**Cognitive domain warfare is the new main battlefield for language confrontation**

**Source: China Social Sciences Network  
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**Date: 2022-05-17**

Cognitive domain warfare refers to an important form of public opinion propaganda, psychological attack and defense, winning people's hearts and minds, subverting confidence, influencing beliefs, competing for thinking, and ideological struggle, guided by modern cognitive theory and science, using multi-domain means such as public opinion, psychology, and law, and using multi-dimensional technologies such as modern networks, media, text, pictures, videos, and numbers, in order to compete for people's initiative in thinking, beliefs, values, personal attitudes, emotions, identification, and judgment tendencies. Cognitive domain warfare is a complex collection of traditional public opinion warfare, psychological warfare, legal warfare, trade warfare, diplomatic warfare, scientific and technological warfare, ideological warfare, and other multi-domain warfare.

At present, cognitive domain warfare has become an important support for countries to carry out military struggles and struggles in other fields. Language confrontation driven by cognitive domain goals has become an important form of cognitive domain warfare and deserves high attention.

**Language confrontation: a new area for exerting influence on combat targets**

Cognitive domain operations are a result of the development of contemporary cognitive science research. They are an emerging field of operations that emerged after people actively explored the cognitive activities of the brain to gain a more complex, abstract and thorough understanding of the brain. They are also a high-end form of influence in language confrontation that targets the advanced, deep and hidden activities of the audience's brain. Whether it is the object of information action, the producer of information, the information content itself or the channel of information, cognitive domain operations are all permeated with cognitive characteristics, and always emphasize taking action at the cognitive level.

In terms of the recipients of information, this cognition targets the deep cognitive aspects of the opponent's audience, including its people, military, military commanders or important leaders, important figures in the political and business circles, and even directly includes the leaders of the other country or specific important generals of the army, etc. It can also be a specific group of people or the public. It can involve the cognitive preferences, cognitive shortcomings, cognitive habits, cognitive biases, and cognitive misunderstandings of individuals or groups; it can also be the beliefs, values, political identity, national identity, social and cultural identity, and emotional attitudes of individuals and groups.

From the perspective of the distributor and content of information, it should be infused with the cognitive design and arrangement of the information producer, which includes the unique cognition of the text, such as the discourse mode of the text, the narrative mode of the text, the observation perspective of things, the cognitive focus and depth of the narrative, the organization form of the sentence, the value concept and other tendencies of the sentence, the acceptability of the concept of the sentence to the other party, etc.

In terms of the channels for information issuance and dissemination, the form of text is closer to multimedia and multimodal forms, closer to the needs of cyberspace, closer to the advantages of contemporary smart phones, and closer to the characteristics of the current emerging media era, that is, it is more in line with the cognitive characteristics, cognitive habits and cognitive tendencies accepted by the audience. The dissemination form of text fully considers the cognitive effects in international communication, especially cross-cultural, cross-linguistic, cross-media and cross-group cognitive communication. In this way, the text will better influence the audience from a cognitive level.

**Language confrontation responds to changes in combat styles and generates new tactics**

Throughout human history, it is not difficult to find that the style of military struggle has been constantly changing. From the initial physical struggle with cold weapons to the contest of hot weapons and mechanical forces, and then to the balance and counter-balance of information capabilities under high-tech warfare conditions, in recent years, it has developed towards the intelligent decision-making competition in the direction of intelligence and unmanned. Each change has brought profound changes in tactics. In the current transitional stage of coexistence of mechanization, informatization and intelligence, people not only pay attention to the competition for dominance in the physical and information domains of the battlefield, but also pay more attention to the control of the cognitive domain that affects the main body of war, that is, the competition in the fields of thinking, cognitive patterns and styles, values, emotional attitudes, cultural models, communication patterns, psychological strengths and weaknesses, cognitive preferences, cultural and knowledge maps, and ideological identity of the personnel on both sides of the war. The latter involves the basic situation of social personnel and social existence, that is, the emerging field of cognitive domain warfare, and its tactics have strong particularity.

