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The Essential Mechanism of Hybrid Warfare — “Fight in the cognitive space” integrating military and non-military means to achieve the ultimate objectives —

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Introduction

In recent years, the term “hybrid warfare”¹ has become increasingly prevalent in security-related discussions. However, the meaning of this term varies according to the analyst, and therefore, the implications for security also differ according to the intended definition.

Within this context, this article focuses on hybrid warfare as a form of conflict that uses combined military and non-military means to achieve objectives below the threshold that leads to full-scale military war between the armed forces of countries. This article then examines the essential mechanisms of how these battles achieve their objectives.

To this end, the author will first clarify the definition of hybrid warfare for the purpose of this article and then identify the military and non-military hybrid methods employed. Following that, the article will discuss the nature of “fight in the cognitive space” that connects these methods to the achievement of objectives.

In course of the analysis, the article will first elucidate the significance of fight in the cognitive space in the mechanism for achieving objectives in hybrid warfare, and then consider, in turn, the targets of the battles, how fight in the cognitive space is directed, and the mechanisms through which it functions.

Based on these analyses, the article concludes with examination on how fight in the cognitive space is manifested in Russia’s ongoing invasion of Ukraine (hereinafter referred to as the war in Ukraine for the sake of convenience), and how nations that value human rights, including Japan, should deal effectively with hybrid warfare.

¹ In this article, the terms “hybrid war” and “hybrid warfare” are used interchangeably, without a specific distinction.

1. Three definitions of hybrid warfare

The term “hybrid” was originally used in thremmatology, or the science of breeding domesticated animals and plants, to refer to the crossing of two different lineages,² but the term has since evolved to describe the use of multiple means in combination, such as hybrid vehicles powered by both gasoline and electricity. Faithful to this etymology, the term “hybrid warfare” is thought to refer to a type of warfare that combines traditional military means of warfare with various non-military means of warfare. The views of many analysts are in general agreement on this point.

However, what varies greatly among analysts is how to position hybrid warfare in relation to full-scale military war. Full-scale military war here refers to high-intensity conflict between the regular forces of two or more states, each using their own firepower capabilities. As shown in Figure 1, the definition of hybrid warfare in relation to full-scale military war can be divided into three categories.

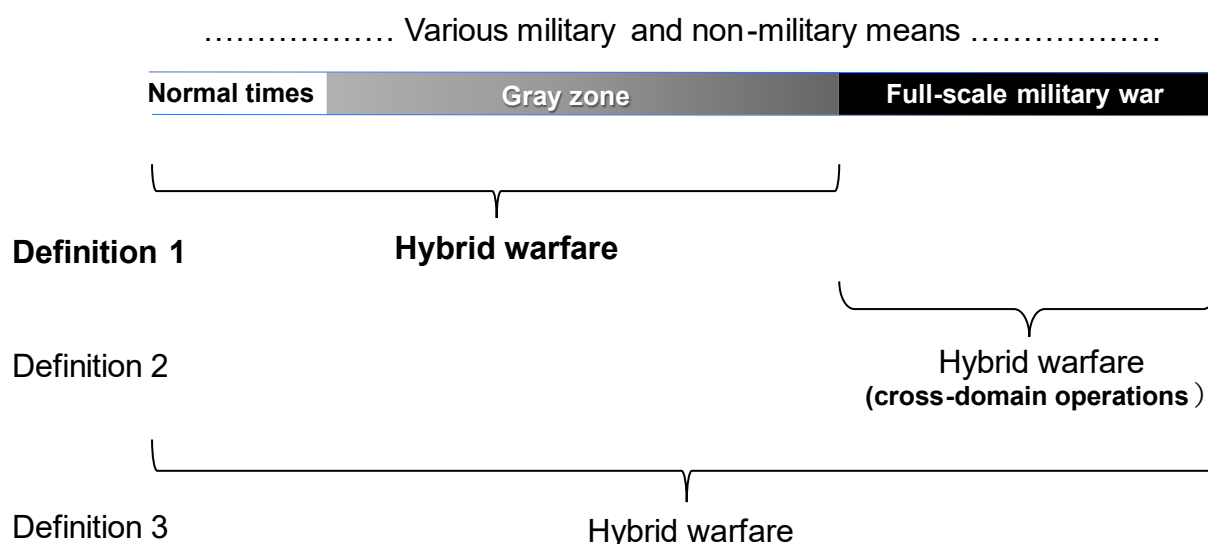


Figure 1 Three Definitions of Hybrid Warfare

Source: Prepared by the author.

The broadest definition shown here is Definition 3, which includes everything from fighting in normal times and gray zone situations that do not escalate to full-scale military war, as well as the use of various hybrid methods in full-scale military war. For example, Hirose Yoko, in her book *Haiburiddo Senso: Roshia no Atarashii Kokka Senryaku* [Hybrid Warfare: Russia’s New National Strategy] (in Japanese) uses the term in this broad sense without giving a strict definition of hybrid warfare.³

² A.S. Hoenby, *Oxford Advanced Learner’s Dictionary of Current English*, Oxford University Press, 1974, p. 425.

³ Yoko Hirose, *Haiburiddo Senso: Roshia no Atarashii Kokka Senryaku* [Hybrid Warfare: Russia’s New National Strategy] (Japanese), Kodansha Gendai Shinsho, Kodansha Ltd., 2021.

Definition 2, on the other hand, is based on the premise that the term “war” itself is used for high-intensity armed conflicts. Therefore, the use of hybrid methods in situations that have not risen in intensity is not included within this category of hybrid warfare. From the same perspective, there are also those who argue that analyzing a category that consists of the framework of hybrid warfare is itself misleading. Instead, the perspective should be the use of cross-domain operations (sometimes referred to as all-domain operations or multi domain operations), within the framework of full-scale military war.⁴ Advocates of this approach take the position that the essence of warfare will continue to be the use of force, primarily firepower, and that new and diverse methods will be employed most effectively within the realm of military war.

Definition 1, in contrast, defines hybrid warfare as the use of various military and non-military means in situations that do not escalate to full-scale military war, or in situations intentionally meant to avoid becoming a full-scale military war, to achieve an objective. This is a term used by many analysts.⁵ In this case, the term “warfare” is extended to a broader meaning that does not necessarily include the use of full-scale military force. However, this definition is often used intentionally, perhaps to draw attention to this new form of “warfare” as a coercive means of achieving objectives used by states (or powerful non-state actors) in place of full-scale military war. Even if full-scale military wars do not completely disappear in the future, new methods of warfare that do not lead to full-scale military war will become important. In this context, clearly distinguishing between the concept of hybrid warfare as introduced in Definition 1 and full-scale military war would contribute to a more clear and precise discussion.

