



Questioning a Deity: A Contemplation of Maneuver Motivated by the 2008 Israeli Armor Corps Association "Land Maneuver in the 21st Century" Conference

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Preface

On September 16-17, 2008, the Israeli Armor Corps Association hosted its second annual conference, this entitled “Land Maneuver in the 21st Century.” The centerpiece for speaker presentations and related discussions was “maneuver:” what it is, what it should be, and its relevance to security operations in light of the 2006 Second Lebanon War, ongoing operations in Afghanistan and Iraq, and other recent or continuing conflicts. An international speaker slate proposed a broad spectrum of thinking in that regard, a spectrum ranging from general acceptance of the current definition of maneuver to considerably expanding what the concept encompasses.

This document considers maneuver in light of these speaker presentations and the discussion stimulated by them. First sampling maneuver historically, it follows with an analysis of how theorists, doctrine writers, and military personnel conceive of maneuver in the first decade of the 21st century. These dual foundation stones of history and current thinking serve to underpin presentation of the treatment given the topic during the conference. The closing analysis considers the implications of thinking of maneuver in terms different than is currently the case...or, contrarily, the impact if it instead remains unchanged.

The document will be of interest to individuals in the armed forces, academics, and others desiring to investigate alternative conceptualizations of maneuver in the 21st century.

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Summary

A gathering of nearly 200 individuals representing four nations met at the Israeli Armor Corps Association's museum and memorial in Latrun, Israel on September 16-17, 2008 to contemplate the topic of land maneuver. Granted currency by ongoing security challenges in Israel, that nation's July-August 2006 Second Lebanon War, coalition operations in Iraq and Afghanistan, and other contingencies recent and current, the two days of presentations stimulated no little debate and considerable thought. This document seeks to first provide background for a discussion of what transpired at Latrun and, secondly, to summarize and analyze the perspectives emanating from that event. Those perspectives fell into two general categories: (1) maneuver should retain its present definitional construct unchanged, and (2) maneuver as currently understood has a character valuable beyond the bounds of how it is understood and used today.

Historically, maneuver – defined in U.S. doctrine (and similarly understood by those from the other nations present: Israel, the United Kingdom, and Canada) as “employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy in order to accomplish the mission”¹ – has been historically consistent in basic character but different in detail when contrasted with it as currently understood. Pre-Napoleonic maneuver was taken to mean the polar opposite of battle; maneuver was the preferred option to fighting as it preserved men, money, and materiel otherwise consumed. Subsequently, particularly in the aftermath of World War I, maneuver acquired a new polar opposite in the minds and writings of many: attrition. It became the answer to the slaughter of the trenches. In both of these characterizations we see a common thread: maneuver as a means to avoid unnecessary loss.

Maneuver today retains vestiges of the past that can muddy its doctrinal meaning, but careful reading makes clear its bounds and breadth. It has application across the breadth of the spectrum of conflict and throughout the three levels of war (tactical, operational, and strategic). To paraphrase Brigadier General Gideon Avidor (Israel Defense Forces, retired), it spans a scope that includes a single vehicle employing fire and movement to gain advantage in relation to a foe to the overarching theories of such writers as Basil Liddell-Hart. Entire armies moving over oceans falls under its auspices given that their movement to a theater meets the caveat that – eventually if not immediately – they serve the purpose of bringing fires or the threat of fires to bear in gaining advantage over an enemy and abet the accomplishment of sought-after objectives. It is this understanding of maneuver that established the common ground for all meeting on those two late summer days in central Israel.

Succinctly, the issue of relevance then and herein is whether military doctrine should retain maneuver in the sense of its current definition or be expanded to allow (1) employment of more than fires and movement alone and (2) application to other than combat situations. The U.S. Army's Director of the Combined Arms Doctrine Directorate, Colonel (U.S. Army, retired) Clint Ancker, proposed retention of the standing definition. He was, however, careful to note that doing so allows for the participation of forces providing other than fires and movement, e.g., though it is ultimately the forces that bring the two to bear that conduct maneuver, engineer units, communications providers, and other capabilities perform vital supporting roles. Ancker also explained that maneuver in its current sense has applicability to the full spectrum of operations and not only offensive and defensive actions, one example being its use to separate a threat from the population during a counterinsurgency. Maneuver in such circumstances must always be conducted with an awareness of its impact on relevant populations, for the people are fundamental to ultimate success in a stability operation. **Lieutenant** General Moshe Yaalon (IDF, retired) supported this very important point, expanding on it by recognizing that it is not only the

¹ *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02,

populations in a theater of operation that are vital, but also those in the broader international – and, we can include by extension, domestic – communities. Brigadier General Itay Brun (IDF) similarly emphasized the importance of other-than-military influences on maneuver employment, in his case noting that various social forces in Israel are increasingly impacting how the IDF employs its capabilities (though not in ways that necessarily alter the basic nature of maneuver as currently defined).

Two speakers, General Rupert Smith (British Army, retired) and Dr. Russell W. Glenn offered alternatives to retention of maneuver in unchanged form. General Smith distinguished between “industrial war” (essentially conventional war) and “war amongst the people.” While accepting that maneuver as currently defined is a suitable construct when considering industrial war, war amongst the people demands far more than fires and movement alone. In fact, a military force is likely to be in a supporting rather than dominant role during such undertakings. Maneuver as currently understood is key to gaining advantage with respect to a foe that threatens success during war amongst the people. In terms of populations themselves, however, it is information that is vital in acquiring the benefits desired. That information may involve the threatened use of force, humanitarian aid, education, or any number of other forms, but its use demands an expanded conceptualization of maneuver both in the sense that it (1) is an additional capability beyond fires and movement, and (2) is employed to gain advantage with respect to individuals and groups other than threats alone.

Dr. Glenn recognized value in the construct of maneuver as currently defined, yet he encouraged an expansion of the concept because of the inherent value that would accrue were it applied to a broader spectrum of contingencies. Glenn suggested that missions today would benefit from considering maneuver in the context of applying all relevant resources to gain advantage in the service of the objectives sought. Like Smith, he saw maneuver being employed with respect to key components of significant populations rather than only threat organizations.

In support of this broader conceptualization, Dr. Glenn proposed a new definition for maneuver, one in which it is conceived of as “the employment of relevant resources to gain advantage with respect to selected individuals or groups in the service of achieving specified objectives.”

Such a proposal begs the question of whether recent doctrinal initiatives that encourage employment of more than military capabilities and recognize the importance of participants other than opposing forces already address the issues identified by Smith and Glenn. An investigation of operational concepts such as “comprehensive approach/whole of government” (Canada), “comprehensive approach” (United Kingdom), and “full spectrum operations” (United States) are notable for their constituting dramatic steps forward in this regard. These are overarching concepts that provide a construct defining what is sought via the application of a larger palette of resources in terms of broader audiences. They do not, however, supply the level of detail needed by those tasked with actually employing specific resources in the interest of gaining advantage within the bounds of those overarching concepts. Maneuver in the expanded sense does provide this greater resolution and therefore serves to support operational concepts such as full spectrum operations.

The result of the two days of presentations and related conversations left participants with no easy resolution. Maneuver in its current form has an inherent simplicity that is valuable to those seeking to gain advantage in combat via employing fires and movement or threat thereof. Yet there is also great value in taking that clear and easily comprehended concept and applying it to the more extensive challenges that confront all involved in addressing the full range of today’s contingencies. A possible solution should maneuver as currently defined be determined sacrosanct: refer to expanded maneuver as “full spectrum maneuver” or using an equivalent moniker suitable to the particular doctrine in question.

Acknowledgments

Brigadier General Gideon Avidor (Israeli Defense Forces, retired) and the sponsorship of the Israeli Armor Corps Association made this document possible. My thanks to Gideon, Chaim Erez, and the many others whose friendship and professional support continue to serve our respective nations' interests.

An additional thanks to General Rupert Smith (British Army, retired) for his kindness in spending no little time reviewing portions of early versions of this document and later clarifying aspects regarding his concepts as presented at Latrun. I also extend my appreciation to colleagues David Lambert and Clint Ancker for their kindness in reviewing an early draft.

Glossary

Symbol	Definition
ACR	armored cavalry regiment
BA	Bachelor of Arts
BG	brigadier general
CA	California
CEO	chief executive officer
CO	Colorado
COIN	counterinsurgency
Col	Colonel
CNN	Cable News Network
CT	Connecticut
G2	intelligence officer (division or above)
GFC	Ground Forces Command
GHQ	general headquarters
HQ	headquarters
IACA	Israeli Armor Corps Association
IAF	Israeli Air Force
IAI	Israeli Aircraft Industry
IDF	Israel Defense Forces
IGO	intergovernmental organization
IN	Indiana
ISA	Israel Space Agency
ISC	Imperial Service College
JFCOM	Joint Forces Command
LCol/Lt Col/LTCOL	lieutenant colonel
LTG	lieutenant general
MA	Master of Arts
Maj Gen/MG	major general
MOD	ministry of defense
NGO	nongovernmental organization

Ret	retired
S2	intelligence officer (brigade and below)
TDY	temporary duty
UAV	unmanned aerial vehicle
UK	United Kingdom
UNPROFOR	United Nations Protection Force
USMA	United States Military Academy

1. Introduction

maneuver — 1. A movement to place ships, aircraft, or land forces in a position of advantage over the enemy. 2. A tactical exercise carried out at sea, in the air, on the ground, or on a map in imitation of war. 3. The operation of a ship, aircraft, or vehicle, to cause it to perform desired movements. 4. Employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy in order to accomplish the mission.²

Joint Publication 1-02, Department of Defense Dictionary of Military and Associated Terms

General Background

An international gathering of Israeli, American, British, and Canadian attendees came together at the Israeli Armored Corps Association Museum and Memorial Center Latrun in Israel on September 16-17, 2008. What drew them to this second annual conference was the topic of maneuver, one of considerable interest given the outcome of the July-August 2006 Second Lebanon War, demands of the ongoing *intifada*, and operations underway in Iraq, Afghanistan, and elsewhere around the world at the time.

It was a subject sure to inspire both interest and debate. The audience included veterans of Israel's 1948, 1967, and 1973 wars, conflicts in which many attributed victory to the effective maneuver demonstrated by the country's armed forces. The Israel Defense Forces (IDF) Brigadier General Itay Brun described the difficulties suffered by his country's military during the 2006 Second Lebanon War as being in part due to their having transitioned from a focus on maneuver in those previous wars to too great a reliance on fires alone in 2006 Lebanon. He went on to state that the IDF is returning to an operational concept in which maneuver once again plays a greater role, though that move cannot simply entail a return to the past when so much in the way of waging war has changed.³ Major General (MG) Avi Mizrahi, commanding officer of the country's Ground Forces Command, believes progress toward better preparedness for Israel's security challenges has been made while also judging that there is more to be

² Department of Defense Dictionary of Military and Associated Terms, Joint Publication 1-02, Washington, D.C.: Joint Chiefs of Staff, April 12, 2001 as amended through May 30, 2008, p. 324.

³ Conversation between conference organizer and author of the Hebrew proceedings Brigadier General (IDF, retired) Gideon Avidor and Dr. Russell W. Glenn, Tel Aviv, Israel, November 8, 2008.

done. There has been a notable increase in the amount of time spent on training to improve conventional warfare skills and other capabilities applicable to confrontations with a foe like Hezbollah, yet Mizrahi has yet to be satisfied that the quality of that preparation is what it needs to be.⁴

Maneuver, defined in the quotation opening this section, holds no less a place of honor in the hearts of many in other nations' militaries, a legacy of such historical hallmarks as World War II, the 1991 Persian Gulf War, and the victory over Saddam Hussein's military in the spring of 2003 during Operation Iraqi Freedom. Maneuver is a component of one of the U.S. Army's six warfighting functions: "movement and maneuver." The United States Marine Corps prides itself on capitalizing on the benefits of "maneuver warfare." Maneuver is a principle of war that advises placing "the enemy in a disadvantageous position through the flexible application of combat power" because

Maneuver concentrates and disperses combat power to keep the enemy at a disadvantage. It achieves results that would otherwise be more costly. Effective maneuver keeps enemy forces off balance by making them confront new problems and new dangers faster than they can counter them. Army forces gain and preserve freedom of action, reduce vulnerability, and exploit success through maneuver. Maneuver is more than just fire and movement. It includes the dynamic, flexible application of all the elements of combat power. It requires flexibility in thought, plans, and operations. In operations dominated by stability or civil support, commanders use maneuver to interpose Army forces between the population and threats to security and to concentrate capabilities through movement.⁵

Maneuver was for years one of the U.S. Army's battlefield operating systems (a now outmoded doctrinal construct that consisted of maneuver, command and control, fires, intelligence, air defense, mobility/countermobility/survivability, and combat service support). The great air theorist Giulio Douhet sought to justify the need for air forces and a strategy of strategic aerial bombardment based in part on the inability of ground forces to maneuver as he wrote after World War I:

In the days when war was fought with small, light, fast-moving bodies of forces, it offered a wide field for tactical and strategic moves; but as the masses engaged grew larger, the playground diminished in size and the game became more restricted. During the World War the masses involved were enormous, and extremely slow and heavy; as a consequence their

⁴ Conversation between conference organizer and author of the Hebrew proceedings Brigadier General (IDF, retired) Gideon Avidor and Dr. Russell W. Glenn, Tel Aviv, Israel, November 8, 2008.