**Flexibility of topics**  
Cognitive domain operations can select many topics in the cognitive domain and carry out flexible and flexible combat operations. According to the current situation and needs, topics can be selected from the relatively macroscopic strategic level (such as the ideology and system of the opponent's entire society, etc.), the mesoscopic campaign level (such as social problems in the local field or direction of the opponent's society: social welfare policy or environmental protection policy, etc.), and very microscopic tactical issues in society (such as the unfairness, injustice, and non-beautiful side of society reflected by a certain person or a specific event). Macro, meso, and micro cognitive domain issues are interconnected and transformed into each other. It is very likely that a microscopic topic will also become a major macroscopic strategic topic. The raising of issues depends on the relationship with the entire military operation. Cognitive domain operations should be subject to the overall combat operations and serve the needs of the macroscopic political and diplomatic situation. More importantly, topics should be prepared in peacetime, and data on various topics should be collected in peacetime, especially paying attention to various important data in the real society. Once needed, these data can be quickly transformed into arrows, bullets, and shells shot at the enemy's cognitive domain, and even become strategic weapons that affect the overall situation.

**Controllability at the operational level** An important design of cognitive operations is that it is controllable and adjustable at the operational level, and can be upgraded or reduced in dimension according to changes in the situation. If it is required at the strategic level, the commander can activate the strategic-level design and force investment; if it is required at the campaign level, it can also be controlled at the corresponding campaign level; if it is only required at the level of specific small problems, it can also be controlled at the corresponding niche local level, so that the entire action serves the needs of the overall combat operation. The strategic, campaign and tactics here refer more to operational design and force investment. Since the battlefield situation may change rapidly, some issues may also change at the level, with strategic issues affecting the effects at the campaign and tactical levels; some issues, due to the particularity of tactical issues, become campaign and strategic-level issues that affect the overall situation.

**Dominance of emerging media**  
The main influence channel of cognitive domain has shifted from traditional paper media and print media to emerging media. Traditional media mainly rely on single media, such as newspapers, magazines, books, flyers, posters, etc. to convey information; the emergence of television in the later period brought about three-dimensional media. In the Internet era, especially the Internet 2.0 era and the birth of smart communication devices, people rely more on multi-media, multi-modal, short videos, and short texts to convey information. The introduction of various advanced devices such as smart phones, smart tablets, and smart players, and the birth of various emerging social software and tools, have made emerging media the main tool for people to communicate and exchange. Emerging media, emerging social software and tools have become an important space for various forces to play games and struggle in social security, public opinion security, ideological security, social security, and political security. Internet security, especially whether the security of new social media, emerging social software and tools can be mastered, is, to some extent, the key to whether a country's cognitive domain can be secure. Information in emerging media tools and new media space has become the main battlefield, main position, and main space for competition in cognitive operations of various countries. It is worth pointing out that ideas and theories that influence people's cognition will become the most influential weapons at all levels of cognitive domain operations.

**Language confrontation adapts to the intelligent era, cognitive computing enhances new computing power**

In the era of artificial intelligence, based on the substantial improvement in big data analysis and application, supercomputing capabilities, intelligent computing capabilities, natural language processing capabilities, smartphone communication capabilities, and new generation network communication capabilities, humans have begun to accurately model and analyze language culture, psychological cognition, group emotions, and social behavior for the entire society, the entire network domain, local groups, local different groups, and specific individuals. In particular, people have a deep understanding and grasp of brain cognition, human brain thinking, thinking patterns, habitual preferences, image schemas, cognitive frameworks, and even neural networks, human-computer collaboration, and brain control technology. As long as there is enough diverse dynamic data, people can calculate and simulate all people's psychological activities, emotional activities, cognitive activities, social opinions, and behavioral patterns. Through deep calculations, actuarial calculations, and clever calculations, people's cognitive world can be accurately grasped, and a fine and profound control of people's cognitive domain can be formed. This aspect also presents the following characteristics:

**The dimensionality of computation**  
As an emerging field, all aspects of the cognitive domain can be digitized and made fully computable for all aspects of the entire process and all individuals. This can be achieved by widely collecting various types of information and then sorting out the information to form big data on the diverse factors of the opponent's subjects. This will allow various computations to be conducted on the entire population, groups, between groups, and between individual data. As a result, all kinds of activities based on thinking, psychology, emotion, speech, behavior, etc. that were previously impossible to achieve can be completed, displayed, and accurately grasped through computation.

**Cognitive nature of computation**  
computation in the cognitive domain reflects a strong cognitive nature. It can reveal more of the connections between things, events, and people that are difficult to observe with the naked eye. It can reveal the clustering and hierarchical relationships between concepts in the same event framework, and reflect the deep cognitive connections between concepts, whether explicit or implicit, direct or indirect. It reveals the complex conceptual network system between concepts, allowing people to see a deep cognitive world that completely transcends ordinary naked eye observation.

**Intelligence of computation**  
 The computation in cognitive domain also reflects strong intelligence. This intelligence is manifested in the fact that intelligent conclusions can be drawn through computation. For example, through the collection of a large amount of text and data mining, we can find the relationship between various topics, various viewpoints, various tendencies, various groups of people, various positions, and various demands that cannot be seen by human power, so as to form a more comprehensive, in-depth, accurate, and systematic understanding of a certain issue and make scientific and optimized decisions. Such decisions may be consistent with human intelligence, or they may surpass or even far exceed human intelligence. By making good use of the power of cognitive computing, especially by integrating the data of our country and the data of our opponents, we can better prevent, warn, and deploy in advance, and achieve the best, optimal, fastest, and most accurate strikes and counterattacks, and better reflect efficient, powerful, and targeted protection. Cognitive computing here is more about the possible reactions of a possible macro, meso, or micro topic in different groups of people, different time periods, and different backgrounds, in the entire network domain or a local network domain, or within a specific group, especially the analysis and inspection of the active and passive situations that both parties may present when playing games with opponents, and the attack and defense of cognitive domain.

**New application of giving full play to the status of discourse subject and releasing the power of discourse**

Cognitive domain operations have a very important support, that is, it mainly relies on language media to play a role, mainly exerts influence through the discourse level, mainly forms an implicit effect on the cognitive domain through the narrative of discourse, mainly exerts potential effects through cultural models, and exerts explicit or implicit effects through cross-cultural communication. It is mainly reflected in the following aspects:

**Uniqueness of textual discourse**  
The cognitive domain needs to be influenced by information. Although information may be presented through the special visual effects of video images, fundamentally speaking, the uniqueness of the discourse expressed by the text becomes the main support for producing cognitive influence. Among them, the mode of discourse expression, the skills of discourse expression, the main design of the persuasiveness and appeal of discourse expression, and especially the uniqueness of discourse narrative will be the key to influencing people's cognition. This may include the perspective of the narrative, the theme and style of the narrative, the story framework of the narrative, the language innovation of the narrative, the key sentences of the narrative, the philosophical, humanistic, religious, social, natural and other feelings contained in the narrative, the identities of different participants in the narrative, the diversified evaluation of the narrative, the authenticity, depth and emotional temperature of the narrative, the subtle influence of the narrative on the viewpoint, the personal emotions, values, ideology, and position evaluation released by the narrative. The uniqueness of textual discourse is an important reliance for cognitive domain operations to exert cognitive influence through text. Making full use of the complexity of the text, giving play to the respective advantages of diverse texts, and giving play to the role of implicit and explicit cognitive influence of the text connotation have become the key to cognitive domain operations of textual discourse. The most important thing is to innovate the text discourse, win readers with newer words, more novel expressions, and more unique expressions, so that readers can understand and feel the ideas in the text imperceptibly, and accept the ideas of the text silently.

