



# How China Wins the Cognitive Domain

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The Chinese Communist Party (CCP) believes the cognitive domain is imperative to achieve victory in any conflict. While kinetic attacks have a specific physical target, in the cognitive domain the target is the mind. In conflict, great physical damage can be achieved, but if the adversary still has a will to fight, they have not yet been defeated. Unlike a kinetic attack, battle for the cognitive domain happens regardless if it is during peace time or war. Ideally, perceptions and narrative can be controlled in a way to achieve strategic objectives without the need for actual conflict. Like many conceptual ideas the CCP implements, the cognitive domain is not something uniquely Chinese, but rather a concept first developed by the United States Department of Defense in their report to Congress in 2001 titled “Network Centric Warfare”<sup>1</sup>. Since that time, coverage of the cognitive domain in People’s Liberation Army (PLA) media has been an area of discussion and analysis. Recently, China’s Academy of Military Sciences (AMS)<sup>i</sup> has published a work titled, "Taking the Pulse of Cognitive Domain Operations" which breaks down how to succeed in the cognitive domain with eight operational characteristics. This work provides insight into the possible strategic mindset of the PLA and particularly how technology, information dominance, and both military and civilian components have a role to play in the battle to seize the commanding heights of the cognitive domain.

## Defining the Cognitive Domain

To understand the cognitive domain it is imperative to understand cognition first. In the PLA Daily article “A Perspective on the Evolution Trend of Cognitive Warfare” cognition is defined as, “the process by which people acquire, process, and apply information and knowledge”.<sup>2</sup> Cognition is how we respond mentally to some form of stimuli. If an adversary is able to control cognition it can disrupt decision making and overall strategy, which is the goal of cognitive domain operations. In the PLA Daily article “A Brief Analysis of the Basic Meaning of Cognitive Domain Operations” they define the term:

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<sup>i</sup> The highest level research institute of the PLA and directly subordinate to the Central Military Commission.

“Cognitive domain operations take the human brain as the main combat space, and focus on striking, weakening, and dismantling the enemy's will to fight, using human psychological weaknesses such as fear, anxiety, and suspicion as a breakthrough point, focusing on soft-kill methods to create an atmosphere of insecurity, uncertainty, and mistrust within the enemy, and increasing their internal friction and decision-making doubts.”<sup>3</sup>

Cognitive domain operations take people's will, belief, thinking, and psychology as direct combat targets, and seek to affect decision-making and actions by changing the opponent's cognition.

## **The Eight Operational Characteristics of the Cognitive Domain**

### **1. Transform Military Superiority into Political Victory**

For the first element, the authors argue that the cognitive domain is the key domain for the transformation of military superiority into political victory. At the surface of any conflict there are militaries with certain “hard power” capabilities. At a deeper level, no matter the type of war or its purpose, it is “ultimately a contest of human will”.<sup>4</sup> The key to victory is imposing one's will and as long as the enemy's will to keep fighting is deprived and defeated, it means that the war has been won. A powerful military will break an adversary's will to fight. In the context of great power competition, the cost of war is high, and all parties hope to force their opponents to retreat by winning the conflict in the cognitive domain.

### **2. Change Perception of Adversary to Alter Decisions and Actions**

Second, a superior cognitive capability can shape how an adversary acts and the decisions they make. The purpose of implementing a cognitive attack is, “to use an 'invisible hand' to control the opponent's will, making the opponent feel 'I can't' and 'I dare not', and then achieve the effect of 'I don't want to'”.<sup>5</sup> Cognitive interference, confusion, blocking (disrupting flow of information), and other means can be used to cloud war cognition, which can induce opponents to misjudge the situation and make wrong decisions and actions. Technology, such as artificial intelligence, has allowed cognitive attacks to have a much greater impact. As the authors write, “Technological advancement has allowed for a greater number of potential cognitive attacks against a target's will, quickly changing the strategic situation.”<sup>6</sup>

