4

Innovation from Below

Because of the chronic shortage of senior officers, IDF junior officers, in spite of their young years and thin education, are routinely compelled to assume disproportionate responsibilities. Faced with complicated situations, when circumstances deny immediate guidance from older officers on the scene such as recalled reservists who happen to be there, junior officers must take, or better seize, the initiative by devising and executing their own schemes of action to avert sudden dangers or exploit fleeting opportunities. That requires the power of decision, and perhaps bold leadership, but such qualities only become relevant when the young officer has devised a plan of action in a situation that was perhaps never anticipated during training or in the guidance, if any, that came with the task.

It is true of course that any protracted conflict will feature recurring threats and recurring opportunities, which indeed become the subjects of training courses, even of prior planning.
But such is the crooked timber of humanity, and such is the infinite variety of circumstances in which any episode of conflict may unfold, that no prior analytical process can anticipate all the variables and uncertainties that will determine the best course of action in any given situation.

Therefore, in all modern military forces young officers are constantly enjoined to “seize the initiative,” in order to respond as advantageously as possible to unpredictable circumstances by formulating and executing a plan of action before the situation changes. In other words, even though every junior or mid-ranking officer exists within a hierarchical chain of command populated by more senior officers to whom obedience is due, any officer must be mentally prepared to think and act entirely on his or her own to react quickly enough to seize fleeting opportunities and avoid sudden dangers. Hence young US officers in training are told to prepare themselves to seize the initiative, and they hear the same from more senior officers upon their first commands.

There is an excellent reason for all this insistent preaching: in most forms of warfare, nothing is more power-enhancing than a superior propensity to take the initiative—it can overcome even gross inferiorities in numbers and firepower.[[1]](#endnote-1) It is a matter of relative velocities in action and reaction. Just as a fleet-footed boxer can knock out a much stronger opponent who keeps missing him with more powerful punches, an armed force whose officers down to the junior ranks are able and willing to take the initiative is much more agile. It can move, act, and react more swiftly, landing its own punches while sidestepping those of the enemy.

On a larger scale, that agility makes an armed force more capable of *maneuver* warfare, in which the aim is to minimize casualties while maximizing gains by deliberately circumventing enemy strengths and boring down to exploit detected enemy weaknesses. That is opposed to far more common *attrition* warfare, in which strength is frontally activated against enemy strength, in “grinding down” forms of combat in which victory goes to the side that can better withstand material losses and human casualties.

Because no enemy will willingly stand by while its strengths are circumvented and his weaknesses exploited, the contest is decided by the relative velocity of each side’s action, which in turn will depend—other things being equal—on the relative propensities of officers, up and down the chain of command, to take the initiative and act. More battles, indeed entire campaigns, have been decided by invisible and unmeasurable “initiative” imbalances than by material imbalances, as is certainly the case with Israel’s battles and campaigns.

Yet to teach, promote, encourage, and even demand the initiative is often useless; it may be counterproductive in armed forces whose officers are just not up to it, who are not willing to risk all on their own judgment of the situation. They will do nothing while awaiting orders because of fear of failure, thereby becoming useless as decision-makers, whereas they could have been even somewhat useful if sent orders from above that were simply to be obeyed. The reason is simple: the actual extent of the initiative that can truly be exercised by real-life officers in real-life armed forces depends on their *structure* above all. That is, it depends on what they really are, as opposed to what they say they are or what they would like to be, specifically in their command-and-control practices.

Nobody exceeds the US Army, Navy, Air Force, and Marines in stressing the importance of taking the initiative, especially in staff and command courses where field-grade officers are trained. At the same time, however, no armed forces in the world have better surveillance systems with which more senior officers can monitor their subordinates, and no armed forces in the world have better telecommunications with which more senior officers can send instructions to subordinates—indeed they are called “command and *control*” systems. Finally, the US armed forces are the most amply organized and structured, with the most elaborate headquarters, and the largest staffs at each echelon. For example, the G-3 or “Operations” section of a US Army divisional headquarters might have as many as twenty officers, as opposed to three or four in a German division, when they still existed in the 1980s.

