**Chapter 2**

**Military Theories: The Old, the New and What’s in Between**

From the dawn of time humanity has had to face war – actual fighting – and has written about war and its different forms. Sumerian pottery artifacts dealing with war have been found dating back to the fourth century BC, as well as documents from additional places in the ancient world. These documents dealt with the tactical and technical aspects of war, and they only briefly touch upon a theory of war, including the levels of war. For example, among the classic writers, Vegetius, who wrote about the military institutions of Rome, dealt with the tactical aspects of war, and Thucydides, in his book, The History of the Peloponnesian War, primarily conducted a historical analysis of wars.

The Art of War, the famous book by Sun Tzu[[1]](#footnote-1) is unusual in that it dealt with the strategic aspects of war,[[2]](#footnote-2) such as war’s importance to the state or how to plan a military campaign. However, Tzu does not engage in a serious discussion of the difference between a military commander and a king or head of state, with each of these referred to simply as a “military leader”, “leader”, or “army minister”, etc. This was not an issue until the modern era, and in certain places to this day, given that the king or head of state was often also the commander of the army. There was almost no distinction between a military leader and a civilian leader or between tactics and strategy,[[3]](#footnote-3) as these terms are understood today.

This chapter deals with military theory, and will analyze the writings of several military thinkers over the course of history – thinkers who analyzed warfare as it developed during the first and second Industrial Revolutions – the Prussian Carl Von Clausewitz, the British B.H. Liddell Hart and the Soviet Georgii Isserson, as well as the writings of thinkers who dealt with military change at the end of the third revolution and the beginning of the fourth revolution – the British Rupert Smith, the American David Petraeus, and the Israeli Shmuel Nir. These writers were chosen to be reviewed in this book because they all wrote about war based on their observations about the way commanders manage it. Additionally, they contributed to an understanding of the phenomenon, especially how one should relate to it, and the connection between the different echelons that deal with it.

**A Focus on the Act of War – classical theories**

As a basis for discussion, we will deal with the writings of Clausewitz and Liddell Hart, as theoreticians whose influence on commanders, statesman and armies is indisputable. Alongside the differences between them, the key common denominator between them in the context of our discussion is their standpoint that the battlefield is the sole and most important focal point of war.

**The Diplomatic-Military-Civilian Reality during which Classical Military Thought Developed**

The first Industrial Revolution enabled the industrialization of war in the ground and naval dimensions, and the second revolution brought an ability to communicate almost instantaneously within the battlefield, and from it to the rear with the help of the telegraph.

An additional innovation that was developed from the time of Napoleon was the establishment of military staffs, as support bodies – task orientated, permanent and professional – for the commander. Until that time, the heads of the army would directly manage military campaigns and were assisted by a limited team of aides. For example, this was how Henry V managed his invasion of France, and even led his army at the Battle of Agincourt (25 October 1415),[[4]](#footnote-4) and three Kings personally participated in the Battle of Alcácer Quibir (4 August 1578).[[5]](#footnote-5) As a result of the Prussian failure at the Battle of Jena (1806), Gerhard Johann David von Scharnhorst was appointed to rehabilitate the Prussian army. In this framework, a staff was created and headed by Scharnhorst, who also implemented several other important reforms which lead the Prussian army into a new era.[[6]](#footnote-6)

The industrial developments offer the simplest explanation for the division between the different levels of war that are customary till today: The telegraph enabled heads of state to define policy and to deliver orders, to receive reports and update the orders on the basis of those reports; a professional staff provided the commanders of the army and the national leaders tools to manage a war; and finally, an industrialized army facilitated the mass movement and supply of equipment and personnel which enabled the execution of the army’s plans. As a result of this, in the first half of the 19th century Clausewitz began to publish his writings which included his division of the management of war into three different levels.

The levels of war were conceived as follows – the first level was the state and the last two where the in the military ranks. The state level is the broad strategic level, the level that defines the national aims and the national objectives for force engagement, that is, what the army must achieve through force. The military levels include the military strategy level, which translates the national objectives into clear a clear military act, and the tactical level which employs the forces to achieve the objectives on the battlefield.

**Clausewitz – the patriarch of the rationalization of war**

There is no doubt that Carl Von Clausewitz (1780-1831) deserves special credit in any discussion of military theory. His unique place in history is owed to the fact that he was the first theoretician to observe and write about war with a scientific approach. Many perceive him as the patriarch of modern diplomatic-military thought given that in his writings, he tried to shape a rationalization of a phenomenon that was perceived at the time as being merely chaotic.

After his death, thanks to his wife Marie, the six volumes of his book “On War” were published. The impact of Clausewitz’s writing has been felt for a great many years. Based on testimonies from the heads of the Prussian and German armies (Helmuth von Moltke the Elder, Alfred von Schlieffen) and even Marshal Ferdinand Foch, Clausewitz’s approach was adopted in the wars that took place in Europe during the 19th century and even during the World War I.

Clausewitz’s book introduced three central issues that constitute the key innovations in this field. These are: Clausewitz’s trinity, the division into different levels of war and the importance of achieving a decisive military defeat as a mechanism to connect between the different levels of war.

**Clausewitz’s Trinity**

The first thing that Clausewitz does is to simplify war into three central tendencies:

“As a total phenomenon its dominant tendencies always make war a paradoxical trinity--composed of primordial violence, hatred, and enmity, which are to be regarded as a blind natural force; of the play of chance and probability within which the creative spirit is free to roam; and of its element of subordination [of war to policy], as an instrument of policy, which makes it subject to reason alone..”[[7]](#footnote-7)

This approach enabled Clausewitz to better analyze the reciprocal relations between these tendencies and to attach to them signs:

“The first of these three aspects mainly concerns the people; the second the commander and his army; the third the government. The passions that are to be kindled in war must already be inherent in the people; the scope which the play of courage and talent will enjoy in the realm of probability and chance depends on the particular character of the commander and the army; but the political aims are the business of government alone.”[[8]](#footnote-8)

“These three tendencies are like three different codes of law, deep-rooted in their subject and yet variable in their relationship to one another. A theory that ignores any one of them or seeks to fix an arbitrary relationship between them would conflict with reality to such an extent that for this reason alone it would be totally useless. […] Our task therefore is to develop a theory that maintains a balance between these three tendencies, like an object suspended between three magnets.”[[9]](#footnote-9)

This famous trinity of Clausewitz led quite a few researchers to present these tendencies as an equilateral triangle (with sides of equal length). The presentation of the triangle as equilateral gives each of these tendencies an equal weight, even though Clausewitz was of the opinion that this was exceedingly rare within the phenomenon of war, given that in war, one of the sides is usually dominant over the others. Nevertheless, this tripartite arrangement enabled theoretical and scientific tools for the analysis of war.

**The Levels of War – policy, strategy and tactics**

The trinity enabled Clausewitz to propose one of his most famous arguments: That war does not stand alone. There is a broader diplomatic and social context, and therefore maximum force is not employed, but rather just enough force to achieve the diplomatic objectives that were defined by the head of state, and not by the head of the army. From within this definition, we can reach several conclusions.

The **first conclusion** is that is important for a political or military leader to clearly define the opening objectives of a war, both the diplomatic and military objectives, update the objectives frequently based on developments, and most important, to define as needed the level of force to be employed and its direction. Therefore, “war is not merely an act of policy but a true political instrument, a continuation of political intercourse, carried on with other means. […] The political object is the goal, war is the means of reaching it, and means can never be considered in isolation from their purpose.” War in this case is the degree of violence employed by the army.

The **second conclusion** is that the war objectives should connect between the tendencies of the public (anger, hostility), as reflected by the political leaders, and between the national objectives of the head of state. In this regard, we should add risk and probability management by the military commander as a tool for decision-makers.

The **third conclusion** is that the objective of an army must be to develop a theory that connects between these three elements: the diplomatic objectives, given that war is a tool to achieve the objectives and the military management of war. Later on in his book, which as noted the author did not adjust to his more advanced concepts, Clausewitz divides the levels of war into two – strategy and tactics. Strategy is:

[Quote which is missing a reference]

Clausewitz adds that “[Quote which is missing a reference]” In general, it is impossible to give highly detailed orders at the start of a war, and therefore “[Quote which is missing a reference]” For Clausewitz, strategy is the art and science of the military leader managing the war.

“[Quote which is missing a reference]” For Clausewitz, tactics are the act of warfare itself, but there is a connection between tactics and strategy – “[Quote which is missing a reference]”

Clausewitz identified three levels that are connected by a logical connection – the policy level that defines the war objectives; the strategic level plans and manages the war based on the policy; the tactical level engages in warfare that implements the strategy and influences it.

However, Clausewitz did not provide sufficient theoretical tools to understand the connection between the different levels and to understand the influence mechanisms between them. This is in part because his ideas about this issue, whether those that had already crystallized or those that had not, are unknown to us.

**Military Decisive Defeat as a Mechanism to Connect between the Levels of War**

Clausewitz left us without an organized methodology for how to connect between policy, strategy, and tactics, apart from the sheer genius of the leader. There is no doubt that Clausewitz was picturing Napoleon as a genius who could create the connection between the three levels in an intuitive manner while present on the battlefield.

However, a critical reading of Clausewitz’s letters shows that even if he did not say so explicitly, he proposed that the act of war itself connects between the levels, that is, the military defeat of the enemy on the battlefield alone. There are many examples of this in his writings, for example:

[Quote which is missing a reference]

The decisive defeat of an enemy army on the battlefield requires that all levels deal with the act of war in a cognitive manner. Relevant questions need to be answered, such as where and when should one defeat the enemy army; how does one explain to the nation that it needs to galvanize itself for the war; which resources does the state need to provide for the war. An enemy army is a measurable entity, about which one can obtain strong intelligence and then formulate a clear set of actions for each level in order to defeat it.

