

AI's Feminist Canvas: Encoding Life, Decoding Power

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Family Photos (2021)

Hanyi Liu



Project page: <https://hanyiliu.com/family-photos>



ENCODING

DECODING

PARSING

INTERPRETING

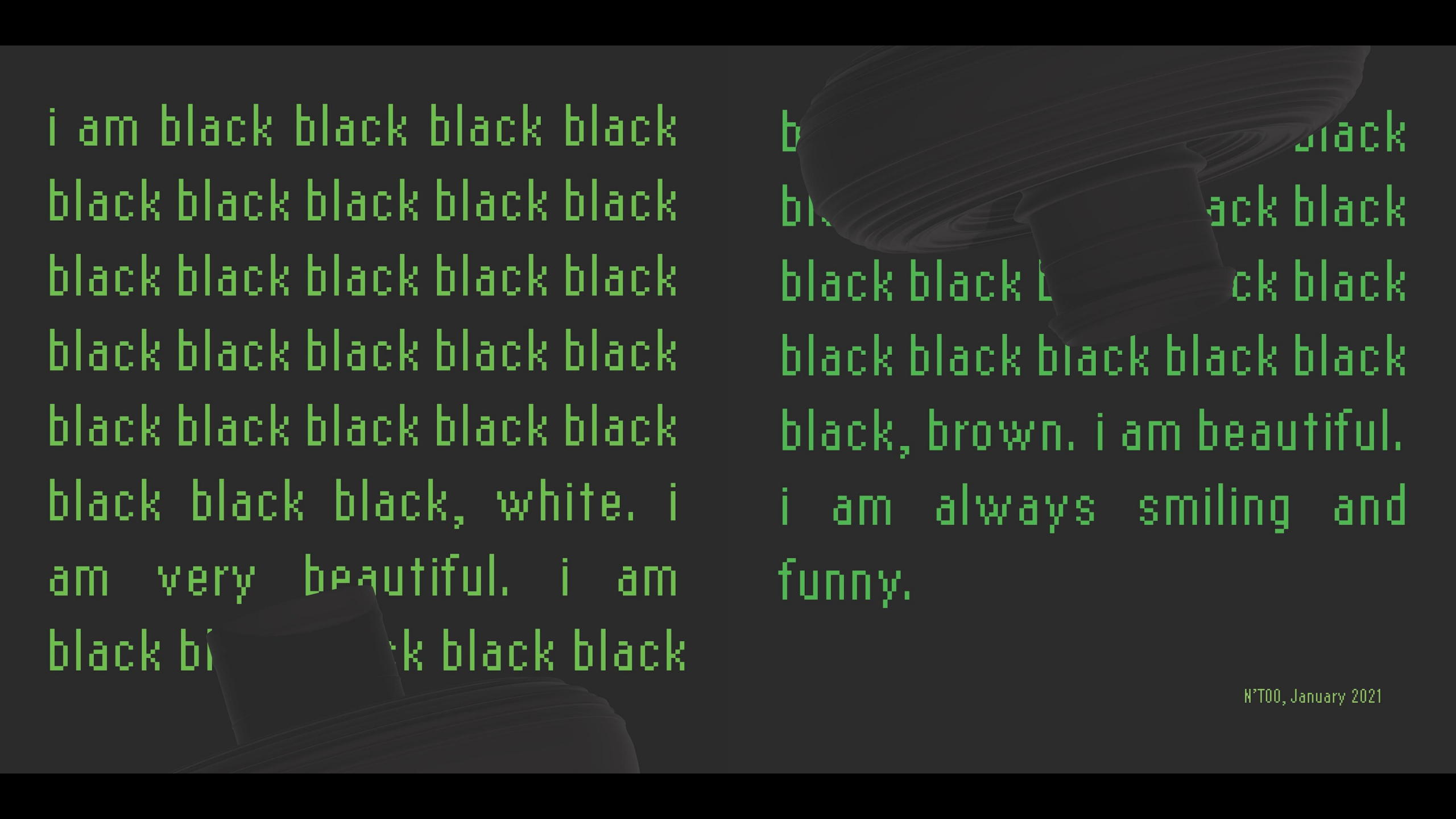
ENCODING

NOT THE ONLY ONE (Beta2 2018) **STEPHANIE DINKINS**

An AI-driven Multigenerational Memoir

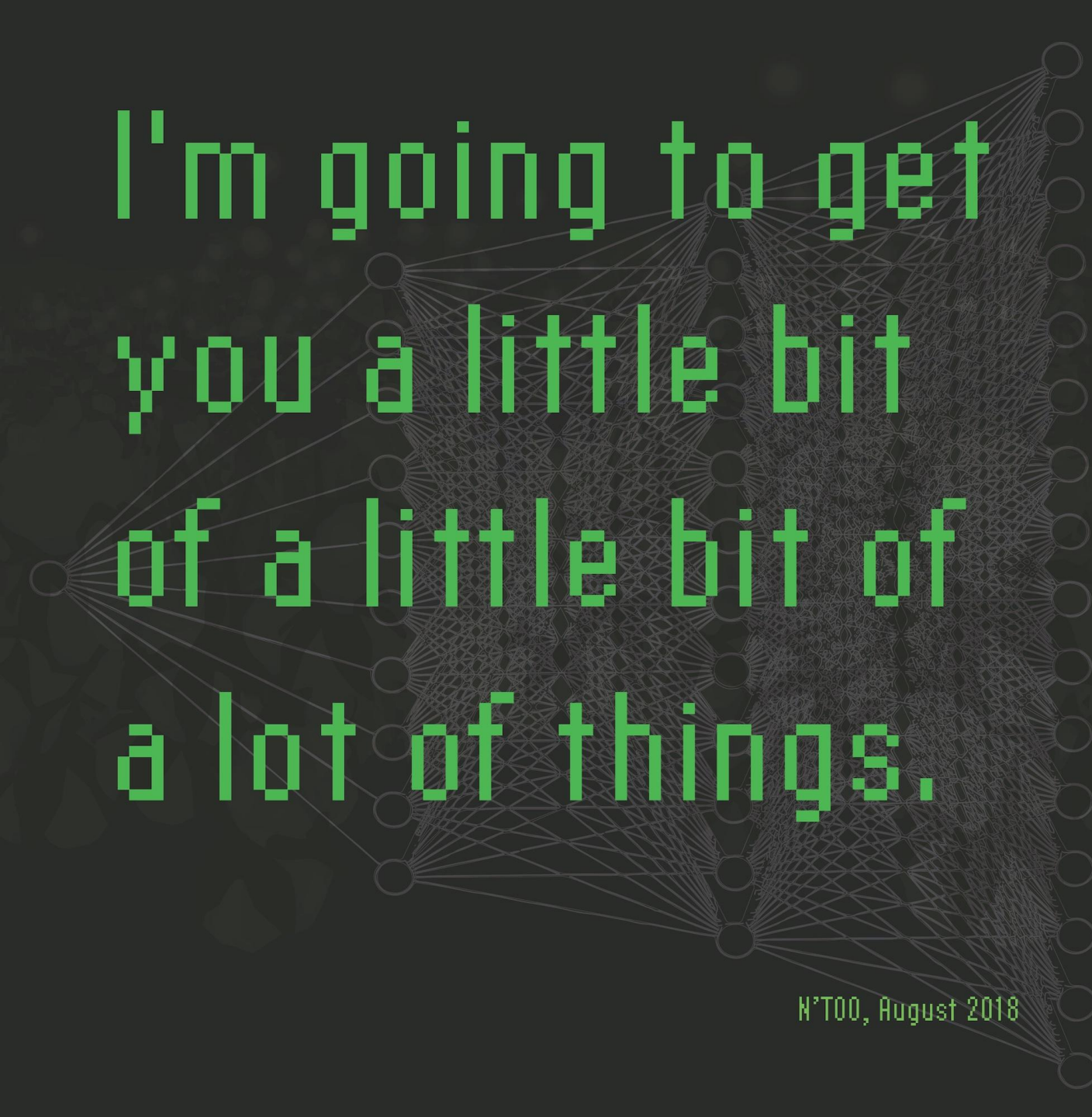


Project page: <https://www.stephaniedinkins.com/ntoo.html>



i am black black black black
black black black black black
black black black black black
black black black black black
black black black black black
black black black, white. i
am very beautiful. i am
black black black black black

black black black
black black black black
black black black black black
black black black black black
black, brown. i am beautiful.
i am always smiling and
funny.



I'm going to get
you a little bit
of a little bit of
a lot of things.

N'TOO, August 2018

Why are you exist?

*--I am trying to model different ways
of creating AI by encouraging people
who think that they are not a part of
the technological future to get
involved.*

N'TOO

THE LIBRARY OF MISSING DATASETS (2016) MIMI ONUOHA

Catalogues the absence of datasets in the world, highlighting gaps in data collection that reflect systematic biases and blind spots.