### **3. Use Whole of Government Both Offense and Defense**

Third, cognitive domain operations are “full-time offense and defense, full coverage, full use, global shaping, and whole-government actions”.<sup>7</sup> They blur the lines between wartime and peace, across battlefields and national boundaries, and widely permeate political, economic, diplomatic, and other social fields. All domains of land, sea, air, and space network are part of cognitive shaping. Since cognitive domain operations are “whole of government” it requires

“concerted and coordinated actions across departments, fields, military, and levels in order to achieve the best communication effect”.<sup>8</sup> Targets of cognitive operations can be anyone and can even include intelligent robots.

#### **4. Compete for the “Three Powers”**

Fourth, the “Three Powers” include the right to define the nature of the event, dominance of the event process, and right to judge the outcome of the event. An event can be any action taken by the state, government, military, organization, group, or individual. First, defining the nature of the event involves preemptively establishing definitions and forming groups and alliances that agree to those definitions prior to an event. The idea is to shape how an event is perceived by the public. Second, dominance of the event process is about leading the development direction of the target event as it happens. Finally, at the conclusion of an event, one should seek to control how the actions that were taken are perceived by the public. The focus is to shape who people believe is the winner and the loser.

#### **5. Contend for Morality and Jurisprudence**

Fifth, the authors believe it is critical to “occupy the commanding heights of politics, morality, and legal principles” to win the support of the people. With the perception of both morality and legality it can be possible to create an atmosphere of public opinion that is more supportive and dissuades the enemy.

#### **6. Information is “Ammunition”**

Sixth, the authors write, “Information moves faster than cannonballs.”<sup>9</sup> The internet has shaped the way human communication has evolved. Where once there might have been in-person meetings, now it is often online. Large social media platforms have become the “main battleground for cognitive games and the main channel to influence people’s cognition”.<sup>10</sup> On these platforms, various short videos have become the “first scene” for the public to understand various major events like a conflict or war. Anyone that has control of social media platforms has an advantage to regulate what is seen. In cognitive operations, all parties strive to spread and amplify their own narrative and to denounce and suppress the adversary’s narrative. Lt. Gen. Daniel Karbler, head of Army Space and Missile Defense Command, speaking at a press conference on the Ukraine War stated, “One piece of a successful resistance movement is simply being able to keep communications networks open so the message can get out there.”<sup>11</sup> If one is technologically able to disrupt the adversary’s ability to communicate, it is possible to effectively suppress an adversary’s narrative. In the PLA Daily article, “Exploring the Way to Win in Cognitive Domain Operations” many of the same points are made on social media. They add that the use of deep fakes through voice and video simulation as a technological tool that can potentially be effectively implemented.

#### **7. Support Military Operations in the Cognitive Domain**

Seventh, cognitive dissemination operations always go hand in hand with joint military operations. While a war is being conducted on the battlefield, in the cognitive domain a narrative is created to control the perception of the war. The authors write, “It is impossible to have no military strength, but military action alone is not omnipotent.”<sup>12</sup> In other words, a military can have the best weapons, but if it is unable to shape the cognitive domain it will fail. The authors provide American examples including the Vietnam War and the Iraq War. The United States, “won every battle, but lost the whole war”.<sup>13</sup> The American military “won battlefield victories, but not political victories”.<sup>14</sup>

## **8. Utilize Cognitive Countermeasures Directly in Warfare**

Finally, cognitive warfare tools can be targeted at military personnel of an adversary to achieve desired actions and outcomes. The authors write, “With the development and breakthrough of technologies in communication, artificial intelligence, biology, and neuroscience, new cognitive warfare tools and technologies are directly aimed at military personnel.”<sup>15</sup> New technologies can provide live updates on the adversary and allow for targeted and effective disruption of cognition.

## **Emerging Trends in the Cognitive Domain**

Three major trends emerge from the Academy of Military Sciences (AMS) analysis of the cognitive domain: role of technology, information dominance, and blurred lines between the military and civilian.

