Why do we gender AI?

Level 3 ● Advanced

1 Warmer

Rank these uses of voice assistants in order from 1 (most useful) to 6 (least useful).

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

a. making phone calls
b. setting alarms
c. telling you which song is playing
d. making reservations
e. finding and reading emails
f. reminding you about important events or dates

2 Key words

Fill the gaps in the sentences using these key words from the text.

shortcoming	compliant	inclusive	sceptical	impairment
predominantly	binary	chatbot	blush	abuse

1. If something is _____, it involves all types of people.

2. A _____ is a fault or problem that makes something less effective.

3. _____ consists of angry, offensive comments.

4. If you _____, your cheeks become red because you feel embarrassed or ashamed.

5. A _____ is a piece of software that is able to have a conversation using an auditory method.

6. _____ is another word for *mainly* or *mostly*.

7. A _____ person is too willing to do what other people want.

8. If something is defined as _____, it has two parts.

9. If people are _____ about something that other people think is true or right, they have doubts about it.

10. If you have an _____, a part of your body is unable to do something fully.

3 Find the information

Find the following information in the text as quickly as possible.

1. What was the aim of Mozilla's 2019 Common Voice project?

2. By what percentage is Google's speech recognition more accurate for men than it is for women?

3. Which organization is planning to launch a voice assistant called Beeb in 2020?

4. What is Project Q?

5. How many people were involved in Project Q's voice sample?

6. By what percentage is Alexa's understanding of native accents greater than its understanding of non-native accents?

Why do we gender AI? Voice tech firms move to be more inclusive

Gender-neutral voice assistants and accent recognition among projects in the pipeline

Kieran Yates

11 January, 2020

1 Technology that can understand regional accents and gender-neutral voice assistants are among the developments expected in the voice technology field in 2020. Products such as Alexa and Siri have faced growing criticism that the technology behind them disproportionately misunderstands women, ethnic minorities and those with accents not represented in datasets that have historically favoured white and Chinese male voices. In response, a wave of new projects aims to redress the balance and make the growing voice tech industry more inclusive.

2 Dr Charlotte Webb, the co-founder of Feminist Internet, detailed some of the current technology's shortcomings. "Voice tech has failed by not being programmed to respond adequately to abuse," she said. "The example of Siri stating 'I'd blush if I could' when insulted is a well-known example, as is Alexa replying 'Well, thanks for the feedback'."

3 A study for the *Washington Post* asked people to read out different news headlines and then looked at what Alexa thought people had said. The difference between what was said and what the device understood was 30% greater for people with non-native accents. Recent research also indicates that Google's speech recognition is 13% more accurate for men than it is for women.

4 Feminist Internet has developed a chatbot called F'xa in an attempt to raise awareness about bias in AI systems, including voice technology. Another enterprise that intends to make voice tech more inclusive is Project Q, a "gender-neutral voice assistant" expected to launch in 2020.

5 "Current voice technology is essentially gendered," says Ryan Sherman, a creative developer at Project Q. "When we look at Siri or Google Assistant, they all predominantly start out as female by default, so we started out with that question: why do we gender AI? Research shows that female voices are more helpful, compliant and subservient. Whenever male voices are used within AI technology, it's used to telegraph superiority, intelligence and more commanding qualities, an example being IBM Watson. All voice tech only offers two options, and the world has moved past only seeing gender as binary."

6 Project Q launched in 2019 with a prototype voice developed by non-binary linguists. They then asked a sample of 4,500 people from across Europe whether it sounded male or female. The answers were split 50/50. "We are now working on developing this as an actual voice that can be used across voice assistants but also metro stations, games … there is huge scope," says Sherman.

7 He is also optimistic that transforming the sonic architecture of everyday life can change attitudes. "Q is a voice to break down that gender binary and really highlight that tech companies should take responsibility which is proportional to the kind of influence that they exercise over society."

8 Established companies are also trying to diversify voice tech. Mozilla launched the Common Voice project in 2019 with the aim of recruiting global voices as a dataset to help diversify AI speech through machine learning.

9 "Something we learned early on about companies that started years ago with voice recognition is that they often took datasets that came from public radio," said Katharina Borchert, Mozilla's chief innovation officer. "Those tended to be male, native speakers with really trained voices. That automatically led to a biased result because that is all the machine has. There's not a lot of female voices, and it doesn't have people with regional accents. That's why the early version had real issues understanding women because it's a different pitch. So the larger the diversity of speakers, the greater the quality over the long haul."

