

Briefing Memo

Operational Art and Tactics of the United States Army

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Introduction

Operational art is found in the military units of countries around the world including the United States Armed Forces. The general meaning, necessity, circumstances, etc., of operational art has been further clarified through prior research.¹ War involves the three levels of warfare of strategic level, operational level, and tactical level. The strategic level is said to be the field of politics, the operational level and below are said to be the field of the military. Operational art is the measures for coordinating strategy and tactics in the operational level.

On the other hand, the Japan Ground Self-Defense Force does not officially use the concepts of the levels of warfare, particularly those of the operational level and operational art. The main measure concerning military is tactics.

What are the relationship and differences between operational art and tactics in military units that incorporate the concepts of the levels of warfare and operational art? This paper will consider this question based on its doctrine, by focussing on the United States Army.

This paper should be able to shed a clearer light on the characteristics of both operational art and tactics compared when researched individually. In addition, this paper is expected to aid in comprehending the difference in military mindsets and facilitating smooth action when the Japan Ground Self-Defense Force coordinates with organizations that use operational art such as the United States Army.

Operational art and tactics have a strong correlation with the levels of warfare, so this

¹ Previous research in Japan on operational art includes the works of Tetsuya Kataoka, Daisuke Saito, Shoji Sagawa and Keizo Kitagawa. Kataoka, Tetsuya. "From Classical Military Thought to Military Innovation (5th) In Search of Creation Methodology (Operational Dimension of War, Operational Perspective)," *Hoyu* 36, no. 6 (March 2011): pp. 27-46. Saito, Daisuke. "Third Perspective on War: Operational Level of War and Strategy Dimension of War," *Strategic Research*, no. 12 (January 2013): pp. 79-100. Sagawa, Shoji. "Operational Art With Its Essence As Seen from Historical Transition," *Hoyu* 39, no. 4-5 (November 2013 to January 2014 series). Kitagawa, Keizo. "Significance and Necessity of Operational Art for Security Research," *International Security* 44, no. 4 (March 2017): pp. 93-109. Moreover, there was a recent special feature on operational art and doctrines published in JMSDF Staff College Review Vol.10 No.2 (December 2020).

paper will first examine the levels of warfare before looking at operational art and tactics. Operational art began appearing in the United States Army's doctrine in 1986. This doctrine was later revised multiple times until today, and in conjunction with this, the definitions and explanations of operational art and tactics found in the doctrine have changed too. This paper's examinations will reference only the doctrine in its current state due to space limitations.

1. The Levels of Warfare

This chapter will cover what actions are taken at each of the levels of warfare touched upon by the United States Army.

(1) The Levels of Warfare

The levels of warfare are considered a framework for defining and clarifying the correlation between national objectives, operational approach (see below), and tactical tasks.² The United States Army has also established the three levels of the strategic level, operational level, and tactical level. The significance of establishing this framework of the levels of warfare is that it makes clear what roles are played by each level of commanders and headquarters within three broad roles (which are creating strategy, synchronizing and sequencing battles and engagements, or conducting tactical tasks) and that it becomes possible to clarify the accountability relationships by focussing on said roles.

(2) Strategic level

The scope of "ends," "ways," "means" and (tolerable) "risks" are defined within the strategic level. The "ends" of the strategic level are the objectives of a national or at a multilateral level, or the goals at the theatre level, derived from policies and national strategies. The strategic level defines the "ways" of how to use the powers of a country, including those other than military force, in order to achieve these ends, and the abilities and "means" required to do so.

(3) Operational level

The operational level of warfare links the tactical employment of forces to national and military strategic objectives through the design of campaigns and major operations. It defines what, when, where and how commanders should utilize major units in order to achieve the assigned ends. In contrast to the actions of the tactical level, the ends and the resources that can be used are provided. In addition, actions include not only pre-made plans, but also the carrying over of tactical victory to the advantages of the strategic level, and reverse tactical losses. Operational art is particularly important in

² The relationship between "mission" and "task" in the U.S. Army Doctrine is that mission is the task, together with the purpose.

this level.³

(4) Tactical level

The tactical level of warfare is about the conduct of tactical actions, battles, engagements,⁴ and other tactical tasks to achieve military objectives assigned to tactical units or task forces. This level covers tactics.

2. Relationship and Differences Between Operational Art and Tactics

This chapter compares and examines the definition of operational art and tactics of the United States Army, and the relationship and differences between them per individual item. Table 1 below presents a quick summary of this comparison.