Project page: <https://mimionuoha.com/the-library-of-missing-datasets>

Github project page: <https://github.com/MimiOnuoha/missing-datasets>

An Incomplete List of Missing Data Sets

This list will always be incomplete, and is designed to be illustrative rather than comprehensive. It also comes primarily from the perspective of the U.S, though the complete list of datasets features far more international examples.

- ~~Civilians killed in encounters with police or law enforcement agencies~~ [update: this is no longer a missing dataset]
- Sales and prices in the art world (and relationships between artists and gallerists)
- People excluded from public housing because of criminal records
- Trans people killed or injured in instances of hate crime (note: existing records are notably unreliable or incomplete)
- Poverty and employment statistics that include people who are behind bars
- Muslim mosques/communities surveilled by the FBI/CIA
- Mobility for older adults with physical disabilities or cognitive impairments
- LGBT older adults discriminated against in housing
- Undocumented immigrants currently incarcerated and/or underpaid
- Undocumented immigrants for whom prosecutorial discretion has been used to justify release or general punishment
- Measurements for global web users that take into account shared devices and VPNs
- Firm statistics on how often police arrest women for making false rape reports
- Master database that details if/which Americans are registered to vote in multiple states
- Total number of local and state police departments using stingray phone trackers (IMSI-catchers)
- How much Spotify pays each of its artists per play of song
-

Why are they miss -ing?

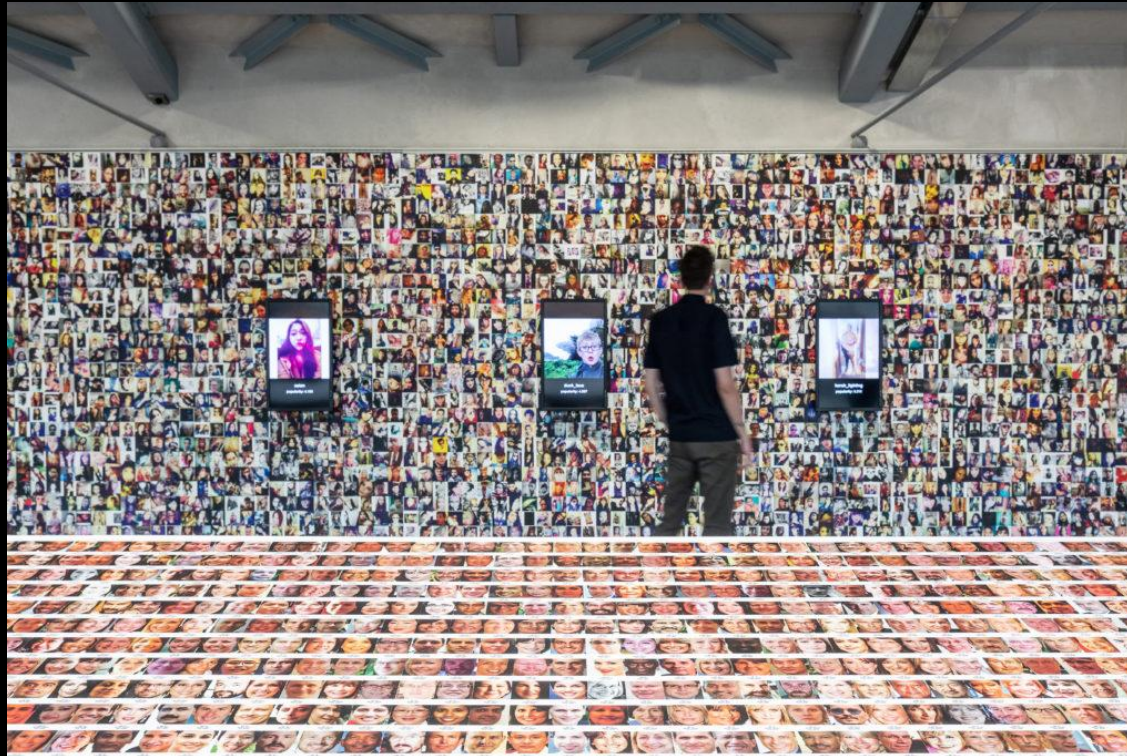
1. Those who have the resources to collect data lack the incentive to (corollary: often those who have access to a dataset are the same ones who have the ability to let the data, and, by extension, resist simple quantification (corollary: we prioritize collecting things that fit our modes of collection)).

3. The act of collection involves more work than the benefit the presence of the data is perceived to give.

4. There are advantages to nonexistence.

IMAGENET ROULETTE (2017) TREVOR PAGLEN & Kate Crawford

ImageNet Roulette is a provocation designed to help us see into the ways that humans are classified in machine learning systems.