In any case, an ambiguous definition of “hybrid warfare” in this article could lead to confusion. Therefore, it is necessary to establish the definition at the initial stage of discussion, but, as mentioned above, which definition is appropriate to adopt will depend on the focus of the discussion.

In this article, the focus will be on the emergence of states and non-state actors that aim to achieve objectives previously achieved through full-scale military war by various methods, including military and non-military means, without resorting to full-scale military war. Therefore, this article will use the term “hybrid warfare” in the sense of Definition 1 in order to examine hybrid methods as the main focus.⁶

⁴ Yoshikazu Watanabe, Takeshi Inoue, and Takahiro Sasaki, *Puchin no “Chogensen”: Sono Zenbo to Shippai no Honshitsu* [Putin’s “Unrestricted Warfare”: Its Whole Picture and the Essence of Failure] (Japanese), Wani Books Plus, Wani Books Co., Ltd., 2022, pp. 7-11.

⁵ In Junjiro Shida, *Haiburiddo Senso no Jidai: Nerawareru Minshushugi* [Hybrid War Era: Enduring Threats to Democracy] (Japanese), Namiki Shobo publisher, 2021, the adoption of Definition 1 is appropriate after referring to many previous studies, pp. 11-62. The European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE), jointly established in Helsinki, Finland, in 2017 by NATO, the EU, and their member states, works to address hybrid threats in situations that do not lead to full-scale military war under a similar recognition. “Hybrid threats as a concept,” Hybrid CoE, <https://www.hybridcoe.fi/hybrid-threats-as-a-phenomenon/> (last accessed September 13, 2023).

⁶ As described here, the entities conducting hybrid warfare are not limited to states; they can also be non-state actors. For convenience of description, however, in the following, the entity will refer to a state and the aggressor entity will be referred to as the aggressor state.

2. Various methods of hybrid warfare as military and non-military means

Now that the definition has been clarified, the author would like to consider the various methods of hybrid threat used in hybrid warfare. Table 1 organizes the methods now available into three categories: non-military social and economic methods, technological methods that span both non-military and military means, and armed military methods.

Social economic methods (non-military means)	<ul style="list-style-type: none"> - Manipulation of public opinion in the target country, influence operations, media manipulation (information warfare) - Isolation of the target country through manipulation of international public opinion, etc. - Economic coercion through trade, investment, energy supply, etc.
Technological methods (non-military + military means)	<ul style="list-style-type: none"> - Cyberattack (targets: government, military, social infrastructure, SNS social media, etc.) - Electromagnetic attacks (targets: military, national backbone communications, social infrastructure) - Use of unmanned vehicles on the ground, at sea, under the sea, and in the air - Attacks on space infrastructure (targets: intelligence, communications, global positioning system (GPS), etc.)
Armed methods (military means)	<ul style="list-style-type: none"> - Use of armed operatives, volunteer soldiers, disguised fishermen, private military companies, etc. - Deployment, implementation of exercise, or limited use of regular military units, missiles, etc. - Providing support for or provoking civil unrest in the target country

Table 1 Various methods of hybrid warfare

Source: Prepared by the author.

The reason for the deliberate classification of technology between military and non-military is that these technological methods play a major role across both military and non-military fields today. Further, as mentioned later, that these methods span both military and non-military fields is regarded as one of the reasons why hybrid warfare is now emerging as a major issue in the field of security.

In the non-military field, besides what is commonly known as information warfare⁷ aimed at manipulating the leaders and public opinion of the target country through such activities as influence

⁷ The term “information warfare” here is not “intelligence warfare” but “information warfare.” In Japanese, both terms for information and intelligence are translated the same as “information,” but while intelligence is mainly used to refer to the content of information in the military and diplomatic fields, information is often used as a term that focuses on the high-speed and wide-ranging transmission and diffusion of all kinds of information, regardless of its content. It is necessary to make a clear distinction between the two, and to discuss the handling of the two in their respective fields separately.

operations and manipulation of public opinion, there is also use of economic coercion through trade, investment, and energy supply. It is important to note that these hybrid methods are not only directed at the target country but are also directed at the international community.

Technological methods include exercise of capabilities through the use of various advanced technologies in the fields of cyber, electromagnetic waves, unmanned vehicles, and space. These capabilities employ advanced technologies in information warfare or economic coercion and are also integrated into military measures. Although new technologies such as artificial intelligence (AI) and the quantum field may have a great impact in the future, these four areas are named as examples of areas that have already exerted great impact at the present time.

Further, as already defined, even if hybrid warfare manifests a level lower than full-scale military war, armed military methods still play an important role. For example, there are means of sabotage, occupation, assassination, etc., which are carried out by using irregular armed operatives, volunteer soldiers, members of private military companies, disguised fishermen, etc., who are not full-fledged regular military forces and who cleverly conceal the involvement of a particular state. Use of full-scale military forces as a means of intimidation to the extent that it does not lead to large-scale direct combat with the military forces of the target country is also important. Deployment of large-scale troops, conducting military exercises, and demonstration firing of missiles are typical examples, but in some cases, use of military forces including limited small-scale battles carefully planned not to fall into a full-scale military war is also included. It may also involve provocation and support of civil war within the target country.

In hybrid warfare, these various methods are used systematically and in combination to achieve specific objectives, but what is the actual mechanism by which multiple methods are linked to achieve these objectives? Let us consider this next.

3. Fight in the cognitive space that connects various methods to objectives

What is the purpose of war in the first place? In the Post-Westphalian era, the objectives of war include the acquisition of territories and people that generate economic benefits (including the recovery of territories lost in the past), the securing of resources and trade routes, the acquisition of buffer zones for national defense and the weakening of potential enemies, and the strengthening of internal politics through the demonstration of the ruler legitimacy. Today, the globalization of the economy has slightly reduced the value of bringing a target country's territory and people under direct control, but it can be said to have increased the value of forcing a target country to agree to trade, finance, and other conditions favorable to one's own country.

In a full-scale military war, these objectives are achieved by using military armed forces to attack the target country, first by destroying all or part of the target country's armed forces on the battlefield, and then by occupying the desired area or forcing the target country to accept conditions in exchange for not fully occupying it.

In contrast, in hybrid warfare, the aim is to achieve an objective without leading to the use of

large-scale military force. How is this possible? Simply put, it is by working on the psychology of the leaders of the target country. The most obvious example would be direct intimidation. In addition to intimidation by large-scale military force, intimidation by economic means such as trade, finance, and energy supply, and, in newer areas, methods such as the destruction or freezing of systems through cyberattacks are also means of intimidation.