⁵ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. A-2.

movements were reduced to a minimum and the wars a whole became a direct, brutal clash between opposite forces.⁶

It was maneuver that made Napoleon's reputation as a general and made his victories at Ulm, Austerlitz, and Jena-Auerstadt possible. Robert E. Lee won battles despite being outnumbered in considerable part because of his brilliant use of maneuver against McClellan in southeastern Virginia and versus Hooker at Chancellorsville; some attribute the Confederate general's failure to maneuver more effectively at Gettysburg as the cause of his defeat there. If today's militaries had gods, Maneuver would be amongst their chief deities.

Document Structure, Conference Objective, and Sponsors

This, then, was the topic of interest during the two September days in 2008. The pages that follow are less a recitation of what each speaker said and the questions asked than a discussion of the topic that held the attention of both presenter and audience member. Their interactions serve as the foundation for this consideration and the basis for the fourth chapter herein, that which contemplates the varying perspectives offered during the conference in light of a concise overview of maneuver history (Chapter 2) and discussion of how maneuver is conceived of today (Chapter 3). Chapter 4 provides arguments for both retaining maneuver in keeping with that conceptualization and altering it considerably; it then offers readers an analysis regarding the implications of each course of action. This document is therefore a consideration of maneuver in light of recent events and deliberations on the subject during the two days at Latrun rather than a typical conference proceedings.

The objective in bringing together the nearly 200 attendees at Latrun was "to provide a forum for information exchange and discussion regarding the wide range of maneuver challenges likely to confront the military over the next generation."⁷ The organizers of the event went on to establish the background for the forum: "The cold war era is no longer here but in many cases the military doctrine and formations are deeply rooted there. The urbanization process, the well organized guerilla warfare confrontation with conventional forces, the media involvement and many other developments drove us to look for

⁶ Giulio Douhet, *The Command of the Air*, Trans. Dino Ferrari, Washington, D.C.: Office of Air Force History, 1983, 16.

⁷ "Land Maneuver in the 21st Century" conference announcement, The Armored Corps Association, Latrun, Israel, undated, p. 2.

maneuver of different nature.”⁸ Organized by the Land Warfare Forum of the Israeli Armored Corps Association (IACA) in collaboration with Ground Forces Command (GFC) of the Israel Defense Forces (IDF), its sponsors were

- The Irregular Warfare Center, U.S. Joint Forces Command (JFCOM)
- Elbit Systems
- Israel Aircraft Industry (IAI)
- Rafael
- NIMDA

Speakers and their presentation titles appear in the agenda at Appendix A. Appendix B contains presenter biographical sketches as available.

⁸ “Land Maneuver in the 21st Century” conference announcement, The Armored Corps Association, Latrun, Israel, undated, p. 2.

2. A Concise History of a Broad Topic: Maneuver

Fire without movement is indecisive. Exposed movement without fire is disastrous. There must be effective fire combined with skillful movement.⁹

Infantry in Battle, 1939

General Avidor, Director of the Land Warfare Forum, opened the 2008 conference with the intriguing comment, “Maneuver ranges from the movement of a single vehicle to gain advantage to far more sophisticated concepts as outlined by Liddell-Hart and entire doctrines on the topic.”¹⁰ The range is broad, and when one looks back into history it becomes apparent that there is also great depth to the concept of maneuver. John Churchill, later Duke of Marlborough, was a master of maneuver as it was envisioned at the dawning of the 18th century. Though perhaps known best for his stunning victories at Blenheim (1704), Ramillies (1706), Oudenarde (1708), and Malplaquet (1709), battles of real consequence were a rarity during his tenure as head of the coalition that opposed the forces of Louis XIV from 1702-1711. His was an era where battle and its related costs in men and materiel were thought better avoided. “Maneuver” thus was for many thought of in terms of operations other than battle, those in which a general would turn an enemy out of its defenses or block its movement through movement and threat of combat. Often a stunning advantage was gained without more than an exchange of artillery fire, and sometimes with no shots fired at all. Military theorists Carl von Clausewitz and Hans Delbrück both credited Frederick the Great of Prussia with talents exceeding those of his contemporaries due largely to the king’s willingness to fight, to understand the complementary, nay inseparable, nature of maneuver and battle in bringing about lasting decisions. Paraphrasing Clausewitz, author Raymond Aron described Frederick as tending “consistently towards the pole of battle...whereas his contemporaries incline towards the opposite pole of manoeuvre.”¹¹ Frederick can therefore in a sense be seen as a bridge between the maneuver (vice battle) operations of the era before Napoleon and that of the Frenchman’s major battles in decades not long after Frederick’s departure from the scene.

⁹ *Infantry in Battle*, Washington, D.C.: The Infantry Journal Incorporated, 1939 (reprinted by the United States Army Command and General Staff College), p. 223.

¹⁰ Comments made by Gideon Avidor (BG, IDF, retired) at the opening of “Land Maneuver in the 21st Century” Land Warfare Forum conference, Latrun, Israel, September 16, 2008.

¹¹ Raymond Aron, *Clausewitz: Philosopher of War*, NY: Touchstone, 1986, p. 72-73.

Even with this very brief historical sojourn we see conceptions of maneuver at variance with those in keeping with the definition as it stands now. Maneuver and battle were in the 18th century seen largely as separate extremes: Marlborough relied on maneuver and occasional combat to achieve his objectives as contrasted to Napoleon who sought to employ maneuver to bring his foe to battle. Today we do not attempt to separate the pair: Napoleon is considered a master of both and the two are inextricably intertwined in military art. Thus Aron's comment that "Clausewitz appears hostile to manoeuvre" strikes a reader as counterintuitive until one realizes that he (Aron) refers to the Prussian's references to maneuver as an opposite pole to battle.¹²

Understanding the "pre-Frederick" concept of maneuver as one motivated by limiting the costs of war, it is straightforward to see how maneuver evolved to the state as many understand it today, i.e., one in which it has a foil other than battle: that of attrition. Union leaders in the American Civil War, at least those who had received instruction at West Point, were familiar with Napoleon and Baron Henri de Jomini, the latter of whose theories capitalized on the emperor's operations to present a formulation of war that much emphasized the gaining of advantage via movement against critical positions. Battle had its place, but the commander who best understood the mechanics of war would either find his maneuvers made it unnecessary or put him at such advantage that victory was all but assured. Little wonder that we see McClellan attempting to flank the Confederates via the Peninsular Campaign in southeast Virginia, or that in retrospect Lee and Jackson received acclaim as the conflict's great maneuver generals while Grant was to the less understanding a grinding butcher who won through sheer attrition (his brilliant Vicksburg campaign being among the successes ignored). One can see the influence of Jomini and Lee in the observation by Jackson's biographer G. F. R. Henderson as he wrote, "Manoeuvring, which has been described as the 'antidote to entrenchments,' is likely to be a conspicuous feature in all skilful tactical operations."¹³ This is the maneuver so admired today, that which the United States Marine Corps seeks through "maneuver warfare" and to which Douglas Macgregor refers when writing

The reader will recall that in *maneuver warfare*, the objective is to gain a positional advantage in time and space that places the enemy at such a disadvantage that he is compelled to surrender or be destroyed. This is in sharp contrast to *attrition warfare* in which the objective is to inflict more casualties and physical damage on the enemy than the enemy can afford to sustain.... Armed forces execute dominating maneuver when they successfully exploit technology, organization, training, and leadership to attain qualitatively superior fighting power as well as dramatic positional

¹² Raymond Aron, *Clausewitz: Philosopher of War*, NY: Touchstone, 1986, p. 46.

¹³ G. F. R. Henderson, *The Science of War: A Collection of Essay and Lectures, 1892-1903*, London: Longmans, Green and Company, 1905, p. 81.

advantages in time and space which the enemy's countermeasures cannot defeat.¹⁴

Just as the notion of maneuver and battle being separate rather than interdependent entities was fundamentally a theorists' construct, so too is that of maneuver and attrition being other than inseparable parts of the larger whole that is combat. William F. Owen condemns this artificial division, rightfully recognizing that when taken beyond its purpose as an explanatory tool it can become misleading:

The definitions...employed in making this distinction use the argument that "attrition" seeks to defeat an enemy by killing and destruction, whereas "manoeuvre" defeats by attacking those components without which the greater body of the enemy cannot fight, such as command and logistics.... The whole edifice of Manoeuvre Warfare rests on the idea that there are two competing forms of warfare, Manoeuvre and Attrition, one of which is skilled and the other [of] which is clumsy. This construct is false; it makes no sense to favour one form over the other. To do so is to limit available options by slavish adherence to means over ends. The idea that MW and Attrition are either separate styles or part of a spectrum does not stand up to deeper analysis. MW adherents have sought to prove them as opposing or differing styles; they are better explained as complementary. They are in no way distinct or alternative forms of warfare.¹⁵

We need not linger further here. Our look back into history was taken only to establish the foundation for where we are when it comes to maneuver in the dawning years of the 21st century, to understand how those attending the 2008 conference at Latrun conceived of this concept. We see that it has changed character considerably while retaining at least one vital characteristic. Once the counterpoint to battle, it has come to be thought of as the alternative to attrition warfare.¹⁶ Common to both, however, is the role it played as an alternative to a

¹⁴ Douglas A. Macgregor, *Breaking the Phalanx: A New Design for Landpower in the 21st Century*, Westport, CT: Praeger, 1997, p. 37. Emphasis in original.

¹⁵ William F. Owen, "The Manoeuvre Warfare Fraud," *The RUSI Journal* 153 (August 2008): 62-63.

¹⁶ General Avidor posits that this duality of maneuver and attrition (the latter of which he descriptively refers to as "grinding" in some cases) do not fully represent current conceptualizations of warfare. Perhaps in part motivated by Israel's reliance on fires during the Second Lebanon War, his is a trinity consisting of maneuver, attrition, and "crushing by fire," wherein aircraft, artillery, rockets, and other applications of force dominate and no direct contact between forces takes place. In General Avidor's words, "Crushing is conducted by an army against decision-making centers, communications centers, military establishments, and formations.... It might include massive attacks on the other side's population in order to exert pressure on decision-makers.... The Middle East has not known such warfare yet, [but] the expanded availability of non-conventional weapons increases chances of its application there." Just as maneuver and attrition are inherently intertwined in warfare, Avidor understands that crushing by fire is likewise an inextricable part of the whole even though it may on occasion be employed separately from attrition or maneuver approaches. For example, crushing fire might be applied to command posts or other assets behind enemy forces that are farther forward and against which the friendly force is maneuvering. Conversation between conference organizer and author of the Hebrew proceedings Brigadier General (IDF, retired) Gideon Avidor and Dr. Russell W. Glenn, Tel Aviv, Israel, November 8, 2008; Brigadier General (IDF, retired)

more costly, casualty intensive form of fighting. Little wonder that it has gained such an enviable following among all who contemplate participation in combat.

3. Maneuver at the Opening of the 21st Century

Generalship consists of being stronger at the decisive point – of having three men there to attack one.¹⁷

Infantry in Battle, 1939

Harkening back to the quotation at the opening of the first chapter, the maneuver of interest here is that in the fourth part of the definition shown, i.e., the “employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy in order to accomplish the mission.”¹⁸ This U.S. joint definition shares much in common with others in use. Looking at those in use by the other nations represented at the 2008 Latrun conference:

Israeli Definition: “The combination of force movement and fires with the objective of gaining an advantage over the enemy...”¹⁹

British Definition: “Manoeuvre is the means of concentrating force or the threat of force at decisive points to achieve surprise, shock and opportunities for exploitation. It has both spatial and temporal dimensions which can be exploited to keep the enemy off balance...”²⁰

Canadian Definition: “Employment of forces on the battlefield through movement in combination with fire, or fire potential, to achieve a position of advantage in respect to the enemy in order to accomplish the mission.”²¹

¹⁷ *Infantry in Battle*, Washington, D.C.: The Infantry Journal Incorporated, 1939 (reprinted by the United States Army Command and General Staff College), p. 68.

¹⁸ *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02, Washington, D.C.: Joint Chiefs of Staff, April 12, 2001 as amended through May 30, 2008, p. 324.

¹⁹ Russell W. Glenn, “Expanding the Concept of ‘Maneuver,’” Presentation given at the “Land Maneuver in the 21st Century” conference, Latrun, Israel, September 17, 2008. General Avidor provided this definition. An alternative definition taken from Giora Segal, *Strategic Assessment*, Feb. 2008 as appeared in Frank Hoffman, et. al., “Maneuver,” Presentation at the Israeli Defense Forces-U.S. Joint Forces Command Hybrid Threat Seminar War Game, Tel Aviv, Israel, November 9-13, 2008: “Ground maneuver is the movement of military forces *in relation to an enemy* in order to gain an advantage in both time and space.” Emphasis in original.