Therein lies the problem: US officers are not idle fellows, content to draw their pay without exerting themselves overmuch. They have a very strong work ethic: if they are assigned to serve as staff officers in a divisional G-3, one can be sure they will work hard to generate an unending flow of detailed orders, warnings, and redirections for the brigade commands below them, within each of which is an equally hardworking G-3 officer who does the same for the battalions of that brigade. But in spite of all the good teaching and exhortations younger officers hear about taking the initiative, about sizing up a situation and acting swiftly instead of just reporting back and awaiting orders, the inevitable result of all those officers above them so well equipped to monitor them is to reduce the perceived freedom of action of more junior commanders, and thus their propensity to think up initiatives and execute them on their own responsibility.[[2]](#endnote-2)

It is useless to exhort officers to act boldly in devising and executing their own self-initiated plans when so little room is left by the constant interference of higher command echelons.[[3]](#endnote-3) In other words, even in the absence of the culturally mandated authoritarian rigidity of many armies, whereby junior officers are always on standby awaiting orders, this matter of the “initiative,” which is really of the greatest importance, does not depend on what is taught in military schools. Rather it depends on the very nature of the command echelons at each level: “thick” ones with lots of officers restrict initiative downward while “thin” ones with few officers force responsibility downward.

In the IDF seizing the initiative is not a matter of choice: understaffed command posts with understaffed headquarters above them can only issue broad, undetailed “mission orders” to subordinate commanders. Simply, they can only define *what* needs to be done: seize this, hold that, clear an area, adding a warning perhaps (landmines!), but they give no instructions on *how* the thing is to be done. That is left to the commander on the spot, who may be a very experienced 60-year-old retired general, recalled to command an entire reserve division mobilized for war, or a 21-year-old lieutenant in charge of a platoon.

What is missing is exactly what keeps headquarters staff busy in over-officered armies: the issuance of detailed orders for subordinate units that specify what is to be accomplished and *how* it is to be accomplished, perhaps with lots of tactical specifics, prescribed routes, recommended modes of action, detailed fire-support plans, supply provisions, and more, amounting to very detailed directives, as opposed to the few words of a typical “mission order.”[[4]](#endnote-4) The front commander Yigal Alon’s written order for the first ever, large-scale IDF operation (*Operation Yoav* in October 1948), an all-out counteroffensive to drive back the invading Egyptian army, consisted of a single page.

Unit commanders who receive such detailed directives but then encounter an unexpected obstacle when trying to implement them—which happens all the time in war because enemies must strive to block whatever is underway—cannot simply improvise their way around that obstacle. They must refer back to the headquarters who issued those detailed orders, describe the unforeseen obstacle, and ask for new orders. While awaiting word from above, the unit must pause. The overall effort thus becomes a series of interrupted actions – and each interruption provides breathing room to the enemy, allowing it to devise and execute countermoves. Soldiers serving in such armies quickly become used to a go, stop, go again, stop again sequence while their immediate commanders report up the chain of command and await orders at each remove. (This was true of the US forces that landed in Italy and France in 1943 and 1944 to drive back the Germans, except for the forces under George S. Patton’s command.)

With mission orders—and the entire risk-taking mentality that goes with them—initiatives at each level of command replace directives from above. Unit commanders can command their own action, immediately responding to unexpected obstacles by maneuvering around them or taking whatever other action might be appropriate, without referring back to headquarters or stopping to await new orders.

Powered by the unencumbered exercise of the initiative by commanders down the chain of command, the overall action can be fast and fluid, with obstacles circumvented in a continuous sequence of moves, even if there are a lot of zigzags as unit commanders try to find the best way forward, to try something else if they encounter too much resistance. If the enemy happens to have a strictly top-down command system (as is true of most armies around the world) commanders at each echelon will be tied down waiting for new orders, still in the process of reacting to the previous move even as a new move is unfolding.

