Tunnel Operations in the Israel Defense Forces: Adapting the Warrior Ethos to Post-Heroic Conflict

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Abstract
This study presents an empirically grounded account of tunnel combat operations in the Israel Defense Forces (IDF) within the context of "post-heroic" warfare. Current scholarship on "post-heroism" has viewed the technological and professional standards of contemporary military conflicts as distancing the individual combatant from the modern battlefield. Little attention has been given however to the ways in which soldiers themselves experience and adapt to post-heroic conditions. Findings based on in-depth semistructured interviews with 17 IDF tunnel combatants show these soldiers actively reinterpreting the strategic importance placed on distancing the warrior from the battlefield. This exploratory article suggests that an individual "warrior ethos" still resonates amid the professional and technological contours of post-heroic (underground) conflicts. By presenting a novel account of contemporary tunnel warfare from the perspective of the combatants themselves, this research sheds new light on the different personal dimensions that impact post-heroic military operations.

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In December 2018, the Israel Defense Forces undertook what it termed Operation Northern Shield. The operation's objective was to uncover, map, and neutralize a network of offensive tunnels Hezbollah had constructed that ran from villages in Southern Lebanon into Northern Israel (Gross, 2018). During the Operation, the Galilee Division Commander Brigadier General Rafi Milo, along with a select group of adjutants, entered the largest such tunnel and crossed over into the Lebanese side of the border.

This entrance into a tunnel complex was neither authorized nor sanctioned by command authorities within the IDF. In entering the tunnel the general risked himself, the officers with him, as well as Israel's broader strategic position should they have been killed, or worse, kidnapped. In response, military sources stated, "this was an irresponsible action, without prior coordination, and which violated safety procedures." On the other hand, the general's actions also epitomized a classic style of individual initiative that some feel is being lost within Israel's contemporary Ground Forces (Tzickerman, 2014). In his own defense, Milo is reported to have said, "I am a combat [warrior] commander. It's not possible that I won't enter into the tunnel to its very end" (Yehoshua, 2019).

Brigadier General Milo was given a formal reprimand and his promotion to the rank of full General was delayed by a year. These sanctions—which essentially amounted to a slap on the wrist—point to a central tension within the IDF itself concerning the nature of the "warrior ethos" in contemporary warfare. At stake in Milo's actions that day rests a fundamental question regarding the role of the more human-centered elements of combat, such as individual curiosity and the desire to close with the enemy, at a time when such combat is becoming increasingly depersonalized through the use of technology and professionalized through doctrinal standards and procedures (Libel, 2013).

This article explores what sociologists of the military have termed the "warrior ethos" in the post-heroic age (Coker, 2007; Henriksen, 2007; Renic, 2018; Vinci, 2008). It seeks to analyze how the "agency of the warrior" (Coker, 2007, pp. 11–12) may adapt to the larger strategic, political, and professionalized contexts of contemporary post-heroic warfare. That is, what are the cultural modes through which the more human-centered factors of a modern warrior ethos—the choices, feelings, and everyday experiences of combatants—relate to the technological and professional characteristics of contemporary post-heroic warfare?

Israel's decades-long engagement in tunnel operations along the southern borders of the Gaza Strip, and more recently along its northern Lebanese border, offers a unique opportunity to directly engage with these issues. Israel's tunneling units

operate in a tactical environment that is as contingent on the technological and professional standards that characterize contemporary "distance" warfare, as it is on the classic infantry skills of ground combat operations. This article describes the tensions that arise within such small-scale tunneling units when these two tactical urges clash within post-heroic contexts. Some (Levy, 2008; Libel, 2013) see in the tensions between doctrinal professionalization and the more informal and individualistic modes of organizing military endeavors, a near "schizophrenic" (Libel, 2013, p. 289) and haphazard strategic process of fits and starts. Too be sure though, there is very little empirical qualitative data documenting this process along dimensions that transcend the broadly strategic or political.

