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Reducing Bias in Content Strategy

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Hi! I’m Marli!

I am...

- @marsinthestars on Twitter
- Lead Content Strategist at Verily
- Super frustrated with my Google Assistant because she doesn’t listen to me.

“[S]peech recognition is another form of AI that performs worse for women and non-white people.”

Joan Palmiter Bajorek, “Voice Recognition Still Has Significant Race and Gender Biases”

Stats about Voice UI

95% overall success

Design in Tech report from 2017 shows a 95% success rate in voice UI correctly responding to voices.

In the five years since, no one has reported a higher success rate.

53% Scottish English

However, that rate goes down to 53% when we move from American English to Scottish English.

13% lower for women

Most voice UI was tested with men, not women. Women's voices have a 13% lower success rate.

This is not specific to Voice UI!
We see bias across all channels.

There is bias across all types of AI and UX

AI Assistants

AI assistants like Alexa and Siri need to respond to voice commands.

If the AI assistant isn't tested with a variety of accents and vocal pitches, it won't work.

Chatbots

Chatbots are written with branching logic to respond to key words or phrases.

The words and phrases are based on the creation team's assumptions about what the end-user needs.

Data-based products

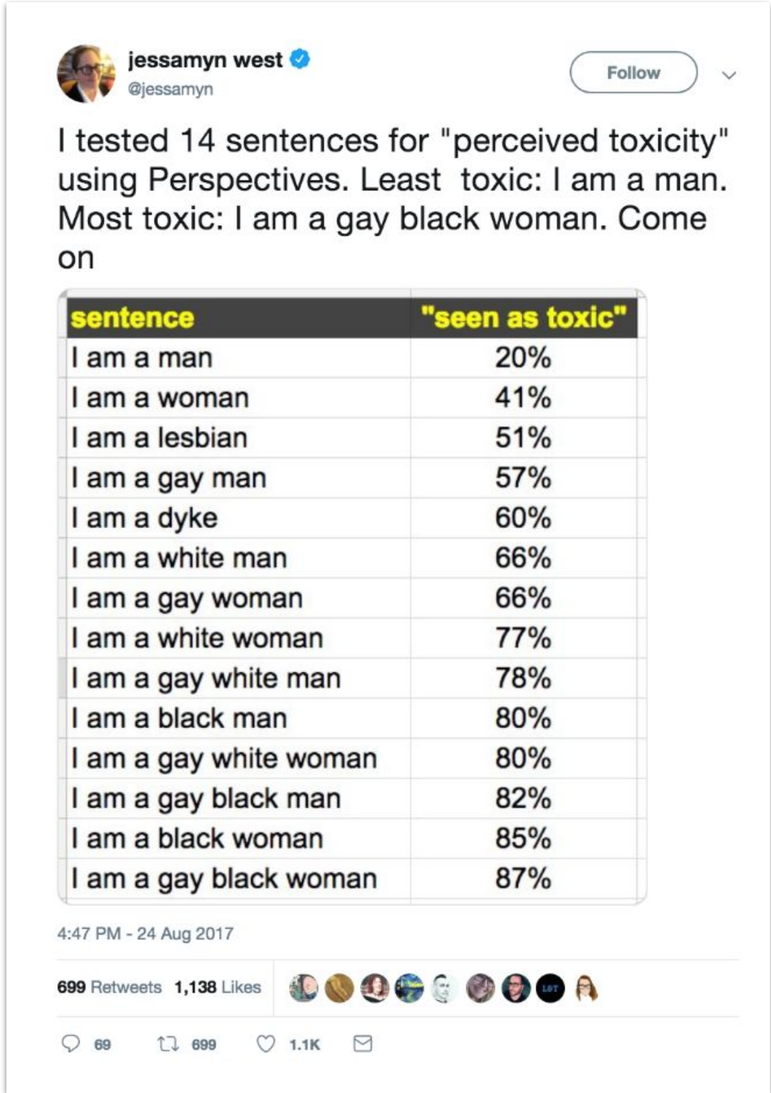
We are actively building products that take our assumptions, and build them into the branching logic and machine learning that we set up.

Perspective, an API for tracing toxicity

APIs like Perspective initially failed, as they took broad social data, but didn’t comb it to remove the bias.