This is how the commentary on Clausewitz has developed, and as such he is considered the patriarch of the destruction approach in war. A lack of critical thinking about his writings led to intellectual stagnation among militaries, and an inflexible belief that the decisive defeat or destruction of an enemy army are self-evident, regardless of the context, a line of thinking that Clausewitz himself strongly opposed. Given that Clausewitz did not leave us an alternative methodology that enables a connection between the different levels of war, the term decisive defeat on the battlefield has reigned supreme even to the point where it frequently skewed the perception of Clausewitz’s Trinity, given that a military decisive defeat appeared to be the entirety of the act of war.[[10]](#footnote-10)

**Clausewitz – epilogue and limitations**

Clausewitz began to write his book, *On War*, in 1918, and after eight years (1827) he had six completed parts and two additional parts in the form of a draft. However, Clausewitz did not allow himself to stagnate, and over the years he further developed his thinking about military theory. Over time, two insights developed and strengthened. The first was that, as opposed to the simplistic perspective that a decisive defeat on the battlefield was everything, he realized that war is not the total and uncontrolled employment of violence to destroy the enemy. The second insight was that wars with limited objectives also existed.

In light of these two insights, Clausewitz understood that he needed to fundamentally rewrite the six parts that he had already written, and in his words in 1827, “[Quote which is missing a reference]”. Clausewitz returned to active military service and focused on historical research of limited wars to expand his new theory, but his sudden death from illness, on the 16th of November 1831, stopped the process of rewriting his theory. Paradoxically, most of his book, which his wife compiled and published a year after his death, was based on his old insights. These insights led over the years to mountains of commentary on his teachings, which did not necessarily correspond to the final conclusions that he had reached. Therefore, Clausewitz left us with only a relatively shallow understanding (perhaps greatly so) of the nature of war from Clausewitz’s time onwards.

**Liddell Hart and the Indirect Approach**

The harrowing results on the battlefield during the First World War, which to a certain extent was managed in the shadow of Clausewitz, led quite a few military theoreticians to develop different military theories, with one of the most famous being the “indirect approach strategy”. Sir Basil Henry Liddell Hart was a junior officer who participated in World War I and was injured during the Battle of the Somme.

After the war, Liddell Hart began to publish different articles, and in 1929 published a comprehensive book under the title “The Decisive Wars of History”.[[11]](#footnote-11) This book mainly analyzed wars of the past – the Grecian and Roman wars and other wars that took place prior to World War I. The book presents for the first time an approach that is now associated with Liddell Hart’s name. In later editions, (1954, 1960 onwards), the name of the book was changed to “Strategy: The Indirect Approach”, and a chapter was added about World War II.

As with Clausewitz, Liddell Hart based his writings on a sophisticated analysis of the wars in the generations before him, but his conclusions were completely different.[[12]](#footnote-12) The first innovation presented by Liddell Hart was the manner in which decisive defeat was achieved in war. As noted above, according to Clausewitz, war is won on the battlefield by negating the physical capabilities of the enemy. Liddell Hart went so far as to argue that wars can be won by negating the enemies will to fight, and to a certain extent this was a recognition of Sun Tzu’s principal that: “supreme excellence consists in breaking the enemy’s resistance without fighting.”[[13]](#footnote-13) That is, the psychological factor is more important than the physical factors.[[14]](#footnote-14) While in the past we did see military victories that were achieved by instilling fear among an enemy army,[[15]](#footnote-15) and even Clausewitz included the principal of a “morale” war, these are not methods for winning a war.

This led Liddell Hart to the even more radical conclusion that, “the perfection of strategy would be, therefore, to produce a decision without any serious fighting”.[[16]](#footnote-16) That is, in complete opposition to Clausewitz, who saw combat and physical clashes between armies as the essence of warfare, Liddell Hart argues that one should avoid these clashes as far as possible.

Liddell Hart’s approach to the act of war is complex in its essence. Removing a physical threat and the surrender of an enemy army is clearly and obviously of value to everyone, but the strategy of the indirect approach requires complex thought on how to achieve these objectives while avoiding contact.

This issue led Liddell Hart, as opposed to Clausewitz, to present for the first time a set of maxims in the format of “Do’s and Don’t do’s”.[[17]](#footnote-17) Initially, Liddell Hart directed these maxims to military commanders and not politicians, given that if they were implemented, a commander could fulfil his mission according to the rules of strategy of the indirect approach. However, it is clear that in Liddell Hart’s Britain, a military commander could not undertake an operation without aligning both strategy and tactics. Presumably as a graduate of the British Army and the British political culture, he was convinced that this alignment would occur naturally according to the regular and traditional chain of command. That is, orders would be sent by the political echelon down the chain of command until they reached the tactical echelon to implement them.

That said, the uniqueness of these maxims, even if not said explicitly, is that they are intended to serve both strategy and tactics simultaneously, that is both the army and politicians together.[[18]](#footnote-18)

“Do” Maxims

* Adapt your objectives to your means
* Always keep your object in mind
* Choose the line (or course) which is least expected
* Exploit the line of lowest of resistance
* Take a line of operation which offers alternative objectives
* Ensure that your plans and your assessments are flexible – adaptable to the circumstances

“Don’t do” Maxims

* Do not throw your weight into a stroke whilst your opponent is on guard
* Do not renew an attack along the same line (or in the same form) after it has once failed

There is no doubt that the simplicity of these maxims secured their influence over the military ranks because they enabled all levels, the junior and senior, to conduct a focused discourse about implementing the mission. They seemed to enable the focused management of a discourse about the large campaigns of World War II. In other words, the nature of war between the first and second World Wars did not change greatly (even if technology improved) and therefore Liddell Hart’s proposal was to manage them in a different way to Clausewitz, who had his maximal influence on World War I.[[19]](#footnote-19)

**Liddell Hart – epilogue and limitations**

Even during Liddell Hart’s lifetime, the nature of war had begun to change. The key phenomena in the period after World War II were the arrival of nuclear weapons and a multitude of guerrilla wars on a scale that the modern world had not experienced before.

The increased number of guerrilla wars that took place during the Cold War and in the shadow of Soviet encouragement, led to guerrilla movements developing across the globe. During those years, western armies dealt with Communist guerrilla movements, such as the struggle against the British in Malaya (1954-1960) and in Kenya (1952-1956);[[20]](#footnote-20) the different conflicts in South America and especially the Cuban Revolution that was directed against the United States (1953) and many others. These conflicts and others were perceived as a new Soviet method for war against the West – a relatively cheap and more effective method.[[21]](#footnote-21)

These challenged Liddell Hart’s Indirect Approach strategy. His “Do and Don’t Do” maxims were less suited to the developing type of warfare. This understanding would lead Liddell Hart back to work and to conduct more focused research of guerrilla warfare. His revised research led to two key conclusions: the first that: “need quote.”[[22]](#footnote-22) The second conclusion was that:

Guerrilla warfare overturned one of the two major accepted principles of war – the principle of ‘force concentration’ and this inversion applied to both sides. For guerrilla fighters, dispersal is a critical condition for survival and success. They must never expose themselves as a target, and therefore they take action only in small groups, but can briefly come together like drops of mercury, in order to conduct a sudden attack on an objective whose defenses have been weakened. Guerrilla fighters convert the principle of ‘force concentration’ into the fluid principle of ‘power’. However, this is a principle that regular forces, who are vulnerable to a nuclear threat, also need to adapt to a certain extent. Dispersal is also required for fighting against partisans, because there is no value to force concentration in a narrow AOR against forces that are as elusive and rapid as mosquitoes, and the chances of restricting them are greatly dependent on the capability to deploy a thin but dense net over as broad a territory as possible. The greater the dispersed control, the greater the chance that the moves against the guerillas will achieve their purpose.

The challenge of “dispersal vs concentration” and its implications are discussed above, as are additional challenges, such as intelligence,[[23]](#footnote-23) the relationship to physical space and others. Although Liddell Hart describes this challenge well, which is one of the most complex challenges that regular armies face in warfare against terror and guerrilla organizations,[[24]](#footnote-24) he did not succeed in proposing a coherent solution to the problem that he had defined with great accuracy, and we are merely left with his perpetual call to study history[[25]](#footnote-25) and develop an appropriate strategy.[[26]](#footnote-26)

A critical appraisal of the indirect approach strategy quickly reveals the failure buried within it. The “do and don’t do” maxims were intended to provide a different solution than Clausewitz’s when dealing with the nature of war in the period up to the First World War, and maybe even the second. However, given that these maxims were [content focused]/[context focused] and defined how to manage a war with set characteristics, they indeed failed when the nature of warfare changed, exactly as happened in the years after World War II with the rise of guerrilla warfare on the one hand, and the threat of nuclear war on the other.

A [content focused]/[context focused] solution is not a comprehensive methodological solution and it does not enable a flexible discourse, given that the [content]/[context] is predefined in relation to a set characteristic of war. The moment that this characteristic of warfare changed, the indirect approach strategy was incapable of generating new principles for the changing reality in our time, and it failed.

**The Campaign, the Operational Level and the Systems Approach – War as a System**

A considerable change in the size of armies began at the start of the 19th century and had reached monstrous proportions by the beginning of the 20th century. This quantitative change created a new problem for the management of wars. Given that the classical theories focused on a decisive defeat on the battlefield, they did not pay sufficient attention to the conceptual problems that accompanied this enormous growth in the size of armies. The obvious solution was simple, just expand existing operational methodologies. Consequently, most of the solutions to this problem were organizational in nature. These included the establishment of intermediate HQs, (the key change being the establishment of the Corps to amalgamate several divisions) and a restructuring of the General Staffs (primarily to regulate the command and control between political actors and the army).

Despite these organizational innovations, there were still immense difficulties in utilizing force and producing the required value. The problem became more severe as newer technologies entered the battlefield, while the classic infantry and cavalry lost their status. This mass turned into something else which was not given sufficient attention.