Further, direct intimidation is not the only means to influence the psychology of leaders. Manipulation of the psychology of the people in the target country aims to negatively influence trust in the leaders and cause division in the society with the result that the leaders of the target country cannot respond effectively. It then becomes possible for the aggressor state to enforce its intentions. In addition to stoking fear by intimidation, other means of intimidation to achieve these objectives will include information warfare, such as influence operations using cyberspace such as social networking services (SNS) social media and inducing manipulation of public opinion, and the fostering of social unrest through the destruction of infrastructure and the economy by cyber and electromagnetic attacks, terrorist attacks, and other means.

Furthermore, the target of psychological manipulation is not limited to the target country's domestic sphere. It is also effective for the aggressor state to appeal to the international community, including the leaders and citizens of third countries, to expand the aggressor state's legitimacy and to emphasize the target country's faults, isolate the target country's leaders internationally, and narrow the options available to them. Specifically, the aggressor state can use such methods as spreading unilateral narratives and disinformation in line with such narratives, destroying information infrastructure to gain information superiority by restricting international transmission from the target country, and embracing third countries through economic means and other means.

Although employment of any single method may not be sufficient to exert power over the target country, when used in combination in a systematic and combined manner for a single purpose, they function effectively as methods of hybrid warfare.

The characteristic feature of hybrid warfare as a totality is that all methods work on the psychology of the leaders and people of the target and/or third countries, and their combined effect is to achieve the ultimate objective. While full-scale military war aims at victory in the physical space of destroying the target country's military forces, the essence of hybrid warfare lies in the fact that it aims to win in the cognitive space, as shown in Figure 2.

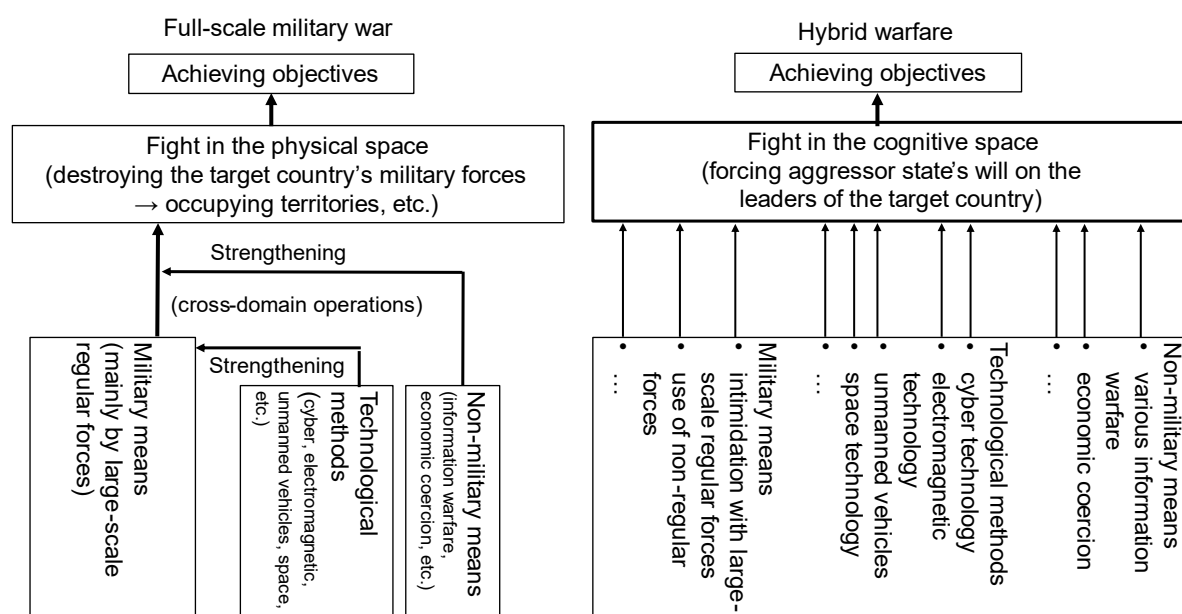


Figure 2 Mechanism of Full-scale Military War and Hybrid Warfare

Source: Prepared by the author.

In fight in the cognitive space, various military and non-military means are combined to achieve the objective. The ultimate aim of those means is to force the aggressor state's will on the leaders of the target country, and each means complements the other to achieve that ultimate goal.

In this sense, fight in the cognitive space should be distinguished from information warfare (sometimes referred to as “cognitive warfare” as a similar expression), which is one of its various methods. Information warfare, which involves the spread of disinformation on SNS social media and the international dissemination of narratives favorable to one's own country, is one of a variety of methods of fight in the cognitive space, along with military and economic coercion and the provoking of social unrest through cyber and irregular forces. In contrast, the concept of fight in the cognitive space, which links all methods, is the essence of hybrid warfare as opposed to fight in the physical space in full-scale military war.

However, fight in the cognitive space is not a recent development, although hybrid warfare has recently been the focus of attention. Rather, it has existed since ancient times. As stated in Sun Tzu's work, *The Art of War*, a book compiled during the period of 475 to 221 BC, “In the practical art of war, the best thing of all is to take the enemy's country whole and intact; to shatter and destroy it is not so good,”⁸ even in the past, violence was not always necessary in war if the forcing of the will can be achieved.

However, why has hybrid warfare, which achieves its objectives through fight in the cognitive space by various methods, including non-military means, gained particular attention in recent years,

⁸ Yoshio Sugino (ed.), *Shin Senryakuron Taikei I: Sonshi* [New Strategic Theory System (1) Sun Tzu] (Japanese), Fuyoshobo Shuppan publisher, 2001, p. 36.

especially since the beginning of the 21st century? There are three possible reasons as follows.

The first reason is the trend toward outlawing war that took hold after World War II. Of course, as seen in the current situation in Ukraine, there is no transcendent power internationally to physically stop acts of aggression that are illegal under international law. However, the norm that the use of force is illegal is now shared internationally, and countries that seek to change the status quo must be prepared to face international isolation when they use military force. This means that they are more likely to resort to hybrid methods than to the use of force.

The background to the international establishment of the concept of the outlawing of war, which began with the Pact of Paris after World War I and took root internationally after World War II, is the reality of the growing power of nuclear weapons and other weapons, and the irreversible strengthening of the trend in the international community toward respect for human rights and humanitarian considerations, despite the reality of more powerful nuclear weapons. Therefore, the perception that war is illegal is by no means limited to a formal legal concept but rather has the power to greatly influence international politics and diplomacy through international public opinion.

The second reason is that, as mentioned briefly above, with changes in the world's economic structure, the acquisition of colonies has become less economically attractive, and direct acquisition of territory is no longer the ultimate goal. Even in cases when a country seeks to acquire a certain territory located over resources or to expand its territory in an area with indeterminate borders, if there are inhabitants living there, the cost of suppressing their resistance after the status quo is changed makes it more advantageous to establish a government that suits one's own country than to aim for direct control of the area. Now, hybrid methods are being used to achieve this objective.