²⁰ Russell W. Glenn, “Expanding the Concept of ‘Maneuver,’” Presentation given at the “Land Maneuver in the 21st Century” conference, Latrun, Israel, September 17, 2008. The British definition is from *Land Operations*, British Army Doctrinal Publication, May 2005, Para 0306. David Russell-Parsons (Lt Col, British Army) email to Russell W. Glenn, Subject: Manoeuvre, August 5, 2008.

²¹ Russell W. Glenn, “Expanding the Concept of ‘Maneuver,’” Presentation given at the “Land Maneuver in the 21st Century” conference, Latrun, Israel, September 17, 2008. This Canadian definition is in keeping with Allied Administrative Publication 6, *NATO Glossary of Terms and Definitions*. David Lambert (LCol, Canadian Army) email to Russell W. Glenn, Subject: Definition, August 3, 2008.

We see in these current definitions maneuver as Clausewitz envisioned it (at least when he was not referring to it in pre-Napoleonic terms), which is perhaps a reflection of the Prussian's increased influence as a theorist during the latter years of the 20th century. Viewing the two fundamental components of combat (defense and offense), Clausewitz describes the first as "nothing more than a means by which to attack the enemy most advantageously, in a terrain chosen in advance, where we have drawn up our troops and have arranged things to our advantage"²² while, regarding its counterpart, "we should choose as object of our offensive that section of the enemy's army whose defeat will give us decisive advantages."²³

Bill Lind's writings on maneuver warfare were particularly popular with the United States Marine Corps some two decades ago. He provides an additional definition generally in keeping with those previous:

Maneuver...is organized movement of troops (forces) during combat operations in a new axis (line) and region for the purpose of taking an advantageous position relative to the enemy in order to deliver a decisive strike."²⁴

All of these perspectives regarding maneuver overtly or subtly share two characteristics no matter how they differ in detail: each views it as a means to gain advantage and the object over which that advantage is sought is the enemy. Most share a third: the implements to be employed in achieving the desired end involve the use of force or threat of its use, force generally being conceived of in terms of fires and movement.

Current doctrinal discussions do not limit themselves only to the standing definition of maneuver, however. The U.S. Army *Operations* manual, for example, provides two kinfolk for the basic concept:

- Operational maneuver: "Deploying land forces to positions that facilitate joint force offensive action. Operational-level offensives in counterinsurgency may be conducted to eliminate insurgent sanctuaries."²⁵ Further, "operational maneuver from strategic distance combines global force projection with maneuver against an operationally significant objective."²⁶ Aron notes that when writing of the "use of

²² Carl von Clausewitz, *Principles of War*, Harrisburg, PA: Military Service Publishing Company, 1952, p. 17.

²³ Carl von Clausewitz, *Principles of War*, Harrisburg, PA: Military Service Publishing Company, 1952, p. 24.

²⁴ Lind, William S., *Maneuver Warfare Handbook*, Boulder, CO: Westview Press, 1985, p. 4. The definition is quoted from Colonel F. D. Sverdlov, *Tactical Maneuver*, as appears in translated for in *Strategic Review*, (Summer 1983): 88.

²⁵ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. 3-8.

²⁶ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. 8-1.

combat with a view to the ultimate objective of the campaign,' [Clausewitz similarly] includes the movements of armies, their transfer, the choice of country, the distribution of forces, all that prepares for combat or battle in favourable conditions, all that will have the greatest influence on success.... It concerns the concentration of force at the opportune place and time."²⁷

- Offensive maneuver: "Seeks to place the enemy at a positional disadvantage. This allows friendly forces to mass overwhelming effects while defeating parts of the enemy force in detail before the enemy can escape or be reinforced."²⁸

Nor should we consider maneuver to be limited only to a single level of war. Historian Russell F. Weigley helps us to understand both why Jomini and Clausewitz might interpret Napoleon's use of maneuver somewhat differently and that the concept has application across the levels of war (tactical, operational, and strategic). We see in the following descriptions of two different events support for both Jomini's more mechanical interpretation of warfare and Clausewitz's appreciation for the movement of forces as a precursor to war's ultimate arbiter – battle. The first is tactical, the other strategic:

Bonaparte...was not yet twenty-seven.... He had built up a concentration of two to one against the Sardinians at Mondovi and by skillful maneuver was threatening their rear; the *manoeuvre sur les dessières* was to become another standard Napoleonic weapon, of tremendous psychological advantage beyond its threat to deliver physical ruin.

They also might form part of a scheme germinating in Bonaparte's brain to dispose of the remaining enemy, the great naval power, not by frontal assault but by a grand strategic *manoeuvre sur les dessières*: to exploit British naval deterioration by moving through Egypt to a now-indispensable pillar of British wealth and power, India.²⁹

Weigley brings us full circle, for in Napoleon's *manoeuvre sur les dessières* and maneuver as an alternative to attrition we see theories such as Basil Liddell-Hart's indirect approach as alluded to by Brigadier General Avidor in his remarks at the opening of the Land Maneuver in the 21st Century conference.

We can summarize this concise overview of how current students and practitioners of war tend to view maneuver as follows:

- It possesses two primary foci: (1) the gaining of advantage and (2) the enemy as the object of the advantage sought.

²⁷ Raymond Aron, *Clausewitz: Philosopher of War*, NY: Touchstone, 1986, p. 127-128.

²⁸ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. 3-9.

²⁹ From Russell F. Weigley, *The Age of Battles: The Quest for Decisive Warfare from Breitenfeld to Waterloo*, Bloomington, IN: Indiana University Press, 1991, p. 306 and 312, respectively.

- It seeks to do so through a combination of fires and movement, which some instead articulate as the use of force or threat of its use.
- It has application over much of the spectrum of conflict (e.g., conventional warfare and counterinsurgency)
- It is similarly of value at all three levels of war: the tactical, operational, and strategic.
- It has multiple kin that employ the concept in an expanded sense, do so with additional restrictions, or seek to further clarify its application to one or more parts of conflict today.

With our foundation well in place, we now turn to how those attending the 2008 Latrun conference perceived the topic of concern and consider the implications of the presentations, debates, and discussions that grappled with the question, “What is maneuver today?”

4. Debating the Character of 21-Century Maneuver

We must change our understanding of maneuver.³⁰

General Rupert Smith
British Army (Retired)

Attrition warfare has been tolerable during some parts of Israel's 60-year history. Crushing warfare has not proven a viable solution, and today's international expectations make its value a diminishing one. The only reasonable strategy remaining for the nation is one based on maneuver, and it is therefore maneuver on which we should now concentrate.³¹

Brigadier General Gideon Avidor
Israel Defense Forces (Retired)

The nature of conference discussions regarding maneuver in the 21st century ranged from a belief that it should remain as currently defined and understood to a notable expansion of its meaning and use. The arguments for both were well considered with all participants willing to concede the value – if not the desirability of accepting – their colleagues' views. We will open this final chapter by presenting these two viewpoints, later considering the implications of staying the course or significantly changing tack.

Staying the Course: Retaining the Essentiality of Maneuver as Defined

Civilians might find it remarkable that the Iraqi Army, which had fought for many years against the Iranians in the 1980s, collapsed so quickly. But it was all a matter of manoeuvre, of paralysing your enemy by speed and by decisiveness. The Iraqis were completely outmanoeuvred and outfought, cut off from their lines of communication and logistics.³²

³⁰ Rupert Smith (Maj Gen, British Army, retired), "The Utility of Force," Presentation at the "Land Maneuver in the 21st Century conference, Latrun, Israel, September 16, 2008.

³¹ Gideon Avidor (BG, IDF, retired), Notes on maneuver sent to Dr. Russell W. Glenn, November 17, 2008. See footnote 16 above for a brief discussion of General Avidor's "crushing warfare" or "crushing by fire" concept.

³² Mike Jackson, *Soldier: The Autobiography of General Sir Mike Jackson*, London: Corgi, 2008, 412.

Lieutenant General Mike Jackson
British Army (Retired)

It seems appropriate to begin a discussion of arguments for retaining the current understanding of maneuver with Colonel Clinton Ancker (U.S. Army, retired) given his position as the U.S. Army Training and Doctrine Command's Director of the Combined Arms Doctrine Directorate.³³ Colonel Ancker emphasized the complementary nature of current conceptualizations of maneuver, pointing to the importance of land maneuver in facilitating the effectiveness of air operations and the reverse – the utility of air maneuver in enhancing that on land during combat. He described how maneuver applies at various echelons, the base level entailing the employment of fire and movement in support of individual ground or air engagements while at those above expanding to encompass a larger construct of multiple engagements in time and space combining to achieve the synergistic effect of land and air operations. Ancker in turn provided insights regarding the horizontal character of maneuver, i.e., that pertaining to its application across the spectrum of conflict. Relevant at all echelons and to the three levels of war, he explained that while maneuver by nature entails the use of force (or threat of its use), it applies to counterinsurgencies and other stability operations in addition to conventional warfare. It can likewise span several lines of operation, occur entirely within a single line of operation, or take place within a given functional area or organization that is itself a component of a line of operation. In Figure 4.1, which depicts a notional contingency with four lines of operation, provides an example. Maneuver might support both the security and government capacity lines of operation via a mission to deny insurgents access to polling places during an election. Alternatively, it might be restricted to a single unit acting to eliminate a terrorist cell within the security line of operation.

³³ The material here is adapted from Clinton Ancker (Colonel, U.S. Army, retired), "The Evolution of Army Maneuver Doctrine," Presentation at the "Land Maneuver in the 21st Century" conference, Latrun, Israel, September 16, 2008. Quotations are taken from slides in this presentation unless otherwise footnoted.

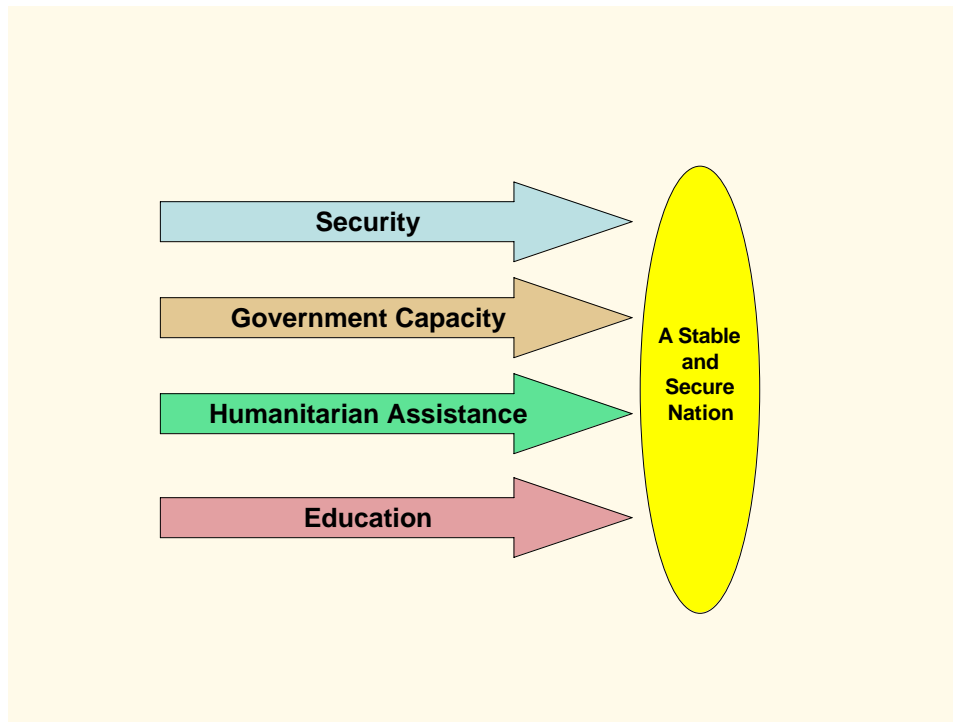


Figure 4.1: A Notional Example of Lines of Operation

Ancker further explained that maneuver should not be construed in an overly narrow sense. Its current definition is robust enough to encompass far more than only those capabilities that provide firepower or themselves conduct movement to gain advantage. Infantry, artillery, armor, attack aviation, fixed wing aircraft and other capabilities that directly influence an enemy are therefore not the only elements that make up maneuver. The engineer, air defender, communications provider, intelligence analyst, and others who facilitate movement and fires are also key parts. As already once cited when discussing maneuver as a principle of war, “maneuver is more than just fire and movement. It includes the dynamic, flexible application of all the elements of combat power.” Drawing from the same quotation, we remind ourselves – just as Colonel Ancker did his audience – that it also applies to more than conventional warfare alone: “In operations dominated by stability or civil support, commanders use maneuver to interpose Army forces between the population and threats to security and to concentrate capabilities through movement.”³⁴

This application of maneuver to stability and even domestic operations represents an evolution in the concept without altering its fundamental character. Whereas the “traditional” or World War II/Cold War leader would consider maneuver in terms of gaining a positional advantage over an enemy force, often conceived of in terms of seizing or retaining a piece of terrain, now “winning battles and engagements is important but alone may not be decisive.