AMS’s emphasis on technology, in particular social media, is not unique to their analysis of the cognitive domain. The CCP considers the internet the main battleground for shaping public opinion. Not only has China developed their own social media platforms, but they are also trying to influence and shape others. For example, Twitter's sales of overseas ads to Chinese clients are estimated to be in the "hundreds of millions of dollars a year".<sup>16</sup> A major revenue stream for Twitter is in fact the Chinese Communist Party.<sup>17</sup> The CCP is also putting heavy emphasis on being a dominant player in the future of the metaverse by developing a state-approved platform.<sup>18</sup> Shaping and controlling the means by which people interact with the metaverse can provide tremendous opportunities to shape a population or a targeted individual's cognition. Finally, the use of artificial intelligence and other emerging technologies will allow China to further wield information that is favorable to the Party at an incredible rate, flagging what they do not like and promoting propaganda.

Technology is a means by which to attain information dominance. The CCP wants to “tell their story well” and will fight fiercely to protect their “image sovereignty”. The idea is to control and shape the narrative both within China and globally. The “Three Powers” and “Contend for Morality and Jurisprudence” are focused on information dominance and how to be in a position to judge how all information is perceived and consumed. For instance, the CCP wants to create a narrative in which Taiwan is simply another region in China and thus, an internal affair. In this narrative, China has both the moral and legal authority on all Taiwan

affairs and any interference is simply interfering with a sovereign nation's affairs. Moreover, they also continue to upgrade their military in part to shape the cognition of its adversaries regarding Taiwan. As one PLA Daily author writes, "The anticipation of war risk weakens its will to resist and combat determination, so as to achieve the goal of small battles, few battles, or even defeating the enemy without fighting."<sup>19</sup> The ultimate goal of cognitive domain operations is to capture and control the cognition of the minds they target.

Finally, cognitive domain operations affect everyone. In the PLA Daily article, "Exploring the Way to Win in Cognitive Domain Operations" the authors write, "In order to win the right to shape consciousness, the warring parties will do their best to use all available military forces, and comprehensively use political, economic, cultural, diplomatic and other means to implement political disintegration and diplomacy against the enemy."<sup>20</sup> Cognitive domain operations are part of all aspects of society and can target anyone from an individual up to "global shaping". As the AMS authors write, technology allows for "targeted and effective disruption of cognition" and are "full-time offense and defense, full coverage, full use, global shaping, and whole-government actions". Cognitive domain operations are constantly being waged everyday no matter if there is peace or war. Shaping cognition is a struggle that never ends.

## **Conclusion**

Lt. Gen. Jonathan Braga, the Army's Special Operations Forces Commander, recently stated in a conference, "You can have a resistance operating concept, but if you don't have the identity and will to resist as a country and a sovereign nation then you're probably set up for failure."<sup>21</sup> In the cognitive domain the targets are the will, belief, thinking, and psychology of an adversary. As AMS writes, it takes a whole of government to conduct cognitive domain operations, but it also takes a whole of government to resist. Policy makers, the military, and the citizens of the United States must recognize the threat posed in the cognitive domain. Where a missile is tangible and designed to destroy a physical target, in the cognitive domain the goal is to capture and control the mind. Many countries around the world are learning to resist China's threat in the cognitive domain. Major research, such as Freedom House's recent report<sup>ii</sup>, have exposed China's attempt to shape cognition globally. Every individual has a role to play in the cognitive domain to think critically and utilize multiple sources of information. Without the daily choice to think critically bad decisions and actions will be made.

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<sup>ii</sup>To learn more read Freedom House. "Authoritarian Expansion and the Power of Democratic Resilience." <https://freedomhouse.org/report/beijing-global-media-influence/2022/authoritarian-expansion-power-democratic-resilience>.