Nevertheless, there were only a few theoreticians who attempted to deal with the change in weapons and the size of armies. It took a long time until their doctrine reached a critical mass within military thinking and their solutions were recognized for their contribution to military action. This approach is called the systems approach. Its unique nature derives from the fact that it views the act of war from the perspective of systems analysis and attempts to influence all aspects of war: military organization, command and control concepts, and even national organization.

In this section we will present two key theoreticians who present a type of linear development in modern systemic thinking. Isserson, whose approach was largely rooted in the maximization of weapons, and Naveh, who developed the concept into a comprehensive theory.

[There is a section here on terminology for the Hebrew reader – I have not translated it, but maybe it should be adapted for an English audience]

**The Deep Operation – Isserson**

In his book, *The Evolution of Operational Art*,[[27]](#footnote-27) Georgi Isserson reveals his insights into tactics and strategy as enablers for achieving results during the wars of his time. Isserson relied on his own research into different losses and victories beginning with the Napoleonic Wars and onwards. His historical appraisal did not stand alone, but was combined with an evaluation of the weapons available to the armies of Isserson’s time, especially motorized armored forces and primarily the tank, as well as the aerial forces that were beginning to be developed during his time.

This connection between the historical insights and the developing weapons available to armies, allowed him to draw several key conclusions:

“Before the World War, military art admitted only two main elements: strategy as teaching on war, and tactics as teaching on battle. This bifurcated understanding only demonstrated once again how far military theory lagged behind practice.

Even in the second half of the nineteenth century, the evolution of the forms for armed combat exceeded the bounds of this understanding of strategy and tactics. Armed conflict gave birth to a whole chain of combat actions that stretched across a front line and were distributed in depth. These actions exceeded the limits of battle and therefore could not be subsumed into tactics. Because these actions did not embrace the phenomenon of war as a whole, they could not be treated as the teaching of strategy on war.”[[28]](#footnote-28)

Accordingly, based on Isserson’s understanding, operational art was a completely new doctrine. Its foundations were rooted in the period after World War I, when it gained an independent status. Before World War I, military art was made up of two basic branches: strategy, the study of war, and tactics, the study of combat. Consequently, the challenge facing military personnel was to extricate oneself from the Napoleonic paradigm of one decisive battle on the battlefield achieving the desired strategic result. Isserson argued that technological and social developments had permanently removed this option from the toolbox of those dealing with war.

“A modern operation does not constitute a one-act operational effort in a single locale. Modern deep operational deployments require a series of uninterrupted operational efforts that merge into a single whole. In operational terminology, this whole is known as a series of successive operations […] A series of successive operations is a modern operation. Without depth, an operation is deprived of its essence and becomes historically conservative, failing to correspond with the new conditions that define it.” [[29]](#footnote-29)

Given that this is the modern reality, the challenge facing those dealing with war is to create a system that enables operational art, or in Isserson’s language:

“…the challenge [of operational art] was to make the chain of combat efforts a highly efficient system coordinated purposefully and sequentially along the front and throughout the depths to bring about the enemy’s [strategic] defeat. For operational art, the solution for this problem involved contending with the new and complex problem of controlling armies deployed as a continuous front along a single line.[[30]](#footnote-30)

**The Form of Organization Required to Implement Operational Art**

In his book, Isserson does not just deal with the theoretical level, he also makes recommendations for organizational schematics on the battlefield to implement his vision of operational art. These schematics were perceived by many conservatives as ridiculous given that the distances and numbers included in them were perceived during Isserson’s time as being fanciful from a technological perspective.

The following schematic clarifies Isserson’s thinking:

**Schematic figure: preparations of an operational force and warfare at depth**[[31]](#footnote-31)

[Insert the figure from the Hebrew]

From this schematic we can learn about the strength required of an operational force in terms of operational range and also the [combat endurance]/[operational durability] needed to reach the enemy depth and bring the required operational output. There are two examples that constituted breakthroughs during Isserson’s time and that arise from the schematic and these are:

* The reorganization of aircraft from being a supporting force to an independent force as a part of a comprehensive campaign – Isserson proposed that aircraft be organized into organic units capable of independent action at a depth of 1,000 km behind enemy lines in order to relieve the pressure on the front in parallel to maximizing the operational ground forces at different depths.
* The organization of forces into distinct echelons with specific purposes – Isserson’s understanding that there is no one location on the battlefield that can bring the desired operational result, as was accepted in the time of Napoleon, led him to divide his forces into echelons. The uniqueness of this form of organization was that it enabled a force to maximize its potential on the battlefield at any moment and to avoid a linear exhaustive battle like those that were compelled during World War I.[[32]](#footnote-32)

The revolutionary nature of Isserson’s proposals can be understood only in relation to the period he wrote in, between the two World Wars, while his country, the USSR, was in the midst of political and industrial revolutions.

The ability to fulfil the potential inherent to operational art as proposed by Isserson required a reform of military equipment on a national level. The transition from an infantry to a mechanized army numbering in the thousands could not be just the whim of an army acting on its own. This change could only happen if the state and its resources joined the effort. This was the source of difficult arguments within the Russian army, which in the end only fully adopted these proposals during World War II under the constraints of the war itself.

Consequently, it is not surprising that although he was recognized as a theoretician, which allowed him to make statements outside of the consensus, this did not prevent the military and political system of his time from feeling challenged by him to the extent that he was ousted by the army.[[33]](#footnote-33)

**‘Depth’ and its Place in Isserson’s Operational Art**

Isserson argues that depth defines the logic of a campaign. In physical terms, armies only see the frontlines, that which sit directly in front of them. The frontline causes blindness among commanders as to the genuine nature of the war they are fighting and causes them to overemphasize the tactics of the opening battle.

However, as Isserson underscores, this is a mistake that needs to be avoided and given that the frontline is only one element that is visible before a clash, depth is of the essence. Depth enables a force to deal with both the breadth and depth of the enemy and to decisively defeat them on the battlefield. Consequently, Isserson’s operational art calls to defeat the enemy through continuous action at depth, and not at the front, as armies did during World War I. Only a defeat at depth can enable a strategic defeat of the enemy, given that is where the enemy’s true strength is located.

“Under present conditions, we must refer not to a series of successive operations, but to a series of successive strategic efforts, and to a series of separate campaigns in a single war. This understanding is historically fundamental to the evolving nature of the operation and its changing forms and methods of conduct. The blunt facts are that we are facing a new epoch in military art, and that we have to shift from a linear strategy to a deep strategy.”[[34]](#footnote-34)

Consequently, in the modern age, one can decisively defeat an enemy army only by using a strategy that enables continuous operations whose purpose is to reach the depth of the enemy formations and to act there against them.

**The Abstraction of Operational Art – Naveh**

In his book,*In Pursuit of Military Excellence: The Evolution of Operational Theory,[[35]](#footnote-35)* Shimon Naveh outlines the reasons for the development of operational art by the Soviets in the 1930s and 1940s and by the Americans in the 1970s and 1980s. He begins his analysis with the following statement:

“The marked increase in the size of the armed forces, which began in the early nineteenth century, acquired monstrous dimensions towards its end, and led to the expansion of military operations, both in space and time. This quantitative change created a new problem in the conduct of war, in the intermediate sphere between the traditionally accepted levels of military planning.”[[36]](#footnote-36)

Therefore, the field of operational art is a result of the expansion of war during the industrial age to large scale clashes between armies, in a manner that requires the building of intermediate levels to allow human perception to comprehend the phenomenon. In his words, “the new operational field is not an autonomous entity, detached from the universal wholeness of the phenomenon of war […] The operational level does differ from the tactical level, both in quantity and in quality, and from the strategic level in substance.”[[37]](#footnote-37)

**The Uniqueness of Action at Depth in Naveh’s Approach**

The term depth has a unique context in Naveh’s work, which is that depth constitutes the link between tactics and strategy. If the front causes military planners to be paralyzed through a focus on tactical details, depth releases them from this paralysis and requires that they evaluate the “what for?”, which forces them to deal with the strategic level. It is depth that enables the army and politicians to look at the same point in time and space in order to direct their efforts. Although this is a significant insight and a further development of systemic theory, Naveh does not leave us with clear tools on how to define depth, the systemic objective. Ostensibly, we are simply talking about an intuitive link whose only contribution is in the attempt to connect between tactics and strategy.

**Systemic Thought and the Operational level**

As we described above, there is an inbuilt tension between the abstract strategic objective of a war and the mechanical actions of tactics in bringing them about. As opposed to Clausewitz’s approach, which identified a logical continuum between policy, military strategy and tactics, reality is far more complex. Over the years, a difficulty was created to correctly synchronize between the different levels, which led to the creation of mechanical solutions to complex strategic problems (annihilation, blitzkrieg). According to Naveh, a translation mechanism is required – the operational level – “between the mechanical context of random activity in the context of abstract thinking.”[[38]](#footnote-38)

In this context Naveh integrates two different elements: the first is systemic thinking, as a cognitive tool for commanders at all levels, and the second is the operational level, as an additional level, distinct from the three levels described by Clausewitz.

Naveh deepened systemic thinking within military thought, which conceptualizes clear criteria for operational art and extricates it from the world of weapons that characterized the approaches of Isserson and Godrian.

Naveh set nine criteria that can enable systemic thinking to emerge from the tactical world:[[39]](#footnote-39)

* It must reflect the cognitive tension, transpiring from the polarization between general orientation towards the strategic aim and the adherence to the tactical missions;
* Industrious maneuver;
* Synergetic action;
* Disruption of the opponent’s systems and not destruction;
* Articulation of the randomness factor;
* Non-linear nature;
* Deliberate interaction between notions of maneuver and attrition;
* Autarkic within the scope of its mission;
* Related to a broad and universal theory.