Table 1

Operational Art of the U.S. Army	Classification	Tactics of the U.S. Army	
Cognitive approach	Definition	Employment, arrangement and actions of forces	
<ul style="list-style-type: none"> • Determine when, where and how to engage in tactical actions • Prepare to perform tactical actions in an advantageous condition 	Relationship of both	Execution of tactical actions arranged by operational art	
<ul style="list-style-type: none"> • Skill, experience, knowledge, judgment, critical thinking, creative thinking, etc. • Science of operations 	Necessary abilities	Art of tactics	<ul style="list-style-type: none"> • Creative and flexible array of means to accomplish missions • Decision making under conditions of uncertainty • Understanding of effects of combat on soldiers
		Science of tactics	Understanding of those military aspects of tactics that can be measured and codified
PMESII -PT and METT - TC	Problem understanding	METT - TC	

³ There is a description of operational art being used in levels outside the operational level in the doctrine. However, in this paper, operational art is described with a focus on the operational level.

⁴ In U.S. Army Doctrine, the following explanations are provided. Engagements are combats conducted by relatively lower echelon maneuver forces, brigades and lower echelon units generally conduct engagements. Battles are larger scale than an engagement, and consist of multiple engagements. Combat is defined as “a lethal clash of opposing wills and a violent struggle between thinking and adaptive commanders with opposing goals.”

Table 1 Continued

Operational Art of the U.S. Army	Classification	Tactics of the U.S. Army	
<ul style="list-style-type: none"> • Concept of operations • Tactical tasks 	Outputs	Art and science of tactics	Combination of TTP
		Tactics	Exhibition of combat ability (victory/loss on the battlefield)

(1) Definition

The definition of operational art is “the cognitive approach by commanders and staffs—supported by their skill, knowledge, experience, creativity, and judgment—to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means.” “Cognitive” is an adjective that means “related to process of knowing, understanding, and learning something,” and the term “approach” also means “method.”⁵

The definition of “operations” by the United States Army is “A military action or the carrying out of a strategic, operational, tactical, service, training, or administrative military mission.” Comparing the three terms of “operational level,” “operational art” and “operation” gives the impression that operational art contains stronger connotations of “art required for the operational level,” rather than “art required for conducting operations.”

Next, the definition of “tactics” per the United States Army is “The employment, ordered arrangement, and directed actions of forces in relation to each other.” The phrase “forces in relation to each other,” is believed to express the belief that tactics begin only after two or more units are present. In addition, from this definition, it is understood that the United States Army includes actions not directly linked to combat in tactics.

Here we will supplement the differences between “tactics” in the United States Army doctrine and the Japanese term for “tactics” (*senjyutsu*). The term “tactics” is generally used when translating the Japanese term “*senjyutsu*.” The meaning of “*senjyutsu*” can be, for example, “the art of unit ordered arrangement, movement and exercising of combat ability in the most advantageous way to achieve the mission based on the

⁵ *Longman Dictionary of Contemporary English 4th ed (new)*, Kirihara Shoten, 2003.

situation in operations and/or combat⁶” or “measures when conducting combat,⁷” and as such, it is essentially “art” or “measures.” However, as indicated above, the current definition of “tactics” by the United States Army is “employment, arrangement and actions,” which has a slightly different nuance from “art” and “measures” for employment, etc.⁸ Either the art of tactics or science of tactics, discussed below, or in some cases both meanings, can apply to “senjutsu” in Japanese. For the purpose of this paper, “tactics” shall indicate the United States Army doctrine’s definition of “tactics.”

(2) Relationship between Operational Art and Tactics

First, we will explain the basic relationship between strategic role⁹ and tactics of the United States Army.

The strategic role of the United States Army is defined in the doctrine as extending from the deterrence stage prior to conflict to the execution stage during large-scale combat on land within a conflict, and the stage where the outcomes of victory before and after the end of conflict are carried over to the government and others. These roles are executed through decisive action. Decisive actions are actions classified under tactics, and among which are particularly central actions.¹⁰ Decisive actions include offense, defense, stability, and defense support of civil authorities, and strategic ends will be achieved by carrying out these actions continuously and simultaneously.

Operational art, which connects these strategies and tactics, has two major functions. One is directly supporting strategy by consolidating various military activities as strategies, including tactical actions. The other is to ensure that tactical actions occur under the most advantageous condition possible. Through operational art, commanders arrange tactical actions within the framework of time, space and purpose so that actions in pursuit of strategic objectives can take the most optimal form.

In other words, operational art determines when, where and for what purpose to execute (essentially multiple) tactical actions and prepares for the carrying out these tactical actions in an advantageous condition, while tactics is the execution of tactical actions arranged based on operational art.

