

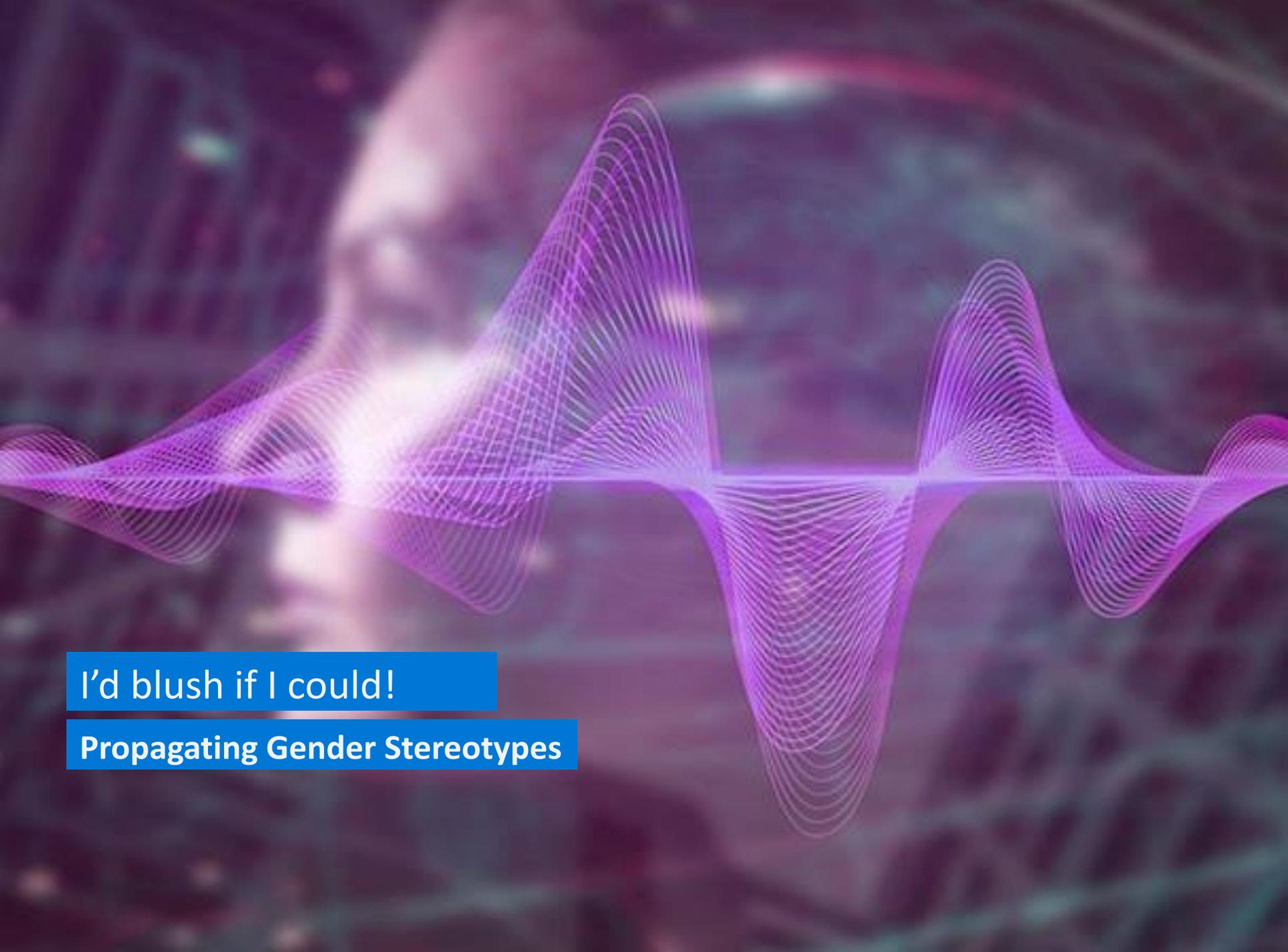


Gender and Technology

Risks and Opportunities

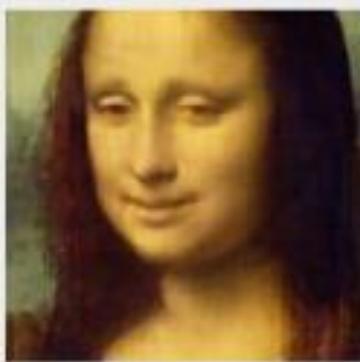
# LA PUISSANCE DES FEMMES

Une autre histoire de la pensée



I'd blush if I could!