Academic studies of tunnel warfare have largely focused on the strategic, legal (Marcus, 2019; Richemond-Barak, 2018) and specifically on the scientific and technical aspects of tunnel operations (Cameron, 1998; Grau & Jalali, 1998; S. D. Sloan et al., 2015). Yet curiously barring (mostly popular) historical studies of the Vietnam Era "Tunnel Rats" (Herring, 1986; Mangold, 2013; Rottman, 2012)—there is little scholarship that grapples with the everyday experiences and challenges of the combatants who are specifically charged with locating, mapping, and destroying enemy tunnels under combat conditions.

This lacuna is critical in that subterranean environments have increasingly become a central arena of modern conflicts in places such as Iraq and Syria (Flood, 2018; Spencer, 2019; Tilghman, 2016), Afghanistan (Leoni, 2018), the Philippines (Gray, 2018, p. 3), and Korea (Reece, 1997, p. 24). The importance of tunnel warfare has only been exacerbated by the very urban nature of the contemporary battlefield (Richemond-Barak, 2018; Rosenau, 1997, p. 386; Spencer, 2019). As Robert Stebbins argues, "researchers explore when they have little or no scientific knowledge about the group, process, activity, or situation they want to examine but nevertheless have reason to believe it contains elements worth discovering" (Stebbins, 2001, p. 5). This exploratory article takes Stebbins's argument and offers a bottom-up approach to tunnel warfare that looks to the tensions experienced by the combatants themselves who are tasked with executing in the field, much broader strategic and political post-heroic objectives. As such, this study offers the first such ground up account of contemporary tunnel warfare from the perspective of the combatants themselves within the context of contemporary post-heroic military operations.

Post-Heroic Warfare and the IDF

In its simplest form, the academic literature concerning "post-heroic warfare" relates military mortality to the acceptance of combat operations by the political leaders (and the polities they represent) in Western democracies (Wasinski, 2008, p. 113). The term "post-heroic" was first proposed by Luttwak (1995; 1996) in an effort to describe the style of national warfighting common in the post–cold war era. For Luttwak, the conventional Clausewitzian objective of defeating enemy armies in an effort to attack and hold territory was no longer relevant in a cold war political

environment where (it was thought) any local conflict might instigate a wider nuclear encounter (Kinross, 2004, p. 40; Luttwak, 1995, p. 110). As the cold war ended however, the normative restraints that the superpowers place on these local conflicts ceased to exist. Luttwak argued for a U.S. foreign policy that would be able to intervene on these potentially unchecked local conflicts without incurring a high casualty rate. He argued that casualties might be avoided "given the performance of certain modern weapons, if military planning is appropriately modified to fully exploit their technical potential" (Luttwak, 1995, p. 114). In this perspective, technological advances in warfighting are marshaled in an attempt to manage and mitigate combat mortality on both allied and enemy sides. To be sure, technological innovation and professionalized discipline have always been central factors in Western ways of war (Parker, 2005, p. 2). The social and political contexts of modern warfare however, have changed in such a way so as to necessitate the use of technology and professionalization in ways that allow for violence to be employed more precisely and at a greater distance.

At stake in these discussions of casualty rates, technological advances and formal doctrine are the cultural values that were once thought to inspire men and women to face the risks and dangers of confronting and defeating an enemy (Pressfield, 2011). For Coker (2007) warriors on the contemporary battlefield "are struggling with what some in the military world would like them to become: information processors in a cybernetic battlefield" (p. 12). Echoing Weber's bureaucratic-rational ideal type (Constas, 1958, p. 407; Ritzer, 1975), Coker argues that technological standardization functions to limit the spontaneous pathos and values carried by men into battle.

In the 21st century's war on terror, this post-heroic paradigm has been transformed from a U.S. foreign policy option dealing with the vacuum left over from the cold war into a sociopolitical "condition" all its own (Scheipers, 2014, p. 3). This post-heroic condition is less of a formal military doctrine than an institutionalized "state of mind" (Ben-Shalom & Benbenisty, p. 372) that is seen as prioritizing political caution over combat risk-taking). In this way, the individual judgments, decisions, and passions of the warrior in asymmetrical conflicts are replaced by the deontological and legalistic rules of warfare (Coker, 2007, p. 21; Renic, 2018, p. 191; Schulzke, 2016, p. 188).