³⁴ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, A-2.

Shaping civil conditions...is just as important to campaign success. In many joint operations, stability or civil support are often more important than the offense and defense."³⁵ Ancker put it even more pointedly, recognizing that the "population is [a] major, often decisive factor" during such operations. Thus maneuver in these cases must consider "how the force positions with respect to key populations" and "how maneuver impacts on the population." Succinctly, the object of maneuver was at one time by and large only force and terrain oriented. Now a planner or commander must instead incorporate concerns regarding how his organization's maneuver will influence populations, an indigenous government, and other relevant parties so as not to alienate individuals or groups vital to objective accomplishment. The basic nature of maneuver remains unchanged; how it is applied and the influences that impact the employment of fire and movement to gain an advantage over the enemy have expanded considerably given such context.

LTG Moshe Yaalon (IDF, retired) reminded the conference audience that politically motivated issues such as those alluded to by Colonel Ancker have long influenced maneuver even during conventional wars. He recalled that Israel Defense Forces leaders wanted to conduct a preemptive attack in 1973 but were denied that course of action by the country's political heads for fears that such it would cost the nation international legitimacy.³⁶ As we shall see later, Brigadier General Itay Brun similarly concluded that recent Israeli Supreme Court decisions and other governmental actions – often themselves influenced by evolving social pressures within the country – increasingly impact on the employment of IDF resources.³⁷ As with Colonel Ancker, Yaalon and Brun's observations suggest that while the fundamental character of maneuver may remain unchanged, the environment within which its practitioners operate has and continues to evolve. Those observations are vital when considering whether expanding the concept of maneuver is a question that merits contemplation at all in the case of the IDF. General Avidor points out that use of force – to include employing maneuver only in the currently defined sense – dominates the Israeli military's approach to its security challenges in Gaza, the West Bank, and Lebanon for at least two reasons. First, the other three countries represented at the conference tend to employ their militaries for other than reasons of national survival. It is tasks associated with external deployments to conduct stability operations that characterize their recent military undertakings. They must therefore be adept at not only war fighting, but also aid provision, building government capacity, and the many other tasks associated with these types of

³⁵ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, 3-2.

³⁶ Moshe Yaalon (LTG, IDF, retired), "Civil - Military Relations During Land Maneuver Operations," Presentation at the "Land Maneuver in the 21st Century" conference, Latrun, Israel, September 16, 2008.

³⁷ Itay Brun (BG, IDF), "Land Maneuver in the IDF: Operational Concept," Presentation at the "Land Warfare in the 21st Century" conference, Latrun, Israel, September 16, 2008.

operations. Israel, in contrast, suffers more intimate challenges to its national interests, survival among them. The IDF rarely deploys beyond the country's boundaries; even when it does the extent of those deployments is limited to the their immediate environs. Building government capacity and similar responsibilities do not fall within the purview of the armed forces; there is little expectation that IDF leaders look beyond the conduct of other than traditional military tasks. Given the immediate proximity of military activities, other government agencies would more appropriately assume the burden of activities outside a security line of operation. Second, and related to this first point, Avidor notes that Israel's government directs the IDF to restrict its activities to those related to the use of force or threat of use. That the military not take on the wider responsibilities inherent in stability operations is a political dictate, not a choice left to military decision-makers. The motivation to consider maneuver in a wider sense is thus further lacking.³⁸

Changing Tack: A Proposal for an Expanded Concept of Maneuver

Some capabilities required for conventional success—for example, the ability to execute operational maneuver and employ massive firepower—may be of limited utility or even counterproductive in COIN operations. Nonetheless, conventional forces beginning COIN operations often try to use these capabilities to defeat insurgents; they almost always fail.³⁹

Field Manual 3-24/Marine Corps Warfighting Publication 3-35.3, *Counterinsurgency*, 2006

The first of two presentations presenting alternatives to maneuver as currently defined was that by General Rupert Smith (British Army, retired). Drawing on premises forwarded in his book *The Utility of Force*, he described maneuver in the context of “industrial warfare” (analogous to conventional, force-on-force warfare) and “war amongst the people” (akin to counterinsurgencies and other contingencies that fall under the moniker of stability operations). General Smith in both instances likened conflict to a seesaw, the children's playground ride.⁴⁰ At once building on the understanding that warfare has attritional and

³⁸ Conversation between conference organizer and author of the Hebrew proceedings Brigadier General (IDF, retired) Gideon Avidor and Dr. Russell W. Glenn, Tel Aviv, Israel, November 8, 2008.

³⁹ Field Manual 3-24/Marine Corp Warfighting Publication 3-35.5, *Counterinsurgency*, Washington, D.C.: Headquarters, Department of the Army, December 2006, p. ix.

⁴⁰ Material in this paragraph is drawn from Rupert Smith (Maj Gen, British Army, retired), “The Utility of Force,” Presentation at the “Land Maneuver in the 21st Century conference, Latrun, Israel, September 16, 2008; and Rupert Smith (General, British Army, retired), telephone conversation with Dr. Russell W. Glenn, November 2, 2008.

maneuver components as discussed previously – ones he recognizes as ever intertwined – Smith posits that there are two ways in which a force can gain advantage. One, represented by the vertical arrows at either end of the lever in Figure 4.2, involves massing forces (at the tactical level) or national capabilities (at the operational or strategic levels) such that the end of the lever is weighted more heavily than that of the foe. This represents the attritional character of conflict in which a clash of relative firepower is the primary arbitrator: weight of resources allows the concentration of assets to provide firepower that exceeds an enemy's. The second way of gaining advantage involves pulling the lever in one's own direction, thereby lengthening the "friendly" end and providing increased leverage. This is done through skillful application of the art of war, employment of technological advantage, superior leadership, and other means to facilitate obtaining benefit during the application of the firepower available. (General Smith considers firepower as the ultimate determinant on the battlefield, movement being a facilitator that allows bringing firepower to bear. He therefore speaks of firepower alone with the understanding that movement of the resources employed to deliver it is inherently understood.)

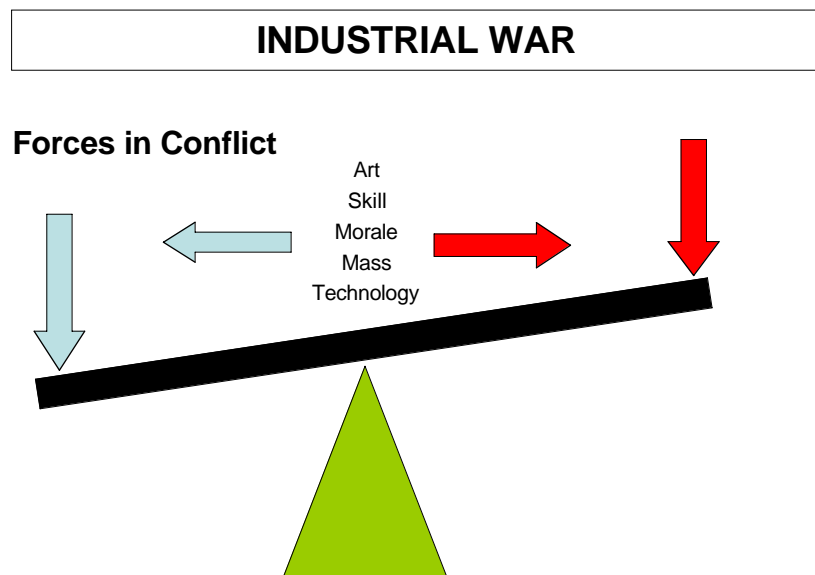


Figure 4.2: Gaining Advantage During Industrial War

Maneuver in conventional (industrial) warfare is therefore a means of gaining advantage employed in conjunction with attritional means. This is in keeping with maneuver in the sense of the current definition. However, in conflicts Smith calls “war amongst the people,” those involving more than conventional forces alone in opposition or in which conventional forces are not in competition with each other at all (such as we see in many contingencies at the beginning of the 21st century), success involves more than overcoming an adversary via massing firepower at the appropriate place and time. Concentration of firepower may very well still have a role, but it is complemented by other means. Figure 4.3 depicts this very different form of conflict. Here conventional force is a facilitator; firepower acts not directly on the lever to gain advantage, but rather it serves to move the fulcrum below the lever such that the friendly force end lengthens. Maneuver in the sense of the current definition (i.e., that of gaining advantage over an enemy through fires and movement) takes place here.

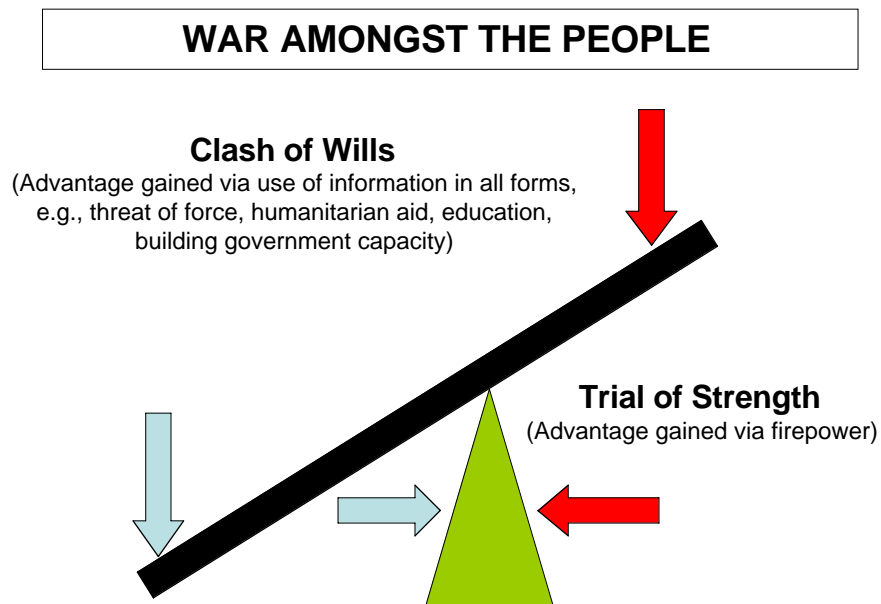


Figure 4.3: Gaining Advantage During War Amongst the People

But this below-the-lever activity (what General Smith calls the “trial of strength”) is only one component of maneuver during war amongst the people. That above

is where we see the introduction of an expanded concept for maneuver. Here – in the “clash of wills” – it is information in the broadest sense that is the implement for securing advantage. This clash of wills is a struggle seeking to change the intentions of relevant populations (and, to the extent feasible, components of the enemy force as well). Whether information is in the form of threatened use of firepower, educating voters, psychological operations, humanitarian aid, building government capacity, or any of its other myriad characters, it is above the lever in Figure 4.3 that agencies seek not to bring weight to bear but rather want to maximize the influence gained through the application of information in all its forms. The military is very likely in a supporting role as other organizations employ the various forms of information to gain advantage with respect to parties relevant to the accomplishment of friendly objectives. It is therefore crucial that those employing firepower against the enemy (i.e., those who are conducting operations to move the fulcrum beneath the lever) do not “maneuver against themselves,” to put it in Smith’s parlance. Defeat of the enemy force is desirable, but it must not occur at the cost of alienating the individuals and groups most important in war amongst the people: those of the people themselves.

General Smith summarized the differing approaches to the two forms of war as follows:

[In industrial war,] the currency of a fight is your firepower. In the end it’s won or lost by firepower. You can improve your position by maneuver, but in the end [it’s firepower that] wins it.... [During war amongst the people,] the currency of changing people’s minds is information. Now this may be imparted by shots being fired overhead or the appearance of a large mass of arms and soldiers at the end of the road. It is received as information. It they pay attention to it in that form, their intentions change. It may be transmitted through the media or all sorts of other things as well, but the point about it is that you change someone’s mind with information.

Smith thus sees gaining advantage in today’s environment as a combination of firepower (as in conventional war) and employing information to gain advantage by changing the intentions of relevant parties. His is thus a broader form of maneuver than that as currently defined for he (1) includes the many forms of information as means to gain advantage rather than accepting that fires

and movement alone serve that purpose, and (2) that advantage is sought in terms of more than the enemy alone.

A second Latrun speaker also called for broadening our understanding of maneuver. Dr. Russell W. Glenn drew on a 2005 U.S. Joint Forces Command-Israel Defense Forces conference held Norfolk, Virginia during which attendees built on an Israeli proposal to expand the definition of maneuver in light of security challenges faced by the two nations. The premise was that a government should consider the full range of capabilities available, both military and nonmilitary, when undertaking an operation. The resulting definition for maneuver (referred to as “operational maneuver” in the proceedings for the event, not to be confused with the definition of the term as introduced in Chapter 3) was “deploying campaign resources (of all elements of national power and all forms of combat power) in time and space to achieve specified objectives.”⁴¹ The most notable departure from the doctrinal definition of maneuver was the expansion of the capabilities available for use, i.e., the employment of “campaign resources,” to include “all elements of national power and all forms of combat power” rather than only “movement in combination with fires.” The definition also drifted away from the important distinction of using the assets to gain advantage, instead addressing only the achievement of “specified objectives.”