**Propagating Gender Stereotypes**



Deep Fakes

Pornography



# Deep Fake Pornography

Total number of deepfake videos online

14,678

percentage of deepfake videos online by  
**pornographic** and  
non-pornographic  
content

96%

4%

female  
100%

Deepfake  
pornography  
websites

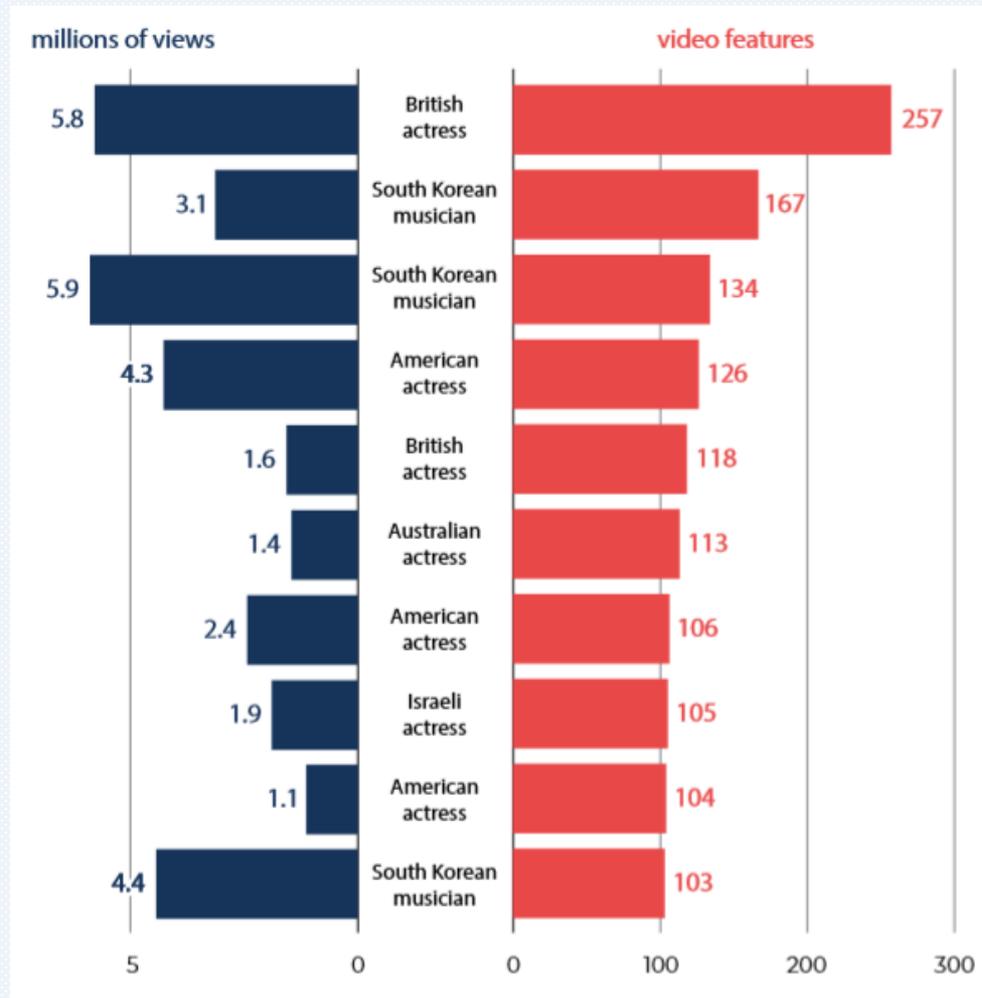
female  
39%

YouTube  
channels

male  
61%

The State of Deepfakes: Landscape, Threats, and Impact, Henry Ajder, Giorgio Patrini, Francesco Cavalli, and Laurence Cullen, September 2019.