(3) Differences in Problem Solving

⁶ *Introduction to Military Science by National Defense Academy Defense Studies Study Group*, 2nd ed., 141. Kaya Shobo, 2012.

⁷ *Kojien* 6th ed, Iwanami Shoten, 2008.

⁸ In the past doctrine, such as the 1993 edition of *FM100-5 Operations*, “tactics” is defined as “the art and science of employing available means to win battles and engagements,” which was close to the definition of tactics in Japanese.

⁹ Refers to general roles not a specific mission.

¹⁰ Decisive action is located at the top of the tactical doctrinal taxonomy of the U.S. Army, which also encompasses enabling operations such as reconnaissance, security, and troop movement, tactical mission tasks such as ambush and suppress at lower levels, as well as forms of maneuver and forms of defense.

Operational art and tactics both have aspects of a method for problem solving at each level of warfare. This chapter will examine the differences of both by focusing on problem solving. As discussed earlier, the tactics of the United States Army include actions not directly related to combat, but this chapter will address problem solving with a focus on combat.

i. Skills Needed for Problem Solving

The words used to express abilities and techniques related to operational art, taken from the doctrine, include skill, broad experience, a knowledge of capabilities, tactics and techniques across multiple domains, judgment, critical thinking, and creative thinking. In addition, as the term “operation art” suggests, it is essentially an “art,” but the doctrine also states that the science of operations is also important in order to apply operational art effectively. The definition of science of operations is not clear, but as an example, the doctrine uses the movement times of units or the available supplies, which suggests it relates to matters that can be directly calculated from data or the act of estimating itself.

Meanwhile, the doctrine states that the art and science of tactics is required for tactical problem solving. The art of tactics is comprised of three aspects. First is the creative and flexible array of means to accomplish mission.. Second is decision making under conditions of uncertainty when faced with a thinking and adaptive enemy. Third is the understanding of the effects of combat on soldiers. Understanding of the effects of combat on soldiers means understanding the differences between actual combat and training exercises, and understanding the friction resulting from the violence, death, and chance characterize combat. The science of tactics is explained as understanding of those aspects of tactics that can be measured and codified.. As an example, the doctrine cites matters that can be understood numerically such as friendly and enemy organizations, and documented knowledge such as specific operating procedures.

Comparing the two, both are believed to require creativity or a certain extent of knowledge. However, the art and science of tactics emphasize uncertainty and friction, as they appear to place emphasis on response skills in the field.

ii. Problem Understanding

In both the operational level and tactical level, problems are understood by comparing the desired situation with the current situation. The indices for comparison are operational variables and mission variables.

First, operational variables are political, military, economic, social, information, infrastructure, physical environment, and time, and can be expressed as the acronym “PMESII-PT.” Operational variables are used by commanders and others to

comprehensively understand the environment they are placed in prior to being assigned a specific mission.

Next, mission variables are mission, enemy, terrain and weather, troops and support available, time available and civil considerations, and can also be expressed as the acronym “METT-TC.” Mission variables are used by commanders after a specific mission is assigned, and they are used to understand matters that have an impact on mission execution. “Mission” is used in the explanation of mission variables, but this is related to analysing the “documents” of the mission and the intention of the senior units in the background in order to make the details of the mission clear.

In the author’s opinion, the doctrine clearly states that tactical problems are understood by mission variables, even though the doctrine cannot be used to confirm whether operational variables or mission variables are more important in relation to operational art.

iii. Outputs

A) Operational Art

First, we will explain the outputs of operational art. Commanders assigned a mission first consider operational approach. Operational approach is a broad description of what actions must be taken to achieve the assigned mission. However, since realistic considerations are not yet conducted at the stages of operational approach, detailed plans cannot be formulated as is. Commanders convert operational approach to the concept of operations through operational art, and ultimately convert it to the tactical tasks that should be executed. In other words, the outputs of operational art are the concept of operations or the tactical tasks.

Operational approach and concept of operations express methods for achieving a mission, but the concept of operations is derived by adding various reviews, in contrast to operational approach, and improves such matters as formulation and the possibility of execution more than operational approach.

Elements of operational art are used as an intellectual tool to aid this review. Elements of operational art include end state and conditions, center of gravity, decisive points, lines of operations and line of effort, tempo, phasing and transitions, culmination, operational reach, basing and risk. By using elements of operational art, the following three matters will become easier. First is understanding and explaining a commander’s plans and method of using combat power. Second is determination of the most effective and efficient usage method of decisive actions. Third is consistency of ends, ways and means based on risk. This paper has already discussed that the scope of ends, ways, means, and risks are stipulated in the strategic level, but operational art will combine

these in the appropriate form based on the situation.

