Department

The Future of Misinformation

Charles Day

The American Institute of Physics

DAVID HARE'S FIRST play for television, *Licking* Hitler, centers on a small band of propagandists who seek to sap German morale in World War II by broadcasting fake news from a house in the English countryside.

The play's fake news is imaginatively conceived. One story line concerns rumors that the blood of Russian prisoners of war is being used by the German army to treat its own wounded soldiers. The news is also imaginatively spread. Two of the propagandists, German emigres, pretend to be Wehrmacht radio operators who are also friends. Supposedly separated by hundreds of miles, they chat and exchange news, real and fake, once they have discharged their military duties for the day.

Hare's play is based on the exploits of Sefton Delmer, the German correspondent for the Daily Express before the war. Delmer's fluency in German and background in tabloid journalism made him an ideal recruit for Britain's Political Warfare Executive (PWE).

Despite its literary sophistication, PWE's black propaganda was disseminated through the mundane medium of radio. And while Russia's campaign to undermine the 2016 U.S. presidential election through Facebook and other social media might seem a step up in technology, the deceptive messages mostly took the form of text written by humans.

However, there is a new computational front opening up in fake news, one that truly is innovative. Two years ago, Adobe previewed its Voco audio editing and creation tool. During the demo, a recording of a man saying "and I kissed my wife and dogs" was transformed within seconds into a recording of the same man saying "and I kissed Jordan three times." Except it was not the same man-Voco was able to generate the fake after being given a text string. An Albased approach known as deepfake can generate video of a person saying anything, including, in the case of Barack Obama in a 2018 demonstration video for BuzzFeed, "some kind of fdystopia."

A computational arms race is already under way between coders who generate fakes and those who detect them. What if the fakers prevail? The public will become even more distrustful of mainstream media, video and audio evidence could become less admissible as evidence in court, and, ironically, real news could be denounced as fake.

Charles Day is Physics Today's Editor-in-Chief. The views in this column are his own and not necessarily those of either *Physics Today* or its publisher, the American Institute of Physics. Contact him at cday@aip.org.

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