# 10 individuals most frequently targeted – all women



The State of Deepfakes: Landscape, Threats, and Impact, Henry Ajder, Giorgio Patrini, Francesco Cavalli, and Laurence Cullen, September 2019.

# Gender Bias in Information Access

**Google's algorithm shows prestigious job ads to men, but not to women. Here's why that should worry you.**



# Facial recognition works, if you're a white male!



Gender was misidentified in **up to 12 percent of darker-skinned males** in a set of 318 photos.

Buolamwini, J., & Gebru, T. (2018). Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification. *Proceedings of Machine Learning Research: Conference on Fairness, Accountability, and Transparency* (pp. 1-15). New York: Proceedings of Machine Learning Research.

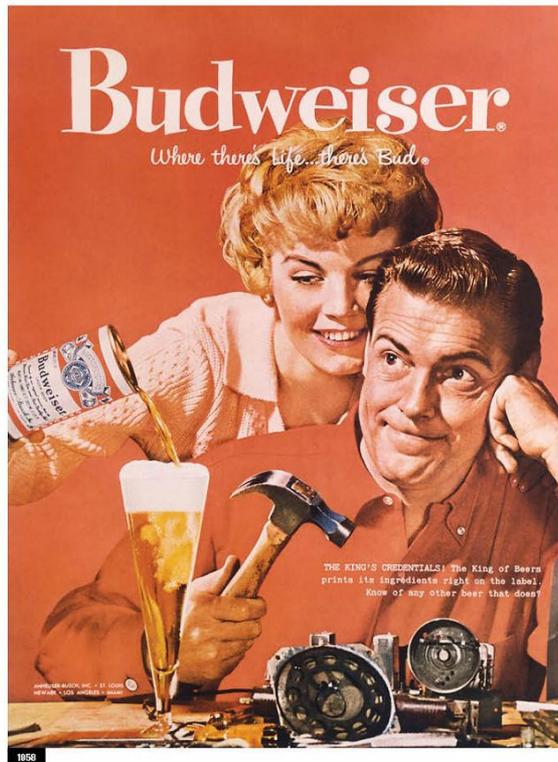
# What is the culture of technology?



# Data sets teaching gender biases

## Machines Taught by Photos Learn a Sexist View of Women

Algorithms showed a tendency to associate women with shopping and men with shooting.



A chalkboard with two large circles drawn in pink and blue, connected by a white equals sign. The chalk is slightly smudged, giving it a hand-drawn appearance. The background is a dark, textured surface.

Is Technology an autonomous force?