That asymmetry was certainly evident during the thirty years of Arab-Israeli conventional warfare that ended with the 1973 ceasefire, but for a few days of major combat against Syrian forces in Lebanon in June 1982. After that, with no further wars of movement, the IDF became absorbed by repetitive security operations, in which there was little room for the exercise of initiative. But then came the so-called “Second Lebanon War” of July 12–August 14, 2006, followed by an official commission of inquiry whose brief was to evaluate every aspect of the IDF’s performance, as well as the government’s decision-making process.[[5]](#endnote-5) The final report, publicly issued on January 30, 2008, was harshly critical, especially regarding what it described as “an overcentralized style of command” said to have inhibited the initiative of subordinates.

Foreign observers, already surprised by the complete indifference to prestige or even security considerations in exposing everything that went wrong in the course of winning a war, were puzzled by the “over-centralization” finding regarding practices that are perfectly normal in other first-class armies.[[6]](#endnote-6) But in Israel itself the criticism resonated strongly, because a great many Israelis have combat experience and some expertise in military matters and were therefore rightly concerned by any sign of diminished freedom of action for subordinates down the chain of command, an unwanted consequence of technological progress in telecommunications.

The Initiative as the Path to Innovation

There is a direct relationship between the IDF’s culture of initiative in combat and technological innovation. Officers who learn to take the initiative, whose minds are formed by the mission-order mentality, are much more likely to view critically what is around them, be it army tactics, operational methods, procedures, the equipment issued to units, or even the cut of uniforms. And they are much less likely to accept limitations and shortcomings as inevitable. Instead of learning to accept, or even cherish, inherited organizational formats, specific weapons issued to their units, prescribed tactics and standard operating procedures, they tend to question everything—and then strive to come up with their own supposedly better answers. That is the larval stage of all innovation: the increasingly detailed questioning of what there is, preparatory to formulating alternatives.

It is no wonder that many young IDF officers proceed straight from military service into start-up ventures with fellow soldiers, and not only in the high-tech sector.[[7]](#endnote-7) That is true not only of those who served in one of the IDF’s more technological units but also of those who served in ordinary combat units. In a fairly typical experience, when former Jerusalem mayor and Knesset member Nir Barkat completed his military service as a captain in the 35th paratrooper brigade, he founded a software company (BRM) which successfully developed new antivirus software for the internet. Years later, he described his transition from the army to the startup world: “The feeling around us was that we were part of an elite group and that the sky was the limit…therefore, [one is] allowed to make some mistakes…I felt immediately at home…there was room for bold actions, trial and error, just like the paratroop unit I served in.”[[8]](#endnote-8)

In September 1968, Edward Luttwak visited the office of MG Mattityahu (“Matti”) Peled, then head of the General Staff’s quartermaster department (now the Technological and Logistics Directorate) responsible for the supply of everything from boots to missiles, and subsequently a distinguished professor of Arab literature, and a peace campaigner. Peled had just received the first sample of a new combat harness for the infantry—an open-mesh nylon vest that seemed very practical with its four rifle-magazine pockets, four hooks for hand grenades, a pocket for the first-aid kit, and a lightweight fiber belt with fittings for two water bottles. The harness and belt were obviously a huge improvement over the existing webbing, magazine holders, grenade pouches and belt that were Second World War, ex-British surplus gear made of very stiff, heavy woven cotton, with awkward buttons and ill-fitting straps.

When asked if he had solicited suggestions before starting the design process—after all, a high proportion of all Israelis would be wearing that webbing—Peled burst out in good-natured laughter and said he had not issued any announcement nor solicited any suggestions. But word had got out anyway; every single infantryman who had ever served in the army already had his own far more advanced design, at least in his own mind. And what was the reaction when news of the chosen design started circulating? Oh, just the usual reaction, Peled said: nobody had actually seen it, but everybody already knew that the new harness was a complete failure, what with its flammable nylon, flimsy open mesh, and loose hooks instead of pouches for the grenades. As it was, the critics were wrong, and the new combat harness turned out to be a great success—except for the grenade hooks, were replaced with pouches—because it already embodied creative responses to all the uncomfortable years of marching and fighting with the old British webbing.