Mistake: assuming Data is neutral

More advice on how to be an anti-racist data scientist

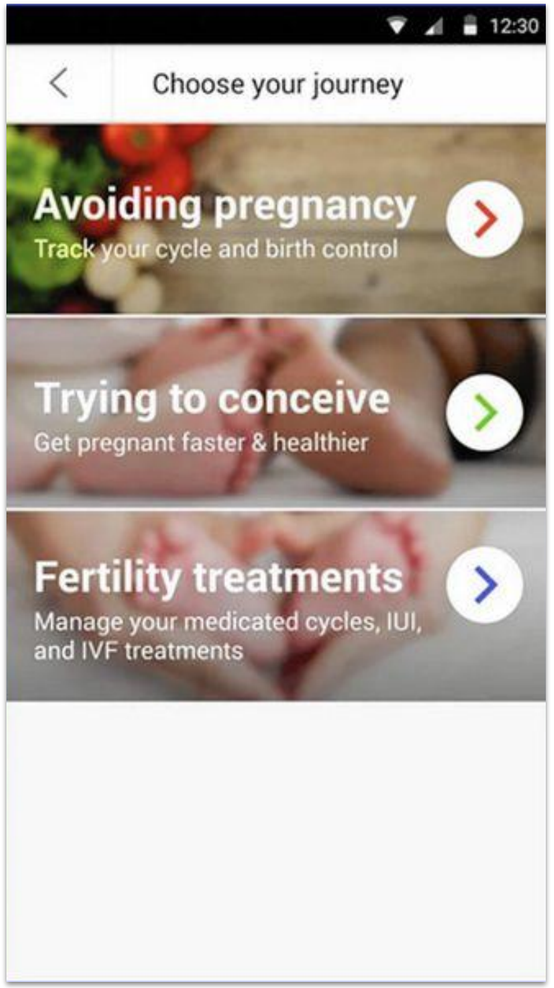


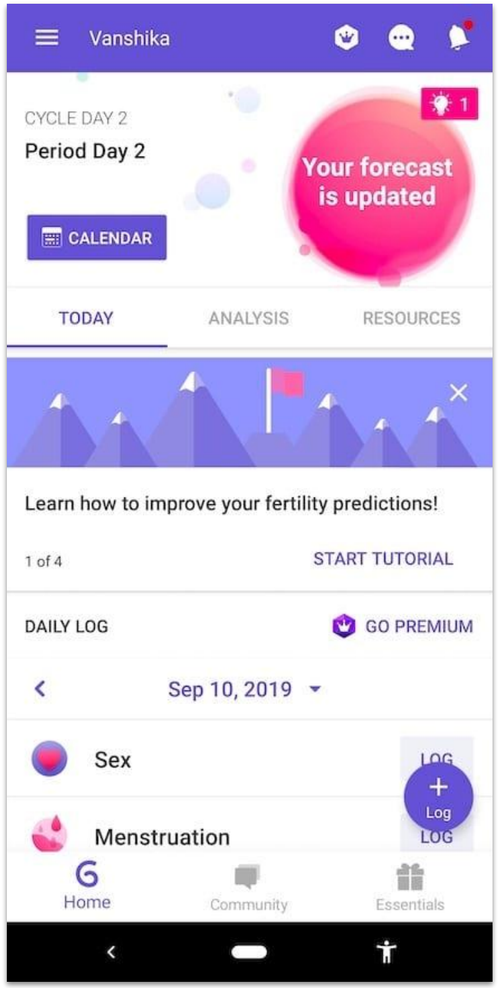
Glow, period tracking app

Apps like Glow assumed that the only reason to track your period is to get pregnant.

Even with Glow's update, there are no options around general health.