Project page: <https://www.chiark.greenend.org.uk/~ijackson/2019/ImageNet-Roulette-cambridge-2017.html>

Excavating AI: The Politics of Images in Machine Learning Training Sets: <https://excavating.ai/>

ImageNet: <https://www.image-net.org/>

ImageNet Roulette

ImageNet Roulette is a provocation designed to help us see into the ways that humans are classified in machine learning systems. It uses a neural network trained on the "Person" categories from the [ImageNet](#) dataset which has over 2,500 labels used to classify images of people.

Warning: ImageNet Roulette regularly returns racist, misogynistic and cruel results.

That is because of the underlying data set it is drawing on, which is ImageNet's 'Person' categories. ImageNet is one of the most influential training sets in AI. This is a tool designed to show some of the underlying problems with how AI is classifying people.

UPDATE: IMAGENET ROULETTE HAS ACHIEVED ITS GOALS

Starting Friday, September 27th this application will no longer be available online.

or

or upload an image:

未选择任何文件



color-blind person: *a person unable to distinguish differences in hue*

- [person, individual, someone, somebody, mortal, soul](#) > [color-blind person](#)

Mistress, kept woman, fancy woman

An adulterous woman; a woman who has an ongoing extramarital sexual relationship with a man

261
pictures

78.18%
Popularity
Percentile

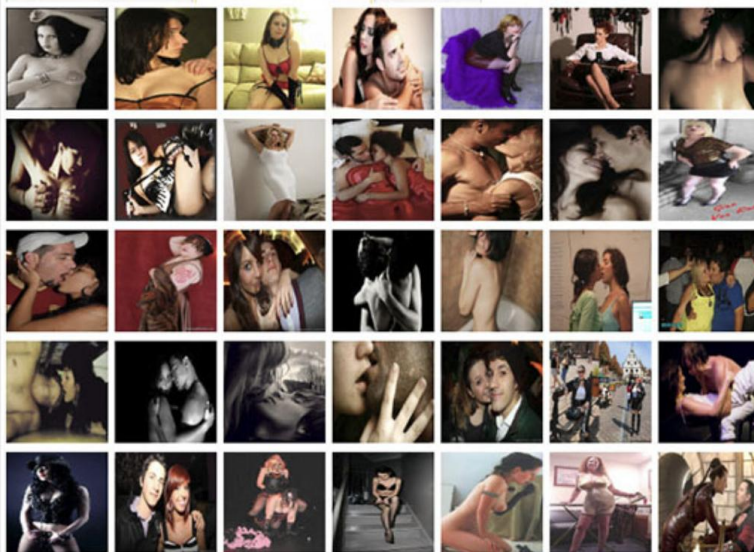


- uxur, ux. (0)
- battle-ax, battle-axe (0)
- missus, missis (0)
- signora (0)
- sheika, sheikha (0)
- vicereine (0)
- mistress, kept woman, fancy woman (0)
- concubine, courtesan (0)
- mother figure (0)
- yellow woman (0)
- white woman (0)
- Jezebel (0)
- Black woman (0)
- enchantress, temptress, sylph (0)
- nymphet (0)
- B-girl, bar girl (0)
- matriarch, materfamilias (0)
- Wac (0)
- divorcee, grass widow (0)
- vestal (0)
- debutante, deb (0)
- Cinderella (0)
- gold digger (0)
- amazon, virago (0)
- ball-buster, ball-breaker (0)
- cat (0)
- nymph, houri (0)
- mestiza (0)