Nevertheless, it is obvious that however lively their minds, the young conscripts who make up the bulk of the standing army, along with the ex-conscript lieutenants serving an extra “professional” year or two and the small cadre of career professional officers, are not exactly well placed to come up with important innovations. Conscripts are high-school graduates at best, and at the ripe old age of eighteen cannot have accumulated much pre-army work experience either. It is true of course that their technological creativity may be greatly stimulated by all the high-tech gear they operate in their army service, but their lack of a university education must limit their ability to evaluate technological innovations with proper quantitative methods. As for career officers, who do have a university education, they are both few and badly overworked, reducing their ability to pursue innovation, which is hardly their mission.

It does help that Israel is a largely informal society in which there is a general readiness to talk to anyone and even listen to them up to a point. Nor is it hard to reach IDF decision-makers and have them listen to any reasonable new idea. Author Edward Luttwak was not a reservist but a newcomer to Israel in the summer of 1970, when the Israeli air force was flying over Egyptian territory across the Suez Canal to destroy the echeloned anti-aircraft missile batteries the Soviet Union was generously supplying. The batteries were being emplaced closer and closer to the Suez Canal front line, diminishing the ability of Israeli fighter-bombers to strike back against the Egyptian artillery batteries constantly bombarding (thousands to tens of thousands of shells per day) the vastly outnumbered Israeli troops and against an eventual Egyptian canal-crossing offensive. Opening the skies for effective aerial operations in support of the ground troops required destroying the missile batteries, and this in turn was predicated on locating them and conducting carefully planned and precisely conducted strikes. Locating the Egyptian artillery and surface-to-air missile batteries in order to strike them successfully required aerial photography that had to be conducted at medium altitudes with aircraft flying a straight path at a constant speed – a perfect target for missiles. Evading the missiles required aborting the photographic mission to conduct violent aerobatics. As a result, though only one Israeli photo-reconnaissance aircraft was destroyed by a missile, many missions were aborted, reducing the effectiveness of the air force's support essential for the ground forces.

With zero credentials, Luttwak reacted to the distressing news by seeking an appointment with Aryeh Dvoretzky, a leading mathematician then serving as the IDF chief scientist, to suggest another way of photographing terrain across the canal: rigging a radio-controlled model aircraft (some were large enough) with a stabilized video camera. Dvoretzky took careful notes, remarking in passing that distorting thermal might be a problem.

Three years later, in 1973, the state-owned Tadiran electronics house unveiled “Mastiff,” the first of the small remotely piloted vehicles (RPV, now Unmanned Air Vehicle, UAV, or simply “drone”), which was to launch what became an industry in which Israel remains a global leader. There is no evidence that the 1970 suggestion to Dvoretzky had any part in this (others were on to the same idea), but what happened was certainly indicative of the open-door mentality that so greatly facilitates innovation in the IDF.[[9]](#endnote-9) That episode, moreover, exemplifies what creates the demand for innovation: the IDF responds to obstacles and setbacks by trying harder; and its doctrine strongly emphasizes the imperative of tenacity in pursuing the set objective—above all do not give up, especially when the situation seems hopeless.[[10]](#endnote-10)

Reservists with ideas have their opportunity when IDF leaders facing unpalatable alternatives look for new solutions for pressing problems, be they methods or techniques, hardware, software, or anything else. They will naturally turn to reservists they think might be well placed to provide answers. Reservists who are managers in Israel’s more efficient enterprises in their civilian lives are a natural source of managerial advice, and of course they themselves are forever battling to reduce the inevitable efficiency chasm between their own outfits and the IDF, with its built-in inefficiency, the inevitable consequence of abundant, almost free manpower mostly still in training, of equipment inventories forever sliding into obsolescence, and facilities chronically underutilized except in war.