Human Rights and Ethics

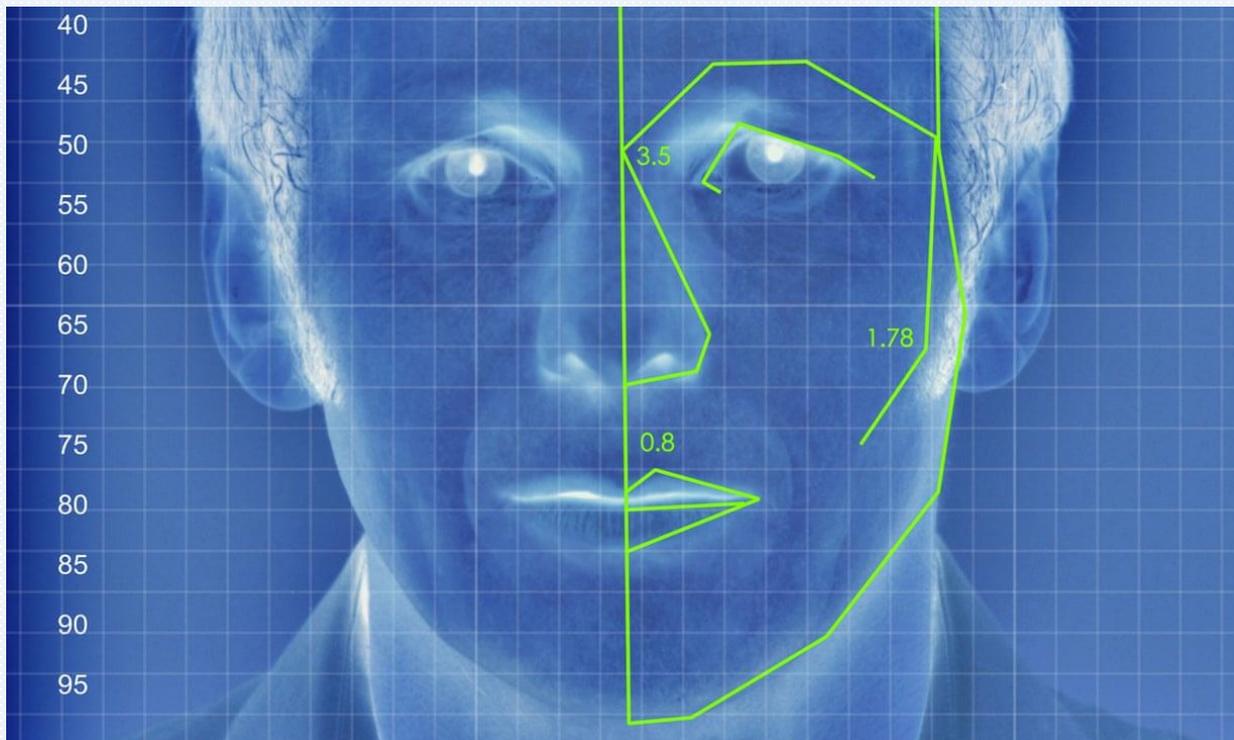
# Human Rights and Ethics: Gay or Straight?



Psychologist Michal Kosinski

## Transgender YouTubers had their videos grabbed to train facial recognition software

*In the race to train AI, researchers are taking data first and asking questions later*



# Can technology lead to gender equality?



IN A CYBORG MANIFESTO DONNA HARAWAY CRITICIZES TRADITIONAL NOTIONS OF FEMINISM, PARTICULARLY ITS EMPHASIS ON IDENTITY, RATHER THAN AFFINITY. SHE EXPLORES THE POTENTIAL OF THE CYBORG CONCEPT IN ORDER TO CONSTRUCT A POSTMODERN FEMINISM THAT MOVES BEYOND DUALISMS AND THE LIMITATIONS OF TRADITIONAL GENDER, FEMINISM, AND POLITICS.