Naveh enabled us to look at each of these elements, to create new and adapted content for each one of them and to insert the systems approach into operational art.

Alongside the deepening of systemic thinking within military thought, Naveh called for the establishment of a distinct operational level, to connect the strategic level to the tactical level. This level is meant to enable the management of huge armies operating in vast spaces on the ground, in the air, at sea and in the knowledge dimension, in a manner that could translate abstract strategic insights into an implementable tactical actions.

**Criticism of the Need for an Operational level**

A critical appraisal of operational art raises three theoretical questions. The first: according to Naveh, planning a campaign takes place in a hierarchical process between three levels (‘the essential trinity’): “[this appears to be a quote, but there is no reference]”. Contemplation of these definitions raises another question: In order to resolve the tension between the higher and more abstract level and the lower mechanical level, is there a need to build another level? Would it not be possible to use, in accord with the needs, the three levels that Clausewitz defines, and to describe the campaign idea within the framework of the military strategy level?

The second question: In light of the historical analysis, Naveh proposes a thesis that operational art is uniquely connected to general systems theory. Basing himself on Ludwig von Bertalanffy, Naveh assigns criterion for this doctrine and enables its adaptation to military thought, as described above. Without getting into a debate about general systems theory, one can easily see that the characteristics that Naveh describes are methodological, and suitable for complex thought of any type – not just thinking at the operational level. They are no less suitable for thinking about strategic problems or especially complex tactical problems. Naveh does not explain why this theory is only relevant for the new intermediate level and not for these two other levels.

A third question that should be asked relates the relevance of the theory of operational art to our time. Naveh proposes an operational level crushing blow as an achievement of the combat system, that is a negation of the enemy system’s capability to achieve its aims. He defines the primary characteristics of a crushing blow – unity of purpose; striving to bisect and dismantle and not destroy; action in two dimensions, the horizontal-frontal – the linear and the vertical – from the home front to depth – non-linear; simultaneous efforts; jointness between them with an emphasis on the integration of maneuver and fire; inverting the enemy campaign by concentrating a critical mass behind its center of mass; subterfuge and surprise as key elements in dealing with the center of mass. It is clear that this description is relevant to thinking about war as a meeting between armies in the industrial age, and less relevant to thinking about the different types of problems that armies deal with today within the framework of the fourth Industrial Revolution taking place now.

The historical account shows that operational art did indeed help to create, although sometimes only emphasized, a revolution in military planning in the face of a broad and complex challenge. Operational art helped release armies from the then prevailing war concepts, which were mistakenly defined as ‘Clausewitzian’, and which were connected linearly, to destruction and with a connection between policy and the military act. It reached its peak in the conceptual competition during the 1980s, in the context of wars between armies, between the Soviet’s campaign crushing blow for deep campaigns and the American’s depth warfare. It is likely that some of the elements of the revolution would not have been assimilated into military thinking without dealing with an operational level. However, since the time of its integration, is there still a need for a campaign messenger? This is the fourth theoretical question about operational art and the operational level.

These questions show that the relevance of the operational level as a distinct level is low when considering the problems described in the previous chapter. Having systemic thinking at only one level blocks the innovation of the systems approach, and the contribution of this approach to thinking at all levels of war. Furthermore, the creation of additional command levels is likely to encumber command and control, except when the size of the army or the breadth of the military action requires the creation of additional mechanisms.

We will now turn to an analysis of other approaches that assimilated elements of systems thinking into military thought, without the need to create mechanisms or additional levels of command and control – on the contrary, these approaches point to the need to bring the different levels closer, to enable a direct dialogue between them, and in so doing to deal with the challenge of connecting the war levels.

**War in Context – New Theories**

From the 1990s onwards, in the days after the Cold War and with the development of the third Industrial Revolution and the impressive display of its capabilities during the first Gulf War, the challenges facing armies developed and changed. In the international arena, there were peacekeeping and humanitarian assistance missions in Somalia and the former Yugoslavia, and after 11 September 2011, actions to conquer and stabilize Afghanistan and in Iraq. Israel faced the challenge of warfare with Hezbollah until its withdrawal from South Lebanon in 2000; immediately afterwards the events in Gaza and Judea and Samaria which were known in the IDF as the “high tide and low tide” events; and later warfare in Lebanon and Gaza.

Despite the impressive achievements in Iraq, in Yugoslavia and to a certain extent in Afghanistan, the large and advanced armies experienced a feeling of a lack of success in their struggle against adversaries with inferior military power that used guerrilla and terror methods or a combination of the two.

The first common thread was the understanding that military conflict had changed, as we described in the previous chapter. The nature of military clashes, the combat arena, operating methods, etc. led military theoreticians to the conclusion that change was needed in the military approach to conflicts, and consequently also in the operating methods.

The second common thread, even if very few recognized this, was the feeling of frustration felt by many commanders in the regular armies. These officers stood at the head of expensive, sophisticated, and large systems. However, they understood that despite the great power at hand, the numerous weapons, and huge budgets – they still experienced genuine difficulty in defeating their adversaries. While these adversaries were primitive organizations, they were surprisingly sophisticated in terms of the strength of their resolve and their capability to employ ‘human’ precision weapons.

This feeling led to a wave of publications that reflected the new military thinking that was shaping the foundations of a new systemic age. The process of adaptation – the approaches of three of the leaders , Israeli, British and American, we will describe below – included a revised definition of the discourse between the strategic level and the tactical, but not necessarily through an operational level. Despite the differences between the various approaches, one can point out several similarities amongst them.

**Shmuel ‘Semo’ Nir – ‘Wearing out’ (and not decisive defeat) and “A culture of asking questions”**

Like many other military thinkers, Shmuel ‘Semo’ Nir[[40]](#footnote-40) was influenced by the military clashes that occurred during his service in the IDF, many of which he personally participated in, especially in intelligence roles. The two key clashes that influenced his thinking during the 1980s were the war with Hezbollah on the northern front of the State of Israel, and the war against the Palestinians on the internal front.

Semo understood that as with the rest of the world, the low intensity conflicts taking place were of a different type, a type that he called “limited conflicts”. Even if he didn’t coin the term, he did succeed in introducing the concept of “limited conflicts” into the internal discourse within the IDF, which challenged the prevailing Clausewitzian concept of ‘decisive defeat’.

Semo’s research led him to his central argument, that the current conflicts that armies are dealing with are of a different nature to the classic wars. The primary points of difference are: the tight connection between tactical military action and political/diplomatic action, the merger of the civilian and military fields within the conflict, the multitude of abstract elements in the conflict (such as information operation campaigns and ‘public opinion maneuver’), the blurring of the borders of the operational zone and the numerous restrictions in employing military force.

This understanding was the basis for Semo’s attempts to revitalize military-diplomatic action and his attempts to improve the connection between the political echelon and the army. Consequently, several key terms organize Semo’s military thinking, first and foremost ‘wearing out’ and ‘a culture of asking questions.”

**‘Wearing out’ is the new Clausewitzian Decisive Defeat and the Reduced Value of Territory**

Semo devotes a lot of space to the time period in which a conflict should be managed. Generally, states seek to shorten the length of conflicts, as far as possible, for many reasons: the high economic cost that military operations entail, the loss of public support, etc. Semo argues that armies need to rethink attrition, which he calls ‘wearing out’.[[41]](#footnote-41) Attrition or its practical forms, ‘attrition warfare’, ‘wearing down warfare’, etc. have had cold water thrown on them due to the extensive means required to implement them. In Semo’s words, given that the organizations that armies are facing have permanently adopted the ‘wearing down’ method, armies must also consider using this method, but in a manner different to that used by the terror and guerrilla organizations.

Consequently, Semo argued that the key tools for strategic ‘wearing down’ are psychological warfare and information operations.[[42]](#footnote-42) The ‘wearing down’ of semi-military organizations is achieved through continuous and numerous psychological victories in all the fields of conflict.[[43]](#footnote-43) Therefore, physical damage is not only insufficient, but does not even constitute the main tool in war. This stands in complete contradiction to Clausewitz’s theory of decisive a defeat on the battlefield.

In Semo’s understanding, the concept of ‘wearing down’ can save armies from Clausewitz’s approach and enable a critical perspective of the war objectives of the two sides. As such, the sides can better adapt their operating methods to achieve the required military and diplomatic results. This form of thinking enables an army to reflect on the ways that adversaries conceptualize the ongoing conflict. Often, the parties view the conflict in different ways – one side might see it as a low intensity conflict, while the other sees it as total war, in which they use all tools to achieve victory. This has great importance for this book, given that if the strategic objectives of the two sides are not similar, their influence on the tactical means to be adopted will be different. This influence includes the importance of the objectives, that is the willpower and readiness to pay the price required to achieve victory, in Semo’s words, “it is not military power that decides who wins a conflict, but rather psychological power.”[[44]](#footnote-44)

A case in point of ‘wearing out’ in Semo’s writings relates to the value of territory in a conflict. Semo was the first in the IDF to distinguish between territory for tactical purposes and territory for strategic purposes. This distinction is revolutionary in and of itself, all the more so within the IDF, which until the end of the 1980s was influenced by the formative ethos of the Yom Kippur War in 1973, which was fought between regular armies. If in the past, territory was the primary goal and objective of military and diplomatic action together, under Semo’s approach, territory was just a means, the place where the weapons that were employed and that threatened the State of Israel were located. Consequently, if the strategic-military value of territory falls, a conventional military force will have difficulty in implementing its mission, especially in operations in which it was clear that a retreat will happen at some point, whether earlier or a later.[[45]](#footnote-45)

**“A Culture of Asking Questions” and the Reconceptualization of Intelligence for Competition over Learning**

The ongoing nature of these conflicts is inherent to ‘wearing out’, conflicts that take place over many years. Even though the first and even the second World Wars took place over many years, at each stage the parties to the conflict all sought a rapid and decisive victory. In contrast, ‘wearing out’ is an almost endless conflict, which does not at the start seek a rapid and decisive victory.