Of course, border disputes over uninhabited areas and disputes over sea areas including uninhabited islands continue to persist. However, even in such cases, information warfare and legal battles revolving around international public opinion are being used, while all-out military conflict is being avoided. In the case of Russia's ongoing invasion of Ukraine, this reason does not apparently appear to be the case, since invasion of the territory through full-scale military war is taking place. The reasons for this will be analyzed later in this article.

The third reason why hybrid warfare has gained attention in recent years is the development of science and technology, especially information technology. The development of IT stemming from the rapid expansion of the Internet since the 1990s has significantly changed the cognitive activities of humankind.

The speed at which information now spreads and the extent to which it is shared cannot be compared to the days of World War II. In the past, the results of military actions that occurred on the front lines were classified as confidential and passed on to national leadership a few days later, but only a limited number of people were in a position to know. Today, what happens on the front lines is known by the entire world almost in real-time.

Even before military operations commence, it has become possible to exert significant pressure on the decision-making function of the government of the target country. Methods used include

intimidating its citizens and manipulating public opinion with statements of economic measures and military deployments and exercises, or by appealing to international public opinion for its own legitimacy and taking control of the narrative through information transmission, even if it involves spreading falsehoods.

Thus, the arena of fight in the cognitive space through the use of hybrid methods has drawn attention as a new battleground that can significantly impact the achievement of national objectives.

4. How fight in the cognitive space functions

So how does fight in the cognitive space actually work? Next, we will consider the mechanism, but first let us consider the target to which this fight is directed.

In the previous section, we have seen that, in addition to directly focusing on the leaders of the target country, other targets for manipulation of international public opinion include the people of the target country and the leaders and people of third countries. Let us look at a concrete example of such a case.

In 1992, the government of Bosnia and Herzegovina, in the midst of the civil war in the former Yugoslavia, made an international appeal calling the massacres by Serbian forces “ethnic cleansing,” which played a major role in gaining international support. The term was coined by the U.S. public relations firm Ruder Finn, which, along with the term “war advertising agency,” highlighted the need for efforts to win over international public opinion in times of conflict.⁹

In the case of the recent invasion of Ukraine, Russia had been preparing a false flag operation by creating fake videos and other information to spread false information about the mistreatment of Russian residents in the Donbas region in eastern Ukraine since autumn of 2021, a few months before the February 2022 military invasion began, on SNS social media. Ahead of Russia’s disinformation campaign, the United States publicly announced the conspiracy.¹⁰ This is what is known as an information disclosure operation.

Russia is also actively publicizing its own arguments justifying the invasion to countries in Africa, Latin America, and elsewhere. In the Spanish-language information space, in particular, its arguments far outweigh those of Western democracies, and this may have a significant impact on Hispanics in the United States.¹¹

In addition to information warfare, Russia is testing new types of missiles and key figures are making various statements, as described in detail below, as threats toward Western countries that

⁹ Toru Takagi, *Dokumento Senso Kokoku Dairiten: Joho Sosa to Bosunia Funso* [Document War Advertising Agency: Information Manipulation and the Bosnian Conflict] (Japanese), Kodansha Ltd., 2002.

¹⁰ “*Maenomeri de Kimitsu o Kokaisuru Beikoku: Sono Nerai towa, Ukuraina Kiki no Shinso* [The U.S., which discloses secrets in a hurry: What is its aim? The depths of the Ukraine crisis]” (Japanese), *Asahi Shimbun* newspaper, February 20, 2022.

¹¹ Kazuhiro Taira, “*Ukuraina Shinko ‘Mienai Johosen’ de Roshia ga Katteiru? Sono Riyu towa* [Is Russia Winning the ‘Invisible Information War’ in the Invasion of Ukraine? What are the reasons?],” May 23, 2022, <https://news.yahoo.co.jp/byline/kazuhirotaira/20220523-00297192> (Japanese) (last accessed September 23, 2023).

support Ukraine. It can be said that this is another method of fight in the cognitive space directed at international public opinion.

In addition to the three targets—the leaders of the target country, the people of the target country, and international public opinion—there is another target that is often overlooked by those who focus only on international relations. That target is the people of the aggressor state that launches the hybrid warfare. As long as fight in the cognitive space is a battle, attacks occur in both directions. In the international community, as both the aggressor state and the target country seek to win the support of other countries not only through the dissemination of information but also through actual actions in the political, economic, and military spheres, thought control of the people becomes a top priority, especially if the aggressor state is an authoritarian country that suppresses the free will of its people.

President Vladimir Putin published an essay entitled “On the Historical Unity of Russians and Ukrainians” in July 2021, the same time preparations for the invasion of Ukraine were launched.¹² In the essay, he explains to the Russian people the justification for Russia to place Ukraine under its control, using his own argument. Thus, guiding public opinion in a certain direction toward the achievement of strategic objectives and silencing opposition to the state’s direction is another major area of fight in the cognitive space.

The fight in the cognitive space targeting one’s own citizens is effective not only in “defense” but also in “offense.” Clever stories, used to persuade one’s own people, or narratives,¹³ can be persuasive in appealing to third countries when the content gains a foothold domestically and is transmitted to the rest of the world. Russia’s acquisition of a certain degree of sympathy from African and Latin American countries, as mentioned above, can be said to be an effective use of these narratives.

To summarize, it can be said that fight in the cognitive space is directed against four major targets: the leaders of the target country, the people of the target country, international public opinion, and the people of one’s own country. Figure 3 schematically depicts the paths of influence transmission through these four targets.¹⁴

¹² Vladimir Putin, “On the Historical Unity of Russians and Ukrainians,” July 12, 2021, translated by Hiroo Yamagata, https://genpaku.org/PutinInHisWords/PutinRusUkSame_j.pdf (Japanese) (last accessed September 23, 2023).

¹³ Such narratives may contain disinformation but rather often use the technique of creating a story by reconstructing facts to support one’s own claims, and their aim is often long-term perception formation rather than short-term information manipulation.

¹⁴ In this Figure 3, only the fight in the cognitive space by the aggressor state is shown with arrows in one direction for the sake of simplicity, but the overall picture of the actual battle will include countermeasures by the target country and efforts in the opposite direction.

