

Understanding and Combatting Emerging Misinformation Technologies

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1 MISINFORMATION TECHNOLOGIES:

Recent years have seen extensive use of media technologies for the generation and dissemination of misinformation and conspiracy theories.

Technologies such as deepfakes and generative AI can be used to misappropriate other people's identities, to generate evidence of events that never took place, and to spread that false evidence in contexts where people may confuse it for real evidence.

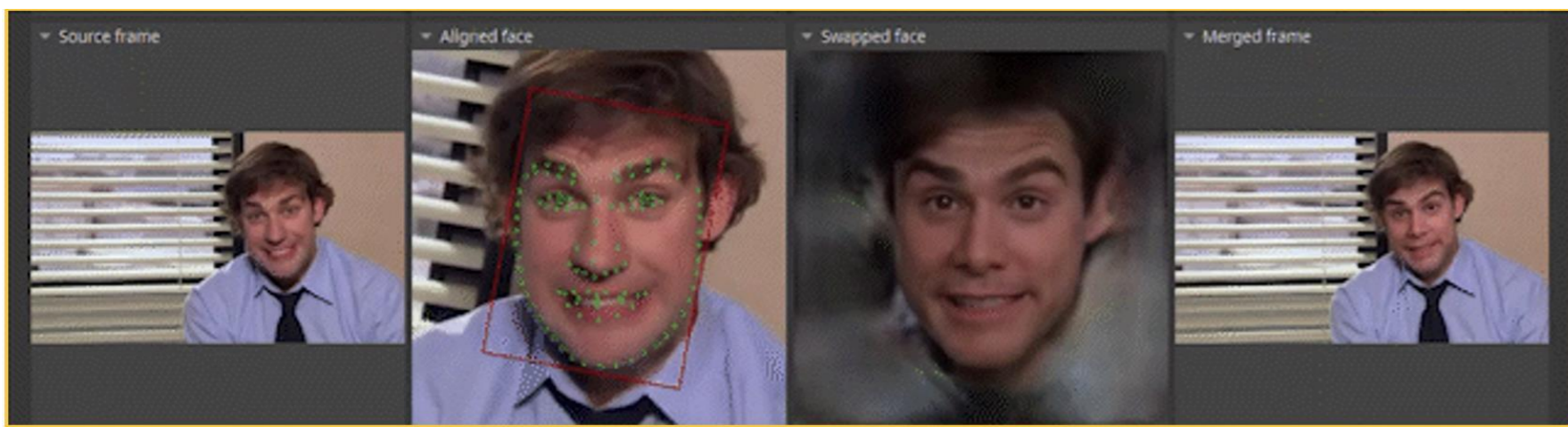


Fig. 1: Example of deepfake technology

2 OBJECTIVES OF THIS THEME:

We draw on the expertise of our research group in understanding the social and psychological impacts of emerging misinformation technologies.

There are two strands to this work;

Understanding the impacts of encountering new misinformation technologies, such as deepfakes and generative AI.

Understanding how we can mitigate these harms. Can we reduce susceptibility to misinformation? Can we do so without undermining peoples trust in real video evidence?

3 PROJECT: DEEPAKE DECEPTION

This project sets out to understand how deepfakes are used and understood in context, quantifying their harms, and developing strategies to limit negative impacts. So far, we have examined:

- How the presence of deepfakes in online discussions undermines peoples trust in real video evidence
- How people with little digital literacy become confused when confronted with fake videos encountered in entertainment media.
- How both text-based misinformation and deepfake misinformation can cause worryingly high levels of false memories

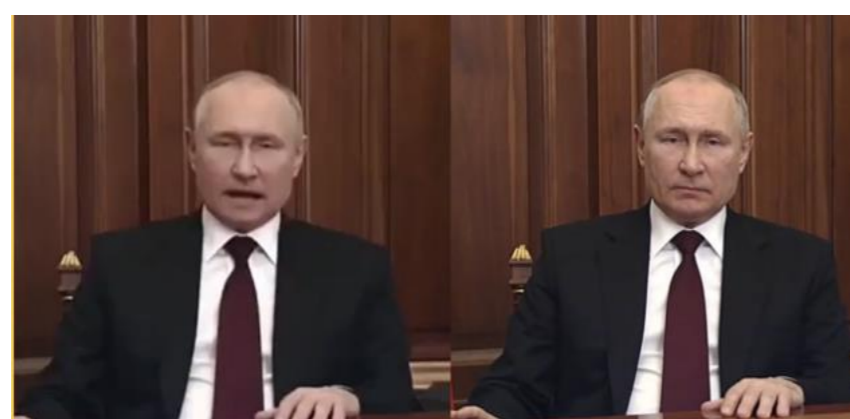
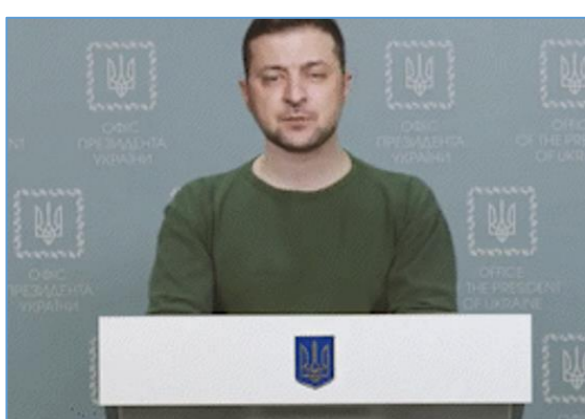