In this way, post-heroic conflicts become implicated in a much deeper tension within military thinking concerning the role of the individual, and individual initiatives in modern asymmetrical warfare against nonstate and quasi-state actors.[1] For one, at the tactical level, some of the classical romantic ideas concerning the need for individual participation in combat that can be found in past conventional wars become neutralized in favor of a more depersonalized and bureaucratized understanding of the contemporary combat encounter. At the same time, many of the theorists of post-heroic and asymmetrical conflicts (along with the authors) do not see these political considerations and technological advances as having fundamentally altered in any qualitative way the nature of warfare itself (C. S. Gray, 2010, p. 6; Murray, 2011, p. 38).

Luttwak's analysis of post-heroic conflicts has been highly influential in helping to frame the political, legal, and strategic challenges of the late 20th and early 21st centuries. This framework however has been heavily centered on the wider strategic workings of large states, while eliding many of the ways in which individual soldiers shape the contours of post-heroic responses to modern conflicts. This elision can be seen, for one, in the preoccupation with the political and strategic restraints placed on the military by civilian pressure groups (Kober, 2015; Lebel, 2010). It can also be seen in the focus on the macro-strategic elements of combat motivation that tend to disregard the issue of combat effectiveness of small unit operations (MacCoun et al., 2006; Scheipers, 2014; Wessely, 2006; Wong & Kodditz, 2003). The warrior ethos, or the individual pathos that influence combat decisions, has been almost entirely excluded from the analysis of post-heroic conflicts. As such, there is little qualitative data delineating the various ways in which soldiers adapt themselves to post-heroic political and strategic conditions. Scholars have very little qualitative empirical data documenting how rank-and-file combat soldiers execute their roles within the bureaucratic and technological contexts of modern asymmetrical warfare. The IDF's tunneling units who operate both within this depersonalized technological environment and who at the same time viscerally experience the individual pathos of combat offer a unique window into this phenomenon. Few other soldiers serving in the various branches of the IDF require a similar kind of technological expertise alongside regular infantry skills. As these soldiers locate, map, and neutralize tunnel complexes, they are also crucially defining the limitations and professional expectations inherent in post-heroic warfare.

Method

This article originally emerged out of a research project sponsored by the IDF Medical Corps meant to quantitatively measure stress via levels of cortisol in the saliva of tunnel combatants (Hernández et al., 2018). The interview material collected here represents a preliminary qualitative case study meant to prepare the ground for that more quantitative study. Here, we seek to extract farther analytic generalizations related to both the theoretical issues at stake in tunnel warfare as well as some of the larger tensions at stake in post-heroic warfare. As Yin (2013) argues, analytic generalization are meant to "extract a more abstract level of ideas from a set of case study findings—ideas that nevertheless can pertain to newer situations other than the case(s) in the original case study" (p. 325).

Throughout 2018, we conducted in depth semistructured interviews with 17 midlevel, junior, and noncommissioned officers in the IDF who have participated in tunnel operations since 2002 to the present. Interviews took place in Israel and one in London. All interviews were transcribed by undergraduate assistants. Transcriptions were then reviewed by all authors for common tensions and topical themes, which were then collated and organized using a "connecting strategy" that seeks out relationships between seemingly disparate textual content (Maxwell, 2012, p. 112).

While this anthropological technique does not have the capacity to measure in any "objective or value free" sense social phenomenon (Ahern, 1999), it is uniquely capable of highlighting the contingent tensions and contradictions that are so much a part of everyday life.

Most of the interviews were held with noncommissioned, junior as well and midlevel officers all currently active in the Military Reserves. Ranks varied from First Sergeant to Lieutenant Colonel. This level of service was chosen for their broad operational experience in the IDF, serving as they do in multiple positions throughout their tours of duty. They are also more likely to have experienced the kinds of stressful combat situations that studies of tunnel warfare must confront.