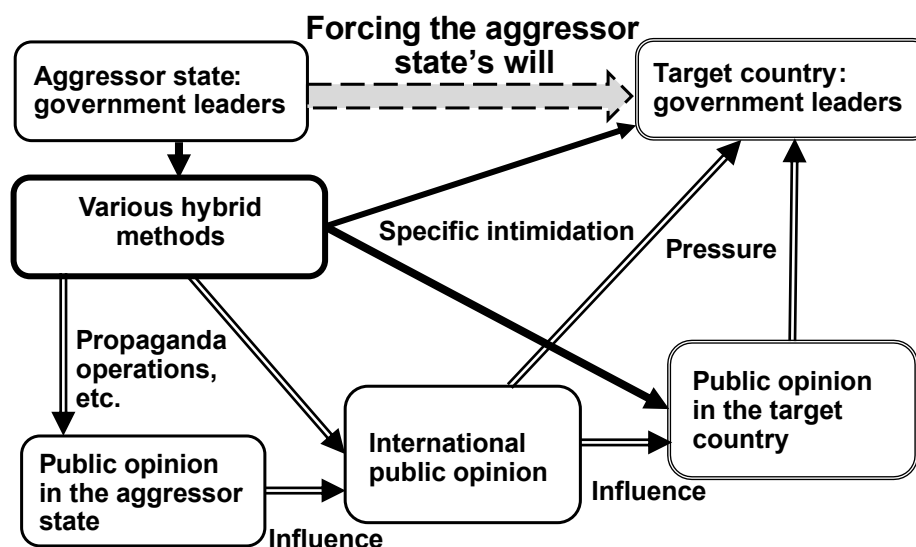


Figure 3 Paths in a Fight in the Cognitive Space

Source: Prepared by the author.

Through each of these pathways, influence is transmitted in the cognitive space, and the ways in which various military and non-military means influence human cognition are not limited to influencing rational judgment.

Recognizing the limitations of discussing economics based solely on the assumption that humans act rationally, a scholar named Daniel Kahneman laid the foundation for the discipline of behavioral economics. In his book *Thinking, Fast and Slow*, he argues that there are two modes of thought: System 1 (fast, instinctive, and emotional) and System 2 (slower, more deliberative, and more logical).¹⁵ It could be said that fight in the cognitive space aims to work on each of these two modes of thought.

In more detail, System 1 (fast, instinctive, and emotional) has developed in order for humans to survive as animals and includes reflexive reactions to avoid danger and emotions such as fear that are closely linked to these reactions. However, System 1 is not limited to animal senses but also includes instantaneous reactions based on culturally imprinted preconceptions, such as an unexpected memory triggered by a nostalgic scent. This reaction is basically involuntary, beyond one's control.

In contrast, System 2 (slower, more deliberative, and more logical) refers to the brain's function of consciously paying attention and drawing conclusions. Since System 2 typically involves making rational judgments based on logical thinking, it can be paraphrased here as logical thinking, although strictly speaking it refers to voluntary judgments in general, which is a bit broader in scope.

Until now, major theories of security, including the theory of deterrence, have mostly discussed the interaction between leaders on both sides based on logical thinking, which is System 2. However,

¹⁵ Daniel Kahneman, *Thinking, Fast and Slow*, Farrar, Straus and Giroux 2011.

in fight in the cognitive space, which targets not only the leaders but also the people of the target country, one's own citizens, and international public opinion, working on intuition and emotion as System 1 also has a great influence. Let us consider this mechanism in some detail below.

First, it goes without saying that System 2, the appeal to logical thinking, is effective not only when focusing on the leaders of the target country but also when focusing on the people of the target country and others. Specifically, it may be possible to appeal to the economic interests of the country, such as trade, or to show an overwhelmingly superior military posture in order to make the target country abandon resistance.

Next, let's consider System 1, working on intuition and emotion. Although this system is effective against leaders, it is considered to be more effective when attempting to sway public opinion of the target country. For the people of the target country or third countries, System 1 could include provoking fear and anxiety through economic and military intimidation, amplifying social divisions involving immigration and ethnic issues, and stirring a sense of social unrest and distrust in the government through cyberattacks and the destruction of infrastructure through the use of terrorism, and other means. In addition, as in the case of the war advertising agency mentioned above, as with commercial advertising, the effectiveness lies not only in the content but also the creative expression to appeal intuitively to the legitimacy of one's own country and the inhumanity or incompetence of the government of the target country. This is a technique widely used in the advertising industry and will be an extremely important factor in the spread of information on SNS social media and other media outlets.

The European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE) conducts research not only on the hybrid methods used by aggressor states but also on vulnerabilities of their own, for the purpose of dealing with various types of attacks that appeal not only to logical thinking but also to intuition and emotion.¹⁶ This involves identifying weaknesses in the economic, political, social, and military fields in advance to prevent their exploitation by an aggressor state. They take a proactive approach to research with the aim to identify and address vulnerabilities and enhance resilience. Such vulnerabilities include, for example, dependence on other countries for energy, growth of extreme and radical political forces, intensified persecution of social minorities, and inadequacies or deterioration in political control over the military.

Besides methods directed against the target country, when an aggressor state primarily works against people of its own country (or in some cases, third countries), it often appeals to intuition and emotion as well as to logical thinking. Specifically, the aggressor state may use economic benefits to manipulate public opinion, use episodes of injustice or inhumanity committed by the target country to promote propaganda, or use narratives to arouse nationalism. In the case of authoritarian countries, disinformation may be disseminated through SNS social media in a manner that does not identify the

¹⁶ Described as an area of activity of the Community of Interest, Vulnerabilities and Resilience on the Hybrid CoE website. <https://www.hybridcoe.fi/coi-vulnerabilities-and-resilience/> (last accessed September 23, 2023).

source as the government. Additionally, a false flag operation may be employed to claim that the target country committed wrongful actions through the use of covert forces, making it appear as if the target country acted first.

As seen above, the essential mechanism of hybrid warfare involves utilization of a diverse range of hybrid methods across economic, political, social, and military fields. This aims to engage fight in the cognitive space against four targets by employing both logical thinking and intuition/emotion to achieve the objectives. Without understanding this point, it is impossible to deal effectively with hybrid warfare.

5. The positioning of hybrid warfare in the war in Ukraine

From the perspective of hybrid warfare less than a full-scale military war as discussed in this article, there are two different approaches to analyzing the war in Ukraine, which became evident when the Russian army crossed the border and invaded on February 24, 2022.

One approach is based on the viewpoint related to the history of the war, which suggests that the invasion that Russian President Vladimir Putin was aiming for at the outset was hybrid warfare that did not lead to a full-scale military war. The other is the viewpoint of analyzing the current situation in which Russia is fighting a full-scale military war against Ukraine and at the same time fighting hybrid warfare against other countries, especially those, including Japan, that are supporting Ukraine, centering on the West.

Let us examine them in detail, beginning with the first. What was Russian President Vladimir Putin's intention in invading Ukraine? Two days after the military invasion on February 24, 2022, the Russian state-run news agency mistakenly distributed an article about Russia's victory that appeared to have been a planned draft, saying "Ukraine has returned to Russia."¹⁷ The mis-delivery of the article about Russia's victory led to the observation that President Putin intended to end the conflict in three days' time, which was the prevailing view at the time.