Other reservists who are not high-tech jet setters or management gurus nevertheless enrich the IDF with more prosaic forms of expertise: for example, it sometimes happens when visiting an outpost that decent, even quite good food is served out of the very rudimentary field kitchen, cooked by a reservist on his annual recall who is a foodie or even a chef in private life. Other reservists on sentry duty might be the CEOs of important companies. Author Eitan Shamir at one point served in the headquarters of a reserve armored division alongside an older reservist on his annual recall, a sergeant whose job it was to gather and present maps, aerial photos and other planning aids for the G3 operations officers—a humble clerical job. When the division’s commanding officer found out that the sergeant was the CEO of a major Israeli company in his civilian life, he reassigned him from his humble duties to a much more important position to use his managerial skills. The CEO/sergeant was far from pleased—he had enjoyed his annual holiday from having to make hard decisions.

One can easily visualize what else IDF reservists transmit when doing their annual recall service, with so many young and inexperienced conscripts and so few career officers around them: all manner of expertise down to the most minute combat techniques. And of course reservists transmit to the conscripts their experienced, not to say cynical, sense of military values: look at us, here we are, still being recalled to serve years after leaving the standing army—you are needed now and you will be needed in the future. When your officer runs ahead calling out *aharai*—follow me—you will want to follow in attacking, or if it is a matter of standing and resisting, to do so. But do not look for opportunities to become a hero—it is not with muscle and blood that the IDF solves its problems but with *sechel,* literally “brains,” but more accurately, discernment, a blend of intelligence and experience.

Sometimes only brute force will do, and certainly without a capacity for brute force there is no survival. But in the IDF—which is inevitably and uniquely a “civilian armed force” because of the centrality of its reservists—it is not brute force, nor standing operating procedures, nor the traditions of the service, but *sechel* that comes up as the desired remedy in a tight spot. And that is how innovation also begins, out of an elemental impulse to look for entirely new solutions when old ones are ineffective or too costly.

This is the legacy of the IDF’s founding generation. Moshe Dayan, Israel’s one-eyed war leader (both as chief of staff 1953-1958 and defense minister 1967-1974), who had visited units of the U.S. Marines in combat in 1966 in Vietnam, judged them to be “excellent fighters, bold, courageous, dauntless.”[[11]](#endnote-11) Nevertheless, Dayan recalled a day where the attendees of a diplomatic conference in Washington observed a parade by the ceremonial unit of the US Marines:

I, too, clapped my hands in appreciation of their accomplished performance, but somewhere within me I felt a certain distaste, even anger and humiliation, at this use of combat troops as marionettes… The soldier’s job is to fight, and does not do battle – at least not today – in straight and regular ranks and with fixed rhythmic movements…It is true that the fighting man is called a soldier and the men in an army wear uniform clothing, but battle demands of every man that he exert to the maximum his individual capability, and not that he moves his legs and swing his arms like a robot at the press of a button.[[12]](#endnote-12)

Exerting “individual capability” to the maximum is the purpose of the IDF’s most selective unit, *Talpiot*, nicknamed *Sayeret Sechel*, “brains commando,” or less kindly, *Sayeret Chenonim*, “nerd commando” (though leadership aptitude is a requirement).[[13]](#endnote-13) It exists specifically to harness the creativity of young conscripts for the development of new military technologies. Its training course is the IDF’s longest at 41 months, five months more than the standard three years of compulsory conscript service, with graduates attaining both a bachelor’s science degree from Hebrew University and the rank of first lieutenant, initiating a compulsory further six years as career officers, though some remain longer.

In the unit’s recruitment process, selectivity is taken to an extreme: each year, the top two percent of all Israeli high school students are invited to take admission tests, followed by demanding exams in mathematics and physics. At that stage, some 200 candidates of the cohort are selected. Next, candidates undergo a battery of psychological and aptitude tests that further reduce their number to around 50 finalists, who can then start the program, with 40 or fewer successfully graduating.