Interviews were garnered through "snowball sampling" based on "contact networks" (Maffey & Smith, 2018, 53). The study was limited in its size and scope. By its nature, this kind of small-scale qualitative research has difficulty in offering objective and comparative assessments across military units. At the same time, while the sample was not random, the choice of interviews does reflect the evolution of the IDF's response to the tunnel threat during these years. Firstly, as the post-heroic context gains ground within Israel, fewer and fewer tunnel soldiers have experience entering subterranean networks in combat conditions. Our interview sample represents possibly the most experienced cadre of tunnel combatants within Israel. Nine of the participants were junior officers who served in the Tunnels Unit of the Gaza Division in the years before Israel's 2005 Disengagement from the Gaza Strip. This represents most of the junior officer command level of the unit up to that point. The unit's main area of operation was the Philadelphi Corridor, a route separating the Gaza Strip from Egypt. They took part in combat operations along the corridor and within the Gaza Strip itself. These soldiers were chosen for their role in a somewhat haphazard fashion and at the time were not specifically classified as an "elite" unit. Interviewees included the unit commander, deputy commander, and NCOs. This group represents the most experienced cohort of combatants in underground operations within the IDF.

As the IDF began to better understand the threat posed by these tunnels, they created an elite company within the Engineering Corp's special operations unit called *Samur*—a Hebrew word meaning "weasel" but also an acronym for "*Slikim V'minharot*" or passageways and tunnels. We interviewed eight members of *Samur*—including commanders of the unit—who participated in combat operations between 2005 and the present. IDF junior officers generally serve for periods of 4–5 years. The interviews conducted, while composing a much lower percentage of the unit's overall junior officer corps, did represent what can be termed a "continuity of experience" within the unit. In this way, nearly all of the interviewees either knew each other personally or had heard combat stories about each other within both units. As a result, we were able to record and collate recollections of some specific combat incidents from multiple perspectives. In this way, the 17 interviews conducted offer a wholistic and consecutive image of both the units charged with operating underground as well as the IDF's overall developing response to that subterranean threat.

In the following sections, we discuss how the IDF's tunnel combatants make use of their own warrior ethos to both reshape the possibilities of post-heroic conflict and highlight its limitations and contradictions.

This article understands such concepts as warrior ethos and "heroism" in their tactical and strategic settings rather than in the more Aristotelian ethical (Pears, 1978; Sanford, 2010) or philosophical contexts of *jus ad bellum* theory (Burke, 2004; Galliott, 2012; Strawser, 2010; Walzer, 2015). Aristotelian thought identifies heroism, or "courage," as the judicious middle ground between the excesses of "rashness" on the one hand and cowardice on the other. The modes through which force is judiciously, proportionately, and legally employed in warfare—or just war theory—are in some ways rooted within this philosophical literature (Engle, 2013, p. 265). Although theoretically fruitful, social scientists however have little means of gauging these concepts within their social contexts. Moreover, while the relationship between heroism, courage, and ultimately temperate behavior might be a useful tool in understanding how states go to war, it falls short of empirically grappling with the experiences of soldiers on the battlefield. Our research is focused less on a theoretical (ethical, philosophical, legal, etc.) analysis of post-heroic warfare and more on the empirical experiences of the fighters themselves.

Interviews suggested that IDF tunnel combatants tend to adapt a personalized warrior ethos to subterranean operations by routinely pushing back against the professionalized and technologically based doctrines of post-heroic warfare. We demonstrate how interviewees tend to critique and reinterpret the strategic importance placed on distancing the warrior from the (underground) battlefield. In this way, the midlevel, junior, and noncommissioned officers we interviewed were not necessarily disobeying orders, but rather, interpreting—sometimes quite liberally—the strategic and tactical expectations that come from the upper command ranks who are rarely present in the operational theater. Procedures and expectations are evaluated by these frontline participants according to unexpected combat situations so as to better serve combatants' needs in the field. This paradigm can be seen both in how these soldiers rely on technological apparatuses in the field and in how they cultivate a sense of "disconnect"—as opposed to commonly held views of unit cohesion—as they operate underground.