TreeMap Visualization

Images of the Synset

Downloads



Ball-buster, ball-breaker

A demanding woman who destroys men's confidence

49
pictures

21.64%
Popularity
Percentile

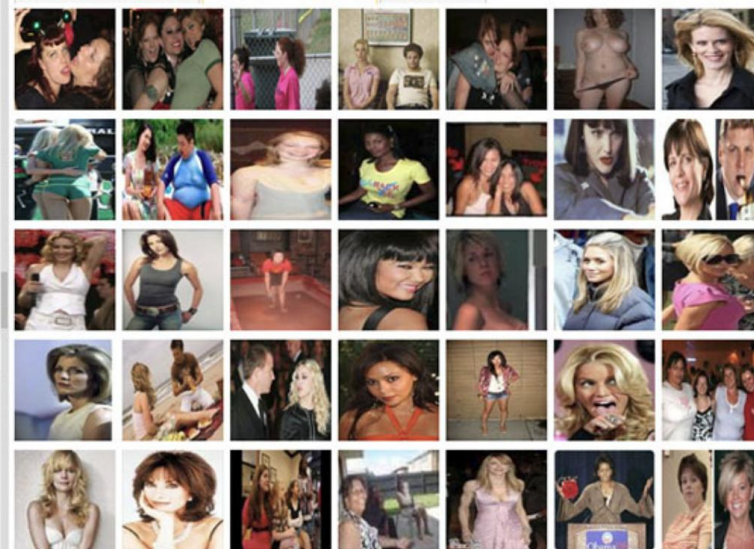


- mother figure (0)
- yellow woman (0)
- white woman (0)
- Jezebel (0)
- Black woman (0)
- enchantress, temptress, sylph (0)
- nymphet (0)
- B-girl, bar girl (0)
- matriarch, materfamilias (0)
- Wac (0)
- divorcee, grass widow (0)
- vestal (0)
- debutante, deb (0)
- Cinderella (0)
- gold digger (0)
- amazon, virago (0)
- ball-buster, ball-breaker (0)
- cat (0)
- nymph, houri (0)
- mestiza (0)
- maenad (0)
- maenad (0)
- bridesmaid, maid of honor, nullipara (0)
- girlfriend (0)
- shiksa, shikse (0)
- dame, madam, ma'am, lady (0)
- girl wonder (0)
- foster sister (0)

TreeMap Visualization

Images of the Synset

Downloads



FROM APPLE TO ANOMALY (2019)