This extensive length of time is an enormous risk when managing a campaign of this type. There is a risk of the divergence of the different means to the point where what is important to the campaign, and what is not, is forgotten. This fact led Semo to define a new principle of war – “a culture of asking questions.” This principle is based on conducting constant learning processes fed by comprehensive intelligence that could enable decision-makers to direct the means available to them in an appropriate manner.

As such, the need for learning and for “a culture of asking questions” increases. Semo argues that the weaker side has a very small margin of error, given that they do not have room to maneuver or reserves, and they therefore require constant renewal in identifying the weaknesses of the enemy and damaging them.[[46]](#footnote-46) Furthermore, this renewal does not just relate to the employment of new weapons, but also touches on other fields. An example of this is the increased use by terror and guerrilla organizations of the media and cyber activities.

Accordingly, the stronger side also needs to engage in constant longitudinal and transversal learning, to narrow the room for maneuver of the weaker aside, and over time to weaken them to the point where they lose the will to fight. Low intensity conflict is therefore a learning competition between the sides. The relevant terminology for a military response includes learning circles, a culture of questioning (the ability to ask questions) and sophisticated knowledge management. That is, the heart of the conceptual military response against an enemy guerrilla organization, revolves around developing new knowledge, raising question marks about existing knowledge and broadly sharing insights to overcome local weaknesses.

The primary tool that is required to create sophisticated critical learning and to enable “a culture of asking questions” is intelligence. Semo removes the intelligence tool from its natural place, from the military field. From his perspective, we are not talking about the classic intelligence process that includes intelligence gathering, processing, evaluation and analysis of the information gathered about the enemy (states, organizations or individuals) and the areas in which military operations are planned for (‘operations areas’) or where military operations can be conducted.

Semo’s intelligence is required to bring insights from the many and varied fields in which the conflict takes place. A prominent example of this is the increase in civilian intelligence of different types. From a marginal phenomenon in the First and Second World Wars, civilian intelligence became an enormous field to the point where it now sometimes overshadows classical military intelligence. Among the new areas of interest are: the economic situation of the state, the economic situation of its citizens, division into geographic areas, tribes, clans, religions, key sources of energy, etc. This demand for intelligence greatly increased the need to broaden the areas of interest to military intelligence, and even more so the need to maintain close connections between national and civilian intelligence actors and those in the army.

Semo did not succeed in formulating his ideas into an organized doctrine, even though he had great influence on IDF combat doctrine in the field of low intensity conflict.[[47]](#footnote-47) From the articles he published and other items that he wrote we gain a greater understanding of the nature of low intensity conflicts, of the way they should be managed and methods of coping with them. The importance of his thinking to this book can be illustrated by his assertion about the way that military efforts should be managed:

As opposed to war (even a “limited” one) and the nature of the operations within one – a limited [low intensity] conflict is political, even the nature of its efforts and not just its objectives and constraints, and therefore, the method of implementing military operations within its framework, even those at a lower level and a lower scope, will be dictated, sometimes directly, by political considerations, whereas the military-operational considerations are secondary. [[48]](#footnote-48)

That is, the nature of the conflict requires tight coordination between all the levels dealing with the conflict. This coordination needs to take place, and not infrequently, even between the strategic-political level and the tactical level that implements the political decisions.

**Smith – Complex Analysis Leads to Relevant and Simple Action**

Unlike the other thinkers, General Rupert Smith does not base his observations on a methodical analysis of military history, but rather on his rich experience in command of British ground forces. These observations are based on the experience he gained as a junior officer focused on a potential large war between the Warsaw Pact and the NATO alliance. In reality, most of his assignments were in less clear conflict zones, especially Ireland. He was the commander of the UN forces in Kosovo and completed his service as the deputy commander of NATO forces in Bosnia. He encapsulated most of his ideas in his book, *The Utility of Force*, which was published in 2005.[[49]](#footnote-49)

His primary thesis was that the changes in the characteristics of warfare are reflected in the fact that war now takes place between people and not between armies and military formations and warfare is consequently influenced by public opinion. In so doing, Smith was declaring for the first time, as a representative of the western armies, that the era of industrial wars was over. That is, the characteristics of the first and second World Wars have ceased to exist, and they will not come back and are not relevant to the post-industrial age from the beginning of the 21st century.

Smith’s argument goes even further, and he argues that the employment of military force is a means that serves other means to achieve strategic objectives. This is a situation that did not exist in the previous generation of industrial wars.[[50]](#footnote-50) That is, an army alone could repeat the results of World War II, in which a strategic result was achieved when the Allies met at the center of Berlin and brought the war to an end. Smith argues that with the nature of the new wars this will, at most, be the beginning of the real war, the “war amongst the people”.

Consequently, if war takes place amongst people, the population will indeed be an inseparable part of the warfare. The population will be an objective and a means and not just the army of the enemy. The actual results of a conflict will be determined based on the perception of different populations, and not by the physical outcomes of where the forces are located, the scope of casualties, etc. Therefore, the strategic objectives of warfare will require a psychological change among the enemy as a collective, and not just among enemy leaders as in the past. Smith’s argument is so strong that he states conclusively: “you can win all the battles and lose the war, you can lose and still be declared the winner in the war amongst people.”

Smith does not limit himself to the world of theory, which leads him to two key recommendations to implement his ideas. The first and most significant deals with the manner of force employment with an emphasis on methods for analyzing the problem. The second deals with the organization of military force for war amongst the people, and the best method of force employment.

**How to Employ Military Force**

If one accepts the “war amongst the people” approach, Smith argues that there is no choice but to create new methodological tools to analyze the situation. The existing tools are suitable for industrial wars, the wars of Clausewitz and Liddell Hart, of army against army. Wars amongst the people require changes to the situational analyses that are the basis for all diplomatic-military action. Accordingly, he defines three key principles:

**The first principle**: Understanding the desired strategic result in order to achieve it. We must develop a deep and detailed understanding of the nature of the desired strategic result in the broadest terms – political, military, economic – and the correct context for military force employment to achieve it. If a military planner understands the required diplomatic result, this will lead them to ask the correct questions and to define a relevant military objective, which will define the result of the military action. A military planner deals with strategic questions, and seeks tactical answers to them, and in so doing directly connects between strategy and tactics and vice versa.

The influence of this principle on the operational military echelon is far-reaching, given that it will now be required to understand the political motives and the complex relations among the politicians, between the politicians and the people that chose them, between the politicians and enemies or colleagues in other states, etc.

**The second principle**: Adhering to action based on international legality. The reason for this is simple: We differ from our enemies in that they strive to negate basic principles of law, while we work to defend these principles. In other words, tactical action not only needs to be legal, but also legally executed. This aspect also directly connects between the strategic and tactical levels, given that tactical action will be directly guided by the strategic demands, without the mediation of an intermediate level. The legal aspect directly connects the strategic leader to the tactical force.

**The third principle**:

Operational planning should be based on two series of questions – strategic and tactical. In Smith’s opinion, if you cannot answer these questions, you should not employ force. The first series deals with the overall context of the problem (the act, in military policy and strategy) and how force employment is relevant to solving it. This series must be conducted using integrated thinking, inter-organizational and even international, which he calls “institutional thinking”. Integrated institutional thinking brings to the table different ways of looking at reality, the challenges, the problems and the opportunities, and it enables a broad perspective of them. The second series focuses on methods (the tactical act) to allow force employment to serve the solution. Again, we see Smith directly connecting between tactics and strategy, without a connecting operational level.

**Recommendations for Force Organization and Methods of Employment**

Smith does not limit himself merely to a general framework, but rather he points out several practical issues that must be dealt with to increase the effectiveness of a force:

The first improvement concerns the way that headquarters are organized. If we accept the framework created by Smith, it will quickly become clear that military headquarters, as they are structured today, will not be able to cope with the many tasks that are assigned to them. From the day that the professional staffs were first created, they only dealt with purely military issues. The employment of these staffs was accompanied by numerous discussions about their size, working methods, etc. These discussions took place in all modern armies, and frequently lead to difficult arguments, but they never deviated from the military field.

In any case, the objective of the different types of staffs[[51]](#footnote-51) was to assist a military force commander to implement a defined military mission. The different members of the staff represent different professional arrays – administration, fire, air, etc. – and they serve as the commanders of these arrays or as liaison officers to these arrays. With the development of new professional military fields, different positions representing these fields were added to the staffs. Consequently, officers were added to the staffs whose role is to help commanders implement humanitarian assistance roles, or give legal advice, among other fields.

Smith proposes the structured addition of experts who deal with non-military fields, experts who will deal mainly with civilian issues. That is, the implementation of the interdisciplinary thinking required of a commander, needs to be reflected in both the military planning and the civilian planning of operations. Furthermore, there is a need for staff officers whose expertise does not just relate to their own level, but also to the higher and lower levels.

Expanding the scope of the staffs, according to Smith, will enable a unit and its commander to be active in a greater number of fields of action, and have a greater influence on the way their missions are implemented. As such, a commander can evaluate and analyze the information available to him and to influence these fields.

Therefore, staffs will have to deal with a greater number of missions, which will also be of a broader scope. The commander and his staff will constantly have to think about the broader context of the current battle – the overall conflict and its broader aspects.

The second improvement relates to force employment methods: the raid as the key method to achieve results on the new battlefield. Here, Smith proposes to transition to military action based on raids and to disregard the classical offensive as the key tool to achieve results on the battlefield. Raids have a number of characteristics that can assist in the war amongst people. First and foremost, raids require quality intelligence, which leads to critical thinking about the ways to achieve the desired tactical and strategic result. Second, raids will always be more focused than classical offensive in terms of both time and space. The aspects of time and space are built-in to a greater extent with a raid than an offensive, and raids necessarily require less operational space than an offensive as well as a shorter timeframe. Finally, raids enable a force to focus the most effective military tools in a short period of time and do not require the social burden of making weapons accessible to masses of classical military forces.