10 The BBC is developing a voice assistant called Beeb to launch in 2020, designed to respond to users' requests. Mukul Devichand, the corporation's executive editor of voice and AI, says it is also looking at how to respond better to regional accents. "We've been trying to get people to provide voices from all corners of the country to help us ensure that it can be a conversation assistant that represents regional accents and the way language is used in this country," he says.

11 Dr Saul Albert, a social sciences lecturer at Loughborough University, is sceptical that these

offerings provide the full scope of assistance and flags up one gap that requires attention. "If these technologies are going to live up to their marketing promises, Amazon, Google and other technology companies are going to have to involve disabled people in co-design at every stage of the process," he says.

12 "There are standard accessibility features designed into products like the Google Home and the Amazon Echo, as well as specialist initiatives such as Google's Euphonia project, which learns the voice patterns of individual users with speech impairments. Amazon also has representatives working with care service providers and local authorities on 'smart home' projects around the country."

13 Dr Leigh Clark, an expert in human–computer interaction at Swansea University, is more optimistic, though he says there are still considerations when scaling up some of these projects: "If we have gender-neutral voices, do these become the norm or do these become another option for the end user to select in setting up their voice assistants?"

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4 Comprehension check

Choose the best answer according to the text.

1. What is the general problem identified in the article?

    a. that AI voice assistants are predominantly male

    b. that AI voice assistants don't understand non-English accents

    c. that AI voice assistants need to be designed to be more inclusive

2. What, according to research, is the main difference between how male and female voices are perceived?

    a. Female voices sound superior and more intelligent.

    b. Female voices sound more helpful and compliant.

    c. Female voices are easier to understand.

3. What does Google's Euphonia project do?

    a. It helps voice assistants to understand regional accents.

    b. It learns the voice patterns of individual users with speech impairments.

    c. It works with care service providers on 'smart home' projects.

4. What, according to the developers behind Project Q, is the main problem with current voice technology?

    a. It only offers two options – female and male.

    b. It is not programmed to respond adequately to abuse.

    c. It has historically favoured white and Chinese male voices.

The Guardian

one stop english

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5 Find the word

Find the following words and phrases in the text.

1. an adverb meaning *in a way that is bigger or smaller than it should be in relation to something else* (para 1)

2. a three-word verb phrase meaning *change a situation in order to make things fair and equal* (para 1)

3. a two-word verb phrase meaning *increase people's understanding of a situation or issue* (para 4)

4. an adjective that, like *compliant*, means *too willing to do what other people want* (para 5)

5. a four-word adjectival phrase, mainly used in American English, meaning *over a long period of time* (para 9)

6. a two-word phrasal verb meaning *mention something so that people know about it* (para 11)

7. a two-word phrasal verb meaning *make something larger in size or amount than it used to be* (para 13)

8. a noun phrase meaning *someone who uses a product, especially a computer or a piece of software* (para 13)

6 Verb + noun collocations

Match the verbs in the left-hand column with the nouns or noun phrases in the right-hand column.

1.	launch	a.	attitudes
2.	change	b.	a promise
3.	take	c.	a request
4.	respond to	d.	the norm
5.	live up to	e.	a product
6.	become	f.	responsibility

7 Word-building

Complete the sentences using the correct form of the word in brackets at the end of each sentence.

1. Datasets have _____ favoured white and Chinese male voices. [HISTORY]

2. Voice technology often fails to respond _____ to abuse. [ADEQUATE]

3. Voice assistants _____ start out as female by default. [PREDOMINANT]

4. Male voices are used to telegraph _____. [SUPERIOR]

5. Ryan Sherman believes that tech companies should exercise responsibility that is _____ to the influence they have. [PROPORTION]

6. Some AI products have standard _____ features. [ACCESS]

8 Discussion

Discuss the statements.

- Voice assistants will soon become part of everyone's lives.

- Voice assistants just make people lazy.

- Unless we are careful, AI will take over.

KEY

2 Key words

1. inclusive
2. shortcoming
3. abuse
4. blush
5. chatbot
6. predominantly
7. compliant
8. binary
9. sceptical
10. impairment

3 Find the information

1. to recruit global voices (to help diversify AI speech)
2. 13%
3. the BBC
4. a gender-neutral voice assistant
5. 4,500
6. 30%

4 Comprehension check

1. c
2. b
3. b
4. a

5 Find the word

1. disproportionately
2. redress the balance
3. raise awareness
4. subservient
5. over the long haul
6. flag up
7. scale up
8. end user

6 Verb + noun collocations

1. e
2. a
3. f
4. c
5. b
6. d

7 Word-building

1. historically
2. adequately
3. predominantly
4. superiority
5. proportional
6. accessibility