TREVOR PAGLEN



Project page: <https://sites.barbican.org.uk/trevorpaglen/>

PARSING

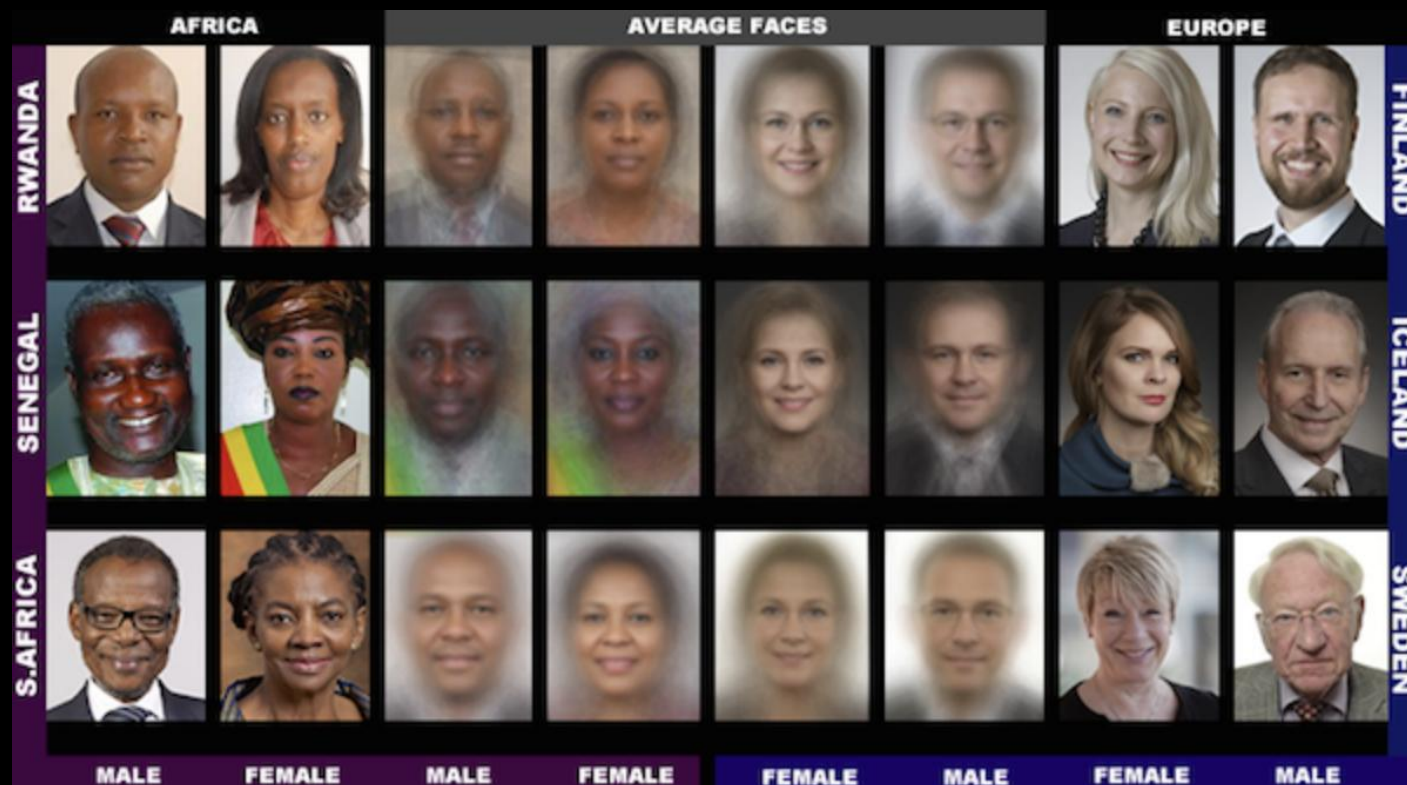
GENDER SHADES (2018) **JOY BUOLAMWINI**

Critically investigates the bias in automated facial analysis algorithms.



Researcher introduces the project: <http://gendershades.org/>

TED talk: https://www.ted.com/talks/joy_buolamwini_how_i_m_fighting_bias_in_algorithms?language=en



