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# THE DISINFORMATION GAME: FINDING NEW WAYS TO FIGHT 'FAKE NEWS'

Innovating new effective ways to tackle false information in media has never been as important, with 'fake news' being disseminated globally online at a rate never seen before.

The importance of tackling false information online has in recent years become a well-known issue. The UK Department for Culture, Media and Sport has stepped up its fight against disinformation, creating the Counter Disinformation Unit (CDU), and disinformation being an important focus of the July 2021 Online Media Literacy Strategy. This increased response and heightened awareness can be attributed in part to concerns over disinformation activity seen in the 2016 US presidential election, during the UK's referendum to leave the European Union, and the media coverage of both these political events. Disinformation is having an effect at a global level, whilst also having a genuine risk of causing harm to people on a personal level, from conspiracy theories such as 'Pizzagate', to disinformation surrounding COVID-19 vaccines. Nation states (including Russia and China), that have traditionally maintained offensive cybersecurity programmes against western states now include cognitive attacks such as disinformation as part of their strategy.

## THE PAST, PRESENT, AND FUTURE OF 'FAKE NEWS'

When we think of 'fake news', one is likely to think of social media platforms, or politicians bending truths to better fit their cause. In reality, deliberate false information purposely disseminated with motives other than to inform is far from new. In the time of the Roman Republic and Roman Empire for example, coins were one of the most effective ways to spread information to a mass populous. Subsequently, disinformation through coin inscriptions and designs were often used by emperors in imperial disputes, particularly that between Mark Antony and Octavian. Disinformation has also been found to be particularly effective in wartime, with airborne leaflet propaganda campaigns being used in both world wars.

As the medium of news has changed, so have primary revenue streams for content creators (e.g., news organisations). Content creators publishing through newspaper, radio, and TV have traditionally generated a large portion of revenue from repeat customers, giving an incentive for quality. However, with the advent of social media platforms such as Facebook and Twitter, incentives and regulation have dramatically changed. The cross-border reach of social media and online content creators publishing through these platforms have created difficulties in regulation as they are often hosted and managed outside of state jurisdictions. Social media platforms and online content creators now generate virtually all revenue from dynamic, targeted advertising, transitioning to an almost singular incentive: eyes-on-screens, facilitating the increased generation of disinformation. Because this dynamic reaches across platforms, an approach to tackling disinformation that transcends a single platform or medium is essential.



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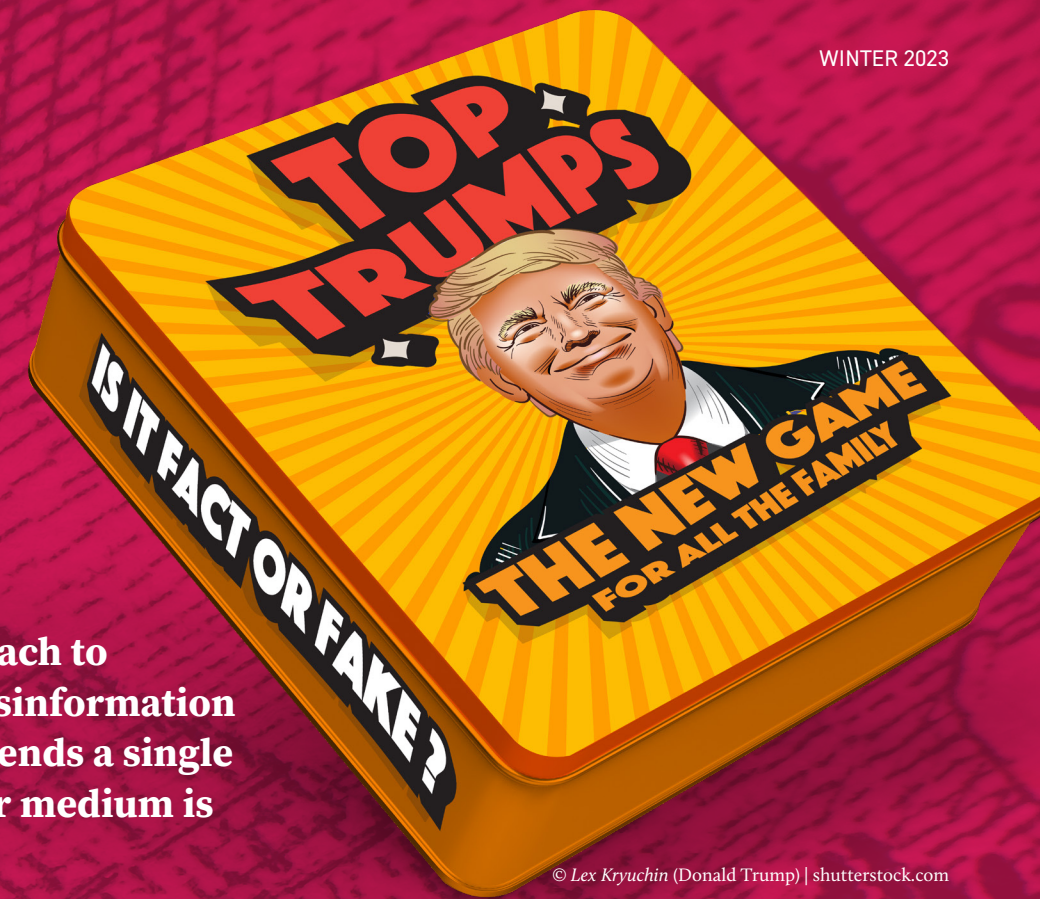
## INOCULATION: A COGNITIVE APPROACH