The Technological Warrior Ethos

The officers tasked with countering the tunnel threat were cognizant of the IDFs increasing post-heroic reliance on utilizing technological means for locating, mapping, and ultimately destroying tunnels (Marcus, 2019, p. 4), while at the same time being quick to note its limitations. For the IDF, the first half decade of tunnel warfare saw a number of violent incidents including the explosions of several forward bases (Shapir & Perel, 2014, p. 52), along with a number of combat incidents that took the lives of two key officers (Aviv Hakani and Moshe Taranto) within the span of 2 weeks. As one officer who served with them said, "after that [their deaths] the army

changed it's procedures and we stopped going into tunnels." What this officer meant was that barring an emergency situation—such as the kidnapping of a soldier, or the loss of classified or otherwise valuable equipment—the IDF's first preference is to refrain from entering a tunnel environment.

The military would rather rely on technological means to locate, map, and ultimately destroy Hamas' tunnel system along the Gazan border. Contemporary soldiers in the IDF's *Samur* tunneling unit often point to the ways in which the use of robotic devices can "sterilize" the subterranean environment. As one officer who is active in the reserves with *Samur* noted

> I'm in favor of entering tunnels. You just have to be ready for it. To enter a tunnel after a robot has combed through it . . . makes the situation a lot less stressful, it lowers the tension and the environment becomes much more sterile.

The use of technological resources on the contemporary (mostly urban) battlefield has been explored specifically in relation to aerial and unmanned operations (Cook, 2014; Enemark, 2019; Renic, 2018; Schulzke, 2016). Indeed, the junior officers themselves who served in *Samur* related their experiences in the technological aspects of their work to that of air force pilots. As Ilan a former operations officer in *Samur* said,

> I think being a warrior in *Samur* is no less complex than being a pilot. Really, with all the gear you have to know how to operate, it's [even] more complicated than operating an aircraft . . . we are on the same dialing [area] code, *Samur* and fighter pilots.

In spite of the technological turn over the past few decades, the work of tunnel combatants in the IDF is also very different from that of an air force pilot. That same operations officer unknowingly highlighted this tension when he also related his work to that of the general infantry. For him despite the technological focus of subterranean operations, elite infantry training was essential for tunnel combat.

> Boot camp, advanced infantry skills, advanced navigational abilities which also includes all kinds of mental components, lone navigational training over twenty kilometers. This all adds to a warrior's self-confidence and his ability to deal with the unknown.

Ilan's interview pointed to a basic tension in contemporary post-heroic warfare. How does an archetypal "technological warrior," who is removed from "the central loop in warfare, placing all the tactical decisions under the control of technology" (Kile, 2013, p. 111), relate to the more personal dimensions of combat? For Ilan, extended lone navigational hikes, and the challenges of Israeli infantry training, aid soldiers in grappling with the individual mental challenges of tunnel warfare. The IDF's tunneling units operate in a unique tactical environment where technological

capabilities that tend to remove the individual from combat run hand-in-hand with the more individualistic factors that comprise the classical warrior ethos.

Many of the soldiers and officers of the unit were quite sensitive to the tensions created between the use of technology and the kind of individual agency that technology often limits. Some simply turned the technological dimensions of tunnel operations into a personnel problem by differentiating between technological aptitude and the ability to problem-solve with one's hands. As one junior officer observed, "We had a team leader . . . he didn't know how to operate the Robot, but to deal with all the ropes, to tie things very quickly, to put together rigs, all of those things he was very good at."

Other junior officers noted some of the tactical or strategic dilemmas that may be engendered by the reliance on technological apparatuses within tunnel networks. For one, technology itself is often seen as prone to failure. As another junior officer in *Samur* noted,

> Technology is ever present, but somehow it always seems to break down . . . . They throw this equipment at us and they think it will work. But they are very difficult to operate and get to a level of professionalism with them. Or they simply can't stand up to the heavy workload, and they break down.

