

# Microtargeting Mass Manipulation

## The Final Frontier of Sensory Propaganda

### PIPS White Paper 10.1: *Executive Summary*

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Over the past year, the United States has experienced a rapid influx of foreign disinformation propaganda. While the overarching goal of these campaigns has been to sow political discord and undermine democracy, this pattern of divisive propaganda is becoming a staple in information warfare fueled by social media. Modern propaganda is moving beyond bot posts with minimal human intervention that promote disinformation and confusion. Soon, actors will be able to use artificial intelligence (AI) to create manipulated audio and video files personalized for individual consumers—fake images and sounds will be indistinguishable from the recordings of real events. Propagandists will exploit the public’s reliance on what they see and hear at a speed that outpaces news cycles, allowing fake media to significantly influence populations before its impact can be corrected. These technological advances will produce Computer-Generated Sensory (CGS) propaganda, a new and powerful tool for persuading mass audiences.

#### *Converging Innovative Tools*

- *Microtargeting* is the process that integrates AI systems into computational propaganda by analyzing the online personal information of target populations. Microtargeting campaigns use consumer data and analysis on population identities to create personalized, maximally persuasive messages.
- *Motion capture* is the imaging technology used to produce videos of real or generated events through the manipulation of existing footage and images. This technology creates the visual perception that a recognizable person completed some action that never occurred.
- *Audio mimicry* allows actors to generate audio files that mimic the sounds produced by real people and events. This audio can be edited using prerecorded sounds to string together messages never spoken or recorded.

## *Computer-Generated Sensory (CGS) Propaganda*

These tools will converge to produce the most dangerous information-based threat to worldwide populations in the next five years: Computer-Generated Sensory (CGS) propaganda. With this tool, propagandists will become the ultimate puppeteers of audience information. CGS technology gives actors the ability to create convincing campaigns that exploit the senses, while appealing to users' individual psychological profiles.

### *CGS Propaganda Threat Analysis*

The following four time-contingent scenarios are likely to develop in the next five to ten years, based on the drivers of CGS propaganda: message efficacy and target audience scale (see Figure 1). These scenarios predict the future threats from CGS propaganda based on whether actors have mastered the microtargeting, audio mimicry, and motion capture elements needed for effective CGS campaigns.

- *Limited Persuasion.* This scenario is the current state of CGS propaganda in which actors have not perfected the three elements that make up effective CGS propaganda. The media component could be obviously fake, the message could be poorly personalized to the audience, or both. Limited Persuasion is the least threatening of the scenarios and unlikely to persist over time.
- *Chatbot Takeover.* In this scenario, the CGS propaganda process is automated in the form of AI-powered robots, known as chatbots, which interact with online users. These chatbots will be able to mimic similar human emotions convincingly and exhibit those sentiments that resonate with an individual's personality and emotional state. As these AI-systems learn, they will be able to craft messages that have the greatest influence on users. Over time, Chatbots will compare what worked on target audiences with similar characteristics, and use those effective messages on similar populations around the world. For CGS propaganda to realize this scenario, chatbots must be widespread online and sustained, thereby giving the public time to recognize their influence, diminishing their impact.
- *Precision Strike and Mass Effect.* These two scenarios are intermediate stages of CGS technology between our current situation—Limited Persuasion—and the most advanced CGS future—Chatbot Takeover. They are also the most dangerous. In the Precision Strike scenario, actors have perfected the realistic quality of sensory media and effectively targeted a small subset of the population. The Mass Effect scenario likewise has high-quality, personalized media files, but a wider audience.

## *Current Policy Recommendations*

The largest drawback to current strategies surrounding CGS propaganda is the current hyper-focus on the Chatbot Takeover future. Most policy recommendations on privacy regulations and AI- weapons only apply to chatbot-like technology and neglect the possibility of using machine-driven tools to moderate the threat of all CGS technology.

## *Additional Strategies to Fight CGS Propaganda*

The United States should develop education campaigns and information encryption tracing systems alongside any policy changes or AI-enhanced weapons the government pursues.

- *Computer-Generated Education Campaigns.* The U.S. government should release CGS directed at the American public, while the private sector develops the technological tools to monitor CGS technology. If the U.S. government develops machine-driven technologies automated as education tools, and not solely as chatbot-like weapons, they will be less dangerous in a full-scale release. These education campaigns on disinformation and fake news should be spearheaded by a non-governmental entity, which would avoid the perception of state-sponsored propaganda or educational programs that preference special interests. However, the U.S. government should simultaneously release these education campaigns along with the private sector to reach more citizens and assist in the technology literacy process.
- *Algorithmic News Sourcing Systems.* The future of online source verifications may rest in applying decentralized, inexpensive, and scalable transaction systems, like blockchain, to information releases. These systems use online data to verify networks and identities. Source verifications could even include chip and sensory technologies that translate data from real-time automated sounds and movements to the verification networks. American industries could adopt permission blockchains by maintaining the role of a middleman and providing basic functionality for these systems without offering full centralization. Actors would gain credibility on social media platforms when their networks and sources of information are confirmed by the encryption networks. However, these systems should not diminish news diversity; the data added to online content would not promote stories, but rather indicate who provided the content and sensory inputs that created the information release. Additionally, online content would not be verified for validity or removed by the platform organizations.

Through these strategies, U.S. policymakers will develop the tools to moderate sudden CGS releases and thus avoid provoking a quicker and unruly transition to Chatbot Takeover. Additionally, the policy community could manage the threat from CGS propaganda as seen in Precision Strike, Mass Effect, and Limited Persuasion scenarios by developing tools that address public manipulation at all stages of CGS technology.

*Conclusion*

CGS propaganda is a new and powerful tool to influence mass audiences, but it also poses a significant danger to international peace. Current U.S. responses and proposals to address CGS technology do not provide active or preemptive solutions to this dangerous propaganda. CGS propaganda may catalyze the end of credible news and online communication and studying the vulnerabilities associated with its use crucial to deterring explosive propaganda campaigns on populations worldwide.

*Figure 1: Computer-Generated Propaganda Threat Analysis*