Recruits are enrolled in a dual degree course in mathematics and physics, which they are to study on a part-time basis (as do most Israeli students) while going through basic infantry training, followed by further training courses in every single branch of the IDF, thus variously serving as riflemen, tank gunners, artillerymen, radiomen, sailors, airmen and more. In the process, trainees learn how the average soldier fares with the weapons and other gear issued in real-life conditions, as opposed to the controlled environments of laboratories and factories. While the emphasis is on technology (as well as the concurrent scientific education), the program does include courses in military doctrine and military history, to stimulate tactical and operational thinking in addition to technological problem-solving. While the overall aim is to stimulate independent thought and creativity, the participants are also given real-life assignments, such as the development of new specialized software that is actually needed by the IDF, or the organization of a complex event, or the conduct of a university seminar in a specific subject.

Graduates of the program (*Talpions*), who number some 1000, enjoy exceptional prestige in both the IDF and society at large. They include leading scientists and founders of some of Israel’s most successful technology and biotech companies. The former director (2010-2016) of the Israel Defense Ministry’s R&D department, BG Ofir Shoham, was an 1983 Talpiot graduate who commanded a missile boat at one point in his 30 years of IDF service, one of many and varied staff, command, and R&D assignments.

What the program as a whole has done for the IDF is to legitimize bottom-up creativity versus the top-down mentality generated by an inevitably hierarchical structure. Specifically, and of the greatest importance for innovation, the very existence of the *Talpiot* program affirms what is perhaps the most basic principle of the IDF as a whole: creativity outranks experience. It was for this reason that General Henry H. “Hap” Arnold, the talented World War II commander of the United States Army Air Forces, established Project RAND in March 1946, to provide new ideas for the unprecedented nuclear-weapon era that had just started which, in his view, had invalidated the expertise accumulated by American airmen in the war just ended.

*Talpiot’s* success led to the establishment of other elite programs, notably “Sky” (*Shechakim*), an intense program whose aim is to nurture cyber wizards and high-end coders. Another program, “Lilies” (*Havazalot*), prepares top candidates to become analysts in the intelligence-research division through a long and arduous journey that includes university-level Middle Eastern studies of either Arabic or Persian as well as special in-house courses.[[14]](#endnote-14) Program graduates are committed to serve for several years as salaried soldiers in addition to three years of conscript service.

The creativity that propels innovation naturally collides with deference to hierarchy. To effect change in the IDF, as in any organization, some existing arrangements, standing order, established practice or priority, must be changed, which can only happen if more senior officers are really willing to listen to subordinates with a new idea. The *Talpiot* program has had a significant role in the hierarchical reversal normally required for the accomplishment of any significant military innovation, but of course it is very small, so the insouciant attitude to rank diffused in the IDF by its many high-status but low-ranking reservists has a much larger role in facilitating innovation.

An extreme example, unimaginable in any other army, was witnessed in 1978 by author Edward Luttwak. He was visiting an especially exposed frontline outpost in southern Lebanon in the company of overall area commander MG Avigdor “Yanosh” Ben-Gal, then the IDF’s top field commander and national hero following the epic victory of his 7th Brigade in October 1973. In that particular sector, the enemy’s preferred tactic was to briefly bombard the outpost with mortar fire to force soldiers into their bomb-proof bunker and then immediately launch an infantry assault in the hope of overrunning the position before the soldiers could exit the bunker and run back to their firing positions along the perimeter. Because the enemy could also stop launching mortar bombs only to start again almost immediately in the hope of catching the soldiers still running out in the open between the bunker and their firing position, the standing order was to wear helmets and heavy flak jackets at all times.