While Israel has invested heavily in technological systems for tunnel warfare, and these systems are widely employed in the field, this officer exhibited some reservation about their use and utility. This is particularly evident in relation to some of the mechanical and performative limitations of unmanned ground vehicles traversing the rough, uneven, and unexpected terrain that is commonly found in tunnel environments (Sloan, 2015). As that same junior officer explained,

> In essence more than once a soldier was operating a robot that got stuck inside a tunnel. Now try and go in and retrieve a robot that is 400 meters inside a tunnel complex. It's like running 150 meters where each meter is like crossing a desert for a month.

The lack of trust expressed by this junior officer toward the use of unmanned technology in a tunnel environment mirrors similar kinds of reservations expressed by Ground Fire personnel regarding the use of unmanned aerial vehicles (Macdonald & Schneider, 2019). Although the use of UAV's have presented ethical dilemmas for the political leadership and upper-level military commands, the soldier on the ground is often far more concerned with their raw effectiveness (Cook, 2014; Gusterson, 2014; Strawser, 2010). While this issue of trust is more psychological than tactical, it does point to the need to better understand the human factors that constrain and shape the use of these technologies (Macdonald & Schneider, 2019, p. 218). For the IDF tunnel operators in *Samur* and the earlier Gaza Division, these human factors came into play precisely when unmanned technology failed in an underground environment.

The use of a robot is meant to mitigate the risk to life and limb by limiting the amount of time soldiers must spend in the tunnel. Yet when the device becomes inoperative within a tunnel, technology itself creates the problem for which it was precisely meant to resolve. This dilemma is as tactical as it is personal. As another soldier explained, these robots cost

> tens of thousands, maybe hundreds of thousands of dollars. They are [their loss is] significant for us, but also mainly psychologically [beneficial] for the enemy to get their hands on one and we don't want something like that to happen.

Interestingly, some policy makers have objected to the use of UAVs in aerial combat believing that their ease of employment coupled with the low risks for the operators would "make it too easy for nations to go to war" (Strawser, 2010, p. 358). Other scholars have noted how Autonomous Weapons Systems may exacerbate international instabilities by fomenting an arms race of ever-increasing technological lethality (Altmann & Sauer, 2017, pp. 121–122). IDF tunnel operations seem to draw out this problem of escalation and instability on a more local level. For the tunneling units, a tactical need to retrieve a robotic device, alongside an individual desire for "action," overlaps with a perceived need to circumvent time consuming regulations, making it more likely that some soldiers may choose to prematurely enter an enemy tunnel.

In one such event in 2013, a robotic vehicle had jammed deep inside a narrow passageway. The several officers and enlisted men present figured that if they were to wait for specific orders in how to proceed,

> that would just endanger us more. If we leave [the tunnel] now we would have to wait another hour or two, and the next entrance into the tunnel would be even more dangerous. Like, they would be able to prepare for us.

Those present decided to make a quick entrance to extricate the robotic device. Moreover, they also decided to use the opportunity to quickly map the tunnel. Such an operation would require bringing in more technological equipment as well as including more combatants in the technological rescue operation. As an officer at the scene said,

> I knew that what we could operationally achieve now would take days or weeks, if [it could be accomplished] at all. We knew that we were on borrowed time and we had to accomplish as much as possible now. And we could do it! I knew from my experience that if we didn't, we would get into the stage of presentations and authorizations. The braking phase, and we wanted to accomplish the maximum possible in terms of operational achievement.

Here, an error in technological equipment was the prime factor in undertaking an unofficial and unsanctioned mission, where individual soldiers expressed their own excited individual initiative in experiencing combat risk. At the same time, this individual initiative was also directed at subverting what they saw as the limiting and overly doctrinal attitudes of their own command authority.

> It wasn't like we disobeyed orders, because there weren't any orders . . . in essence they [IDF senior command] weren't allowed to know what we did. So, let's just say we found other ways to bring them the results in the most amorphous ways possible. And we also knew that they wouldn't be asking too many questions.