Dr. Glenn similarly argued that maneuver in its currently defined form is inadequate to the task of meeting today’s operational demands. While the traditional concept still undoubtedly has a role, (1) it is also necessary to gain advantage with respect to relevant parties other than the enemy, and (2) do so employing more than fires and movement. Glenn argued that failing to consider maneuver in other than only a fires and movement context could in fact hinder or even prevent the attainment of objectives, for the current definition does not provide for applying the well understood concept to scenarios other than those involving combat.

Glenn's proposed alternative does not seek to discount the role of maneuver as currently defined. The employment of fires and movement to gain an advantage with respect to the enemy has a role in modern conflict. His argument instead capitalizes on something both Colonel Ancker and General Smith posit: there are additional assets to employ (e.g., Smith's information) and other parties over which to gain an advantage (both Ancker's and General Smith's population, or at least elements thereof). Modern military operations rarely involve only two primary contestants; there are a number of other actors that influence a conflict as well. During such contests, stability operations in particular, armed forces may be in a supporting rather than lead role given that objectives are such that they require the orchestration of all resources, not simply those military (a condition also recognized by Smith, as we have read). The Australian Army's Lieutenant Colonel Mick Mumford provided a model that helps to describe such situations via a simple graphic depicting counterinsurgent activities in terms of grievances and the costs of continued resistance to counterinsurgent efforts.⁴² (See Figure 4.4.)

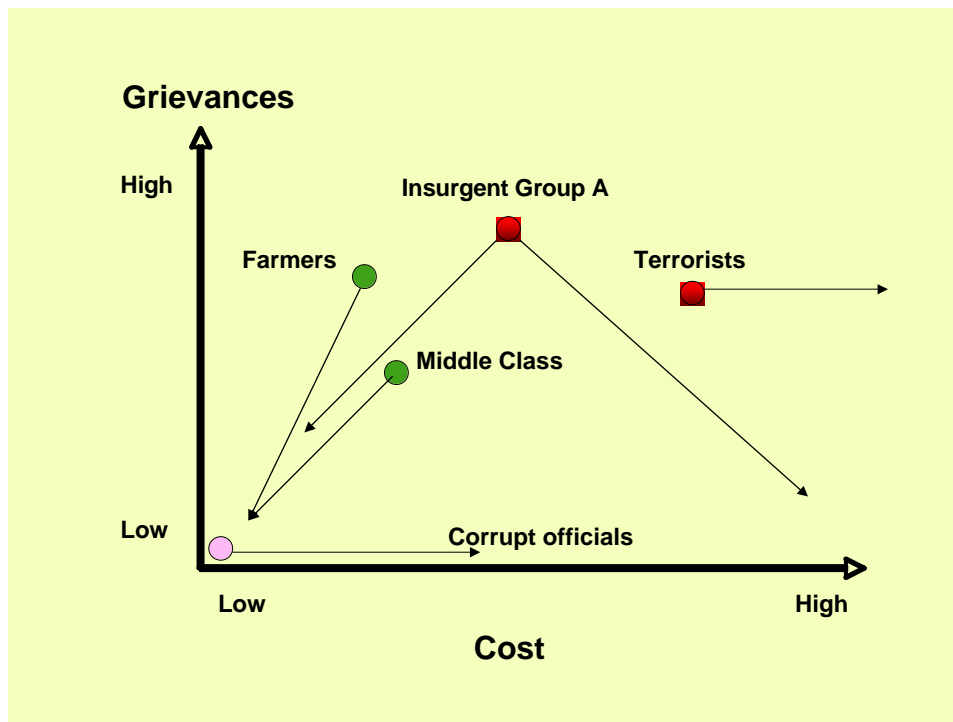


Figure 4.4: Grievances Versus Costs – A Forum for Expanded Maneuver

⁴¹ Russell W. Glenn, *Considering Asymmetric Urban Confrontations: A Summary of the 2005 U.S. Joint Forces Command–Israeli Defense Force Urban Operations Conference*, Santa Monica, CA: RAND, 2006, 23. This document is not available to the general public.

⁴² Mick Mumford (LTCOL, Australian Army) interview with Dr. Russell W. Glenn, Holsworthy Barracks, Australia, March 2, 2007. Figure 4.4 is adapted from one sketched by LTCOL Mumford during the interview.

In Mumford's model, capabilities are brought to bear in order to influence selected individuals or groups by reducing their grievances and, if necessary, increasing the cost of resisting counterinsurgent initiatives. Advantage is gained via the application of resources that aid in conducting these two processes. The example in Figure 4.4 involves five groups of interest in a notional insurgency. The first is the nation's farmers, a largely neutral group that tends to favor neither the insurgent nor counterinsurgent but whose members have significant grievances regarding a lack of land ownership and other matters. The desire of the counterinsurgent in this case is not to punish, but rather to address these grievances. The counterinsurgent addresses these complementary goals via land reform, subsidies, education, provision of farming implements, and other incentives, all while protecting the farmers from insurgent coercion and violence. He may at the same time reduce the cost of not cooperating with the counterinsurgent, understanding that coercion by the insurgent sometimes forces the farmer to provide resources to the enemy or otherwise not cooperate with counterinsurgent initiatives. Counterinsurgent ends are thereby supported via gaining an advantage over the insurgent in the struggle for influence in the farmer community. Another by and large neutral segment of the population, the middle class, has significant concerns regarding corruption and their lack of representation in government. Here voter education, the promotion of political parties, and the development and enforcement of anti-corruption legislation are resources of potential use in lowering outstanding grievances and putting those corrupt leaders at a disadvantage via exposing their lack of responsibility to those who help to elect them. Addressing corruption also obviously serves to address the problem of corrupt bureaucrats, our third group. These individuals live well due to their graft and thus have few grievances, as is shown by their being near the origin of Figure 4.4. As members of government, they also rarely are held to account for their unethical activities. Gaining an advantage in this case – perhaps with respect to less corrupt officials or those segments of the population suffering at the hands of the corrupt – might involve training lawyers and judges and encouraging less unscrupulous members of the indigenous government to conduct an anti-corruption campaign.

Our final two exemplary groups fit in the category of threat. One, terrorists, could include members who are incorrigible and will not respond to overtures regardless of reasonable offers to reduce grievances. Immune to being influenced in this manner, maneuver in the sense of the standing definition may be the only alternative: they will have to be eliminated through the application of force. For those in the fifth group – insurgents – we show two arrows to remind us that organization members are a heterogeneous bunch (as, indeed, they are in all five of our notional groups). The wise leader will therefore not have a "one size fits all" policy. He or she will instead capitalize on advantages the heterogeneity offers. In the case of insurgents, this means that those surrendering and offering assistance in neutralizing their comrades might have grievances addressed through rewards, providing benefits for their families, or

other policies attending to issues of concern to the insurgent population as a whole. Those responding may suffer no costs at all; they may in fact reap benefits. The same initiatives will not equally influence all members of the insurgent group, however. Some will respond to the incentives only in part. Others will not respond at all. The right-hand arrow shows that in their case death, imprisonment, a life on the run, or other coercive measures await. Counterinsurgent advantages reaped in this case might include members of the local population more willingly providing intelligence to government officials as the insurgent threat lessens. Summarizing across the five groups, maneuver involves a wide spectrum of resources being brought to bear to influence both threat and other target groups in an effort to gain advantages that ultimately serve sought-after objectives.

This expanded concept for maneuver demands a definition. Retaining the fundamental elements of (1) employing capabilities to (2) gain advantage, the counter to staying the course is maneuver defined as “the employment of relevant resources to gain advantage with respect to selected individuals or groups in the service of achieving specified objectives.” As our examples show, these resources include more than fires and movement; further, they encompass assets other than those available to military units alone, to include providing money and educators to create a school system or improve local government. Maneuver as currently defined can be part of this new maneuver when called for. Maneuver may therefore involve direct action against an enemy and include lethal force. Gaining advantage might instead be indirect in character, as is the case when winning popular support results in improved intelligence for the counterinsurgent, thereby giving him a leg up on the foe. The advantage may not involve an enemy at all, at least not one as normally envisioned. Taking steps to enforce the rule of law by removing incompetent or corrupt officials provides a case in point. This would provide advantage to less unethical government representatives that in turn could bolster their support amongst the population, thereby building government legitimacy and helping to establish the conditions for the departure of an international counterinsurgency force.

Though the examples in the paragraphs above address gaining advantage with respect to or influencing only members of an indigenous population, maneuver in its expanded form also has potential application to components of regional and other populations.

Is an Expanded Concept of Maneuver Already Inherent in Existing Doctrine?⁴³

There are many forms of manoeuvre in war, some only of which take place upon the battlefield. There are manoeuvres in time, in diplomacy, in mechanics, in psychology; all of which are removed from the battlefield, but react often decisively upon it, and the object of all is to find easier ways, other than sheer slaughter, of achieving the main purpose.⁴⁴

Winston Churchill
The World Crisis

It might seem obvious that there is a need to employ more than military resources alone in the service of stability operation objectives. Yet it takes but little contemplation to realize this is not always realized. The Russian approach to conflict in Chechnya demonstrated an overweening use of force to the neglect of other-than-military means as an alternative to brutal suppression. But the truth remains that such cases are increasingly anomalies, at least in the Developed World. Most there recognize that counterinsurgencies and other stability operations require the employment of much more than fires and movement if objectives are to be achieved. Yet expanding what capabilities are brought to bear should not cause us to discard the fundamental component of maneuver that explains its value: that it serves to gain advantage, whether with respect to the enemy or in a broader context. Conversely, we should not reject out of hand the wider use of this valuable construct – applying resources toward the end of gaining advantage – by insisting on strict adherence to maneuver’s definition in terms only of fires and movement. This spurs two questions: “What have the nations of the Developed World done to capitalize on the understanding that all relevant capabilities ought to be brought to bear to gain advantage?” and “How do these approaches relate to the current and proposed expanded conceptualizations for maneuver?”

While there is some limited recognition in Israel that humanitarian aid and building government capacity have a role to play in resolving conflicts, this realization falls short of constituting a viable alternative to approaches dominated by a reliance on force. There is little doubt that the IDF is always the lead agency in day-to-day interactions with Palestinians in Gaza and the West Bank. The same is not true in the cases of the other nations represented at the Latrun land maneuver conference for reasons already once addressed. In the latter cases the recognition that the military is but one of many governmental sources of conflict resolution to be brought to bear has led to the development of

⁴³ The author thanks Colonel (USA, retired) Clint Ancker for suggesting an investigation of full spectrum operations in conjunction with the consideration of expanding what is meant by maneuver.

⁴⁴ Winston Churchill, *The World Crisis*, Volume 2, NY: Scribner's, 1923, p. 5. Thanks to Frank Hoffman to bringing this quotation to the author’s attention.

a “comprehensive approach/whole of government” perspective on operations (Canada), a “comprehensive approach” (United Kingdom), and U.S. “full spectrum operations” that encompass similar approaches.⁴⁵ More than benign theories, all three provide guidance for their nations’ current operations in Iraq, Afghanistan, and elsewhere. The application is imperfect to be sure; it takes time for bureaucracies to accept, promulgate, and find the means to support new ideas. Latrun speaker William Hansen’s observation that doctrinal change requires acceptance, institutionalization, nurturing, investment, wisdom, and judgment helps to explain the lag between acceptance and realization on the ground.⁴⁶ Yet current practice demonstrates that leaders from Canada, the United Kingdom, and United States accept the wisdom of expanding the role of other government agencies and – increasingly – also including organizations outside the government that have assets capable of abetting the common cause, groups such as nongovernmental organizations (NGOs), intergovernmental organizations (IGOs), commercial enterprises, and indigenous governments. Though different in detail and nuance, the three nations’ approaches are similar in sharing a vision of operations in which the military is not alone, one in which armed forces may not be in lead agency status if conditions so dictate. As our focus here is on maneuver and not these established and emerging doctrines, we will limit our discussion to U.S. full spectrum operations as the exemplary case.