After Ben-Gal and Luttwak arrived, because the real thing failed to happen there was a bunker-to-perimeter running drill. Ben-Gal noticed that one of the soldiers—a 19-year-old private—was not wearing his flak jacket. He called out to him to go back to the bunker and put it on immediately. The soldier instead stood before the general, who was especially reputed for his tactical expertise, to calmly explain that in his view it was more important to run across the open ground between the bunker and the protected firing position as quickly as possible, for which the flak jacket was a serious impediment, especially when exiting the shelter’s narrow door. Ben-Gal replied that the standing order had been formulated by officers at headquarters after careful tactical study, and that he better obey it, and right away. The soldier replied that he would obey, but only because he was outranked, still insisting as he went to the bunker to put on his flak jacket that the standing order was wrong, at least in the case of their specific outpost. A court martial, or at least a commander’s summary punishment, might have ensued in some armies, but Ben-Gal merely joked that in the IDF even “*pishers*”—rude slang for “babes in diapers”—were sure they knew better than the general staff, while the 21–year-old lieutenant in charge commented that the private was irritating and argumentative, but a pretty good soldier.

The episode was exceptional—even in the IDF privates do not normally argue tactics with senior field commanders—but there is a definite willingness to reinterpret orders, or even to ignore them altogether in obedience to a higher principle of officer responsibility officially accepted by all modern armies long before the IDF was established, but perhaps more often asserted in the IDF than elsewhere, i.e., that officers must set aside orders to do the right thing, on their own responsibility.[[15]](#endnote-15)

As it happens, a significant IDF example again featured flak jackets. On June 10, 1982, Syrian commando units of the 85th and 62nd brigades took up positions in Kafr Sill, a former hill village almost absorbed in greater Beirut.[[16]](#endnote-16) Captain Doron Avital led his company of the 202nd Battalion, 35th Paratroopers Brigade, against the hilltop Syrian positions. Before the battle, an order came down from headquarters that all were to wear flak jackets. The paratroopers had been advancing until then against the ill-organized PLO, while the Syrians could lay down artillery fire to shield their positions with curtains of splinters, hence the order.

But Avital was convinced that the order would restrict his soldiers’ mobility excessively, undermining their effectiveness. He repeatedly asked his commanders to reconsider the order but was refused. It was summer, the day was especially hot, and the company’s battle plan called for a steep uphill march over the ridgeline to outflank the dug-in Syrian commandos. Avital told his soldiers that despite the order received he would fight without a flak jacket but left it to each soldier to decide whether to follow his example or not. Almost all did. In the ensuing battle, his company excelled, moving faster and maneuvering in more agile fashion than the other companies whose soldiers in flak jackets were exhausted by the long, steep climb.[[17]](#endnote-17) Avital was not punished for disregarding the order; in fact he was promoted, later becoming commander of the IDF’s most prestigious combat unit, the *Sayeret Matkal.*[[18]](#endnote-18)

In the annals of the IDF there are many such stories because its culture does indeed sustain the principle of officer responsibility so clearly explained by von Moltke—principles proclaimed by all armies, but which are usually rendered a dead letter by the failure to accept any disobedience, even if tactically justified. (Under Stalin, Red Army officers were shot for disregarding their orders no matter what, a reaction to the mass desertions and collapse of entire fronts in the summer of 1941). It is evident that the prevailing IDF mentality that tolerates insubordinate applications of the principle of officer responsibility, and positively encourages the “seizing” of the initiative, must also favor innovation—even disruptive innovation that forces uncomfortable changes.