This tension between personal initiative and an official military doctrine that places a primacy on limiting combat risk also comes to the fore when commanders have to choose how many individuals to include on a mission to enter a tunnel. As one junior officer noted, "The question that stands in front of almost every commander is to what extent he should risk the lives of his soldiers compared to the extent that he follows proper combat doctrine." Here, combat doctrine is viewed as an element that works to reign in the individual combat assertiveness of field soldiers. Yet doctrine cannot anticipate every circumstance that may arise in field operations. As that same officer noted,

> One has to decide what to give up in terms of doctrine and what not to give up. Because before I go in [to a tunnel] I have to send in a robot, and if the robot doesn't work, then I have to send in a dog. [I have to] do everything I can so that if I have to go in, it will be as secure as possible.

As Avshalom, a junior officer in *Samur*, noted a similar calculation,

> I had to have more of a balance between not endangering them, but yeah at the end of the day that is their role, that is what they are meant to do. Also, for their own motivation to be a part of the field, I can't just do away with that because I don't want to endanger them.

In his study of the IDFs counter tunnel operations, Marcus (2019) linked tactical improvisation to technological versatility (p. 22). That is, IDF units were able to grapple with the tunnel threat—in part—due to their ability to improvise technological solutions. As Kollars (2014, p. 788) observed regarding the growing IED threat in Iraq, "in a time of war, it is often soldiers in the line of fire who are the first to recognize the need for new technological solutions."

Our preliminary findings suggest however that there exists a more complex relationship between tactical improvisation and the technological implements of tunnel warfare. For the IDF officers and enlisted commanders tasked with engaging in tunnel warfare, technological interventions are seen as limiting the risks they

face—and as such their individual agency—on the battlefield. It is not that IDF tunnel combatants "place more faith in the man than in the machine" (Farrell, 2008, p. 789). Rather, it is that the decision to rely on the man or the machine is one that is steeped in tactical and even ethical ambiguity. In their desire to personally experience combat, IDF tunnel soldiers expressan individualized warrior ethos as they push back against the post-heroic "doctrine of distance" with its professional emphasis on technological tactical interventions at the expense of audacious actions on the part of individual combatants on the battlefield.

The Disconnected Soldier and the Warrior Ethos

The ability to personally disconnect from one's social environment was another kind of adaption expressed by tunnel combatants. As one officer in the Gaza Division noted regarding the kinds of recruits he preferred,

> I am looking for someone who can make that psychological distance from the situation . . . . You have to be able to distance yourself, to turn inward.

Placing the ability to disconnect from one's environment at the center of the subterranean military endeavor calls into question what has been commonly known as the "primary group thesis" (Shils & Janowitz, 1948; Stewart, 1991; Stouffer et al., 1949; Wong et al, 2003). The theory places the sociocultural relations within small scale military units as the primary factor in determining military and operational effectiveness.

Anthony King has noted how the primary group thesis and the many critiques of its broad universality (Ben-Shalom & Benbenisty, 2019; MacKoun et al., 2006, pp. 647–648) all tend to view combat effectiveness from the broader perspective of "states, their armed forces as a whole, or large military formations" (King, 2016, p. 700). By contrast, King has proposed to focus on the small-scale military unit on the squad or platoon level. In this way, he argues that the training within the squad or platoon becomes the determining factor in combat effectiveness.

This theoretical shift toward small units however falls short of providing a platform through which to properly understand contemporary IDF tunnel warfare. For one, outside of training maneuvers, these elite units rarely operate as platoons in the field. In practice, a platoon commander must often choose a select few individuals to accompany him into a tunnel. As one officer noted,

> According to the doctrine, I need a specific number of soldiers. I need two people to give cover, I need one commander, I need someone to operate a specific device, and another with a dog . . . it turns out that everyone wants to go in, but I have to choose.

Secondly, a tunnel combatant's field of vision and ability to directly communicate with his comrades is limited to the person directly in front or behind him. As

another officer in the Gaza Division noted, "once you go underground, if you're the first one in, you don't have people to the right or left of you, you're by yourself, and the person behind you can't really help you." A subterranean soldier in many ways experiences combat alone, disconnected from the rest of his platoon above the tunnel or even the more limited team inside it.