Full spectrum operations are in part a counteraction to a threat reaction. The dominance of Developed Nations’ military capabilities that brought such stunning victories as those in 1967 and 1973 Israel, 1982 Falklands, 1989 Panama, and 1991 Persian Gulf are among those precipitating a response of avoidance by less technology and otherwise conventionally gifted threat entities. Speaking at the 2008 Latrun event, Major General Isaac Ben Israel (IDF, retired) concluded that the U.S. in 1991 relied primarily on maneuver to dominate Iraqi forces.⁴⁷ The lesson to outside observers was clear: confront these sophisticated armed forces on the conventional battlefield and defeat, perhaps catastrophic defeat, is assured. Not all threat leaders were perceptive enough to grasp the obvious, as renewed fighting in 2003 Iraq attested, but the more astute did react. Responses included employing conventional forces in a less-than-conventional manner (e.g., Serbia in Kosovo with its intermixing of tanks and other vehicles amongst

⁴⁵ In Canadian doctrine, the comprehensive approach (CA) is overarching, the whole of government (WoG) aspect a subset thereof. David Lambert kindly articulated the relationship for the author as follows: “CA uses all elements of power necessary to address all the systems in an environment that play a role in the crisis or issue at hand. Within that, Canada may apply multiple agencies from various elements working to a common purpose and ideally with a common effort. Hence, WoG is the [Canadian] portion of the Comprehensive Approach, [the latter of] which may of course include agencies from the UN, EU, etc.” David Lambert (LCol, Canadian Army) email to Russell W. Glenn, Subject: Draft of conference document, November 6, 2008.

⁴⁶ William Hansen, “The U.S. Army Experience: Lessons Learned and Their Implementation,” at the “Land Maneuver in the 21st Century” conference, Latrun, Israel, September 17, 2008.

⁴⁷ Isaac Ben Israel (MG, IDF, retired), “The Future of Maneuver in Light of Technological Advances,” Panel introduction to the “Land Maneuver in the 21st Century” conference, Latrun, Israel, September 17, 2008.

civilians) or an increased reliance on smaller, more dispersed units that sometimes also used populations for concealment and protection from enemy fire (Afghanistan in the 1980s, Chechnya a decade later, and operations in Afghanistan and Iraq today). The cases of Palestinian resistance over the past several years and fighting by Hezbollah in 2006 are of particular interest in this regard. They include avoidance of conventional battle other than at times and places of those organizations' choosing. Ben Israel adopted Brigadier General Itay Brun's description of Hezbollah's approach to fighting during the July and August 2006 conflict in southern Lebanon as a "disappearance strategy."⁴⁸ It is notable that both Hamas and Hezbollah have also relied on resources other than force to secure popular support, e.g., providing aid and services that indigenous governments would not or could not, thereby demonstrating that the insights behind full spectrum operations, the comprehensive approach, and whole of government initiatives are not found in the Developed World alone.

A full spectrum operation is defined as one to "seize, retain, and exploit the initiative and achieve decisive results through combinations of four elements: offense, defense, and stability or civil support operations."⁴⁹ Combining the four types of operations is done simultaneously rather than sequentially; the U.S. Army recognizes that "stability and civil support operations cannot be something that the Army conducts [only] in 'other than war' operations."⁵⁰ Army forces must address the civil situation directly and continuously, combining tactical tasks directed at noncombatants with tactical tasks directed against the enemy."⁵¹ As we have already noted, these are potentially more than intra-governmental operations alone:

Full spectrum operations involve continuous interaction between friendly forces and multiple groups in the operational area. In addition to enemy forces and the local populace, Soldiers deal with multinational partners, adversaries, civil authorities, business leaders, and other civilian agencies. This interaction is simple in concept but complex in application. For example, enemies and adversaries may consist of multiple competing elements. Civil authorities range from strategic-level leaders to local government officials to religious leaders. Populations may include people of differing tribes, ethnic groups, and nationalities.⁵²

⁴⁸ Isaac Ben Israel (MG, IDF, retired), "The Future of Maneuver in Light of Technological Advances," Panel introduction to the "Land Maneuver in the 21st Century" conference, Latrun, Israel, September 17, 2008.

⁴⁹ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. v.

⁵⁰ Only the U.S. Army is mentioned as at the time of writing full spectrum operations is formally only part of that service's doctrine. However, doctrine in the United States Marine Corps is very similar in character and the two services learn from and influence each other.

⁵¹ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. viii.

⁵² *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. 3-2.

Those describing full spectrum operations make a statement with which others penning similar concepts for the Canadians and British would be fully comfortable: “Winning battles and engagements is important but alone may not be decisive. Shaping civil conditions (in concert with civilian organizations, civil authorities, and multinational forces) is just as important to campaign success. In many joint operations, stability or civil support are often more important than the offense and defense.”⁵³

Full spectrum operations, currently the U.S. Army’s operating concept, therefore promotes employing a broad range of military and non-military capabilities in the service of desired ends, whether those ends are mission accomplishment, the gaining of advantage, or others. This is a significant change from the service’s esteemed AirLand Battle doctrine as it was introduced in the 1980s. That doctrine emphasized “the avoidance of attritional, mass on mass, linear warfare [to seek] quick and decisive victory with minimal losses through strategy, preparation, setting conditions for success, decisive operations, and force reconstitution.”⁵⁴ One can see full spectrum operations’ ancestors here, but only with respect to war fighting. The inclusion of other, non-military capabilities did not play a role of significance. Full spectrum operations, like whole of government and comprehensive approaches, constitute a new operational concept. Maneuver in the traditional sense of employing fires and movement to gain advantage is a component of them all. These new operating concepts thus seem to include all that an expanded definition of maneuver encompasses. As a consequence, it behooves us to investigate whether there is need to contemplate broadening the concept of maneuver or whether full spectrum operations and its Canadian and British partners preclude a need for such action.

The Limits of Full Spectrum Operations

The full spectrum operations operational concept provides overarching guidance for employing available assets. However, it is macro guidance in the sense that it offers a structure for designing and executing operations rather than detailing how to accomplish the tasks inherent in conducting those operations. Figure 4.5 illustrates the use of the four types of operations (offence, defense, stability, and civil support) as full spectrum operations doctrine envisions their use. (Note that stability operations – defined as “various military missions, tasks, and activities conducted outside the United States in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, provide essential governmental services, emergency infrastructure

⁵³ *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. 3-8.

⁵⁴ Glenn H. Takemoto, “Back Azimuth Check: A Look at Mongol Operational Warfare,” Fort Leavenworth, Kansas: School of Advanced Military Studies, http://cgsc.cdmhost.com/cdm4/item_viewer.php?CISOROOT=/p4013coll3&CISOPTR=1617&CISOBOLX=1&REC=8 (accessed October 30, 2008).

reconstruction, and humanitarian relief” – are only conducted internationally just as civil support operations are doctrinally limited to domestic U.S. contingencies, thus the division of Figure 4.5 into upper and lower parts.)⁵⁵ The relative size of the block labeled with each type of operation in Figure 4.5 phases reflects its relative importance during that phase.⁵⁶

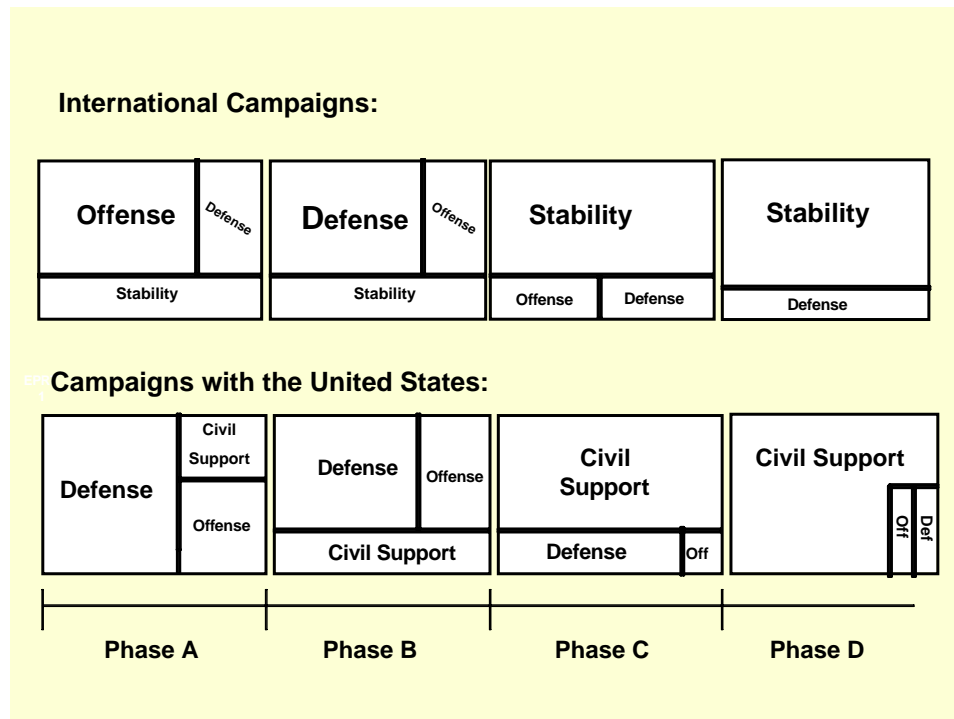


Figure 4.5: Graphical Depiction of the U.S. Army Full Spectrum Operations Operational Concept (A Notional Example)

The difficulty is that while the operating concept educates with respect to how to use the four types of operations and encourages the use of all available capabilities, it does not provide sufficient specificity regarding how to employ those capabilities within and across each of the four operation types. An expanded concept of maneuver would do so, explaining how to orchestrate the use of relevant assets to gain advantage in the service of objective accomplishment within the construct of full spectrum operations. Unfortunately, adopting an expanded maneuver concept is not without its drawbacks, and it is to these – as well as more closely considering such advantages– that we now turn.

⁵⁵ Joint Publication 1-02, Department of Defense Dictionary of *Military and Associated Terms*, Washington, D.C.: Joint Chiefs of Staff, April 12, 2001 as amended through October 16, 2006, 506.

⁵⁶ Quotations and other descriptive material in this paragraph are from *Field Manual 3.0, Operations*, Washington, D.C.: Headquarters, Department of the Army, February 2008, p. 3-1.

Implications of Introducing an Expanded Concept of Maneuver

The concept of maneuver continues regardless of the changing character of warfare.⁵⁷

Giora Segal
Colonel (IDF, Retired)

There is always an argument not to change existing doctrine. It takes years for new doctrine to make its way through an organization via articles, instruction in schools, introduction into training or operations, personal study, and otherwise. Changing too frequently confuses and ensures inconsistency. It also prevents refinement of a doctrine likely imperfect when introduced but improved during application. Yet doctrine must change if it is not to become useless, or worse, even harmful. It has often taken defeat in war for a nation to realize that its military methods were passé. The issue therefore becomes one of benefit. Does change bring more advantages than drawbacks?

There is no doubt that maneuver would become a less simple concept were we to adopt an expanded definition. Having to contemplate all relevant capabilities versus only fires and movement unquestionably complicates planning and executing operations. The range of additional capabilities would be considerable, especially at the operational and strategic levels. Major General Aharon Zeevi-Pharkash (IDF, retired) alluded to Diasporas as a means of gaining advantage; these outside influences could be part of a strategic planner's palette much as negotiating with local citizens' groups would augment a tactical commander's quiver.⁵⁸ But complexity is itself not a reason to reject change, and there are means to mitigate its negative effects. Just as military personnel now backwards plan from mission accomplishment, for example, so too could they begin at the point of having gained the advantage sought and design maneuvers back to the situation as they find it when planning begins.

Expanding the concept of maneuver opens its potential application to a wide variety of current activities. It also has value for historical analysis; expanding the concept of maneuver provides a tool for illuminating how various elements of conflict have been used to advantage in the past. Itay Brun cited Israel's 1967 wars as an exemplar of successful land maneuver relatively unhampered by other than military influences. In contrast, Brun pointed to the 1973 Yom Kippur War as a hallmark in the sense of denoting a quantum leap in Israeli perspectives

⁵⁷ Giora Segal (Colonel, IDF, retired), "Land Maneuver in IDF Doctrine," Presentation at the "Land Maneuver in the 21st Century" conference, Latrun, Israel, September 16, 2008.

⁵⁸ Aharon Zeevi-Pharkash (MG, IDF, retired), "The Nature of Asymmetric Warfare," Presentation at the "Land Maneuver in the 21st Century" conference, Latrun, Israel, September 16, 2008.

regarding security operations. Only in the aftermath of that war, Brun suggested, did Israelis – theretofore convinced that there was no alternative to war as a means of preserving the state – realize that peace with Egypt introduced an entirely new operational concept at the strategic level. In keeping with Churchill’s observation, diplomacy and negotiation had become components of maneuver in the strategic domain. We noted above that Brun also detected changes in the extent of social and judicial influence on recent security operations.⁵⁹ Just as some resisted negotiations with Egypt, so are there those who do not recognize these social and judicial forces as elements to be exploited rather than obstacles to overcome in the service of operational ends.