However, if Russia's invasion force, estimated to be a maximum of 190,000 troops, was seriously contemplating a war against Ukraine's military, a force of about 200,000 troops in the regular army alone, it is not plausible to think that the conflict would be over in three days. What emerges is the view that President Putin's initial aim was to conduct hybrid warfare to replace the Volodymyr Zelenskyy administration in Ukraine with a pro-Russian regime, without leading to a full-scale military war.

In the lead up to the invasion of Ukraine, a special report released by the Royal United Services Institute for Defense and Security Studies (RUSI) of the U.K. on February 15, 2022, nine days before the military invasion, indicated that Russia had established a new 200-person department dedicated to operations against Ukraine in the Federal Security Service (FSB), an intelligence organization, six

¹⁷ "'Ukraina wa Modotta' Roshia Tsushin, Sensho Genko o Gohaishin ka ['Ukraine Has Returned to Russia,' Russian News Agency Mistakenly Delivers Victory Manuscript?]" (Japanese), *Nihon Keizai Shimbun* newspaper, March 2, 2022.

months earlier, in July 2021.¹⁸ According to the report, the FSB was conducting operations such as cultivating pro-Russian factions throughout Ukraine and fomenting anti-government sentiment through economic manipulation to drive up energy prices and other methods. It also said that the FSB had identified the addresses of anti-Russian groups through cyberattacks and was preparing to detain them.

From mid-January 2022, Russia has launched large-scale cyberattacks against the government and financial institutions in Ukraine, aiming to paralyze their functions, and has spread disinformation on SNS social media, claiming that all automated teller machines (ATMs) have become inoperable, to increase social unrest. On February 24, 2022, amid a massive cyberattack that paralyzed the Ukrainian government and military,¹⁹ a large-scale Russian force, numbering 190,000 troops, crossed the border over a wide area in the north, east, and south of the country, intimidating the Ukrainian people. In a substantial use of force, paratroopers (the chain of command is different from that of the army in Russia) landed at Antonov Airport near the capital city of Kyiv, promptly invaded the city of Kyiv, and detained key figures in the Zelenskyy administration. It is believed that the main goal was to install a pro-Russian government.²⁰

Why, then, did the hybrid warfare that President Putin had planned end in failure? Behind the scenes was the work of the U.S., the U.K., and others, which saw through such Russia's attempts in advance and provided timely and appropriate support to Ukraine.

In November 2021, as Russia's troops amassed on the Russia-Ukraine border, the U.S. Biden administration established an organization called the Tiger Team in the White House. This team was tasked with taking countermeasures in a wide range of areas, including not only military but also cyber, energy, finance, and trade, in anticipation of various threats by Russia to Ukraine.²¹ It is also reported that around this time, the U.S. began an intelligence disclosure operation to expose false flag operations by Russia, such as the massacre of Russian residents in eastern Ukraine. In December 2022, a combined team comprised of U.S. and U.K. intelligence agencies and special forces was dispatched to Ukraine to provide security for Ukrainian key figures, psychological warfare countermeasures, and support for arms deliveries from outside the country.²² In the area of cyber defense, U.S. private sector technicians were sent to Ukraine along with units of the U.S. Cyber

¹⁸ Jack Watling and Nick Reynolds, "The Plot to Destroy Ukraine," The Royal United Services Institute for Defence and Security Studies (RUSI) Special Report, February 15, 2022, p. 9.

<https://rusi.org/explore-our-research/publications/special-resources/plot-destroy-ukraine>

¹⁹ Mihoko Matsubara, "'Daigo no Shusenjo' Saiba Kogeki Oshu no Kyoji ['Fifth Main Battlefield' Cyberattack Retaliation Threat]" (Japanese), *Gaiko* [Diplomacy], Vol. 72 (March/April 2022), pp. 32-33.

²⁰ "'Roshia Gun Butai ga Shinko Tojitsu ni Kiu ni Koka, Zerensuki-shi-ra Ju o Te ni Ansatsu Kiki Shinogu...Bei-shi [Russia's Troops Land on Kyiv on Day of Invasion, Zelenskyy and Others Grab Guns, Shrug Off Assassination Crisis...U.S. Magazine]" (Japanese), *Yomiuri Shimbun Online*, May 1, 2022.

²¹ "'Bei Daitoryo Chokkatsu Chimu, Tai Ro Kimitsu o Irei Kaiji, Shinko Yokushi Nerai [U.S. Presidential Direct Team Unusually Discloses Secrets against Russia, Aims to Deter Invasion]" (Japanese), *Nihon Keizai Shimbun* newspaper, electronic version, February 16, 2022.

²² "'Ei-Bei ga Daitoryo Dasshutsu Junbi, Bomei Seiken Juritsu o Shien: Ukuraina [U.K., U.S. Prepare for Exodus of President, Support for Establishment of Exile Government: Ukraine]" (Japanese), JIJI.COM, March 8, 2022.

Command to take various defensive measures.²³

It is believed that U.S. and U.K. intelligence agencies had already obtained an overview of the landing of Russian paratroopers at the airport near Kyiv to eliminate the Zelenskyy administration. Thanks to their efforts, the Ukraine military, while temporarily deprived of the Antonov Airport by Russia's advance heliborne units, immediately took it back and succeeded in thwarting Russia's attempt.

What, then, was the purpose of the invasion by up to 190,000 Russian troops across the border? The intention of not concentrating the forces but dispersing them over a front of more than 1,500 kilometers, crossing the border at once, and rushing all the troops along the road to the big cities was probably to scare the Ukrainian people and make it easier for the pro-Russian groups to seize power in various parts of the country.

Facing failure of the hybrid warfare, President Putin had the option of temporarily withdrawing his troops and reconsidering a new strategy. However, this option would have been difficult after the invasion, in which he had ordered a massive army numbering up to 190,000 troops to cross the border. Although it may not have been the most desirable course of action for President Putin, under the circumstances, a shift from hybrid warfare to full-scale military war may have been seen as the next best option.

Perhaps because it was considered a means of intimidation in hybrid warfare led by the FSB and other intelligence agencies, investigations reported that Russia's first-line troops were ordered to invade Ukraine's territory only one day before the start of the operation,²⁴ and little operational preparation for a full-scale military war had been made. This insufficient preparation was clearly demonstrated in early March 2022 when a convoy of Russia's military vehicles, including combat vehicles, remained stationary on the road north of Kyiv for more than 60 kilometers and did not move for more than 10 days.²⁵ In conventional military practice, for large-scale military operations, combat and logistical plans are prepared and in place, and such a delay would not typically occur.