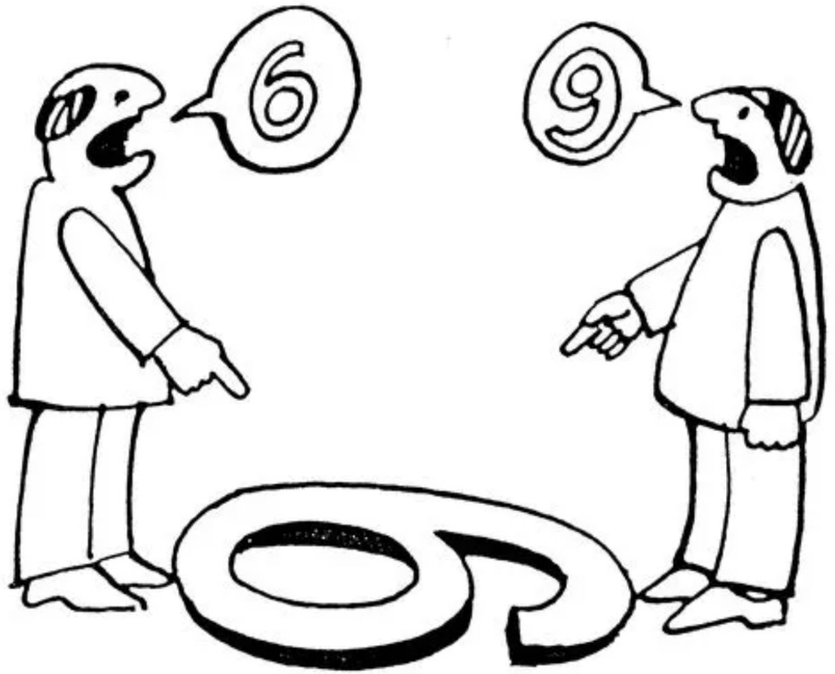
[More info from Vox]





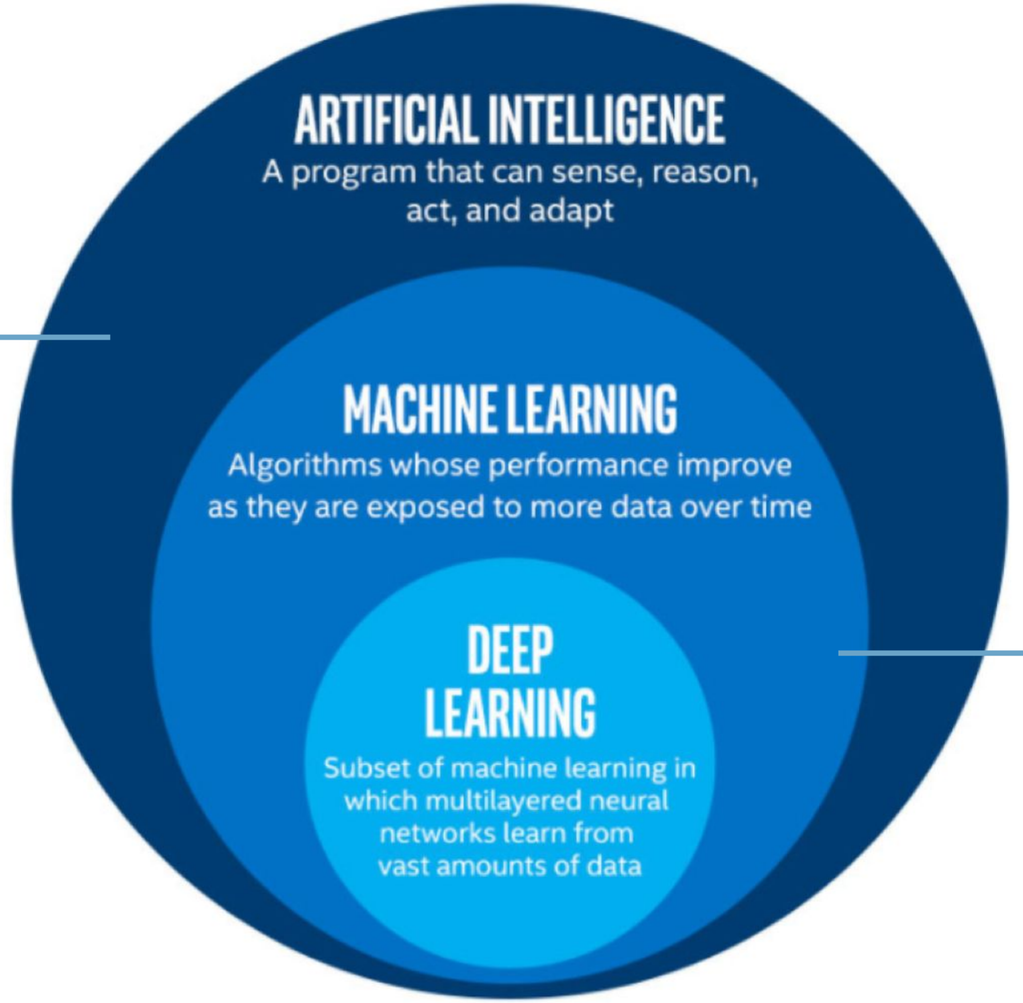
Where does bias come from?