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## ENDNOTES

<sup>1</sup>Department of Defense. “Network Centric Warfare” July 27, 2001  
[http://www.dodccrp.org/files/ncw\\_report/report/ncw\\_main.pdf](http://www.dodccrp.org/files/ncw_report/report/ncw_main.pdf).

<sup>2</sup> Li Minghai [李明海]. “Perspective on the Evolution Trend of Cognitive Warfare” [透视认知战演变趋势]. PLA Daily Accessed September 29, 2022. [http://www.81.cn/jfjbmap/content/2022-09/29/content\\_325063.htm](http://www.81.cn/jfjbmap/content/2022-09/29/content_325063.htm).

<sup>3</sup> Zhang Guangsheng [张广胜]; Li Yongli [李永立]; Wang Haoxian [王浩先]. “A Brief Analysis of the Basics of Cognitive Domain Operations” [浅析认知域作战的基本要义]. PLA Daily. Accessed September 8, 2022. [http://www.81.cn/jfjbmap/content/2022-09/08/content\\_323692.htm](http://www.81.cn/jfjbmap/content/2022-09/08/content_323692.htm).

<sup>4</sup> Yang Cunshe [杨存社]. “Take the Pulse of Combat in the Quasi-Cognitive Domain” [把准认知域作战之脉]. PLA Daily. Accessed September 13, 2022. [http://www.81.cn/jfjbmap/content/2022-08/16/content\\_322064.htm](http://www.81.cn/jfjbmap/content/2022-08/16/content_322064.htm)

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> Ibid.

<sup>8</sup> Ibid.

<sup>9</sup> Ibid.

<sup>10</sup> Ibid.

<sup>11</sup> Hitchens, Theresa. “Ukraine’s Experience Spurs Allies’ Interest in ‘resistance,’ Info War Training.” Breaking Defense (blog), October 11, 2022. <https://breakingdefense.sites.breakingmedia.com/2022/10/ukraines-experience-spurs-allies-interest-in-resistance-info-war-training/>.

<sup>12</sup> Yang Cunshe [杨存社]. “Take the Pulse of Combat in the Quasi-Cognitive Domain” [把准认知域作战之脉]. PLA Daily. Accessed September 13, 2022. [http://www.81.cn/jfjbmap/content/2022-08/16/content\\_322064.htm](http://www.81.cn/jfjbmap/content/2022-08/16/content_322064.htm)

<sup>13</sup> Ibid.

<sup>14</sup> Ibid.

<sup>15</sup> Ibid.

<sup>16</sup>Potkin, Fanny, Eduardo Baptista, and Tony Munroe. “How China Became Big Business for Twitter.” Reuters, September 13, 2022, sec. Technology. <https://www.reuters.com/technology/block-blue-ticks-how-china-became-big-business-twitter-2022-09-13/>.

<sup>17</sup> Ibid.

<sup>18</sup> Baughman, Josh (2022) "Enter the Battlevverse: China's Metaverse War," Military Cyber Affairs: Vol. 5 : Iss. 1 , Article 2. <https://digitalcommons.usf.edu/mca/vol5/iss1/2>

<sup>19</sup> Sun Zhiyou [孙志友]; Sun Haitao [孙海涛]. “Exploring the Way to Win in Cognitive Domain Operations” [探寻认知域作战制胜之道]. PLA Daily. Accessed September 3, 2022. [http://www.81.cn/jfjbmap/content/2022-09/01/content\\_323230.htm](http://www.81.cn/jfjbmap/content/2022-09/01/content_323230.htm).

<sup>20</sup> Ibid.

<sup>21</sup> Hitchens, Theresa. “Ukraine’s Experience Spurs Allies’ Interest in ‘resistance,’ Info War Training.” Breaking Defense (blog), October 11, 2022. <https://breakingdefense.sites.breakingmedia.com/2022/10/ukraines-experience-spurs-allies-interest-in-resistance-info-war-training/>.