1. See the verdict of the preeminent military historian Martin van Creveld: “...historically speaking, those armies have been most successful which did not turn their troops into automatons, did not attempt to control everything from the top, and allowed subordinate commanders considerable latitude…” Martin Van Creveld, *Command in War* (Cambridge, MA: Harvard University Press, 1985), 273. [↑](#endnote-ref-1)
2. On “mission orders” and the culture of the initiative see Eitan Shamir, *Transforming Command: The Pursuit of mission Command in the US, British and Israeli Armies*, (Palo Alto, CA: Stanford University Press 2011). [↑](#endnote-ref-2)
3. In less advanced armed forces officers are themselves disinclined to take the initiative fearing the career risks of failure. For example, in the March 2018 Turkish intervention in Afrin (Operation *Zeytin Dalı Harekâtı*) the advancing units had overwhelming artillery support but visibly acted in rigid, set-piece moves under top-down control. [↑](#endnote-ref-3)
4. See *Haganah* Museum website: <http://www.irgon-haagana.co.il/info/hi_show.aspx?id=21814>. [↑](#endnote-ref-4)
5. Headed by retired judge Eliyahu Winograd, hence “The Winograd Commission” at: <https://online.wsj.com/public/resources/documents/winogradreport-04302007.pdf>. [↑](#endnote-ref-5)
6. As noted by Martin Van Creveld, [“Israel's War With Hezbollah Was Not A Failure,”](http://www.forward.com/articles/12579/) *Jewish Daily Forward*, January 30, 2008. [↑](#endnote-ref-6)
7. See Dan Senor and Saul Singer *Start-up Nation: The story of Israel's economic miracle* (New York: McClelland & Stewart, 2009), 67-83. [↑](#endnote-ref-7)
8. Nir Barkat, “Army and High-Tech,” *Ma'ariv*, September 18, 2000. [(H)] [↑](#endnote-ref-8)
9. Undiminished decades later, when Edward Luttwak on a 2019 visit had another hardware suggestion that prompted a conceptual-development contract within days. [↑](#endnote-ref-9)
10. “The entire world is only a very narrow bridge, and the important thing is not to surrender to fear.” Rabbi Nachman of Bratslav. [↑](#endnote-ref-10)
11. Moshe Dayan, *Vietnam Diary* (Tel Aviv: Dvir Co. Ltd, 1977). [(H)]. One day before the start of the June 1967 Six-Day War, Foreign Minister Abba Eban read aloud a message from Secretary of Defense McNamara: "Very much appreciate and personally respect Dayan who provided the most balanced report on Vietnam situation that has ever been brought to my attention." [needs specific source, p number] [↑](#endnote-ref-11)
12. Moshe Dayan, *Breakthrough: A Personal Account of The Egypt-Israel Peace Negotiations* (London: Weidenfeld and Nicolson, 1981), 169-170. [↑](#endnote-ref-12)
13. Started in 1979 under Chief of Staff [Rafael Eitan](https://en.wikipedia.org/wiki/Rafael_Eitan)(1978-1983) at the suggestion of two professors of physics at the Hebrew University, Felix Dothan and Shaul Yatziv. “*Talpiot,*” or turrets, is from the *Song of Songs*, IV, Verse D, describing the majesty of a castle’s “turrets,” the height of achievement. [↑](#endnote-ref-13)
14. These units are secretive, but the IDF provides basic information on its website. [↑](#endnote-ref-14)
15. The principle is often attributed to Field Marshal Helmuth Karl Bernhard von Moltke, Chief of the German General Staff, 1871–1888. When one of his officers excused an error by pleading that he was only following orders, he replied: “His Majesty made you an officer because he believed you would know when not to follow orders Trevor N. Dupuy, *A Genius for War: The German Army and General Staff, 1807-1945* (New Jersey: Prentice Hall, 1977), 116. [↑](#endnote-ref-15)
16. Richard A. Gabriel, *Operation Peace for Galilee: the Israeli-PLO War in Lebanon* (New York: 1984), 102. [Needs publisher] [↑](#endnote-ref-16)
17. Doron Avital, *Logic in Action* (Or Yehuda, Israel: Kinnert, Zmora Bitan, Dvir Publishing House, 2012), 56-58. [(H)]. Avital also told the story in detail to the authors in a private meeting in 2016. [↑](#endnote-ref-17)
18. General Staff Reconnaissance Unit, or Unit 269, commonly known as *Sayeret Matkal*, or simply “The Unit,” originally established for intelligence-gathering behind enemy lines. Avital retired as a lieutenant colonel, completed a philosophy PhD at Columbia University, became a partner in a venture-capital firm, and was elected a member of the Knesset, Israel’s parliament. [↑](#endnote-ref-18)