

China: Central Military Commission Publication Examines Battlefield Victory Through Cognition

By Cindy Hurst
OE Watch Commentary

In 2019, *Quishi Journal*, the leading official theoretical journal of the Chinese Communist Party, explained that “the scope of military struggle in humankind will inevitably extend from the natural, technological, societal realms to the cognitive realm, thus shaping (China’s) three major warfighting dimensions.” Since then, an increasing number of Chinese theorists have been striving to understand and develop the concept of the cognitive domain. The second accompanying excerpted article is a recent example. The article, published in *Jiefangjun Bao*, the official newspaper of the Central Military Commission, takes a close look at the importance and suggested methods of developing a “cognitive advantage.”

The nature of “cognition” has changed. The article explains that within the past system of mechanized warfare, experience on the battlefield had been the key to survival. Obviously, the older soldiers knew what to expect and their sensory systems (the human mind) were more fine-tuned than those of new soldiers. An experienced soldier could tell the distance of an artillery shell impact point based on the sound of the blast, and they were able to quickly hide and take appropriate action, hence increasing their survival rate. In traditional, mechanized warfare, there was time to react within the range of artillery. However, the article points out that in today’s system of informationization and tomorrow’s system of intelligentization, “discovery means destruction” and human-machine integrated intelligent sensing becomes paramount to survival and victory. In other words, artificial intelligence is needed to extend, expand, and supplement people’s own perception since human perception alone is now too slow to detect and act on any impending danger.

Along with supplementing human thinking with artificial intelligence, to win in psychological war, according to the article, it is “urgently necessary” to strengthen psychological training. The article suggests using artificial intelligence means, such as computer vision, human-machine interaction, and virtual reality technology to construct a high-stress virtual battlefield. Training should include “immersive relaxation training, battlefield psychological adaptability, psychological tolerance, and psychological stability training. This type of training, according to the article, will help the troops to become more psychologically resilient, preventing psychological damage from happening. Along with such training, the article recommends putting into place a system of technology-driven psychological testing to weed out the weak. For example, artificial intelligence technology, such as facial recognition and emotional analysis of big data can capture and record facial expressions, eye contact, and other traits that would determine an individual’s state of mental health and behavioral characteristics. Such testing can take place before war to determine any potential psychological issues that might arise, weeding out officers and soldiers who might not cope as well. This would then ensure overall combat readiness, reduce wartime stress and improve the battlefield survival rate and combat effectiveness. Technology-driven tests can also be used to guide officers and soldiers through psychological recovery, helping them to transition smoothly out of wartime.

“Cognition contains great combat power, of which the perception system is the gateway, thinking mode is the core, and psychological factors are the cornerstone.”

Source: Yang Wenzhe, “在变与不变中探寻智能化战争制胜之道 (Seeking the Way to Win Intelligentized Warfare by Analyzing what are Changed and Unchanged),” *Quishi Journal* (leading official theoretical journal of the Chinese Communist Party), 22 October 2019, <http://www.qstheory.cn/defense/2019-10/22/c-1125137570.htm>.

The scope of intelligentized warfare extends into new domains. Engels pointed out: “Humanity fights in whatever ways production is conducted.” With AI technology rapidly infiltrating into the military domain, it will inevitably lead to a thorough change in the way combat power manifests itself. Being propelled by such new theories and new technologies as big data, quantum computing, smart communications, and brain science, new things that “go beyond people’s expectations and new capabilities of “being omnipotent” will turn people’s current knowledge upside down. The cognitive domain will become another battle domain next to the land, sea, air, space, electromagnetic, and cyber domains of warfare. The scope of military struggle in humankind will inevitably extend from the natural, technological, societal realms to the cognitive realm, thus shaping the three major warfighting dimensions, that is, the physical dimension, the informational dimension, and the cognitive dimension...

Source: Peng Bo, “释放认知战力 撬动胜战之门 (Unleash the Power of Cognitive Warfare to Pry Open the Door to Victory),” *Jiefangjun Bao* (The official newspaper of the Central Military Commission), 31 August 2021. http://www.81.cn/jfjbmap/content/2021-08/31/content_297967.htm

In intelligent warfare, cognitive space is the key combat space, cognitive advantage is an important strategic advantage, cognitive confrontation is the main form of confrontation. It can be said that “without cognition there is no war.” Cognition contains great combat power, of which the perception system is the gateway, thinking mode is the core, and psychological factors are the cornerstone. Enhancing perception efficacy, constructing intelligent thinking, stimulating psychological advantages, and releasing the cognitive combat power of the officers and men to the greatest extent will bring about great benefits for winning intelligent war.

Continued: China: Central Military Commission Publication Examines Battlefield Victory Through Cognition

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Enhance psychological testing. The practice of measuring and selecting soldiers has been around since ancient times. In the Spring and Autumn Period, the young draftee's athletic ability was measured to see if he could wear armor for military activities... In modern warfare, psychological confrontation has its own undercurrents. We should carry out psychological assessments... With the help of artificial intelligence technology, such as facial recognition and emotional analysis using big data, (we can) capture and record facial expressions, direction of vision, and eye to video frequency, to identify the inner psychological state and behavioral characteristics of officers and soldiers. Based on the assessment results, it is necessary carry out psychological adjustments throughout time and in all dimensions. Before combat, conduct thorough psychological prevention and early on to detect officers and soldiers who have not met the mental health standards...; Test for good psychological control during the war to ensure that the psychological state of the participants in the war are able to maintain the best level of combat, reduce wartime stress, and to improve the battlefield survival rate and combat effectiveness; after the war to do a good job of psychological recovery, to help officers and soldiers to achieve a smooth transition between wartime and the normal psychological state.

Psychological training should be used to strengthen morale. Clausewitz pointed out that the courage of soldiers is different from that of ordinary people. Ordinary people's courage is innate while the courage of soldiers can be fostered through exercise and training. Winning intelligent warfare urgently needs the empowerment of psychological training, the concept of psychological training to establish combat effectiveness, the full use of computer vision, human-machine interaction, virtual reality technology, and other means of artificial intelligence to construct a virtual, high-stress battlefield, carry out immersive relaxation training, battlefield psychological adaptability, psychological endurance, and psychological stability training. Such trainings can help participating personnel to effectively enhance their psychological elasticity and stimulate their psychological potential in the battlefield environment time and again so as to prevent the occurrence of psychological damage in war.

Compendium of Central Asian Military and Security Activity

By Matthew Stein

Since Central Asian states gained independence in 1991, new regional military and security alliances have been created (some of which are Russian-led), new military partnerships with non-NATO countries have been established, a number of joint military exercises have been conducted, over a dozen high-profile incidents of violence and civil unrest have taken place, and military installations have been used by foreign militaries. While this activity gained attention, it has not been collectively compiled. A compilation of this activity can serve as a guide for current and future military and security involvement in Central Asia.

<https://community.apan.org/wg/tradoc-g2/fmso/m/fmso-monographs/194880>