As a result, the Russian military, which suffered heavy damage from Ukraine's army's ambush, took about a month to reorganize for a full-scale military war. In late March 2022, Russia's military withdrew from the Kyiv front, and only on April 9, 2022 was a unified military commander appointed for the invasion of Ukraine. This was when the framework for a full-scale military invasion with the military at the forefront was put in place.²⁶

²³ Toshihiro Yamada, "Ukuraina Shinko no Ura ni Aru 'Mienai Senso' Saiba Kosaku ['Invisible War' Cyber Operations Behind the Invasion of Ukraine]" (Japanese), JIJI.COM, April 21, 2022.

²⁴ Mykhaylo Zabrodskyi, Jack Watling, Oleksandr V Danylyuk, and Nick Reynolds, "Preliminary Lessons in Conventional Warfighting from Russia's Invasion of Ukraine: February-July 2022," Royal United Services Institute for Defence and Security Studies (RUSI), November 30, 2022, pp. 7-12.

<https://www.rusi.org/explore-our-research/publications/special-resources/preliminary-lessons-conventional-warfighting-russias-invasion-ukraine-february-july-2022>

²⁵ "Ukraine: Why has Russia's 64km convoy near Kyiv stopped moving?," BBC News, March 3, 2022.

https://www.bbc.com/news/world-europe-60596629?at_medium=RSS&at_campaign=KARANGA.

²⁶ "Roshia ga Shireikan Ninmei, Taisei Tatenashi ka [Russia Appoints Commander, Rebuilds Structure?]"

The lesson to be learned from this history is that when large-scale military force is used as a means of fight in the cognitive space for intimidation in hybrid warfare, it is necessary to be fully aware of the risk of its escalating to “fight in the physical space,” a full-scale military war.

This is an important lesson for both the initiators of hybrid warfare and those who respond to them.²⁷ For the initiators, if they want to avoid a full-scale military war, they must exercise careful use of military force. Alternatively, they must make adequate preparations to transition to a full-scale military war. The responders must not overlook threat of large-scale military force but must exert pressure in various fields to stop it as soon as possible, enhance deterrence to prevent the initiators from resorting to full-scale military war, and make preparations to respond to the situation if it escalates to that level.

In particular, the responders need to be prepared for fight in the cognitive space because if they lose the fight, the resolution may be determined there. Therefore, it is essential to be adequately prepared for this and to ensure that it does not transition to fight in the physical space. Furthermore, if it does transition, dual preparation in both the cognitive and physical spaces is essential to effectively address the situation.

Next, the second perspective in looking at the war in Ukraine from the standpoint of hybrid warfare is that Russia is currently fighting a full-scale military war against Ukraine while also fighting hybrid warfare against the countries supporting Ukraine.

On the military front, there is the threat of nuclear use. On February 27, 2022, three days after the start of the military invasion, President Putin criticized NATO leadership, saying, “the top officials of leading NATO countries... make aggressive statements with regards to our country (Russia),” and ordered that Russia’s military forces, including nuclear capabilities, be placed on a special military alert as a deterrent to NATO countries.²⁸ Since then, there were tests of new intercontinental ballistic missiles (ICBM) followed by an announcement of actual deployment²⁹ and repeated references to the use of nuclear weapons by former President Dmitry Medvedev, thereby further reinforcing the deterrent.³⁰

In a situation of stable strategic mutual deterrence among nuclear powers, a situation known as the “stability–instability paradox” occurs.³¹ In this case regional and limited military conflicts short

(Japanese), Asahi Shimbun Digital, April 10, 2022.

²⁷ For details, see Takahiro Kamiyo and Goro Matsumura, *Ukraina Senso no Kyokun to Nihon no Anzenhosho* [Lessons learned from the War in Ukraine and Japan’s Security] (Japanese), Toshindo publisher, 2022, pp. 69-113.

²⁸ “*Puchin Daitoryo, Senryoku no Tokubetsu Taisei o Meirei, NATO Shidoso o Hihan* [President Putin Orders Special Force Readiness, Criticizes NATO Leadership]” (Japanese), Asahi Shimbun Digital, February 27, 2022.

²⁹ “*Roshia ga ICBM ‘Sarumato’ o Jissen Haibi ‘Saikyo no Misairu’ to Shucho* [Russia deploys ICBM ‘Sarmat’ in actual warfare, claiming it is ‘the most powerful missile’]” (Japanese), Asahi Shimbun Digital, September 2, 2023.

³⁰ “*Medobejefu-shi ‘Kakusenso o Yuhatsushikanenai’ Obei o Hihan* [Medvedev Criticizes the West for ‘May Trigger Nuclear War’]” (Japanese), Asahi Shimbun Digital, January 19, 2023; “*Kurimia Kogekisarereba ‘Kaku Shiyo no Konkyo ni Naru’ Roshia Zen-daitoryo* [If Crimea Is Attacked, ‘It Will Be a Basis for Using Nuclear Weapons,’ Russian Former President Says]” (Japanese), Asahi Shimbun Digital, March 14, 2023.

³¹ Masahiro Kurita states that the origin of this theory was raised by Glenn Snyder in 1965, but its usage in today’s context was presented by S. Paul Kapur in 2005, referring to a phenomenon occurring between India and Pakistan.

of escalating to the use of nuclear weapons among major powers become more likely. Russia is deliberately taking advantage of this situation to prevent NATO member countries from participating in direct military action in Ukraine, while at the same time fighting in Ukraine in the global cognitive space.

In terms of information warfare, President Putin has also emphasized the “historical unity of Russians and Ukrainians,” as mentioned above, and has spread rhetoric among the Russian people, through a strong government-led campaign, as if this were a war to defend Russia against the “Nazi regime” in Ukraine. This logic of self-justification, together with the unilateral discourse that NATO’s eastward expansion threatened Russia’s security and was the root cause of this war, has been transmitted to the world and has exerted a certain influence on the attitudes of countries in Africa, the Middle East, Southeast Asia, Latin America, and elsewhere.

The West and other countries supporting Ukraine have countered this false rhetoric from Russia by continuing information disclosure operations to proactively expose Russia’s false flag operation in advance, as mentioned above. In addition to these efforts, there are also battles being waged to neutralize the disinformation that is frequently spread mainly through SNS social media. Active fact-checking and other verification activities are conducted not only by governments in Europe, the U.S., and other countries but also by nongovernmental organizations and groups, mainly citizens.

Looking at these phenomena as a whole, we can say that fight in the cognitive space is occurring on a global scale in parallel with the fight in the physical space taking place within Ukraine. In fighting this hybrid warfare, Russia combines various methods in the cognitive space with the clear objective of reducing support and assistance from other countries to Ukraine as much as possible.

In response to these phenomena, countries supporting Ukraine are also countering Russia with economic sanctions in addition to supporting Ukraine with military equipment and funds. Rather than considering these various measures in isolation, it is necessary to consider how to effectively combine the various methods in order to take advantage of the fight in the cognitive space against Russia.