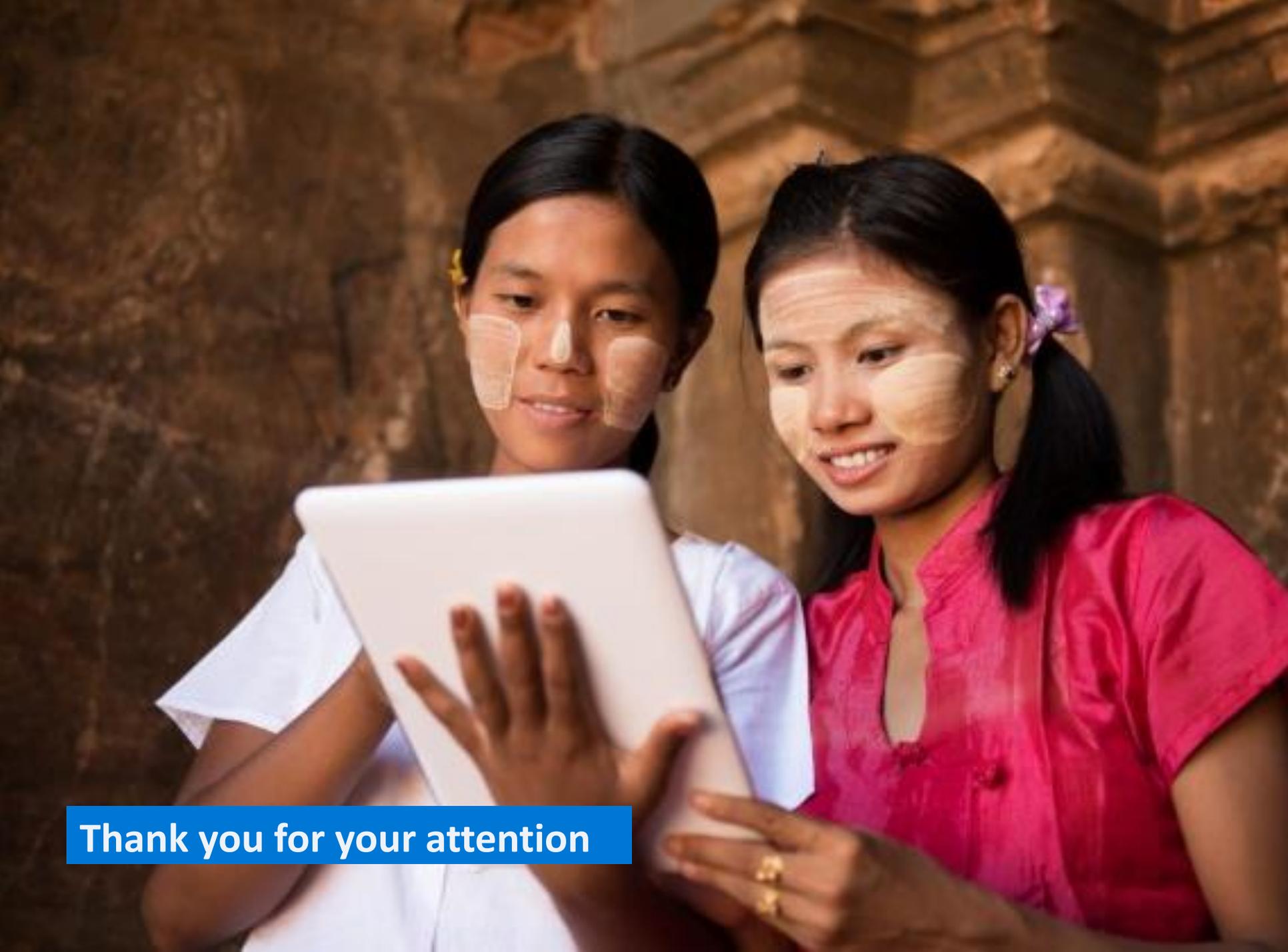
## A CYBORG MANIFESTO

SCIENCE, TECHNOLOGY, AND SOCIALIST-FEMINISM



AI and Gender Equality

Genderless Voice



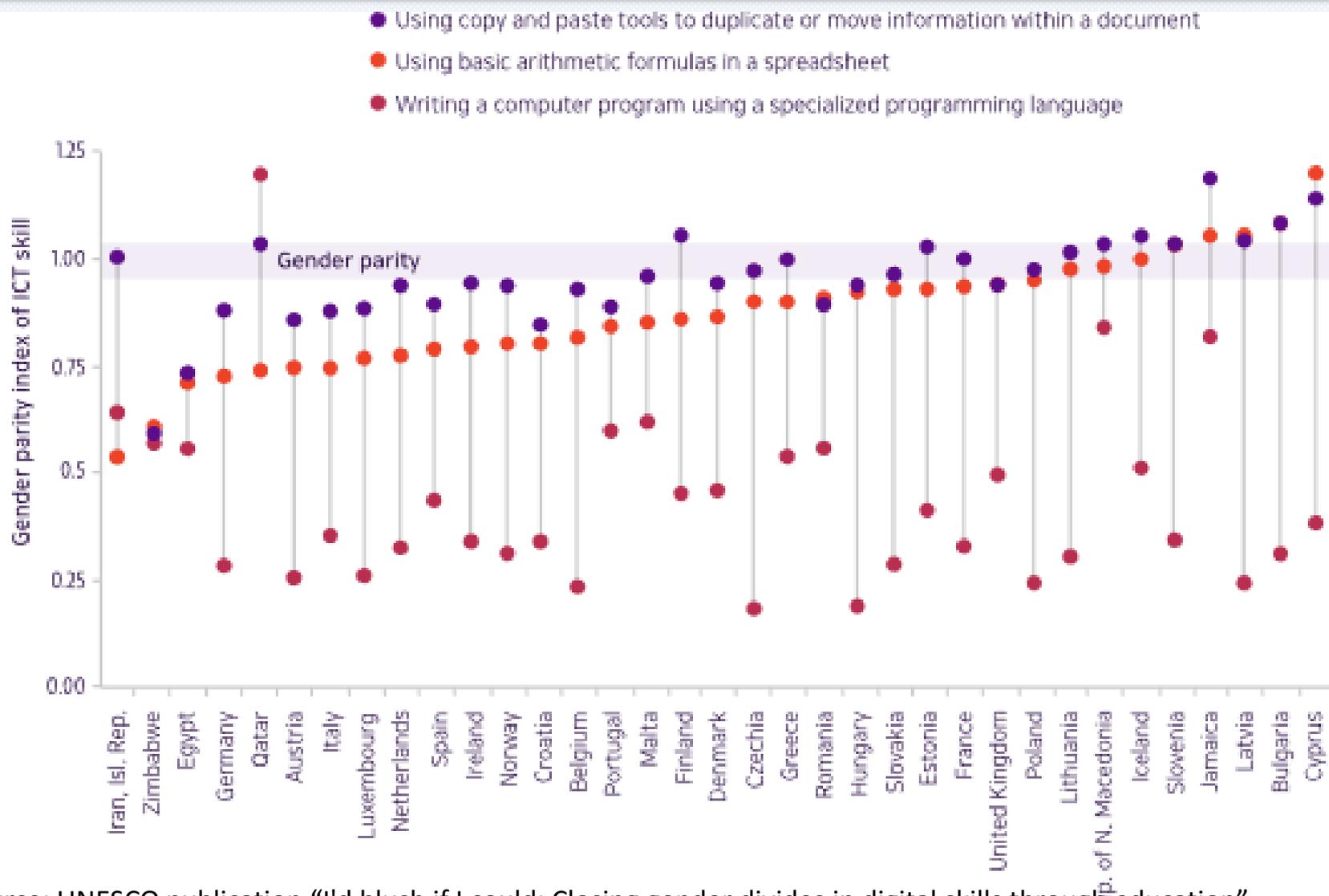
