

A Chinese Concept of “Cognitive Confrontation” In Future Warfare

By Cindy Hurst
OE Watch Commentary

The topic of cognitive warfare is of increasing interest among Chinese military thinkers, especially as China strives to pave the way toward the era of “intelligentization.” Intelligentization is a concept of applying the machine speed and processing power of artificial intelligence to areas such as military planning, operational command, and decision support. A recent article, published in *Jiefangjun Bao*, the official newspaper of the Central Military Commission, talks about “cognitive confrontation,” which the authors describe as “a battle of wits and attacks on the mind.” According to the article, in the era of intelligentized operations, “cognitive confrontation” will take place within the three major battle domains (see diagram below).

The authors explain that “the essence of cognitive confrontation is knowledge confrontation and intelligence competition.” While in the past, under mechanized operations, who destroys whom in the kinetic

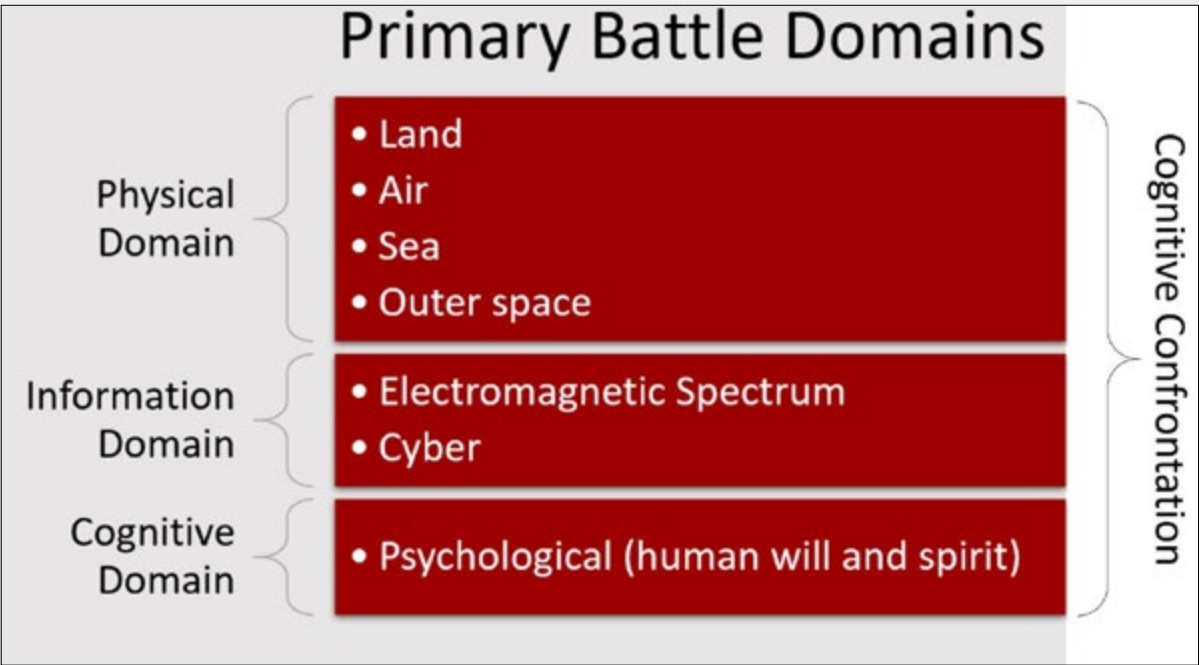
sense was enough to determine the final victor in a battle, under intelligentization, warfare will expand to soft infiltration, which will be used to affect military and civilian morale. Additionally, cognitive measures will be employed to “harass the enemy’s command decision-making.” While they do not offer specifics on how this will be accomplished, the authors explain that under intelligentization, the physical domain will gradually merge with the information domain, with cyber operations being at the core. Cognitive confrontation, such as cyberattacks and control over public sentiment will then become the focal point in the operations.

“Cognitive Confrontation Is a Battle of Wits and Attacks on the Mind.”

Source: “Li Shihua, Zhang Zhichang, and Cao Xinhua, “战场态势瞬息万变 警惕智能化作战新挑战 (The Battlefield Situation is Changing, Presenting New Challenges in Intelligentization),” *Jiefangjun Bao* (official newspaper of the Central Military Commission), 18 May 2021. http://www.81.cn/l/2021-05/18/content_10036359.htm

Cognitive Confrontation Is a Battle of Wits and Attacks on the Mind...

In the age of intelligentization, artificial intelligence-based confrontations belong to the category of cognitive confrontation, mainly including three major domains: cognitive confrontations in the physical space, virtual space, and the world of the human spirit. The essence of cognitive confrontation is knowledge confrontation and intelligence competition. For the two sides engaged in combat, their full understanding, profound comprehension, and rapid reaction to the operational environments, threats, targets, and opponents and their cognitive levels and capabilities for the analysis, judgment, decision-making, and the will of the operational situations will directly influence combat implementation, campaign organization, and strategy decision-making, which influences the trends and outcome of wars. The perspective on victory or defeat in intelligentized warfare has expanded from “hard kill contending for battlefield space and focusing on annihilating the enemy’s organic forces” to “soft infiltration affecting military and civilian morale as well as cognitive games harassing the enemy’s command decision-making.” Cognitive confrontation in human warfare will escalate from intelligence competitions and knowledge confrontations between people to confrontations between people, between people and machine AIs, and between machine AIs. With the gradual integration of operations between virtual space and physical space, and cyberspace as the core domain of “intelligentized operations,” cognitive confrontations such as cyberattack and defense and public sentiment control will become the focal point of the struggle between the two sides in operations.



China’s vision of the primary battle domains.
Source: Designed by the author, Attribution: Public Domain