**Potentiality of cultural models**  
 In cognitive domain operations, we must deeply grasp the characteristics and models of different countries and national cultures. Different countries and different nationalities have different cultural models, and their philosophical thinking, traditional culture, religious beliefs, customs, and ways of thinking are all obviously different; citizens of different cultures also have different national psychology and national cognitive models, and should have typical cognitive preferences belonging to their own national culture, as well as corresponding shortcomings and weaknesses. Some of them obviously have huge differences in cognition with other nationalities in their own country, and even misunderstandings and hostility. Therefore, cognitive domain operations at the cultural level are to grasp the overall cultural models of different countries, build cultural models of different groups in different countries, build different cognitive models of different countries on different things, and fully grasp the overall attitude and behavior of a country on a series of things and issues, especially for some typical cases, cultural taboos, religious requirements, spiritual pursuits, and overall concepts. With the help of existing theories and discoveries, we should comprehensively construct the basic performance of different groups of people in the cognitive field on some typical problems, sensitive problems, and important problems, and provide important references and guidance for the next step of cognitive operations. Strengthening the study of the cultural patterns of different enemy personnel, especially military personnel, personnel in key positions, including the study and construction of the basic cultural characteristics and models of enemy generals, officers, soldiers, etc., such as the character's psychological cognitive behavior and cultural model portrait, has become the core practice of cognitive domain operations. The cognitive analysis of ordinary enemy personnel, especially the general public, citizens, and specific groups, including special non-governmental organizations, is also of great value.

**Cross-cultural strategic communication**  
Cognitive domain operations are international language and cultural communications, and need to follow the laws of international communication. We must grasp the basic paradigm of international communication, skillfully combine our own stories with international expressions, and skillfully combine the other party's language and culture with our own stories and ideas; we must be good at combining different art forms, including text, pictures, paintings, music (sound), video and other means or multimodal means to achieve international communication of information. At the same time, we must coordinate multi-dimensional macro communication at the strategic level: we must use various means to carry out communication based on military-civilian integration, military-civilian coordination, and military-civilian integration; in addition to non-governmental organizations, we must especially rely on civilian forces, experts, opinion leaders, and ordinary people to help the military carry out cognitive domain operations; we must unify the setting of topics, speak out in multiple locations and dimensions, form a strategic communication situation, and form a good situation for emergency solutions for major actions, major issues, and major crisis management, form a good public opinion atmosphere, create positive effects, and eliminate or extinguish adverse effects. In particular, we must establish a capable team that is proficient in foreign languages, understands cross-cultural skills, knows the laws of international communication, and can speak out skillfully on international multi-dimensional platforms. These people can usually conduct extensive topic perception, collection and discussion, and use common or special topics to build personal connections and establish fan communities; more importantly, at critical moments, they can exert influence through their fan groups and complete strategic communication tasks.

At present, with the prevalence of hybrid warfare, multi-domain warfare, and global warfare, cognitive domain warfare has become a common means of mixing and blending. The process of cognitive domain warfare from unfamiliarity, emerging, development to growth is also the advanced stage, complex stage, and upgraded stage of the development of traditional public opinion warfare, psychological warfare, and legal warfare. Its rise is more deceptive, ambiguous, concealed, embedded, implanted, and unobservable, especially considering its deep integration with the entry of contemporary emerging media, and it is constantly learning and borrowing new ideas, new technologies, and new means that integrate into multidisciplinary, interdisciplinary, and cross-disciplinary disciplines. Therefore, cognitive domain warfare has become a form of warfare that we must be highly vigilant and guard against.

*[This article is a phased result of the National Social Science Fund Major Project "National Defense Language Capacity Building in the Perspective of National Defense and Military Reform"]*

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