

TRAINING SECTION

Understanding vision-language AI through an intersectional lens

What is AI, really?

A very simple idea hidden behind letters that sound complicated.

POCKET DEFINITION

An AI is a programme that learns to do something by looking at many examples, instead of someone telling it step by step how to do it.

LIKE A CHILD LEARNING

Nobody teaches a child what a cat is with a list of rules.

We show them many cats — in different sizes, colours, poses — until they can recognise them.

AI does the same, but with millions of examples.

Core elements of AI

What AI “knows” and how it is used depends on these three elements. All three can be questioned.

How it learns

DATA

Thousands or millions of examples.
Photos, texts, videos, sounds.

→ *Key questions*

*Where do they come from?
Who collected them?
Who is included and who is missing?*

PATTERNS

The model looks for regularities:
"whenever I see X, Y appears".

→ *Key questions*

Who sets the categories? (gender, race, and others). Do the patterns we find depend on demographic characteristics with stereotyped links?

RESULT

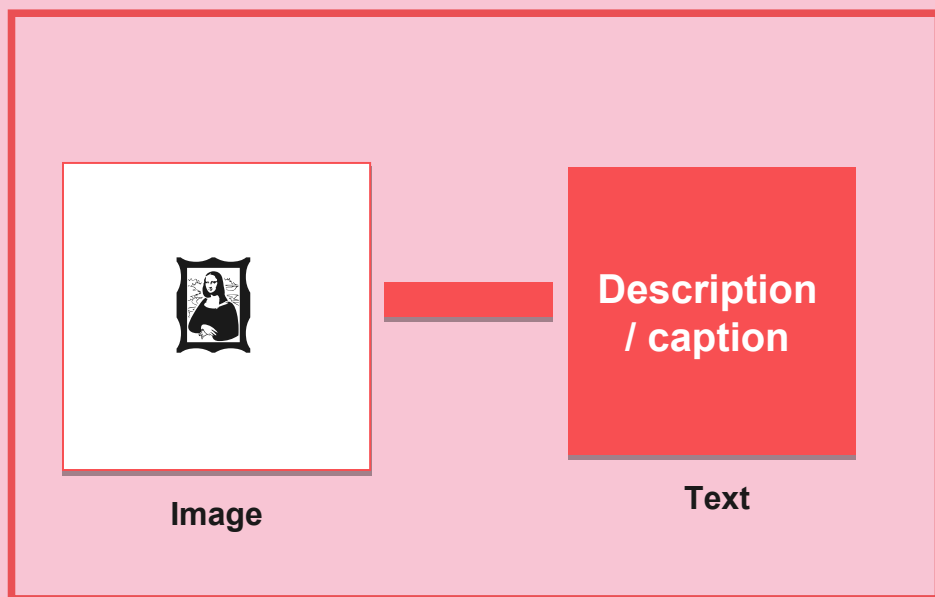
A response: a label,
an image, a text.

→ *Key questions*

The result is presented as "objective", but it carries all previous decisions within it.

Models that look and put words

These are the main focus of today's workshop.



IN ONE SENTENCE

A vision-language model learns **to connect images with words**.

It has seen billions of image + text pairs collected from the Internet.

That is why it can label your face, generate images from text, or answer what is in a photograph.

They are already everywhere (perhaps without you knowing it)

Some places where you have probably encountered a vision-language model this week.



Image search

When you type words and get photos. Or the other way round.



Generated images

Tools like "write and I'll make you an image".



Facial recognition

Cameras that identify people.



Border controls

Systems that decide if we "look like" who we say we are.



Social media

Filters, automatic tags, recommendations.



Public services

Identifying conditions through image diagnosis

They decide more and more about us: who is watched, who passes, who gets help.

Now let's talk about the lens we want to use to analyse and create the technology

What is a feminist lens?

A way of looking, analysing and acting

IT IS A LENS THAT ASKS...

Who has the power to decide?

About whom? About which bodies and which lives?

Who is left out of the narrative?