In this way, concept of operation and tactical tasks obtained through operational art will always contribute directly or indirectly to strategic ends or high-ranking unit commander's ends, and at least for estimate reasons, they are conditions that are executable and as advantageous as possible, and even if they are actions that carry risk, these will be an acceptable range.

B) Tactics

Next, this paper will discuss outputs of tactics. Tactical problems are resolved by using a combination of tactics, techniques, and procedures (below, collectively referred to as "TTP") as well as by using combat power.

Resolving tactical problems using tactics gives the impression of tautology, but this author believes that this means resolving the problems of the tactical level (problems during combat and when executing of tactical tasks) using tactics (employment, arrangement and actions of units), etc. Techniques is defined as "Non-prescriptive ways or methods used to perform missions, functions, or tasks," and are explained as being more specific than tactics. As an example, the actions of some units monitoring the direction of the enemy when a unit is advancing are cited. Procedures are defined as "Standard, detailed steps that prescribe how to perform specific tasks," communication procedures when requesting medical transportation are cited as an example. Combining TTP to adapt to the situation is essential for resolving tactical problems.

Combat power is defined as "the total means of destructive, constructive, and information capabilities that a military unit or formation can apply at a given time," and is composed of eight elements (leadership, information, command and control, movement and maneuver, intelligence,¹¹ fires, sustainment, and protection). The doctrine states that in order to exhibit combat power and by extension attain victory, it is important for commanders to display and maintain their initiative. Ultimately, solutions to tactical problems result from the collective efforts of a commander's plan and the ability of subordinate leaders to execute it.

In the author's opinion, the relationship between the combination of TTP and use of combat power is not clearly stipulated in the doctrine. From the explanation before and after, the author interprets that the art and science of tactics is used to combine TTP into an appropriate form, which is converted to combat power. As a result, the tactical outputs supported by art and science is the exhibition of combat power, and the victory or loss on the battlefield.

¹¹ Intelligence is the product resulting from the collection, processing, integration, evaluation, analysis, and interpretation of available information.

(4) Observations

As compared above, while operational art and tactics of the United States Army are mutually related, understanding of problems, matters for observation, and the outputs are different. Based on this, the following two things can be said.

First, operational art and tactics of the United States Army are separate approaches to address separate mutually related problems. In the scope of this paper, the problems covered by operational art are “what tactical actions should be executed to address strategic ends” and the problems covered by tactics are “how to execute these tactical actions.” For tabletop purposes, it is clear that both address separate problems. However, in actual warfare, merging combat that must be won to achieve strategic ends and immediate combat that seems tactically winnable could raise the possibility of errors in the allocation of resources. The introduction of operational art will provide functions that prevent such errors.

Second, the United States Army perceives the problems of “what tactical actions should be executed to address strategic ends” and “how to execute these tactical actions,” as problems that require separate solutions. Even if a problem appears to be different, some may have common solutions. Conversely, there are some problems where different answers can be found by changing the solution or perspective. As discussed above, operational art and tactics are separate approaches. If the solution to these two problems could be the same, the need to maintain both operational art and tactics will decline. Furthermore, there could be situations where operational art is not introduced in the first place, or even if it could be, it would eventually be eliminated or integrated into one due to such issues as costs needed for research or mastery. The difference between organizations that have introduced operational art and those that have not can likely be found in differences in interpretations of these two problems.

Closing

This paper compared the operational art and tactics of the United States Army and revealed the relationship and differences between them. In addition, this paper allows us to derive the following hypothesis: “organizations that do not have operational art use the same solutions for both the problems of ‘what tactical actions should be executed to address strategic ends’ and ‘how to execute these tactical actions.’”

How does this hypothesis apply to the Japan Ground Self-Defense Force? Speaking from the author’s personal experience, the Japan Ground Self-Defense Force’s senjyutsu training covers “what type of tactical actions to perform towards the ‘tactical ends’ of high-ranking units,” as part of “how to execute these tactical actions,” but does not cover “what type of tactical actions to perform towards ‘strategic ends.’” However, the

traditional problem-solving method shared within the Japan Ground Self-Defense Force would not be effective for anything other than senjyutsu. As a result, if the Japan Ground Self-Defense Force members are forced to handle the problem of “what type of tactical actions to perform towards strategic ends,” it is expected that they must first solve the problem of “how to execute these tactical actions.” In addition, if a satisfactory answer cannot be obtained from this problem-solving method, it will likely be resolved by relying on the techniques of the individual or department responsible for the problem.

The author would like to consider this hypothesis as a future issue.

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