Rather than a platform specific solution such as machine learning powered filtering engines or bot detection algorithms, a cognitive approach gives content consumers the skills to resist disinformation for themselves in a broad array of contexts. Inoculation theory is one such cognitive approach. It follows a biological analogy of vaccines: to increase resistance to persuasion you should be pre-exposed to a weakened version of a persuasive argument. By pre-emptively alerting a person to disinformation tactics, and by demonstrating different mechanisms within the false information cycle, a person can become better protected. Researchers have used inoculation theory to combat disinformation in several different topics starting from cultural truisms, to politics and social issues.

## THE DISINFORMATION GAME

Active learning has proven an effective tool in classrooms to increase engagement and learning outcomes. In an innovative approach, researchers have applied active learning methods to inoculation theory by creating 'fake news games'. Most commonly, these games inoculate players by having them create malicious articles or social media posts in contexts such as election meddling, social issues including immigration and the refugee crisis, and trolling. Results have shown that these disinformation games have reduced players' susceptibility to fake news and increased their scepticism of incoming information.

A wide range of different games have been developed since 2017, some gaining popular media attention. One of the first inoculation games against false information, the 'Fake News Game', is a board game in which players work together to create



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fake news articles in the style of an assigned character. Since then, several online games, such as 'Go Viral!' ([www.goviralgame.com](http://www.goviralgame.com)), 'Bad News' ([www.getbadnews.com](http://www.getbadnews.com)), and 'Harmony Square' ([harmonysquare.game](http://harmonysquare.game)) (all made by the University of Cambridge Social Decision-Making Lab), and others such as 'Chamber Breaker', and 'FakeYou!' (the latter two are not currently accessible online) have been created. Board games, web games, and mobile games have almost all been shown to be effective with different demographics, and the future of this research remains inspiring. This new research topic suggests many areas for intervention, making it exciting for both researchers and players alike. The longevity of games-based inoculation intervention sessions, the delay between inoculation and attack, and creating inoculation sessions that transcend a single theme all have some preliminary work, however a far greater pool of quantitative research is required. The effect that the type of game (e.g., online, board, multiplayer, etc.) has on the inoculation has had little research to-date and a significant number of innovative and interesting disinformation games can be expected in the years ahead.

It is vital that innovative cognitive solutions to fight disinformation online are researched and shared widely, as these disinformation games can protect ordinary people from sharing what can often be life-threatening false information.

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