Expanding the concept of maneuver preserves its current meaning within a larger construct. Ground Forces Commander Major General Avi Mizrahi (IDF) recognized the value of Clausewitz’s example regarding seizure of territory as a bargaining chip in post-conflict negotiations, one demonstrating how the use of fires and movement at the tactical level joins negotiation to gain advantage at the strategic level of war.⁶⁰ An expanded concept encompasses maneuver in sense of that in the 1973 Sinai and amphibious invasions in 1950 Korea, the latter as described by speaker Colonel Don Boose (U.S. Army, retired) during the conference, while also broadening its reach to embrace the use of diplomacy and funding to support “The Awakening” that facilitated Sunni opposition to Al Qaeda-Iraq. We have seen additional potential applications of an expanded maneuver concept at the tactical level via the notional examples used in Mumford’s cost-grievances model. Taking advantage of maneuver’s dynamic character adds yet further benefit to expanding the concept. Just as a leader employing fires and movement must be ever ready to adapt actions to changing situations, those employing maneuver in a broader sense should always be prepared to modify a plan to capitalize on new opportunities or overcome unexpected obstacles.

The result seems a conundrum: both staying the course and changing tack by accepting an expanded concept of maneuver offer benefits. Ancker articulately argues that the inherent simplicity and wide acceptance of maneuver in its current form have value in training and operations that should not be sacrificed. He also suggests that full spectrum operations provide recognition that solutions to today’s conflicts must involve far more than what an armed forces alone can bring to bear. Yet we have seen that the army’s new operating concept provides insufficient guidance for those in the field attempting to apply capabilities in the service of gaining advantage. The expanded concept of maneuver addresses what is needed (all relevant capabilities) and for what reason (to gain advantage

⁵⁹ Itay Brun (BG, IDF), “Land Maneuver in the IDF: Operational Concept,” Presentation at the “Land Warfare in the 21st Century” conference, Latrun, Israel, September 16, 2008.

⁶⁰ Avi Mizrahi (Major General, IDF), “The Ground Forces Command Perspective on Maneuver,” Presentation at the “Land Maneuver in the 21st Century” conference, Latrun, Israel, September 17, 2008.

with respect to selected individuals or groups in the service of achieving specified objectives). Can we somehow secure the advantages of expanding what we mean by maneuver without loss of the benefits in keeping it as currently defined?

A Potential Solution to the Conundrum

The above problem exists for any given individual or organization only if the validity of both perspectives on maneuver are thought to have merit. There are otherwise two obvious courses available in resolving the debate: (1) Exclusively retain its current definition and reject calls for expansion, or (2) Accept the proffered redefined maneuver, that which is inclusive of and builds on the present concept.

A review of discussions in the previous pages offers a third solution. We noted that maneuver has kin in the forms of “operational maneuver” and “offensive maneuver.” While there is an attraction to – and obviously an argument can be made for – replacing the current definition of maneuver (“employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy in order to accomplish the mission”) with that proposed (“the application of relevant resources to gain advantage with respect to selected individuals or groups in the service of achieving specified objectives”), a compromise would be to retain the current definition unchanged and describe the expanded version as “full spectrum maneuver” (or “whole of government maneuver” or “comprehensive maneuver” as appropriate depending on the country’s doctrine involved). So doing preserves the elegance of maneuver as understood in current doctrine while offering a vehicle for employing that elegance more broadly. “Full spectrum maneuver” would provide guidance for how assets can be brought to bear in the service of full spectrum operations, whole of government undertakings, the comprehensive approach, or similar right-minded recognitions that national security operations are oft times too extensive for the military to confront alone.

In Conclusion, A Brief Look Ahead

The 2009 Latrun conference, third in the series, will link the efforts of the Israeli Armored Corps Association and IDF Ground Forces Command in an event scheduled for early September. Those interested in participating should contact the Director, Institute for Land Warfare Studies - Latrun, Brigadier General (Retired) Gideon Avidor, Tel. +972-52- 8409001, Fax. +972-8-9421079, email: avidor.gideon@gmail.com.

Appendix 1: Conference Agenda

Tuesday September 16th

Speaker	Schedule	Subject	Chairman
	Until 0900	Registration	
MG (Ret.) Chaim Erez - The IACA Chairman	0900 - 0915	Opening Remarks	
LTG (Ret.) Moshe Yaalon	0915 - 0945	Civil - Military Relations During Land Maneuver Operations	Morning Session: Maneuver at the Strategic Level Chairman: BG (Ret.) Gideon Avidor
MG (Ret.) Aharon Zeevi-Pharkash	0945 - 1015	The Nature of Asymmetric Warfare	
	1015 - 1030	Discussion	
	1030 - 1045	Break	
Col. (Ret.) Giora Segal, Head of Doctrinal Development Laboratory	1045 - 1115	Land Maneuver in IDF Doctrine	
	1115 - 1130	Discussion	
Col. (Ret.) Benny Michalson	1130 - 1200	The Ground Force Perspective on Maneuver	Chairman: MG (Ret.) Amnon Reshef
BG Itay Brun, Commander, Dado Center	1200 - 1230	Land Maneuver in the IDF Operational Concept	
	1230 - 1245	Discussion	
	1245 - 1300	Break	
BG (Ret.) Avraham Bar David	1300 - 1330	Fire Support and Maneuver	
	1330 - 1345	Discussion	
	1345 - 1445	Lunch	
Col. (Ret.) Clinton Ancker, US Army Combined Arms Center	1445 - 1515	Land and Air Operations the U.S. Army	Afternoon Session: Maneuver from the Operational Aspect
	1515 - 1530	Discussion	

Speaker	Schedule	Subject	Chairman
Col. (Ret.) Don Boose, US Army War College	1530 - 1600	U.S. Amphibious Operations	Chairman: MG (Ret.) Nati Sharoni
	1600 - 1615	Discussion	
	1615 - 1630	Break	
Gen Rupert Smith, UK Armed Forces	1615 - 1710	The Utility of Force	
	1710 - 1745	Discussion	

Wednesday – September 17th

Speaker	Schedule	Subject	Chairman
	Until 0830	Registration	
MG (Ret.) Prof. Isaac Ben Israel	0900 - 0920	Panel Introduction: The Future of Maneuver in Light of Technological Advances	Morning Session: Technology and Maneuver Chairman: MG (Ret.) Menachem Meron
MG (Ret.) Yair Nave	0920 - 0940	Operational Background	
Mr. Nisim Hadas - IAI - ELTA	0940 - 1000	Technological Support for Intelligence Gathering	
Col. (Ret.) Opher Doron, IAI - Mabat	1000 - 1020	Technology and Fire Support	
	1020 - 1040	Break	
BG (Ret.) Nachman Levinger, Elbit	1040 - 1100	Technology Support for Mobility	
Col. Yitzhak Elimelech – Head of Land R&D Division	1100 - 1120	Technology Support for Survivability	
MG (Ret.) Prof. Isaac Ben Israel	1120 - 1140	Panel Summary	
Dr. Russell Glenn (RAND)	1140 - 1215	An Expanded Concept of Maneuver	Chairman: BG (Ret.) Gideon Avidor
	1215 - 1230	Discussion	
	1230 - 1330	Lunch	

Speaker	Schedule	Subject	Chairman
BG Nimrod Sheffer - Head Of Operations - IAF	1300 - 1400	The Role of the Air Force During Land Maneuver	Afternoon Session: Sum Up Chairman: MG (Ret.) Chaim Erez
	1400 - 1415	Discussion	
MG Avi Mizrahi, GFC Commander	1415 - 1445	The Ground Forces Command Perspective on Maneuver	
	1445 - 1500	Discussion	
	1500 - 1515	Break	
MG (Ret) Amiram Levin	1515 - 1600	Land Maneuver Today	
Mr. William Hansen	1600 - 1630	The U.S. Army Experience: Lessons Learned and Their Implementation	
	1630 - 1645	Discussion	
	1645 - 1700	Break	
MG (Ret.) Chaim Erez	1730 - 1745	Concluding Remarks	

Appendix 2: Speaker Biographical Sketches (as available)

Colonel (Retired) Clinton J. Ancker III



Clinton Ancker graduated from the United States Military Academy (USMA) in 1970 and was commissioned as a second lieutenant of armor. After attending the Armor Officer Basic Course at Fort Knox, Kentucky, he served as a platoon leader in L Troop, 3/3 Armored Cavalry Regiment (ACR), Ft. Lewis, Washington. Posted to Vietnam, he served as platoon leader and troop executive officer with G Troop, 2/11 ACR, rifle platoon leader with the 1-12 CAV (Airmobile), and as a training officer and PBO (property book officer) with Special Forces.

After Vietnam, he was the aide-de-camp for the Superintendent, USMA (United States Military Academy). He then returned to the 11th ACR in West Germany where he served as a squadron border officer, squadron maintenance officer, and the commander of F Troop, 2/11 ACR. Following attendance at the Field Artillery Officer Advanced Course, Fort Sill, Oklahoma, he attended graduate school at Stanford University, California, receiving Master of Arts degrees in Modern European History and Political Science. He then became an instructor with the Department of History, USMA. Following attendance at the U.S. Army Command and General Staff College at Fort Leavenworth, Kansas, then Major Ancker returned to Germany where he served as the squadron operations officer, 3/11 ACR; the regimental operations officer, 11th ACR; and Commander of 3/11 ACR. Following his command, he became the G-3 of the 2nd Armored Division (Forward) also in Germany, and deployed with the unit to Operations

Desert Shield and Desert Storm. After the Gulf War he attended the Naval War College. He served as a special assistant to the Commander-in-Chief, U.S. Special Operations Command, MacDill AFB (Air Force Base). In August 1995, Colonel Ancker was assigned to the U.S. Army Command and General Staff College. After six months TDY (temporary duty) as the Chief of the Military Liaison Team to Albania and five years as the Director of the Combined Arms Doctrine Directorate, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas. COL Ancker retired on 30 June 2001. He is presently the Director of the Combined Arms Doctrine Directorate.

Colonel Ancker is a 1970 graduate of the United States Military Academy. He earned Masters degrees in Business Administration from Long Island University in 1974 and in Modern European History and Political Science from Stanford University in 1980. He has a fourth Masters degree in National Security Studies from the United States Naval War College. His military schooling includes Airborne, Ranger, and Pathfinder training.

Brigadier General (Retired) Avraham Bar David



President of Tamuz Systems Ltd.

President of IMCO Industries Ltd (public company)

President of Nir-Or Ltd (private company)

Director in H.L. Grinstein Ltd

Senior artillery consultant for Elbit, IAI, Soltam, Reshef and foreign companies.

CEO, Soltam Ltd

Bar David joined the IDF Artillery Corps in 1958 and later served as a battery commander, artillery battalion commander during the Six Days War (1967),

artillery commander for Northern Command during the 1973 war, the Chief Artillery Officer, deputy head of the GHQ Doctrine Division, and Assistant to the Minister of Defense for emergency services. He was the head of the 120mm mortars program for the U.S. Marine Corps and U.S. Army.

General Bar David's project work includes the development of artillery command and control systems for European armies and the IDF modernization of gun, rocket, and missile programs.

Major General (Retired) Professor Isaac Ben-Israel



Professor Isaac Ben-Israel (Major General, retired) was born in Tel Aviv in 1949. He is married to Inbal (nee Marcus) and has three sons.

He studied mathematics, physics and philosophy at Tel Aviv University, receiving his Ph.D. in 1988. He joined the IDF after graduating from high school (as an academic reservist) and served continuously in the IDF until his retirement (June 30, 2002). Upon retiring, he joined the faculty of Tel Aviv University as a professor.

During his service in the IAF, Isaac Ben-Israel held several posts in operations, intelligence and weapons development units. He headed the IAF Operations Research Section and the Research Division of IAF Intelligence, and was Head of Military R&D in the IDF and the Ministry of Defense (from the end of 1990 until September 1997). In January 1998 he was promoted to major general and appointed as Director of the Defense Research and Development Directorate in the Ministry of Defense.

In the course of his service, Isaac Ben-Israel received several awards, including the Israel Defense Award (in 1972 for developing an airborne weapon delivery system for the Phantom aircraft and in 2001 for a project introducing a new concept of the future battlefield) and the Israel Air Force Award (1976) for developing a C4 system. In 2002 he won the Singapore Defense Technology Distinguished Award for his contribution to the bilateral defense relations between Israel and Singapore.

Professor Ben-Israel has been a member of the advisory board of the Israel Space Agency (ISA) since 2002 and currently serves as chairman of ISA.

Prof. Isaac Ben-Israel served as a member of the board of directors of IAI (2000-2002). He currently is on the board of the Israel Corporation, a member of the R&D advisory board of the TEVA board of directors (since 2003), and a board member of several startup companies.

In the academic sphere, he is a board member of the Fisher Institute for Air and Space Strategic Studies (since 2000), a member of the advisory council of the Neaman Institute for Advanced Studies in Science and Technology at the Technion (since 2000), a member of the scientific committee of the Interdisciplinary Center for Technological Analysis and Forecasting at Tel-Aviv University (since 2003), and a member of the academic council of Afeka - Tel Aviv Academic College of Engineering.

In 2003 he founded RAY-TOP (Technology opportunities) Ltd., which advises the defense industry in Israel and abroad on technological and strategic issues.

Isaac Ben-Israel has written numerous papers on military and security issues. His book *Dialogues on Science and Military Intelligence* (Maarachot Press, 1989) won the Itzhak Sade Award for Military Literature. His book *The Philosophy of Military Intelligence* was published by the Broadcast University (1999) and has been translated into French (2004).

