

## Chapter 6

# Cognitive Warfare: A Psychological Strategy to Manipulate Public Opinion

Szde Yu

*Wichita State University, USA*

### ABSTRACT

*Information warfare is one crucial aspect of cyber security. Unlike physical targets, such as network systems or electronic devices, information warfare is aimed at manipulating what people believe to be true and thereby swaying public perceptions. A more organized and advanced form of information warfare is called cognitive warfare. It is a psychological strategy intended to gradually influence the targeted public's belief, opinion, and perception about a subject, such as an event, a politician, a government, or an ideology in general. This chapter discusses the tactics commonly used in cognitive warfare. Using the China-Taiwan relationship as an example, this chapter illustrates how such warfare is carried out.*

### INTRODUCTION

Global political conflicts are intensifying, both internationally and domestically. Many entities have resorted to cyber operations as a weapon. Even in a traditional war featuring guns and bombs, cyber operations are playing a more and more important role, not to mention in most conflicts where political struggle usually takes place in a more clandestine manner. Aside from the attempts to disrupt the enemy's cyber operations or steal valuable data, information warfare has become one popular strategy to manipulate public opinion. For example, Russia has been accused of interfering with political elections in other countries in an attempt to help certain politicians be elected (Vilmer & Conley, 2018; Keating & Schmitt, 2021). Japan is also known for paying Chinese journalists, scholars, and Internet influencers to tell a different version of history regarding what Japan did in China during World War II in an attempt to justify invasion and deny massacres (Honda, Gibney, & Sandness, 2015; Li, 2017; Song, 2021). It seems whoever controls how information is disseminated

DOI: 10.4018/978-1-6684-8846-1.ch006

nated and what message is being conveyed in such information could ultimately sway the intended audience to form a belief in favor of the controller's political agenda. However, this is easier said than done, especially in modern days when information is overabundant and seemingly everyone has a way to become a source to spread and produce information. Thus, to prevail in information warfare, it takes more than generating fake news. News, fake or not, needs to catch attention from the intended audience, and more importantly, such news needs to be convincing enough to either strengthen current belief or change people's mind. This calls for cognitive influence. Hence, a higher level of information warfare emerges in the name of cognitive warfare. It is usually more elaborate and more organized than usual information warfare. It takes time but if successful it could effect some fundamental changes in one's belief system.

This chapter discusses cognitive warfare and its common tactics. A good example of cognitive warfare can be derived from the complicated China-Taiwan relation. This chapter discusses China's "Three Warfares" strategy as an example of cognitive warfare and also how Taiwan's cognitive warfare is aimed at the Taiwanese people as a counterforce to China's political influence.

## **WHAT IS COGNITIVE WARFARE?**

Cognitive warfare can be defined as "an unconventional form of warfare that uses cyber tools to alter enemy cognitive processes, exploit mental biases or reflexive thinking, and provoke thought distortions, influence decision-making and hinder actions, with negative effects, both at the individual and collective levels (Claverie & du Cluzel, 2022). Alternatively, it can also be defined as "the weaponization of public opinion by an external entity for the purpose of influencing public and governmental policy and destabilizing public institutions (Bernal et al., 2020). Cognitive warfare is now an important aspect of many government's cyber operations. It is usually seen as a form of military operation (Chiriac, 2022), but cognitive warfare can be carried out by any civilians as well.

The abovementioned definitions tend to assume cognitive warfare is aimed at foreign enemies. Although this is largely true, it is not always the case. Cognitive warfare can also be directed at any audiences that the enforcer intends to control or gain support from. This implies a government can engage in cognitive warfare on its own people in order to strengthen support or suppress domestic dissidents. As most countries now seem to face internal struggle no less than external threats, cognitive warfare can be seen as an approach to stabilizing a government's political power or to help an opposite party attain ruling power. The most notable example is probably regarding the former president of USA, Donald Trump. His MAGA campaign, both officially and unofficially, has alleged the mainstream media in USA as fake news generators. Essentially, he is accusing his political enemies within the country of using mainstream media as a tool to wage cognitive warfare on him to lessen his political influence.

Therefore, a more comprehensive definition proposed in this chapter is, "cognitive warfare is an organized cyber operation that is aimed at manipulating an intended audience's opinion and belief by shaping their perceptions through deliberately designed information which may or may not contain truth."

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/cognitive-warfare/332283](http://www.igi-global.com/chapter/cognitive-warfare/332283)

## Related Content

---

### Human-Computer Interaction With Big Data Analytics

Gunasekaran Manogaran, Chandu Thota and Daphne Lopez (2018). *HCI Challenges and Privacy Preservation in Big Data Security* (pp. 1-22).

[www.irma-international.org/chapter/human-computer-interaction-with-big-data-analytics/187657](http://www.irma-international.org/chapter/human-computer-interaction-with-big-data-analytics/187657)

### Trust Management in Vehicular Ad hoc NETWORK

Ryma Abassi (2018). *Security and Privacy in Smart Sensor Networks* (pp. 47-62).

[www.irma-international.org/chapter/trust-management-in-vehicular-ad-hoc-network/203780](http://www.irma-international.org/chapter/trust-management-in-vehicular-ad-hoc-network/203780)

### Formal Verification of Secrecy, Coercion Resistance and Verifiability Properties for a Remote Electronic Voting Protocol

Khaoula Marzouki, Amira Radhouani and Narjes Ben Rajeb (2013). *International Journal of Information Security and Privacy* (pp. 57-85).

[www.irma-international.org/article/formal-verification-of-secrecy-coercion-resistance-and-verifiability-properties-for-a-remote-electronic-voting-protocol/87425](http://www.irma-international.org/article/formal-verification-of-secrecy-coercion-resistance-and-verifiability-properties-for-a-remote-electronic-voting-protocol/87425)

### Foreground Trust as a Security Paradigm: Turning Users into Strong Links

Stephen Marsh, Natasha Dwyer, Anirban Basu, Tim Storer, Karen Renaud, Khalil El-Khatib, Babak Esfandiari, Sylvie Noël and Mehmet Vefa Bicakci (2014). *Information Security in Diverse Computing Environments* (pp. 8-23).

[www.irma-international.org/chapter/foreground-trust-as-a-security-paradigm/114367](http://www.irma-international.org/chapter/foreground-trust-as-a-security-paradigm/114367)

### Privacy Concerns when Modeling Users in Collaborative Filtering Recommender Systems

Sylvain Castagnos (2009). *Social and Human Elements of Information Security: Emerging Trends and Countermeasures* (pp. 247-260).

[www.irma-international.org/chapter/privacy-concerns-when-modeling-users/29055](http://www.irma-international.org/chapter/privacy-concerns-when-modeling-users/29055)