Smith argues that this combination of restructuring the headquarters on the one hand, alongside adopting raids as a method of action on the other, will increase the combat worth of a force during the war amongst the people. A more sophisticated headquarters could better connect between tactics and strategy, and raids would be the primary operating method within defined timeframes and spaces. As such, fewer intermediaries would be created between the implementers and the decision-makers, and higher quality action would result.

**Patraeus – The Importance of the Design Stage**

General David Patraeus is a former American officer who at the end of 2005 moved from a command position in Iraq to become the Deputy Commander of the U.S. Army Training and Doctrine Command (TRADOC). During 2006, the worst year for the Americans in Iraq, he led a broad process of writing a field manual (FM 3-24) for counterinsurgency operations (COIN).[[52]](#footnote-52)

Patraeus’ strategic insights are centered around the fact that despite the warfare methods of terror and guerilla organizations being similar, the US Armed Forces were not fighting to secure the security of American citizens, but rather to maintain American interests. This fact has many implications for the management of a conflict and the type of warfare. This central fact – military action focused only on maintaining interests – necessitates a different type of action from the American forces. It is sufficient to look at the size of Iraq, in terms of geography and demography (not to mention other characteristics) in order to understand the size of the challenge that faced the American army in its desire to maintain the American interests there. However, for Patraeus, although the size of the project was a deterrent in itself, the problem was actually related to the military's ability to focus on clear goals and manage strategy-oriented campaigns over time.

At the beginning of 2006, Patraeus published an article in which he summarized his insights from the warfare in Iraq.[[53]](#footnote-53) In the article, he outlined 14 principles that constitute a sort of general “do and don’t do” that military leaders should implement, in order to execute a complicated mission of this type of warfare. A large part of these insights focus on the tactical level while the rest deal with the nature of the American action in the Iraq from a strategic perspective, which was to support and enable the building of the new Iraqi national army. This led to a campaign of stabilization operations, that is operations whose purpose was to help the target populations to restructure their institutions after subversive elements had been eliminated from the country.

The article did not just deal with the theoretical level, given that in 2006 Patraeus had already received an appointment as Commander of the American forces in Iraq, and within the framework of the American surge phase in 2007 and 2008 he implemented the principles that he had shaped. This allowed him to effectively evaluate the validity of his insights in the field.

**Operational Design as a Mediation Mechanism between Operational Principles**

The fourth chapter of the 2006 field manual deals with the design[[54]](#footnote-54) of campaigns and operations against insurgencies. The field manual defines design as a deepening of our understanding while appraising solutions to the problem as the basis for learning and adaptation. Design, as opposed to planning, is intended to deeply investigate an unfamiliar problem, to define its characteristics and to create concepts and hypotheses that enable thinking about the solution. Design also takes place at the tactical level, in what is termed ‘the commander’s concept’.

“…dialogue among the commander, principal planners, members of the interagency team, and host-nation (HN) representatives provides many benefits to the design process. This involvement of all participants is essential for effective COIN. The object of this discourse is to achieve a level of situational understanding at which [the] participants achieve a sufficient level of understanding that the situation no longer appears complex, they can exercise logic and intuition effectively. As a result, design focuses on rationalizing the problem rather than explicitly developing courses of action [as usually would happen in the usual logic].”[[55]](#footnote-55)

Design is a broad inclusive dialogue, and aside from military actors, it also includes non-military actors from additional government and security agencies, experts in different fields and local actors. This cross-organizational and holistic dialogue creates a situational understanding, which is a deeper understanding of the environment and the problems. More importantly – this situational understanding[[56]](#footnote-56) is developed in relation to the mission, that is, it is directly connected to the purpose of the military action. The purpose of the dialogue is to frame the problem in an iterative and ongoing process, until it is not perceived as being overly complex.

The design phase bridges between strategy and tactics and provides a basis for the commander’s understanding. It begins by defining the desired military end state, which is derived from the diplomatic objectives. It continues by defining the operational idea – the commander’s intention – and the instructions for planning. In so doing, design disseminates the commander’s insights among his subordinates, in order to strengthen them, to enable room for flexibility and initiative, and to enable all the elements of the military effort to execute the essence of the operational idea. In other words, Petraeus argues that design enables modern mission command.

However, design alone is not enough, given that it only provides an initial environmental awareness, based on the working assumptions derived from the cross-organizational learning that was conducted. The element that complements design, to aid learning about a highly complex operational environment, is friction on the battlefield. This friction deepens the awareness and enriches it. It enables there-evaluation of the insights that were developed during the initial design stage, allowing them to be validated or changed, and as such, friction is based on the deeper understandings that were developed during the design phase.

In order to succeed in this, subordinate commanders must have freedom of action, and they must be committed to conveying the highest quality and accurate information possible to the commander in order to update his concepts during the warfare. These arguments return Petraeus to the idea he presented in the article cited above, in which he argues that there is no replacement for the flexibility and adaptability of a commander in different situations.[[57]](#footnote-57)

**Between the Principles and Implementation Methods**

The American Armed Forces work on the basis of field manuals. These field manuals are not written by one person, nor are they approved by one person, even if they were directed by one person, in this case Petraeus. When they began to embed the design approach into a clear course of action, it was clear to them that the template they were presenting would not be a sole “formula for success”. They therefore warned their readers, the military commanders, and instructed them to adapt their dialogue to changing situations. The need for an iterative process is emphasized over and over again because only the practical experience of the tactical echelon, and the day-to-day friction that it creates in the field, can bring the information that is badly required by the superior ranks.[[58]](#footnote-58) Similarly, subordinate commanders must also be exposed to the assessments conducted by the superior ranks.

This requirement is not self-evident within a military organization, given that one of its most salient features is hierarchy, and the connection between the hierarchical levels is executed only through clear orders. The requirement to be involved in the development of insights, all the more so in the culture of the US Armed Forces, constituted a breakthrough or earthquake in the organization, depending on your perspective.

Another earthquake or breakthrough, was the first principle for military force employment that Petraeus formulated: “Work with all your strength and use the locals to complement what you cannot do.”[[59]](#footnote-59) Despite the military value in fulfilling one’s mission oneself and the enduring military approach of using force to implement a mission, Patraeus calls on commanders working within a civilian population to reduce military force employment. Patraeus instructs the commanders to employ military force only for those matters for which it is intended, and no more, and to maximize the engagement of the local population to fulfil their needs. For example – to employ military force for combat against combatants or terrorists, but to engage local actors from municipal matters.

On this point, Patraeus relies on Lawrence of Arabia, who proposed that commanders working with a civilian population make use of the local population. Lawrence argued that even if the local population is less effective than the foreign forces, it is still preferable to use them, given that it is their war, and we are helping them to win, not to win ourselves.[[60]](#footnote-60) It is for good reason that this principle is recognized as having the potential to discourage both commanders and combatants, given that its foundation is the transfer of the responsibility and implementation of the mission to another.[[61]](#footnote-61)

Furthermore, the demand that Patraeus makes of commanders, from the lowest command ranks, is to remember the overall strategic objective, and to direct their actions to be in line with that objective. Patraeus insisted on the ‘discomfort’ that this principle causes, and nevertheless he describes it as an important rule that had already featured in the writings of Lawrence of Arabia.

This difficulty, which demands that the lower levels be exposed in an unmediated manner to the strategic considerations, is perhaps one of the key factors (even if not officially) for the publication of an updated edition in 2014 of the US Armed Forces field manual on counterinsurgency. In this edition, the authors decided to relinquish the fourth chapter on design, which had featured in the previous edition, and to integrate it into the seventh chapter which deals with planning and campaign considerations. This is a little puzzling, given that as opposed to the previous edition, this edition is directed at battalion level leaders to brigade level leaders, and their equivalents, who are universally considered not to be at the operational level.

In any case, the authors of the 2014 edition did not relinquish the need for a dialogue between the political echelon and military commanders.[[62]](#footnote-62) The need to broaden the dialogue and for ongoing evaluations to be conducted is still recognized. However, the removal of the discussion about design from the field manual almost completely negates the ability to fully realize Petraeus’s idea. The primary reason for this is that the role of dialogue is not just to communicate opinions and impressions. The role of ongoing dialogue – which takes place in an iterative process, is to examine actions in relation to intentions (strategic and military objectives) and to evaluate them, to transmit information from various sources, and to reach situational awareness. All this is done to break down a highly complex military problem into discrete missions for concrete action.

**Conclusions from an Analysis of the Military Approaches Described Above**

Up to this point we have described the approaches of Clausewitz, Liddell Hart, Isserson, Naveh, Nir (Semo), Smith and Patraeus. Each one of these approaches was relevant to their time and left behind elements that are also relevant to the warfare of our time. We will now turn to look at the [common]/[useful] elements of the approaches and to distinguish between the components that are relevant to today and those that are not, in order to formulate an approach that is relevant to our reality today.

**Clausewitz and Liddell Hart – When Everything Seemed Simple**

The classical theories of Clausewitz and Liddell Hart primarily dealt with how to win on the battlefield as the key principle of the phenomenon of war.