In addition, Russia, as is its usual practice in hybrid warfare, will attack by methods that exploit each of the vulnerabilities of other countries. Examples include dependence on Russia’s energy and food supplies, military dependence, the division of domestic opinion on immigration and other issues, and the economic discontent of its citizens due to unemployment and other problems. In order to be able to robustly respond to attacks that take advantage of such vulnerabilities, each country needs to recognize its own vulnerabilities in advance and take appropriate measures in a comprehensive manner with an awareness of fight in the cognitive space.

6. How to deal with hybrid warfare as a nation that values human rights

Masahiro Kurita, “‘*Antei-Fuantei no Paradokkusu*’ to *Kitachosen Yokushi: In-Pa Kankei no Kyokun kara* [‘Stability-Instability Paradox’ and Deterrence of North Korea: Lessons from India-Pakistan Relations]” (Japanese), *NIDS Commentary*, No. 64, November 15, 2017, National Institute for Defense Studies of Japan, pp. 1-2.

As we have seen in the previous section, hybrid warfare as fight in the cognitive space has already arisen doubly over the war in Ukraine. Hybrid warfare is taking place between Russia and Ukraine and the countries supporting Ukraine. It is probably no coincidence that many of the countries supporting Ukraine are democracies while Russia, under President Putin's almost authoritarian rule, is an authoritarian state. Countries like China and North Korea, viewed as authoritarian, are taking positions close to Russia.

Since hybrid warfare is fight in the cognitive space, values are inevitably involved. U.S. President Biden has described this warfare as a battle between democracy and authoritarianism, but this expression may not necessarily be appropriate. If we use the political system of democracy or authoritarianism as the axis of conflict, such a classification will lead directly to an evaluation of each country's current political system. There are various gradations between democracy and authoritarianism in the political systems of each country based on their historical backgrounds, and each government has its own legitimacy to protect its national interests in this context.

What is important in the contemporary world's fight in the cognitive space is not so much just the form of democratic governance but rather the human rights situation of each country's citizens protected by their government and the respect for a stable international order based on the "rule of law" that enables such protection.

In the current international community, where non-interference in internal affairs is a principle among nations, there are limitations to directly addressing the political systems of individual countries. Moreover, countries situated in the intermediate range have established their current systems based on various historical circumstances. In order to prevent violent acts of force and maintain a stable international order, it is first of all important to ensure that the rule of law is upheld in the international community.

In order to fight in the cognitive space, it would be appropriate to rely on the value of the promotion of human rights based on the Universal Declaration of Human Rights, which was adopted by the United Nations General Assembly in 1948 and is recognized by many countries, at least in principle. In doing so, it is considered important not to focus too much on the political system itself and to maintain the perspective that promotion of human rights serves as a criterion in resolving individual issues.

Democratic systems are heavily linked to the value of human rights in that they are political systems that ensure political freedom and equality among individuals. Conversely, what President Putin fears, and what President Xi Jinping may also fear, is that the survival of the current system may be jeopardized by the growth of human rights awareness among the people.

Based on this perspective, it is important to continue efforts to correct inadequacies in terms of human rights within democracies, while at the same time, internationally, it is important to promote steady cooperation toward solutions in the direction of gradually promoting human rights for each individual issue, while taking into account the circumstances of each country.

It has been pointed out that authoritarian countries such as China and Russia have a different

concept of human rights and insist that human rights should be based on development as a whole rather than on individual rights, but if this is the case, it may be necessary to appeal for international legitimacy by discussing what exactly is at stake and what the international justification is by discussing it head on and cooperating with governments and citizens of other countries. This kind of thinking will be necessary in forming a new order in cyberspace, outer space, and other emerging areas where order has not yet been established.

Of course, it is necessary to be cautious as such claims on human rights can be used instrumentally as a means to gain advantage for one's own country, which is why it is important to advocate for human rights along with the rule of law in the international community.

Now, if countries like those in the West and Japan need legitimacy in terms of human rights in order to win in fight in the cognitive space, they would seemingly be at a disadvantage in the struggle against authoritarian countries.

In an authoritarian state that interprets human rights arbitrarily and effectively ignores them, the spread of disinformation, the implementation of false flag operations, sabotage and covert activities within other countries, etc., can all be used as hybrid methods, as long as they serve the state's objective. This is because it is possible to gain an advantage in fight in the cognitive space.

In contrast, in countries that value human rights, especially democracies, governments are not allowed to distort or exploit information in ways that violate the human rights of their citizens, and they are strongly restricted from the use or threat of force against other countries that could lead to human rights violations, unless such use or threat is unavoidable for the sake of self-defense.

While passive responses to expose various hybrid attacks by the aggressor state may be effective, such as taking countermeasures against vulnerabilities in one's own country to enhance resilience, it is difficult to win fight in the cognitive space by such measures alone, and proactive measures to take the initiative will be necessary. The key to the proactive measures is the concept of strategic communication.

Aoi Chiyuki, a professor at the University of Tokyo's Graduate School of Public Policy, uses James Farwell's definition of strategic communication as "the conduct of foreign and security policy aimed at changing the behavior and attitudes of others by using words, actions (or non-actions), images, and symbols to help achieve one's own policy goals" and argues that strategic communication is "different from 'PR' or 'dissemination' to publicize and promote a policy after a policy decision is made" and is "measured by whether it has elicited the desired behavior from the target."³²

In other words, strategic communication refers to the totality of activities to reach out to other countries in order to achieve a nation's strategic objectives, not only by disseminating information but also by ensuring consistency in actual actions in the economic, political, military, and other fields; strategic communication does not simply refer to information dissemination by explaining or

³² Chiyuki Aoi, *Senryakuteki Komyunikeshon to Kokusai Seiji* [Strategic Communication and International Politics] (Japanese), Nikkei Business Publications, pp. 23-26.

excusing actions after the fact. In the case of a country that values human rights, strategic communication is different from the hybrid warfare waged by authoritarian states in that it is accountable to the public for the legitimacy of its actions and information dissemination, but it can be said to be the same kind of comprehensive effort to win fight in the cognitive space.

Countries that respect human rights and dedicate themselves to democracy, such as Japan and Western countries, need to win the fight in the cognitive space against authoritarian countries by refining this comprehensive strategic communication approach.

Conclusion

As discussed throughout this article, Japan is already involved in hybrid warfare as fight in the cognitive space. In the future, it is very likely that countries like China and North Korea, having learned a lot from the war in Ukraine, will wage an even more sophisticated fight in the cognitive space.

It is imperative for Japan to seriously consider and take measures to address the various military and non-military means of hybrid threats, the mechanisms by which they achieve their objectives through fight in the cognitive space, and Japan's own vulnerabilities that could be exploited in this process. It would also be important to share this information with other countries that value human rights, so that hybrid warfare by authoritarian states can be nullified at the global level.