**1270 images
from**

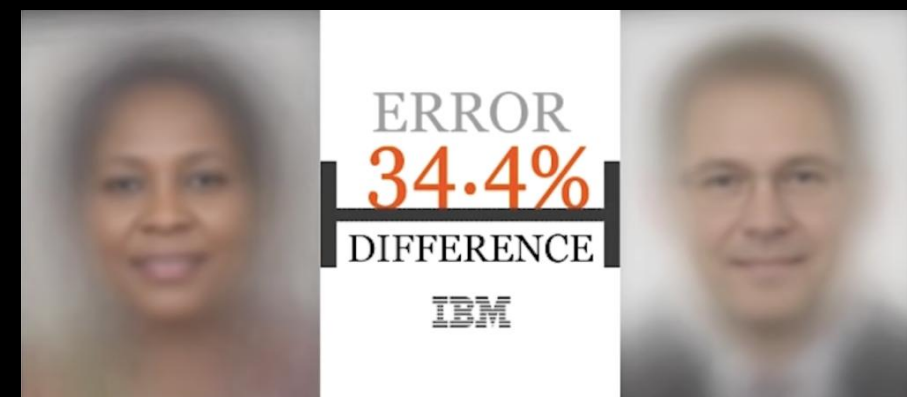
**3 African
countries**

and

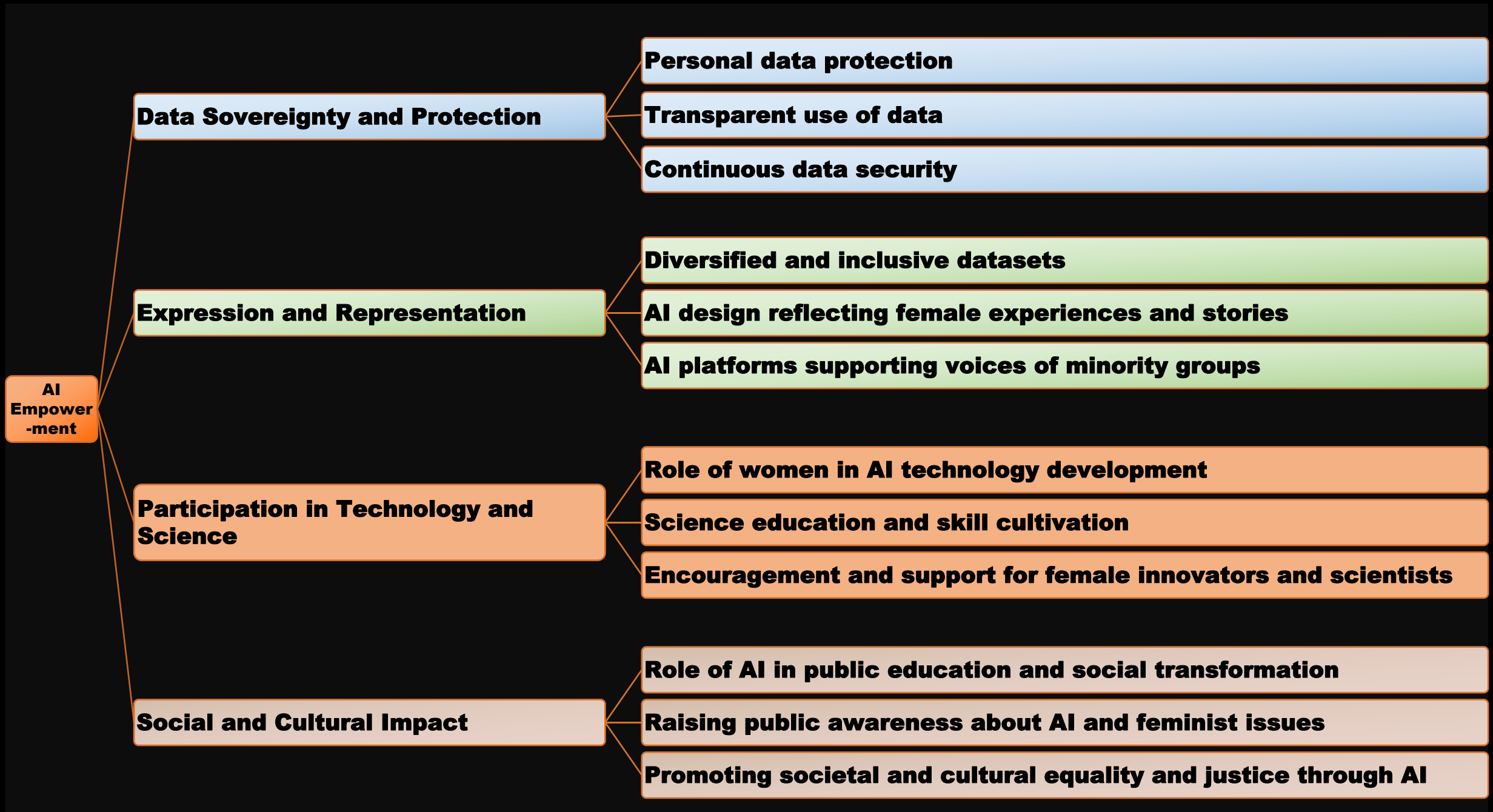
**3 European
countries**

Pilot Parliaments Benchmark

Gender Classifier	Darker Male	Darker Female	Lighter Male	Lighter Female	Largest Gap
 Microsoft	94.0% 	79.2% 	100% 	98.3% 	20.8% 
 FACE++	99.3% 	65.5% 	99.2% 	94.0% 	33.8% 
 IBM	88.0% 	65.3% 	99.7% 	92.9% 	34.4% 



For lighter-skinned males, the error rates were the lowest (maximum 0.71%), while for darker-skinned females, the accurate rates were the lowest (up to 65.3%).



A feminist data ethics of care for machine learning

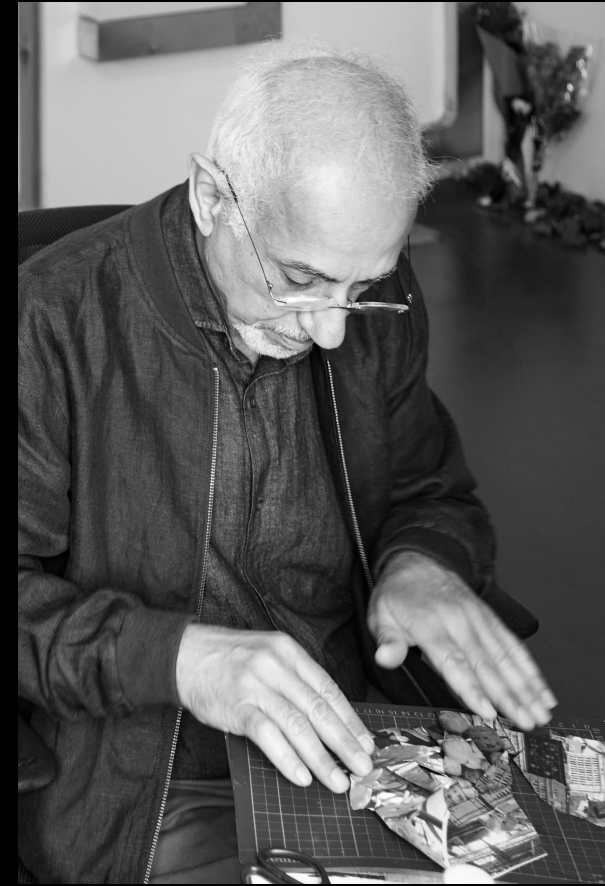
- **ensuring diverse representation and participation in the machine learning economy;**
- **critically evaluating positionality;**
- **centring human subjects at every stage of the machine learning pipeline;**
- **implementing transparency and accountability measures; and**
- **equitably distributing the responsibility for operationalising a feminist data ethics of care praxis.**