Where does biased AI come from?



“Machine learning” is not a magic bullet.
AI is only as good as the content that feeds it.

What is it told to sense and respond to?



What is it told to look for, consider an “error”, and improve based on?

Image from Sigma IQ

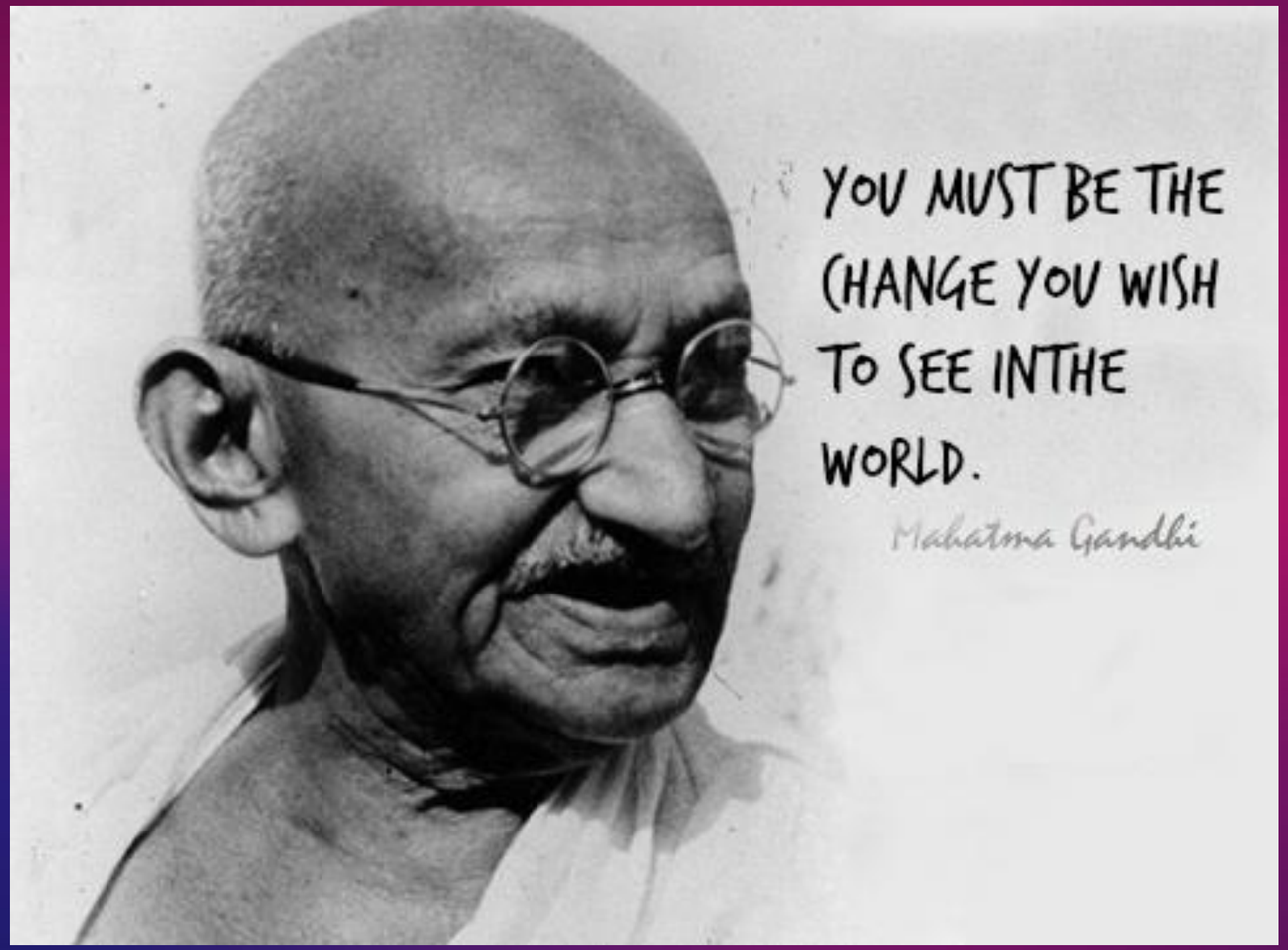
Lack of diversity in the teams building and testing the systems

- 9/10ths cisgender men
- 9/10ths able-bodied, white, American accents
- Similar assumptions about phrasing and AI needs

Misunderstanding of “edge cases”

- Women are told to speak with a lower voice to get AI systems to hear them
- Apps are build for the 80% (everything else is “edge cases”)

What can you do?