Who do we never talk about? Who does not appear in the data?

How are the consequences distributed?

Who receives the benefits? Who pays for the mistakes?

A political, economic and technological proposal to eradicate gender inequalities and hetero-patriarchy, build societies free from sexism and place full lives at the centre.

Intersectionality

Social identity axes:

Power at the centre, marginalisation at the edge.

How to read it?

The closer to the centre, the closer to power.
The closer to the edge, the closer to marginalisation.

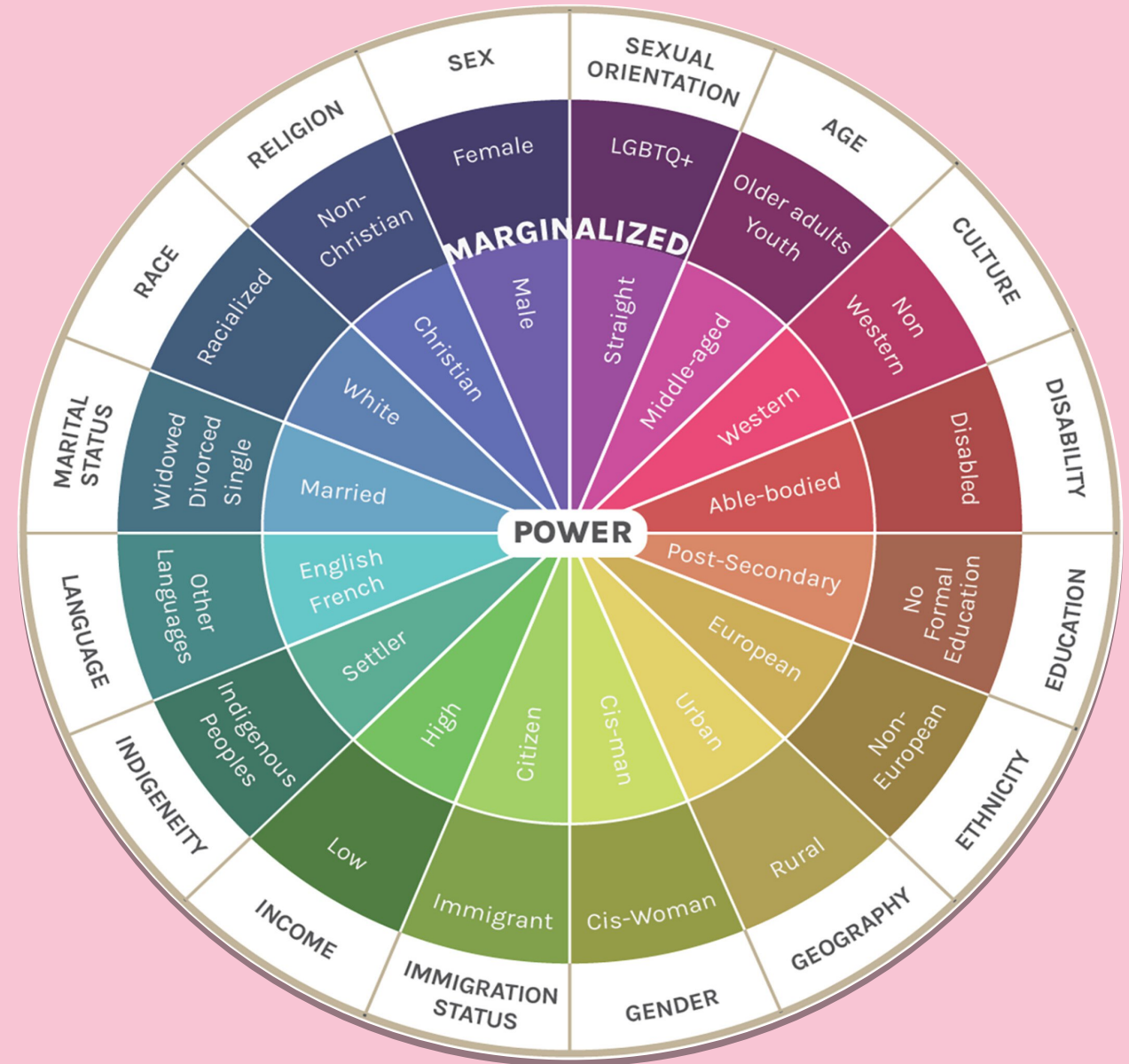
Each person occupies a different position on each axis; **the combination of all is what we call intersectionality.**

Key idea

Privilege and oppression do not add up, they intertwine.

