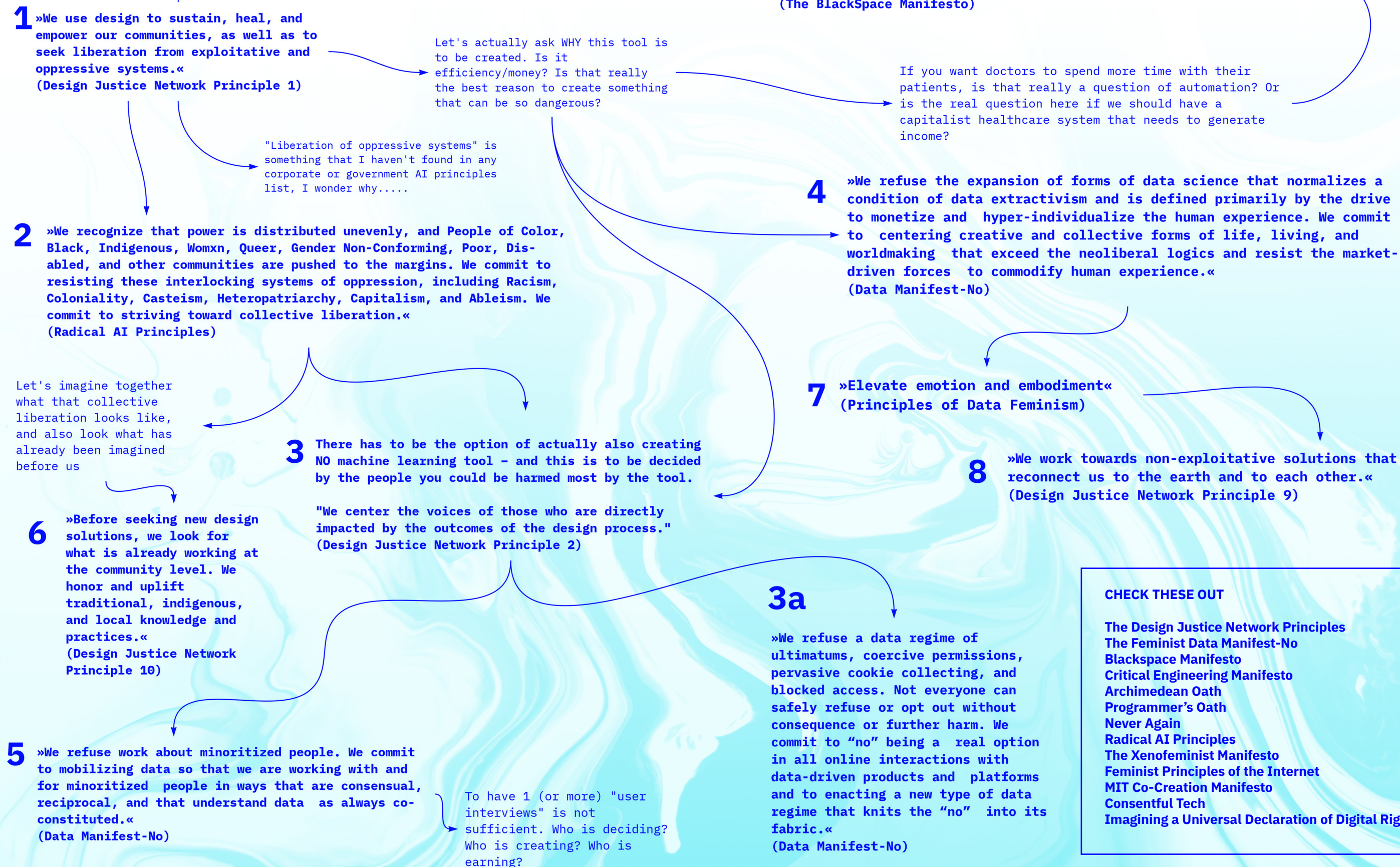
Robots don't have to make important socio-cultural decisions as if
they are humans / humans don't have to work in the Amazon
warehouse like they are robots

"Technology should not aim
to replace humans, rather
amplify human capabilities."

– Doug Engelbart



MANIFESTO REMIX



"In the near future, all children are educated by robots..."

How can we reinvent our technological futures?