Clausewitz left us without a connecting methodology and without any understanding of how this connection should be implemented. From his perspective, he was thinking about a statesman-military commander archetype like Napoleon, who’s genius was the basis for his success. The beauty of Clausewitz’s theory is rooted, perhaps more than anything else, in the simplicity of the battlefield at his time, as well as the simplicity of using the army as a tool for solving diplomatic problems. The battlefield at that time was mostly one-dimensional, on land and at sea, when the range of artillery was the only thing that could defy the geography of a violent meeting point. Armies were relatively small and mostly professional with centralized control by a political-military leadership, which at that time did not excel at a clear separation of powers. Consequently, the ability to manage the battlefield in an intuitive manner truly appeared to be a matter of genius and not methodology. Therefore, the focus of Clausewitz’s work was on the phenomenon of war and not on methodologies that could enable varied connections between the “Clausewitz trinity” or between the different levels of war.

In contrast, Liddell Hart tried to bridge this gap by positing several maxims that if supported by all the ranks could succeed in creating coherent strategy and tactics. There are two key problems with Liddell Hart’s theory: The first, his point of reference was the industrial wars of the period after World War I. The second is related to the fact that Liddell’s maxims are content related and not methodological. As a consequence, when the nature of war changed to guerrilla and terror wars and nuclear weapons appeared, Liddell-Hart’s maxims were no longer relevant. Aside from the name, the “indirect approach”, which perhaps in some form remains relevant today to strategists, we are not left with any tools that could enable us to create a positive reality within the phenomenon of war.

**Isserson and Naveh – When Everything is Big**

Isserson was the first to creatively deal with the size of armies and the modern equipment available to them. The key idea in his work is that size has a logic and methodology of its own. As such, these aspects should be emphasized within the military profession to enable commanders to achieve the maximum with the tools at hand.

It is important to emphasize that Isserson did not question Clausewitz’s insights into the “Clausewitzian trinity” or even the definition of the three levels of war: policy, strategy, and tactics. From his perspective, operational art was an intellectual scaffolding that enabled the organization of an army for battle in a more efficient manner to maximize force within a specific context. This is done to achieve victory on the battlefield.

That is, he does not provide a methodology for how to connect between strategic needs and tactical needs, but rather presents tactics at their best. Even the term ‘depth’ that Isserson developed and which seemingly connects to the strategic level was only intended to enable a decisive defeat of the enemy on the battlefield due to the blindness that existed during his time at the front.

Isserson’s theory is a development of Clausewitz’s that deals with size, and remains within an advanced Clausewitzian framework, if we can call it that, without pretensions to change the Clausewitzian rules.

Naveh sought to go beyond the narrow perspective of tactics and tried to add an additional level to Clausewitz’s three levels. His central argument is that a retrospective appraisal shows that from the time that armies began to grow, the phenomenon of war has complied with the systems analysis approach. Isserson did not need this approach, and he probably did not engage in planning based on this approach,[[63]](#footnote-63) but the results he produced were similar to those of the systems approach. As described above, the assimilation of systemic thinking into military thinking is an important contribution of Naveh, but the discussion about an operational level makes less of a contribution to helping armies deal with the challenges today. Furthermore, Isserson and Naveh did not create a theoretical framework that could surpass the industrial wars, although they did comprehensively and deeply enrich the thinking about these wars.

**Nir (Semo), Smith and Patraeus - When Everything Is Complex**

The increasing complexity of the phenomenon of war in recent decades does not merely reflect the increased complexity in the combat environment, as the enemy side is often characterized, whether the enemy is located in an urban and indistinct space, or whether they are situated at numerous geographical locations across the globe. This complexity also exists on the side of our forces, whether in the classic force employment combat dimensions or in the new dimensions. For example, traditional intelligence and fire operations have been enriched by technology in terms of possible patterns of action, such as the “industrialization of targeted killings” across the globe. However, new spaces have opened for force employment, with an emphasis on the cyber world and the legitimacy of operations with an emphasis on international law, that constitute operational spaces in and of themselves both for diplomats and military personnel.

The physical force employment combat dimensions, which in the past did not need to be synchronized with the cyber dimension, and the refinement of both intelligence and fire and the huge ranges they can now reach (thousands of kilometers), brought enormous complexity in synchronizing efforts. They also raise the question of how they can be converted into a comprehensive operational output on the battlefield. We need to add to this the new constraints that have appeared within the phenomenon of war and have developed into a complete dimension of constraints on force employment, such as the integrating norms of international law. Staff officers and lawyers are integrated from the lowest levels to the highest levels, and sometimes even at the political level, at all the stages of operational action, something that was unthinkable in the past.

Within General Patraeus’s writings, as well as those of Smith and Semo, we can see the supreme importance of the tight connection that is needed between the tactical and strategic levels. Patraeus’s writings even expand this characterization and designate a much more important role to the tactical echelon than other military thinkers. Although the connection between the two levels was recognized in the past, and it is understood and clear, this is the first time that the information and opinions held by the tactical level are meant to influence decisions at the strategic level.

An analysis of Patraeus’s, Smith’s and Semo’s theories reveals that the updated approaches to managing military operations in complex environments do not deal with creating an operational level. They focus on the quality and the content of the dialogue between the strategic and tactical levels. This dialogue should be built on the concepts and principles of: learning; analysis; understanding the policies and the broader context; converting complexity to simplicity, but not superficiality; framing the problem through a design process; the commander as the key component in a process based on expert discourse; disseminating the commander’s understanding among their subordinates to enable them flexibility in their response; and continuing the learning and analysis processes in the face of friction and change while reducing the complexity of command levels as much as possible to strengthen the direct link between strategy and tactical action.

In this regard, Smith's unique approach is even more remarkable, given his revolutionary distinction that frequently, the military is not a sufficient condition in any future confrontation but at most a necessary condition. Even then, its specific weight is not clear within all the components of the operational response during a war amongst the people.

**Comparing the Approaches that were Analyzed**

The following table compares the approaches that we have analyzed:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| The Approach and what it represents | Georgi Isserson & Shimon Naveh | Shmuel “Semo” Nir | Rupert Smith | David Patraeus |
| Key terms and theoretical tools (list of terms, ideas, with no comparison between the columns) | Unity of purpose;  Striving for the neutralization and disintegration of the enemy rather than its annihilation;  Action in two dimensions: the **horizontal-front** – the linear, and the **vertical** – the home front and depth – nonlinear;  simultaneous actions;  Jointness of efforts with an emphasis on the integration of maneuver and fire;  Inverting the enemy campaign by concentrating a critical mass behind its center of mass;  Subterfuge and surprise as a central element in dealing with the center of gravity. | A close link between tactical military action and diplomatic action;  The merger of the civilian and military fields with the conflict;  Multiple simplified elements;  Blurring the borders of the operational zone;  Numerous reservations about force employment;  Learning and “a culture of asking questions” | Reorganization of military force;  Preference for raids and not an offensive and occupation;  Interdisciplinary staffs;  Constant thinking about the broader context as a part of the implementation of the simplified idea – removing layers of commanders and delegation of authority | Analysis and dialogue;  Framing the problem through design processes;  Ongoing situational assessments whose purpose is inbuilt learning;  The commander as the key component in a process based on expert discourse;  Dissemenating the commanders understanding among their subordinates to enable them flexibility in the response |
| Level of war | Four levels: tactical, operational, strategic-military and broader strategic | Three levels: tactical, strategic-military and broader strategic | | |
| What is it appropriate for | Industrial wars, between large armies | War amongst the people, between armies and organizations | | |

The table compares the approaches of Isserson and Naveh with the approaches of Patraeus, Smith and Semo. The comparison highlights three key conclusions:

First: Isserson and Naveh’s innovations are suitable for industrial wars between large militaries, such as the first and second World Wars, but are much less suitable for use in “wars amongst people”.

Second: War has expanded into other fields, aside from the classic geographic battlefield. The foci of the expansion are in to two dimensions: the first, information and public perception operations have become a monster due to the varied communication means that exist today that enable one to reach any individual within seconds. The second is the dimension of time. There are no short wars, although short intensive clashes that fit into the classic categories do take place within wars. War is no longer a phenomenon whose management as the sole province of states, but today it is managed by organizations of varying sizes from tens of thousands of members to individuals spread across the globe.

Third: The size of the challenges facing armies. The demand being made of armies is to win global wars even if it appears that the war is local. Examples are numerous: international law; public perception and the media which are global; and cyber activities that are not bound by geography. A Western army must invest in efficient and effective endeavors in these areas, while in parallel making the traditional investment on the battlefield where direct clashes between the different forces continue to take place.

**The Military Policy Theories – a Summary**

We have seen how commanders and different thinkers have reflected on the changing character of conflict, and have tried to formulate comprehensive theories to deal with these changes, based on components of the classical approaches, including Clausewitz’s trinity, the division of war into different levels and the relationship between tactical and diplomatic action, etc. In the next chapter we will complete our analysis of the problem as the basis for our proposal of a solution in Part 2.

