

THE FUTURE OF FAKE NEWS: DON'T BELIEVE EVERYTHING YOU READ, SEE OR HEAR

In an age of Photoshop, filters and social media, many of us are used to seeing manipulated pictures—subjects become slimmer and smoother or, in the case of Snapchat, transformed into puppies. However, there's a new breed of video and audio manipulation tools, made possible by advances in artificial intelligence and computer graphics, that will allow for the creation of realistic looking **footage** of public figures appearing to say anything: Queen Elisabeth declaring her desire to fly to the moon, or Hillary Clinton describing how she climbed Mount Everest without oxygen. This is the future of fake news. We've long been told not to believe everything we read, but soon we'll have to question everything we see and hear as well.

For now, there are several research teams working on capturing and synthesizing different visual and audio elements of human behaviour. Software developed at Stanford University called Face2Face is able to manipulate video footage of public figures to allow a second person to put words in their mouth—in real time. Face2Face captures the second person's facial expressions as they talk into a webcam and then **morphs** those movements directly onto the face of the person in the original video. On its own, Face2Face is a fun plaything for creating memes and entertaining late-night talk show hosts. However, with the addition of a synthesized voice, it becomes more convincing—not only does the digital puppet look like the politician, but it can sound like the politician, too.

A research team at the University of Alabama at Birmingham has been working on voice impersonation. With 3-5 minutes of audio of a victim's voice—taken live or from YouTube videos or radio shows—an attacker can create a synthesized voice that can **fool** both humans and voice biometric security systems used by some banks and smartphones. The attacker can then talk into a microphone and the software will convert it so that the words sound like they are being spoken by the victim—whether over the phone or on a radio show.

Although their intentions may be well-meaning, voice-morphing technology could be combined with face-morphing technology to create convincing fake statements by public figures. However, these morphing technologies still aren't perfect. The facial expressions in the videos can seem a little distorted or unnatural, and the voices can sound a little robotic. But given time, they will be able to faithfully recreate the sound or appearance of a person, to the point where it might be very difficult for humans to detect the fraud.

Given the erosion of trust in the media and the **rampant** spread of **hoaxes** via social media, it will become even more important for news organizations to **scrutinize** content that looks and sounds like the real deal. People should be looking at the lighting and shadows in the video, whether all the elements featured in the frame are the right size, and whether the audio is **synced** perfectly. **Doctored** content might not pass the scrutiny of a rigorous newsroom, but if posted as a **grainy** video to social media it could spread virally and trigger a political, diplomatic, or public relations disaster, or even start a war.

Text adapted from an article by
Olivia SOLON. *The Guardian* [online] (July 26, 2017)

footage: filmació / filmación

to morph: aplicar canvis / aplicar cambios

to fool: enganyar / engañar

rampant: sense restriccions / sin restricciones

hoax: engany, trampa / engaño, fraude

to scrutinize: examinar detalladament / examinar detalladamente

synced: sincronitzat / sincronizado

doctored: manipulats / manipulado

grainy: granulat / granulado

Part 2: Writing

Choose ONE topic. Write about number 1 or 2. Minimum length: 100 words.

[4 points]

1. **Write an essay** on the consequences that the use of the latest morphing technology might have for news agencies and the lack of trust in the media.
2. Do you shop online, or do you like to go to stores? Does the type of product you are looking for make a difference in your decision? Are online stores fair competition for “real” stores? **Write an essay** in which you discuss some of the advantages and disadvantages of online shopping.

Grammar	
Vocabulary	
Text	
Maturity	
Total	
Nota de la redacció	