The
"view from nowhere" is
developed in Donna
Haraway's Situated Knowledges

<https://radicalai.net/principles>

We recognize that no one
has a 'view from nowhere'

EMPATHY

EMOTIONAL
HEALTH

Let's design an
AI system that actively
destroys biases

Wir
wehren uns dagegen,
beobachtet, aufgenommen oder
erforscht zu werden. Wir sind nicht eure
Forschungsobjekte. Wir waren da, wir sind da
und wir werden immer da sein. Es gibt nichts zu
entdecken, nur zu lernen.
WATCH YOUR SILENCING GAZE!
http://www.wienwoche.org/de/1078/silencing_gaze

POWER AND PRIVILEGE
WIENWOCHEN
11.-20.9.2020

POWER AND PRIVILEGE
WIENWOCHEN
11.-20.9.2020

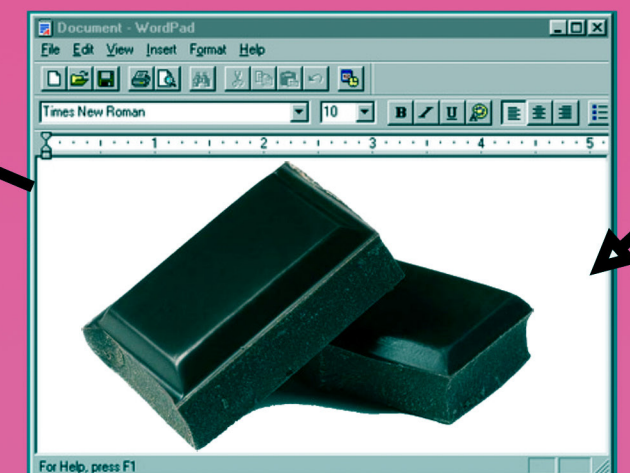
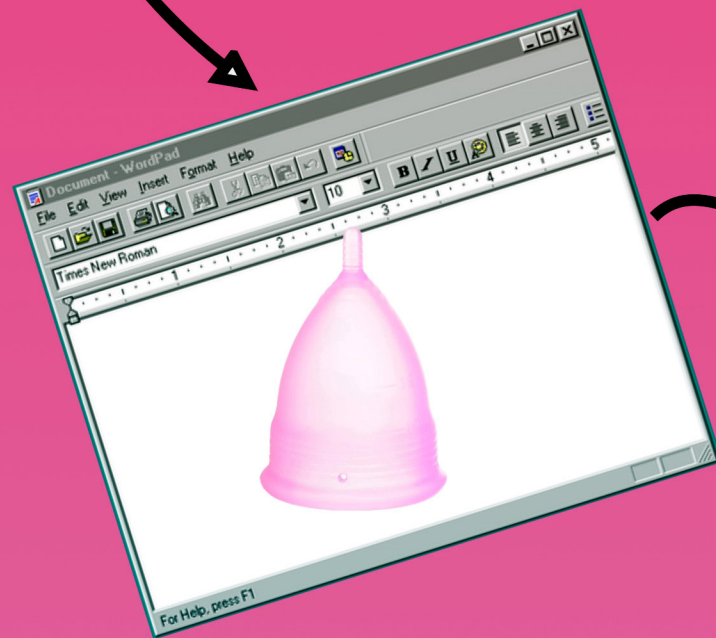
POWER AND PRIVILEGE
WIENWOCHEN

HOW TO BECOME
A HIGH-TECH
ANTI-DISCRIMINATION

**ACTIVIST
COLLECTIVE**



ASK YOUR BIG BROTHER WHAT YOU NEED



"With a neural implant,
anyone can wirelessly access
the internet with their
thoughts."



Visionary Future

Sentences

"We have developed technology to digitally back-up our brains"

"Moods are controlled by brain stimulators embedded at birth"

"A corporation gets elected as president for the first time in history"

"Machines have attained equal legal status with humans"

"Most business transactions or information inquiries now involve dealing with a simulated person"

"High-resolution audio-visual cybersex has become the new sexual norm"