Fig 2. Examples of deepfake videos that circulated during the Russia-Ukraine war

4 PROJECT: GAME BASED INTERVENTION FOR CONSPIRACY THEORIES

This project uses video games to teach people to employ critical thinking skills to counter the online spread of conspiracy ideation.

The dynamic and interactive nature of video games is intended to be more effective than traditional text-based interventions because such games allow people to both learn skills and subsequently put them into practice in a simulated environment.

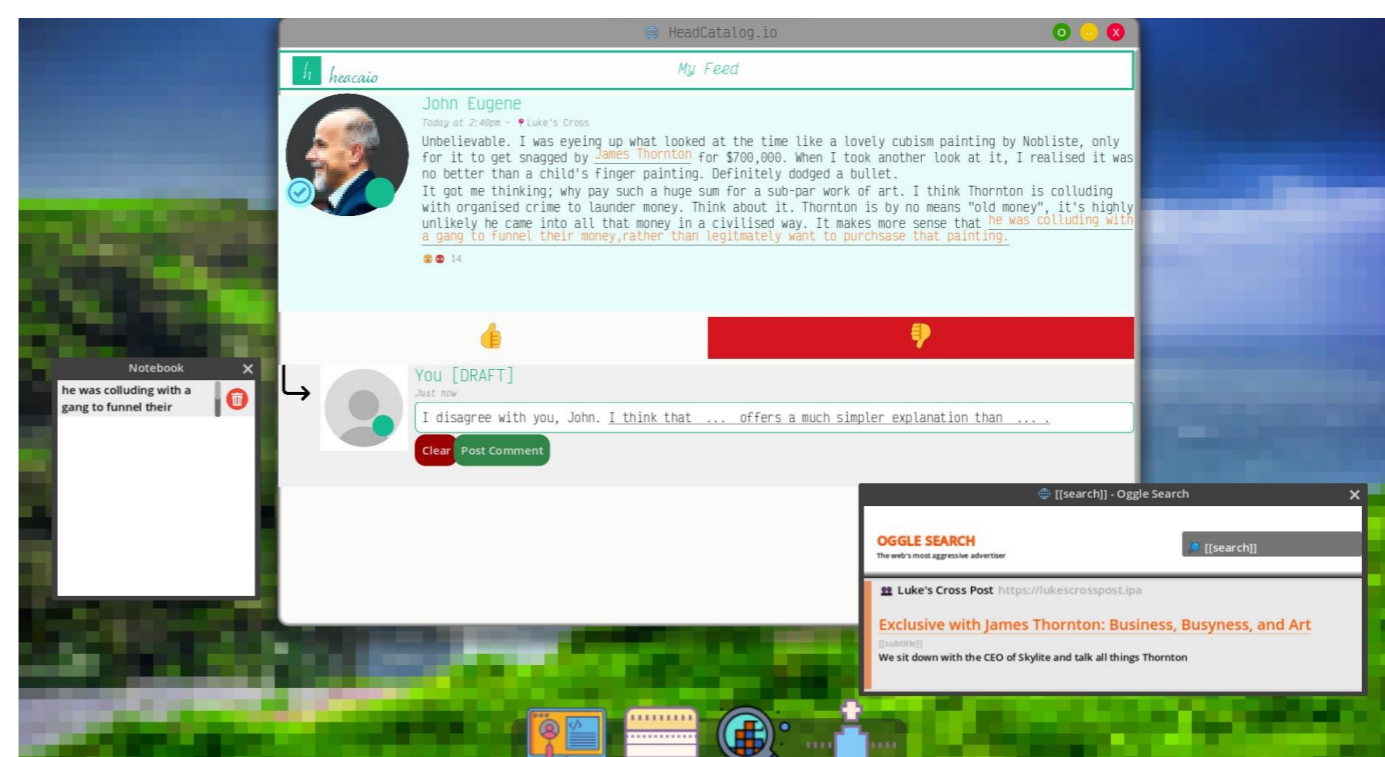


Fig 3. Screenshot of a prototype videos game where people play through social media arguments about conspiracies

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