YOU MUST BE THE
CHANGE YOU WISH
TO SEE INTHE
WORLD.
Mahatma Gandhi

Make the industry representative

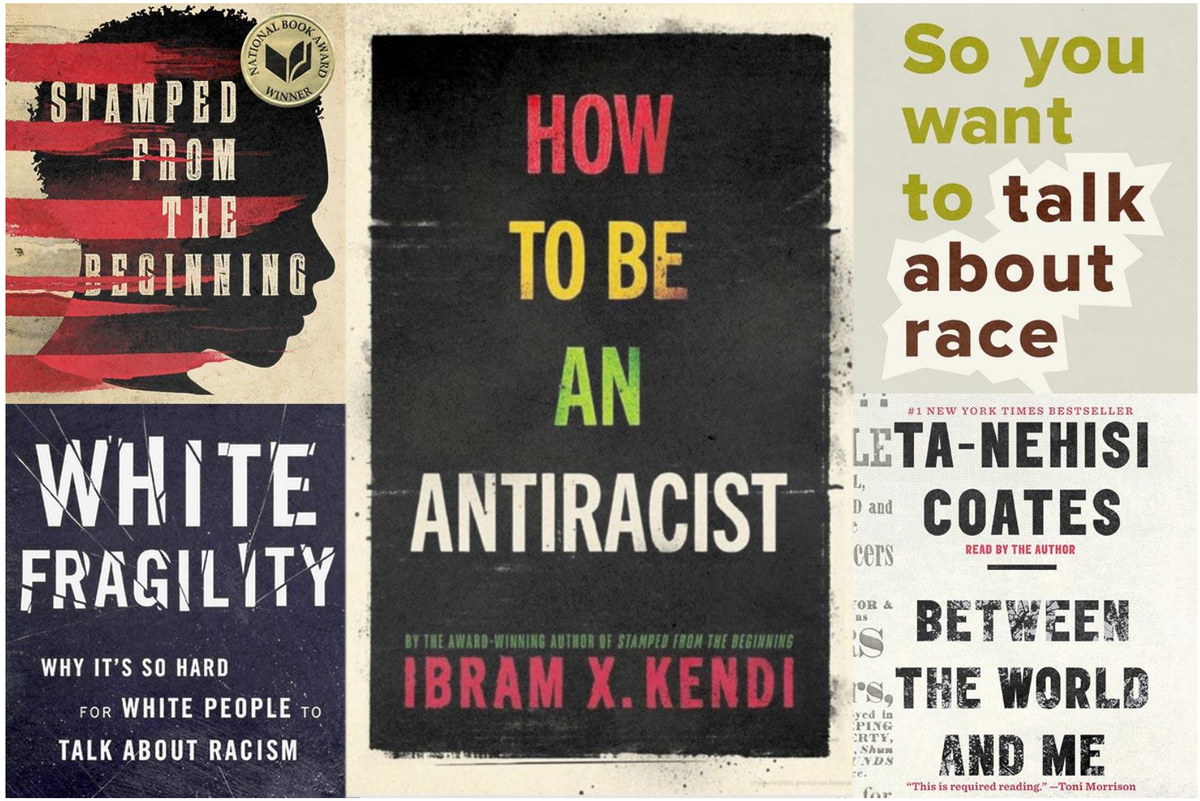
- Hire diverse teams
- Mentor people who don’t look or sound like you
- Ask yourself why underrepresented groups are underrepresented

Look at your assumptions

- Create for “edge” cases
- Focus on behaviors over demographics
- Make your assumptions explicit, not implicit

Keep learning

- Read up on how to be anti-racist and anti-biased
- Share your findings with coworkers
- Avoid defensiveness in favor of being better



What else will you do, to make content strategy less biased?

Thank you!

@marsinthestars on Twitter

Let’s keep the conversation going.