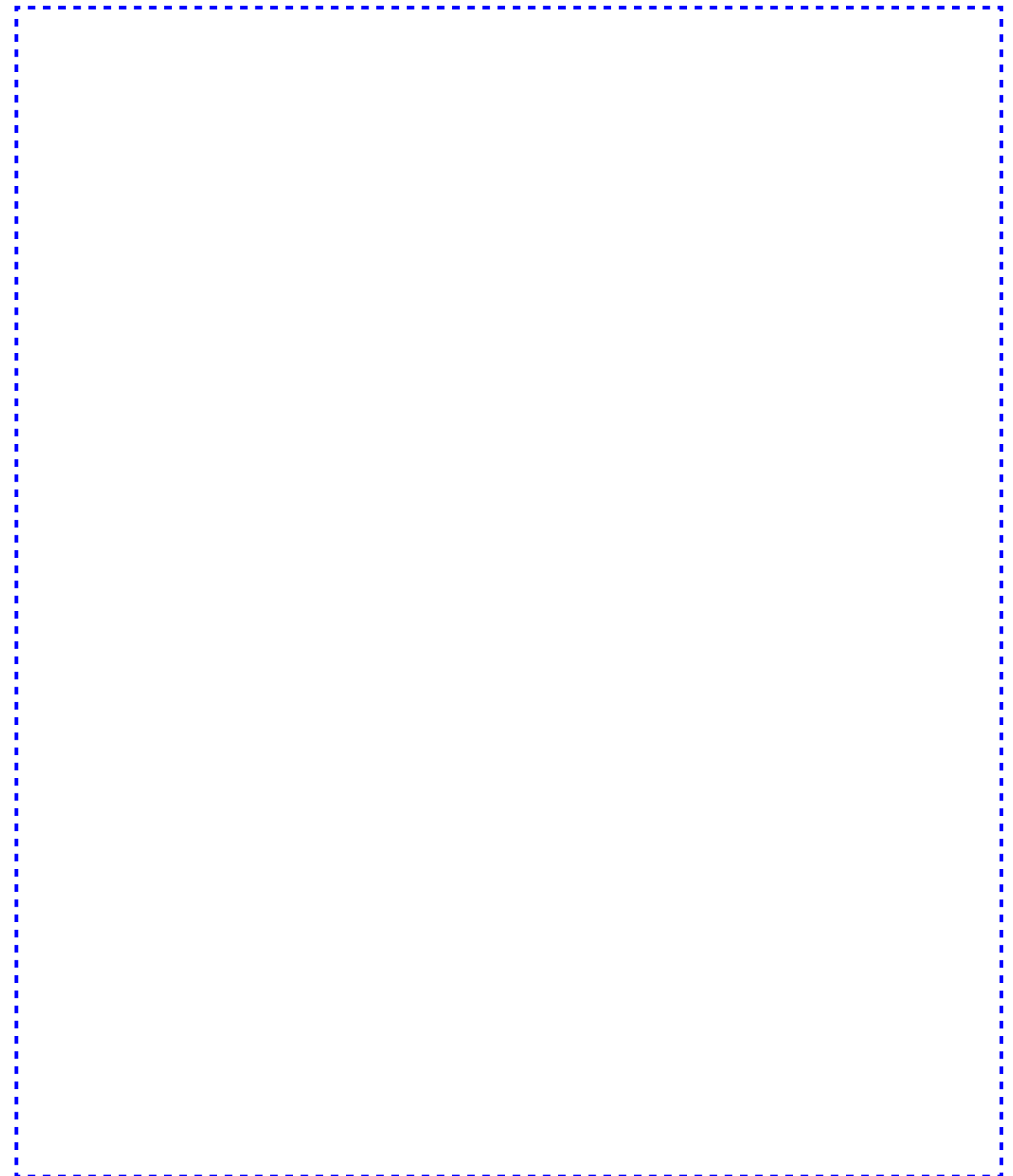
"All civil servants have been replaced by more efficient algorithms"

Values



How can we reinvent our technological futures?

1. Use one of the sentences on the previous page as your framing future scenario. What are the possible implications of this future?
2. Pick two of the values to help you create a re-imagined technological future.
3. Create a collage on this page to convey your new future vision.



BINGO! Awkward Algorithm

Drag a TOKEN to each 'awkward algorithm' you've encountered this week:



Endless Ads for a Product I've Already Bought 	Recommendation Algorithm That Doesn't Know What I Want 	Confused customer- service chatbot 	Name is too short or too long for form
Promoted content that's eerily specific to a private conversation I had 	Clearly Fake News	Camera Didn't Recognize My Face	Got caught in a Youtube recommendation rabbithole 
I had to report a bot	Automated Rejection Letter	Automated Moderator Flagged my Content	One specific ad that is chasing me around the web 
 My Tinder date showing up in my friend recommendations	Watched one weird video, now Youtube thinks that's the only thing I ever want to see 	Comic image recognition miss- labelling	Automated moderator deactivated my profile 

Credits

Workshop and zine created by...

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internet teapot
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Waltraud Ernst
@malweene
Lisa, Bianca, Louis

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