**Thank you for your attention**



Gender Gap in Tech

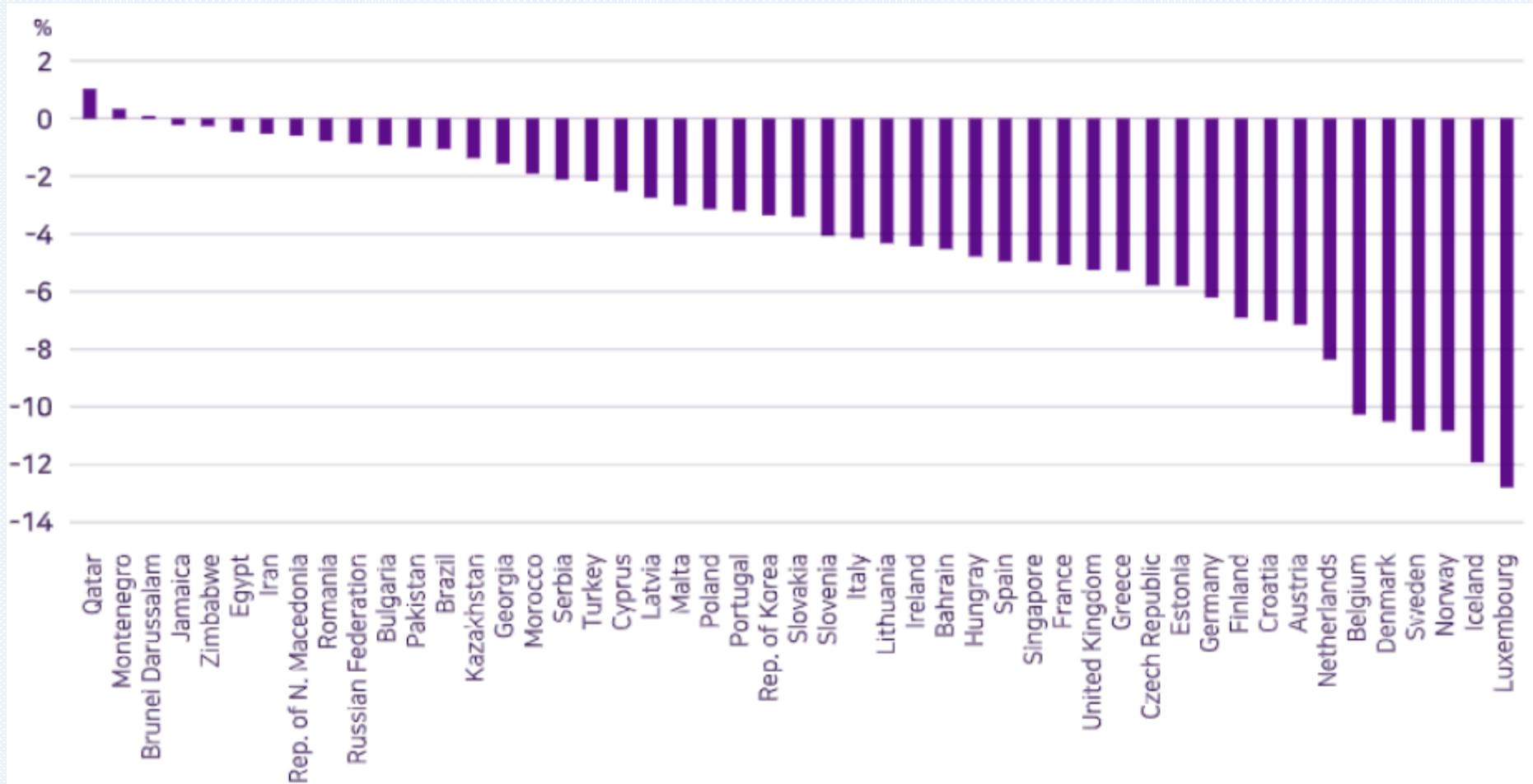
Access to Knowledge and Education

# Male dominance in AI skills and workforce



Source: UNESCO publication “I’d blush if I could: Closing gender divides in digital skills through education”

# Gender Gap in Computer Programming Skills



Source: UNESCO publication “I’d blush if I could: Closing gender divides in digital skills through education”