1. Sun Tzu, *The Art of War*, Allondale Online Publishing, 2000. [↑](#footnote-ref-1)
2. Ibid (p 17 Hebrew need English page number). [↑](#footnote-ref-2)
3. It should be noted that the origin of these two words is in Greek military doctrine. Strategos was a term for a Greek military commander. The simple meaning of tæktik is “order”. [↑](#footnote-ref-3)
4. Many historians of that period believe that the fact that the English King led his army into battle made a significant contribution to the English victory. [↑](#footnote-ref-4)
5. E. W. Bovill, *The Battle of Alcazar*, Batchworth Press, 1921. [↑](#footnote-ref-5)
6. Yehoshafat Harkabi, *War and Strategy*, Ma’arachot, 1990, p. 159. [Hebrew]; Army Doctrine Publication - Army Doctrine Primer, (UK Army: 2011), pp. 2-6. [↑](#footnote-ref-6)
7. Carl von Clausewitz, *On War*, (Michael Howard and Peter Paret, trans), Princeton University Press, 1976, p. 89; Hendel, 2011, Ibid, p. 132. [↑](#footnote-ref-7)
8. Ibid; Ibid. [↑](#footnote-ref-8)
9. Ibid; Ibid. [↑](#footnote-ref-9)
10. For criticism of this, see Hendel, 2011. [↑](#footnote-ref-10)
11. Basil Henry Liddell Hart, *Strategy: The Indirect Approach*, (London: Faber & Faber, 1954). [↑](#footnote-ref-11)
12. Liddell Hart devoted a long chapter in his book in which he accused Clausewitz of mistakes that influenced the course of history and were a source of failure. Need to get English pages reference numbers. Hebrew is 347-361. [↑](#footnote-ref-12)
13. Sun Tzu, op. cit. page reference [↑](#footnote-ref-13)
14. Liddell Hart, op. cit., p. 332 – compare to English. [↑](#footnote-ref-14)
15. See *The Book of Judges*, Chapter 7, Verses 19-25. [↑](#footnote-ref-15)
16. Liddell Hart, op. cit., p. 332 – compare to English. [↑](#footnote-ref-16)
17. Ibid., p. 344-345 – compare to English. [↑](#footnote-ref-17)
18. Ibid. [↑](#footnote-ref-18)
19. After World War II, there were those who challenged the originality of Liddell Hart’s theory, and one can see in interviews that he conducted with German generals more an attempt to prove his theory, than a desire to evaluate that war based on a historical benchmark. See: Len Deighton, *Blitzkrieg: From the Rise of Hitler to the Fall of Dunkirk*, William Collins; UK, 2014. pp. 102, 110-111 – Need to adapt page numbers. [↑](#footnote-ref-19)
20. See the historical survey of the British successes in this conflict in: Tal Tobi, “The British Efforts in the Wars against Guerrillas: Malaya and Kenya As Test Cases”, *Ma’arachot* 402, (August 2005), pp. 62-69. [Hebrew] [↑](#footnote-ref-20)
21. This reference is to an issue of Ma’arachot- which is actually a translation of the chapter on guerrilla warfare that Liddel added to his book – need to check the original English page references. [↑](#footnote-ref-21)
22. Ibid, p. 45 – need to adapt page nos. [↑](#footnote-ref-22)
23. See below for a more detailed assessment and the remarks of Shmuel Nir. [↑](#footnote-ref-23)
24. Perhaps this precise description actually derives from the direct experience of Lt Col Thomas Edward Lawrence (Lawrence of Arabia) who led to the guerrilla warfare in the Middle East against the Turkish army. [↑](#footnote-ref-24)
25. Hart p. 46 - adapt [↑](#footnote-ref-25)
26. Ibid., p. 47. [↑](#footnote-ref-26)
27. Georgi Isserson, The Evolution of Operational Art, US Army Combined Arms Center, Fort Leavenworth, Kansas, Combat Studies Institute Press, 2013. Translation Bruce W. Menning. [↑](#footnote-ref-27)
28. Ibid, p. 13. [↑](#footnote-ref-28)
29. Ibid, p. 48. [↑](#footnote-ref-29)
30. Ibid, p. 26. [↑](#footnote-ref-30)
31. Ibid, p. 64. [↑](#footnote-ref-31)
32. Ibid, pp. 100-101. [↑](#footnote-ref-32)
33. Ibid There is a missing page reference here I couldn’t see anything in his own book about his being ousted (which only happened in 1941) [↑](#footnote-ref-33)
34. Ibid, p. 48. [↑](#footnote-ref-34)
35. We are aware of the criticism of Naveh’s book, especially the many inaccuracies regarding historical facts or his synthesis of them. However, his critics also admit that the theoretical chapter is the most important chapter in the book, and despite the factual inaccuracies, he manages to touch on the essence of operational art. For criticism of his book see, Eitan Shamir, “Between the German Blitzkrieg and Soviet Operational Art”, *Ma’arachot* 436, 2011, pp. 78-83. [↑](#footnote-ref-35)
36. Shimon Naveh, *In Pursuit of Military Excellence: The Evolution of Operational Theory*, Cummings Center Series, Routledge, 1997, 21 in Hebrew Needs a page number – need print edition. [↑](#footnote-ref-36)
37. Ibid, page 23 in Hebrew… [↑](#footnote-ref-37)
38. Ibid, page 26-27 in Hebrew… [↑](#footnote-ref-38)
39. Ibid, pp. 33-34. Also see pages 174-203. in Hebrew… [↑](#footnote-ref-39)
40. Col. (res.) Shmuel ‘Semo’ Nir (1944-2003) was born in Bulgaria and immigrated to Israel at age three. As a child he moved with his mother to Kibbutz Dan. He did his military service in the Shaked reconnaissance unit and the paratroopers. At age 34, when he was already the father of two girls, Nir decided to return to the army and began to serve as a first lieutenant in the Intelligence Corps. Most of his service was in Northern Command, including as the intelligence officer of the division on the Lebanese border and of the Lebanon Liaison Unit. He focused on the combat doctrine of Hezbollah and its theoretical sources. His document, "the Ten Commandments of Hezbollah”, which translated his insights into low intensity conflicts, was written in such a convincing manner, that many thought it was a genuine document captured from Hezbollah. After his release from military service in 1998, Semo focused on developing combat doctrine, primarily in the field of low intensity conflicts, as a fellow at the International Institute for Counter-Terrorism. Semo worked to change the mindset of the IDF and Israeli security organizations through the publication of articles and lectures. He called for Israel to adapt to the nature of low intensity conflicts and to achieve tactical deterrence by keeping the enemy in a constant feeling of uncertainty. This would transform “wearing out” from a burden to an asset. He even travelled to Vietnam and succeeded in meeting former Vietnamese fighters who fought the Americans to learn from their experience. [↑](#footnote-ref-40)
41. IDF Operations Directorate-Doctrine and Training Division, *Limited Conflicts – Collection of Articles of Col. (ret.) Shmuel Nir (Semo)*, 2004, pp. 22-24. [Hebrew] [↑](#footnote-ref-41)
42. Ibid., p. 21, 27 and others. [↑](#footnote-ref-42)
43. Ibid. pp. 117-123. [↑](#footnote-ref-43)
44. Ibid., p.110. [↑](#footnote-ref-44)
45. Ibid., p. 123. [↑](#footnote-ref-45)
46. Ibid., p. 154. [↑](#footnote-ref-46)
47. Col. Nir wrote part of the collection (combat doctrine volume) “*The Limited Conflict*" that the IDF Combat Doctrine Department published in 2001. Nir was also a member of the steering committee that directed the writing of the collection “*The Limited Conflict – Warfare against Irregular Forces*” which was published by the Combat Doctrine Department of the IDF Ground Forces in 2005. Col. Nir participated in the discussions of the steering committee and contributed to dozens of hours of consultation, despite his illness and despite the fact that he had retired from the IDF shortly before these discussions began. [↑](#footnote-ref-47)
48. Ibid., *The Limited Conflict*, p. 10. [↑](#footnote-ref-48)
49. Rupert Smith, *The Utility of Force: The Art of War in the Modern World*, Penguin Books, 2005. [↑](#footnote-ref-49)
50. Lecture by Rupert Smith at the “Army and Defense”, *Second Latrun Conference on Ground Warfare: Ground Maneuver at the Beginning of the 21st Century*, 16 September 2008. [↑](#footnote-ref-50)
51. “Personal staff”, “American staff”, “European staff”. [↑](#footnote-ref-51)
52. US Army field manuals are publications that include basic principles for managing military operations. This type of publication is primarily directed at the military levels above the battalion level up to the supreme strategic level of the army, and they therefore a deal with tactical and [campaign] [operational] [systemic ]aspects of warfare. These publications are also binding for the US Marine Corps. *Fm 3-24: Counterinsurgency*, (Washington, DC, Headquarters Department of the Army, Headquarters Marine Corps Combat Development Command, Department of The Navy Headquarters, United States Marine Corps, 15 December 2006). [↑](#footnote-ref-52)
53. David H. Petraeus, “Learning Counterinsurgency: Observations from Soldiering in Iraq”, *Military Review*, (January־February 2006), pp. 2-12. [↑](#footnote-ref-53)
54. The use of the term ‘design’ in the IDF began in 2006 with the publication of the IDF's employment concept. The term was even initially defined as: “A thought process of brainstorming between the echelons, whose purpose is to create a conceptual framework." Since then the term has only been used in the context of the strategic-military echelon. [↑](#footnote-ref-54)
55. *Fm 3-24: Counterinsurgency,* op. cit., p. 4-3. [↑](#footnote-ref-55)
56. The United Kingdom military uses the term ‘situational awareness’, United Kingdom Glossary s-11. [This is not a proper reference – Glosary of what? Published by whom?] [↑](#footnote-ref-56)
57. Petraeus, *Learning Counterinsurgency*, p. 9. [↑](#footnote-ref-57)
58. FM 3-24 (2006), pp. 4-6. [↑](#footnote-ref-58)
59. Petraeus, *Learning Counterinsurgency*, p. 3-4. [↑](#footnote-ref-59)
60. Ibid. [↑](#footnote-ref-60)
61. It should be noted that the IDF also found itself dealing with this problem in 2005 in the book “Limited Conflict”. In this book, the principle was given the name “Preserving the Essential Nature of the Mission”, and it is based on the view that it is the responsibility of commanders to fulfill their mission and to manage the strategic tension even at the lowest levels and without relinquishing the determination to get the job done. [↑](#footnote-ref-61)
62. FM 3-24: Counterinsurgency, (Washington, DC, Headquarters Department of the Army, Headquarters Marine Corps Combat Development Command, Department of the Navy Headquarters United States Marine Corps, 2 June 2014) – page no? [↑](#footnote-ref-62)
63. We have no evidence in Isserson’s writings that he was exposed at all to early versions of the systems analysis approach and certainly not to Karl Ludwig von Bertalanffy (1901-19720), on whom Naveh based his approach, and who achieved renown only after World War II. [↑](#footnote-ref-63)