A racialised woman with a disability does not experience three separate oppressions, but a specific experience that emerges from the intersection of the three axes.

Change one axis and the whole changes.



Intersectionality

Beyond identities: a look at structures

Matrix of domination: intersectionality is not only about identities crossing in a person, but systems of power — capitalism, racism, hetero-patriarchy, ageism, ableism — that are built and organised mutually.

Patricia Hill Collins & Sirma Bilge (2016)

It is not just who you are, but also how power is organised

Intersecting identities

Each person occupies many positions at once: gender, class, racialisation, age, ability... and the crossing produces a unique experience.

Structures that support each other

Patriarchy, racism or capitalism are not separate systems: they are built and reinforce each other in laws, institutions and culture.



A magnifying glass for questions

When we apply this lens to anything — including AI — we can ask: How is it represented?

Who is there?

01

Which people, bodies, voices appear?

Who is missing?

02

What do the absences tell us? What has been left out?

Who is affected and how?

03

can the same system cause different harm depending on who you are?

Who decides?

04

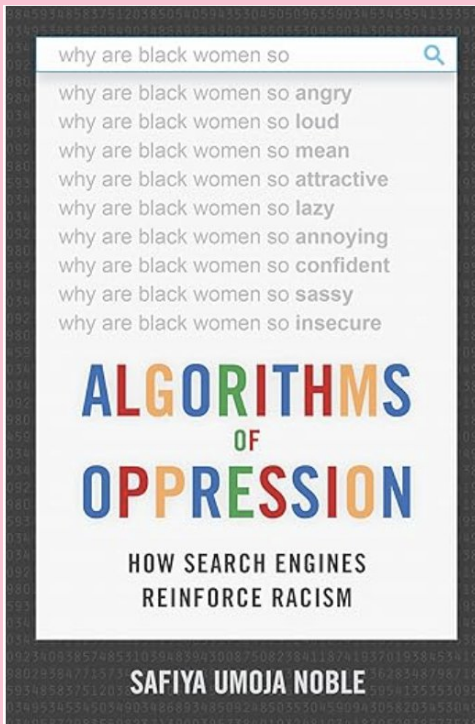
Who made the design decisions? With what perspective?

Contributing to generate political and technological systems that are more just and fair

Stereotypes and control

Stereotype. A simple, repeated image that reduces a group to a few fixed traits. Stereotypes are often not accidents: they are produced. Dominant groups create images about marginalised groups to justify power relations.

Controlling images (Hill Collins). She describes images that seek to dehumanise Black women and justify the exploitation of their labour. These images do not describe reality: they shape it. They dictate who deserves help, who generates suspicion, who remains invisible. E.g.: mammy, jezebel.



Algorithmic oppression. Noble showed how Black women appeared systematically sexualised on Google. **Algorithms are not neutral: they reflect systems of domination.**



Why look at AI through intersectional eyes?

Because today this technology decides about **bodies** and **lives**.

Because we want to work for **technological justice**, transforming the conditions that produce inequalities.

Because justice above all is built with the voices/images at the margins.

01

DATA IS AN UNEQUAL MIRROR

The internet does not represent everyone equally.
Who has been photographed, labelled, described? Who has not?

02

MODELS DO NOT SEE THE SAME IN EVERYONE

They work better with the faces and voices that appear most in the data.
Worse with those that appear less.

03

THE CONSEQUENCES ARE NOT EQUAL EITHER

An AI error can be a joke for some people and a closed border for others.

Data, design and who audits the models?