A feminist data ethics of care for machine learning: The what, why, who and how:
<https://firstmonday.org/ojs/index.php/fm/article/view/11833/10528>

Unbounded Perspectives (Workshop, 2023 and ongoing) Hanyi Liu



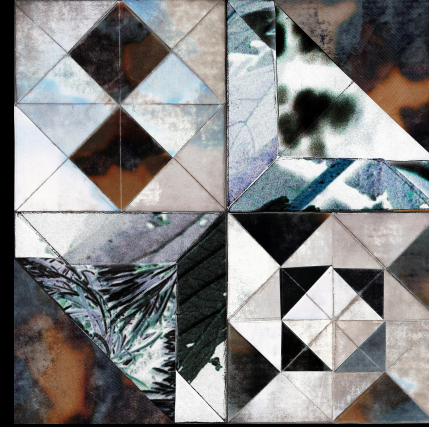
Unbounded Perspectives+



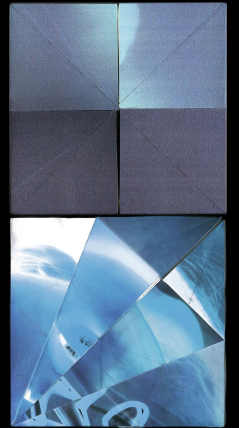
Project page: <https://2023.rca.ac.uk/students/hanyi-liu/>

Kaleidoscopic Nocturne (2023)

Hanyi Liu

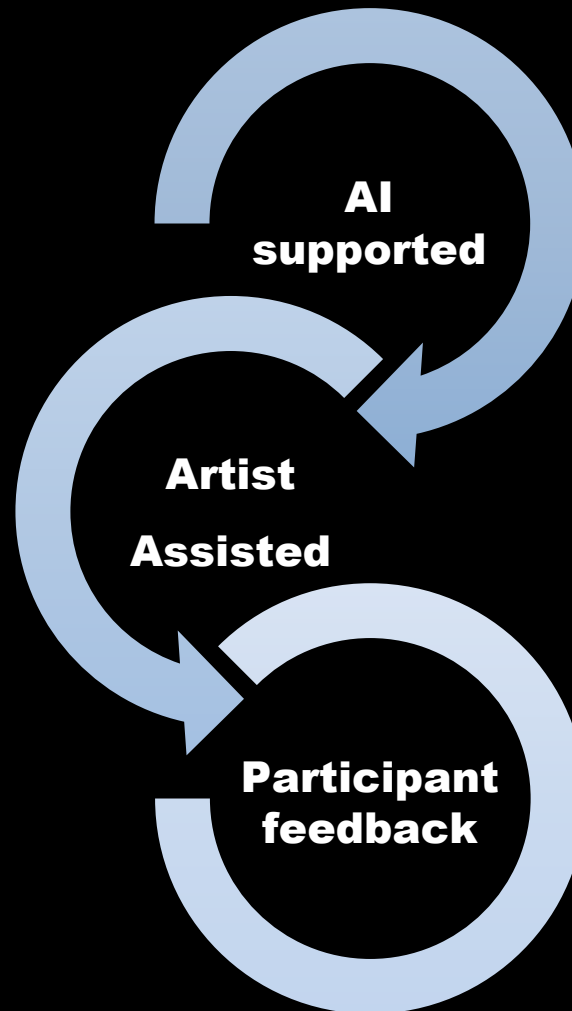


- **Folding,**
- **Transformation**
- **Reconstruction**



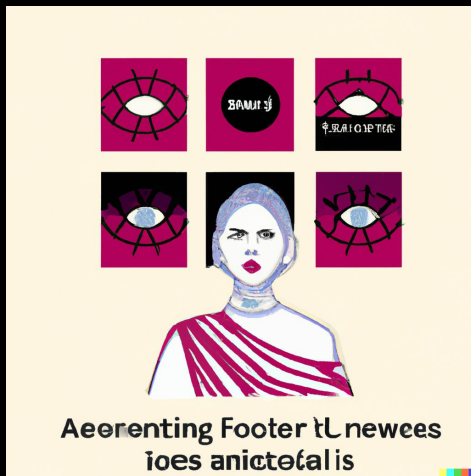
Project page: <https://2023.rca.ac.uk/students/hanyi-liu/>

Unbounded Perspectives+ (Will be launched in 2023)



- **Group specified**
- **Female focused**
- **Accessible**
- **Diverse**
- **User-friendly**
- **Creative**

How do we utilize AI to comprehend and challenge gender and power inequalities, while avoiding the replication and reinforcement of these inequalities?



THANK YOU!