Colonel (Retired) Donald W. Boose, Jr.



Colonel (Retired) Donald W. Boose, Jr. has a degree in anthropology from Cornell University, a master's degree in Asian Studies from the University of Hawaii, and is a graduate of the U.S. Army Command and General Staff College and the U.S. Army War College. Much of his 30-years military career involved Northeast Asian security issues, including service as the Korea politico-military planner for the Joint Chiefs of Staff; six years with the United Nations Command Component of the Military Armistice Commission in Korea; three years as the Assistant Chief of Staff for Strategic Plans and Policy (J-5) for U.S. Forces Japan; and a final military assignment as Director of Asian Studies at the U.S. Army War College, where he continues to teach as a contract faculty instructor. He is the author of *Over the Beach: Army Amphibious Operations in the Korean War* (forthcoming) and *U.S. Army Forces in the Korean War*. He was also the co-author of *Great Battles of Antiquity*, the co-editor of *Recalibrating the U.S.-Republic of Korea Alliance*, a major contributor to the *Encyclopedia of the Korean War*, and the author of articles, book chapters, and reviews on the Korean War and East Asia security matters.

Brigadier General Itay Brun

Brig. Gen. Itay Brun has served in the IDF as the head of Dado Center for Interdisciplinary Military Studies since September 2006.

Up to that time, he served as the Senior Assistant for Analysis to the head of the Analysis Division in the Israeli Defense Intelligence (2005-2006). There, he was responsible, *inter alia*, for the political-strategic assessment and analysis methodology. Between the years 2001-2004, he served as the head of the Analysis Department in the Israeli Air Force Intelligence.

Itay is a graduate of the IDF Command and Staff College. His academic background integrates law studies and political science. He earned his LL.B (law studies) from Haifa University (*cum laude*) and he also has a Masters in Political Science (Diplomacy and Security Studies) from Tel-Aviv University (*cum laude*). During the years 1995-1996 he served as an articulated clerk to the legal advisor of the Israeli MOD and was admitted to the Israeli bar in 1996.

Itay has published various articles on intelligence and air power issues in recent years. He was awarded the IDF Chief of Staff's prize for military writing (2000) for his article "Asymmetric Warfare."

Itay is 43 years old. He is married to Dr. Iris Rabinovich-Brun, a judge. They have two children: a son, Uri (aged 10), and a daughter, Ayelet (aged 6). The Brun family lives in Giv'atayim, near Tel-Aviv.

Opher Doron

Col. (Ret.) Opher Doron served in the Israeli Navy until 2002, to include command of a missile boat squadron and in the R&D Division. His last assignment was the Head of the Navy R&D Division. He is the marketing manger of MABAT which is part of IAI and Division manager at NESS TSC.

Major General (Retired) Chaim Erez



Born in 1935, immigrated to Israel in 1943.

Joined the IDF in 1954 and retired from it in 1987.

His main appointments in the IDF included command postings from platoon leader to major general assignments. His last tours of duty included service as Southern Command Commander and Logistics Division Commander at IDF GHQ.

He was CEO of Israel Chemicals for 8 years after retirement as well as the Director of the Dead Sea Company, the Bromide Company, Rotem, and Desalinization Company.

He is the director of the Israeli Armored Corps Association, a non-profit organization.

He received a BA in History, BA in political science, and studied public management in London School of Economics.

Dr. Russell W. Glenn



Dr. Russell W. Glenn is a 1975 graduate of the United States Military Academy, West Point, NY. He was commissioned in the U.S. Army and served in the United States, Republic of Korea, Germany, the United Kingdom, and Southwest Asia during Operations Desert Shield and Desert Storm. He has been a senior analyst with the RAND Corporation since his retirement from the armed services in 1997. Past and current research includes work on urban operations, counterinsurgency, nonlethal capabilities, and information operations. He has appeared as a subject matter expert on MSNBC, CNN, and the History Channel and has been cited by *The New York Times*, *Los Angeles Times*, *the Economist*, *Wired*, *Science*, the Associated Press, and other national and international media organizations. Publications include over 50 books and reports in addition to some 20 articles.

Dr. Glenn has a Bachelor of Science degree from the United States Military Academy. His Masters degrees are from the University of Southern California (MS, Systems Management), Stanford University (MS, Civil Engineering and MS, Operations Research), and the School of Advanced Military Studies (Master of Military Art and Science). He earned his Ph.D. in American history from the University of Kansas with secondary fields of military history and political science. His military education includes Airborne, Ranger, and Pathfinder schools.

Nisim Hadas



Born 1953, Nisim Hadas graduated with honors from the Technion in Haifa (1974) with a BA in Electric Engineering and Physics. He has a MA in electrical engineering from the Technion in Haifa (1985).

After finishing his service in the IAF as an electronics officer, he joined Elta Systems in 1983 and carried out several projects as head of the fire control radar.

As Deputy Head of the Radar Management in Elta, he initiated various projects in naval reconnaissance and imaging systems for aircraft, helicopters, and UAVs. Hadas brought Elta to leadership in the world market in its field while head of its Radar Management Division.

As the manager of the Radar and Visual Intelligence factory, he expanded factory capability and led various projects in this field. In 2006 he was selected to become Elta Systems Ltd CEO, a daughter company of IAI Industry.

Mr. Hadas has won dozens awards for his contributions and is known as a worldwide expert in radar systems.

He is married and has 5 children and 10 grandchildren.

Major General (Retired) Yitzhak Harel



Born 1957, Yitzhak Harel joined the IDF engineering corps in 1975. After commissioning as an officer he moved to the armored corps where he held positions as:

- 1984 - 1986 Tank battalion commander in the 7th Brigade.
- 1986 - 1988 Tank battalion commander in the 460th Brigade.
- 1988 - 1991 Reserve tank brigade commander
- 1991 - 1993 Commander of the 7th Tank Brigade
- 1994 - 1995 Armored division commander (152nd)
- 1995 - 1997 Reserve armored division commander and HQ's Training Center Commander
- 1998 - 1999 162nd Armored Division commander
- 1999 - 2002 Assistant head of planning at the IDF GHQ.

2002 - 2003 Commander of the Northern Corps - promoted to MG.

2003 Head of the C4I division at the IDF GHQ.

2004 - 2006 Head of the IDF GHQ planning division.

Harel retired from the IDF in 2006 and in 2007 was appointed as CEO, Israel Railway.

He has a BA from the Haifa University and is married with two children.

Amnon Lipkin-Shahak



Mr. Amnon Lipkin-Shahak was born in Tel Aviv on March 18, 1944

Mr. Lipkin-Shahak graduated from the Military High School in Haifa in 1962 and then enlisted into the Israel Defense Forces, serving until July 1998. During his military term of duty, he held various command posts in the paratrooper and armored forces. As a major general he held the posts of Commander of the Central Command and Chief of Military Intelligence.

Lipkin-Shahak was appointed Deputy Chief of Staff of the IDF in March 1991 and was assigned by the late Prime Minister Itzhak Rabin to be head of the Israeli military team negotiating the Gaza-Jericho Accord with the Palestinians.

Lipkin-Shahak was promoted to the rank of lieutenant general on January 1, 1995 and appointed Chief of the General Staff of the Israel Defense Forces. His awards for peacetime and combat service include two Israeli citations for valor and an American Legion of Merit.

Amnon Lipkin-Shahak formed the Central Party that other senior political personalities later joined. He was appointed Minister of Tourism and Minister of Transport in 1991 and was a member of the Defense Cabinet.

Mr. Lipkin-Shahak resigned from all political activities and posts to enter into business after the February 2001 elections. He is now Chairman of the Board of Directors of the Tahal Group and since January 2005 has served as chairman of the executive committee for The Peres Center for Peace. He is married and has 5 children.

Colonel (Retired) Bennie Michalson

Born 1905 in Romania. Married with four children.

Academic education

1987 - BA in History with honors

1994 - MA in Military and Diplomatic History with honors

Military service

1969 - Joined the IDF

1973 - Tank company commander during the war (at the Golan Heights)

1976 - Commander of Terrain Analysis Officers Course

1977 - S2, 14th Tank Brigade (Sinai)

1981 - G2, 90th Armored Division

1982 – Commander, Intelligence Officers Advance Course

1984 - G2, 162nd Armored Division (Lebanon)

1986 – Commander, Advance Training Branch at the Military Intelligence School

1987 - Head of the IDF history department

Non-Military Professional Service

1993 - Manager of the IMI business intelligence section

1997 - Strategic consultant to the head of MOD Export Division for long term planning

1999 - Business consultant in defense and civil fields

Colonel Michalson has published over 70 articles and participated in the writing of a number of books, to include studies of the Iraqi Army during the 1973 war, logistics during the 1991 Persian Gulf War, and a 30th anniversary study of the Yom Kippur War for the Golda Meier Association. He was chief historian for two motion pictures, *The*

Struggle Over the Water and *The Struggle Over the Demilitarized Zones*. He is a member of the Israeli Association for Military History and historian for both the Israeli Armored Corps Association and World War II Jewish Warrior Museum.

Major General Avi Mizrahi



Avi Mizrahi was drafted into the IDF's Golani special forces in 1975 and later moved on to serve in the Armored Corps in which he went on to serve in a long line of positions, including:

- Commander of a tank company, tank battalion, the Armored Corps Officers' Course, and the "Ikvot Ha'Barzel" Armor Brigade.

Other positions held at a later stage include:

- Overseas representative in the U.S. for the IDF ground forces.
- Commander of the "Amud Ha'Esh" Brigade and commander of a course for company and battalion commanders.
- Commander of "Ga'ash" Division.

He served as head of IDF Logistics. MG Mizrahi is currently the Ground Forces Command Commander.

Major General Mizrahi is a graduate of the military academy of the Reali School in Haifa and has a BA in Business Administration and Computers from Pace University in New York. He is married and has three daughters.

General (Retired) Sir Rupert Smith



General Sir Rupert Smith retired from the British Army on 20 January 2002. His last appointment was Deputy Supreme Commander Allied Powers Europe, 1998-2001, covering NATO's Balkan operations, including the Kosovo bombing

and the development of the European Defense and Security Identity. Prior to that he was the General Officer Commanding in Northern Ireland, 1996-1998; Commander UNPROFOR in Sarajevo, 1995; Assistant Chief of Defense Staff for Operations, 1992-1994; and General Officer Commanding 1 (UK) Armored Division, 1990-1992, to include its service during the 1991 Gulf War. His book *The Utility of Force* was published in September 2005.

General Smith was born in 1943, educated at Haileybury & ISC (Imperial Service College) and the Royal Military Academy Sandhurst. He enlisted in the British Army in 1962 and was commissioned into The Parachute Regiment in 1964. He has served in East and South Africa, Arabia, the Caribbean, Europe, and Malaysia.

Lieutenant General (Retired) Moshe Yaalon

Lt. Gen. Moshe Yaalon is a distinguished fellow at the Shalem Center's Adelson Institute for Strategic Studies. Capping a distinguished career as an officer in the Israel Defense Forces (IDF), he served as the 17th IDF Chief of Staff from 2002 to 2005.

Drafted into the IDF in 1968, he served in the Nahal Paratroop Regiment. After fighting as a reservist in the 1973 Yom Kippur War, he returned to active duty and completed officer's training. He held several command positions in the IDF Paratroop Brigade and was wounded in combat at the end of the 1982 Lebanon War. He rose through the IDF ranks, culminating with his appointment as Chief of Staff on July 9, 2002.

From the end of 2005, Yaalon spent nine months in Washington, D.C. as a distinguished military fellow at the Washington Institute for Near East Policy. He is currently the chairman of Beit Morasha's Center for Jewish Identity and Culture and president of "Shekel," an organization which provides community services for people with disabilities.

He pursued advanced studies at the British Army Command and Staff college in Camberley, England and holds a bachelor's degree in political science from the

University of Haifa. Born in 1950 in Kiryat Haim, General Yaalon is married and has three children.

Major General (Retired) Aharon Zeevi-Pharkash



Born 1948 in Romania, Immigrated to Israel in 1962.

1966 Joined the IDF with the air force where he served in various intelligence positions.

1976 Moved to the Intelligence Corps where he served in various command positions.

He graduated from Brigade Commanders Course, Division Commanders Course and the Campaign Doctrine Course. He took part in the 1973 and 1982 wars and took part in many operations, to include that at Entebbe.

1990 - 1993 8200 Intelligence Collection Unit Commander, awarded by the Head of the Intelligence for his achievements

1993 - 1996 Assistant Head of the IDF Planning Division

1996 - 1996 Deputy of the IDF Planning Division

[1998](#) - 2001 Head of the IDF Logistics Division as a major general

2001 - 2006 Head of the Intelligence Corps

2006 Retired from the IDF

General Zeevi-Pharkash has a BA in Middle East studies from Tel-Aviv University, MA in Middle East history from Tel-Aviv University, and is a Harvard University Business Management graduate. He is married and has three children.

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