"Degradation Operations:" A New Chinese Interpretation of Asymmetric Concepts

By Cindy Hurst
OE Watch Commentary

According to Sun Tzu, "A victorious army first wins and then seeks battle. A defeated army first battles and then seeks victory." In other words, in order to achieve victory, one must first attack the adversary's key capabilities before launching into battle. The Chinese Communist Party (CCP) and its People's Liberation Army still uphold this important Chinese strategy, even as cutting-edge technologies such as artificial intelligence, emerge. The following article excerpts, published in the official newspaper of the CCP's Central Military Commission *Jiefangjun Bao*, examine a concept the authors call "degradation operations," which falls in line with Sun Tzu's teaching and the authors consider a "new interpretation of asymmetric concepts."

Degradation operations, they write, use various means to reduce the opponent's overall advantage in order to gain the upper hand. For example, in "environmental degradation," the goal is to increase the dilemma in warfare to reduce the timeliness and accuracy of the adversary's decisions as well as their effectiveness. The authors explain that this could be accomplished, for example, by jamming and sabotaging the algorithm of the adversary's intelligence image recognition systems to make it difficult for their computers to detect and classify targets. In "capability degradation," there is a reversal, or top-down reduction of the opponent's operational capabilities. This means the opponent's system-of-systems operational advantages are constantly being degraded, preventing the connecting of each element, unit, and system from the bottom up. Finally, in "degradation of the operational domain," it will be difficult for the opponent to conduct integrated, multi-domain actions.

While historically there has almost always been chaos and disorder in combat, according to the authors, future warfare is expected to become even more chaotic with new technologies coming online. The authors write that there are no good solutions when putting together a war plan because it is impossible to know what the other side is planning or thinking. One small deviation can create a huge reaction resulting in "inestimable consequences." Therefore, "degradation operations" could be used extensively on the battlefield in future wars, even becoming the main way that both sides—but especially the weaker side—will fight for operational superiority.

> " The approach to combat is to reduce the opponent's advantage to achieve victory."

Source: Zhang Yuantao, Cui Xiaoming, and Zhao Xiaohong, "降级作战：非对称理念新诠释 (Degradation Operations: A New Interpretation of the Asymmetric Concept)," *Jiefangjun Bao* (The official newspaper of the Central Military Commission), 5 October 2021.
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"Degradation operations" usually refers to the use of various means to degrade the opponent's environment, reduce both their decision-making and intelligence capabilities, reduce their operational degradation capabilities, thus reducing the opponent's overall advantage. The approach to combat is to reduce the opponent's advantage to achieve victory. "Degradation operations" can be seen as a characteristic interpretation of the concept of asymmetric operations. They consist of countermoves and reverse dismantling of moves in joint, all-domain operations and multi-domain operations, and they have certain theoretical advantages and practical application.

Environmental degradation. This refers to reducing the opponent's will to fight or their combat effectiveness by weakening and destroying the environment in which the other side's personnel or weapons and equipment rely upon to release their combat capabilities.

Reduced intelligence and decision making. On one hand, this refers to reducing the timeliness and accuracy of the opponent's decision-making ability by increasing the dilemma; on the other hand, the effectiveness of the opponent's decisions can be reduced by actively increasing the cognitive algorithm confrontation. Currently, artificial intelligence technology is based on deep autonomous learning and are mostly "weakly supervised learning." Once the operations of its algorithm model is disturbed, it may cause a deviation in data analysis and the misperception of artificial intelligent behavior. For example, by obfuscating convolutional neural network data, jamming and sabotaging the intelligence image recognition process algorithm, it can make it difficult for computers to detect and classify targets and to interpret their behaviors, which increases the cognitive load and difficulty in decision making.

Capability degradation: The system-of-systems operational capabilities are broken down into unit operational capabilities and the unit operational capabilities are broken down into element-based operational capabilities. Through this kind of top-down degrading of operations, the opponent's system-of-systems operational advantages are constantly degraded and the connecting of each element, unit, and system is prevented from the bottom up...