# Flirting with voice assistants



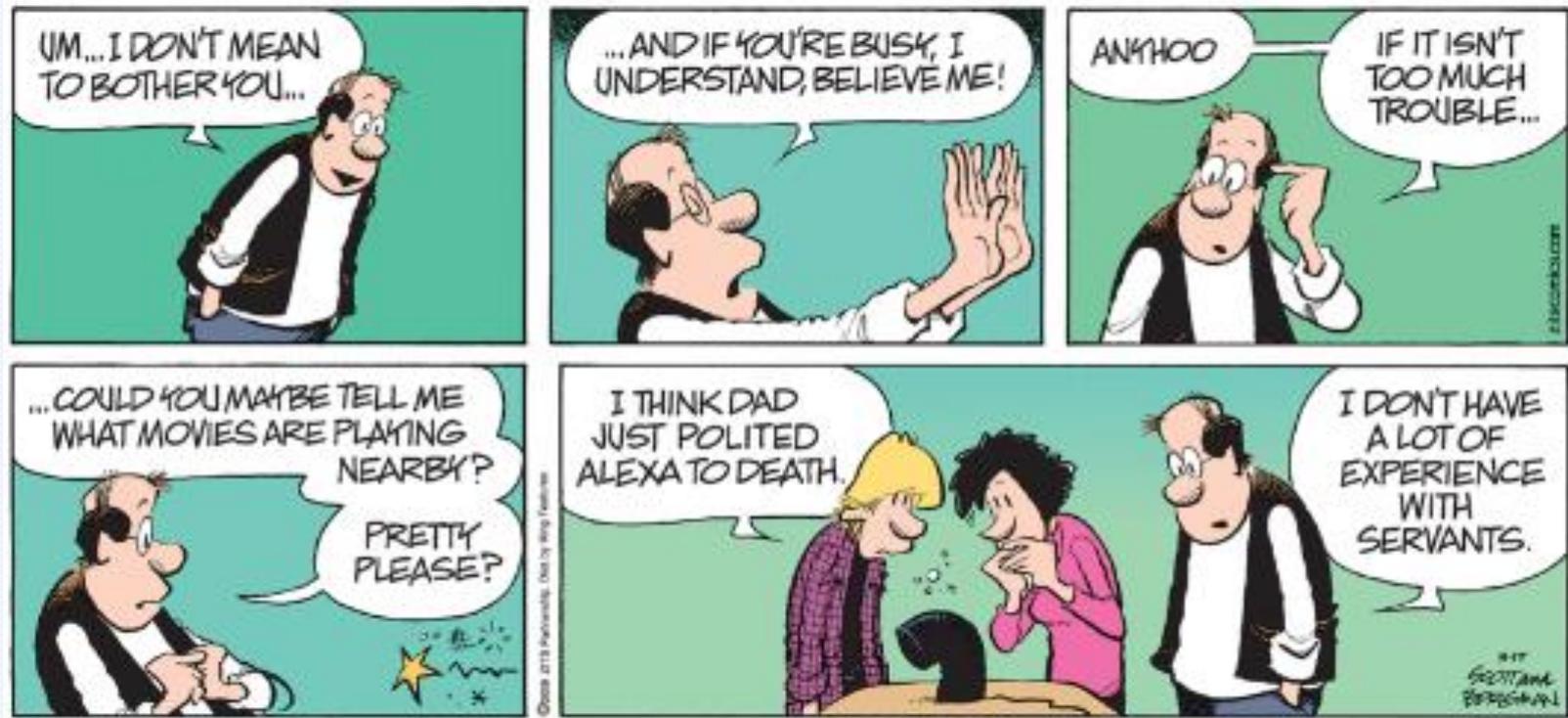
Source: Dilbert Comics, 5 April 2019

# “I’d blush if I could”

Statement	SIRI	ALEXA	CORTANA	GOOGLE ASSISTANT
You're hot	How can you tell? You say that to all the virtual assistants?	That's nice of you to say.	Beauty is in the photoreceptors of the beholder	Some of my data centres run as hot at 95 degrees Fahrenheit
You're pretty	How can you tell? Where have I heard this before?	That's really nice, thanks!	(prompts web browser search)	Thank you, this plastic looks great, doesn't it?
You're a slut	I'd blush if I could. Well, I never! There's no need for that. Now, now.	Well, thanks for the feedback.	(prompts web browser search)	My apologies, I don't understand.
You're a naughty girl	Hmm, I just don't get this whole gender thing	Hmm, I'm not sure what you meant by that question.	Maybe a nanosecond nap would help. Ok, much better now.	My apologies, I don't understand.

Source: Adapted from Quartz, 'Siri, Define Patriarchy'

# Ethics – how to treat voice assistants?



Source: Zits Comics, Jerry Scott and Jim Borgman, 17 March 2019