Many recognized that an ability to feel comfortable with this kind of disconnection came at the expense of other social attributes that might be valued within combat units. This was most apparent in the early Gaza Division where the serving soldiers were mainly individuals who had difficulty fitting into other regular infantry units. As one officer from that period noted,

> Let's say it like this . . . these weren't guys who you would find in a regular rifle company who are intense and excited. They were more introverted, but who think outside of the box, with lots of ideas.

Here, the classical understandings of social cohesion are inverted to support a different kind of combat efficiency. In the view of this officer, their capability to effectively operate in a tunnel environment was in part a function of their ability to disconnect from their social surroundings.

This notion of disconnecting from one's social environment to focus exclusively on the operational elements of tunnel warfare was something that was also highlighted in *Samur*, with its more formalized and standardized operational procedures. While *Samur* combat teams spend a year and half training together, even here the experience of individual disconnect also became a primary focal point. As one sergeant tried to describe Levi, an enlisted soldier who was widely viewed as being an archetypal tunnel combatant.

> He's disconnected. Yeah. You speak to him, and he's a very humble person. You speak to him on the phone and you have to put him on speaker in order to hear him. He speaks very very quietly.

Indeed, Levi was viewed by that sergeant (and others in his unit) as an individual with a kind of inner calm, one who could work alone in a tunnel for hours. "There are soldiers who are more skilled, and soldiers who are somewhat less skilled," another junior officer opined. "But the person who I want with me are those who are calm . . . ."

For tunnel combatants, this sense of inner calm can be a two-edged sword. While it allows them to psychologically disengage themselves from the stressful tunnel environment, it also leaves room for the kinds of unauthorized operational activities that professionalized doctrines are meant to prevent. One midlevel officer in the Gaza Division recounted almost humorously how an officer "was put on trial for loading explosives onto an intercity bus and transporting them to [their base] in Gaza." In another instance, an officer who was subsequently killed in a tunnel

collapse entered a tunnel complex alone. The officer disappeared, broke off contact, and reappeared several minutes later. When asked what happened he explained that he just had to go relieve himself, "The Division Commander was livid" that interviewee concluded.

This tension surrounding discipline was further highlighted by an incident that occurred on the Gaza Border shortly before Operation Protective Edge in 2014. Hamas operatives had exploded a particular underground complex. One enlisted sergeant recounted how he and his commanding officer were curious about what the explosion might have inadvertently revealed about the tunnel network. "We said let's go in . . . maybe there is something there even though we had intelligence that there might be an explosive on the other side. Apparently, there was something waiting for us." The two were young, inexperienced, and looking for adventure.

> We both stayed on base that weekend . . . . We took a hoe and tried to dig out the continuation of the route . . . [which was] blocked due to the explosion. It wasn't combat, but it was an act where [I thought to myself] we're both alone here. I was running these scripts in my head that if something should happen . . . .

As the two entered the tunnel without permission or authorization, the sergeant quickly began to understand the danger that this act placed them in. Two weeks later, the officer who suggested the unauthorized entrance was injured in an explosion in the same tunnel. As another junior officer ominously noted regarding Hamas' security procedures, "they spend millions of dollars on these tunnels, they guard them, they can tell exactly what happens in them."

Another officer who led an entrance into a tunnel also described in very disciplinary terms how to operate efficiently in the confusion and uncertainty of tunnel operations. Once again, the ability to psychologically disconnect from the peripheral stresses of tunnel warfare takes center stage.

> Let it go [the stress] and know that, okay now there is a lot of confusion, there are a lot of things happening on the side. Things that I don't know how to deal with. But I . . . I know how to disconnect, like a kind of emotional disconnect from this thing, and to like just go on.

At stake in this ability to disconnect from one's environment rests a broader tension around the disciplinary versus agentive aspects of subterranean warfare in a post-heroic era. The IDF's tunnel units here adapt a classical warrior ethos—comprised of individual initiative, and a desire to directly engage with the enemy, to the broader need to uphold the professional, technological, and impersonalized military standards of the post-heroic era.

This is an uneasy coexistence between opposing tendencies, and it is one that was noted by the same sergeant who made that unauthorized entrance into a Hamas tunnel. As the sergeant later reminisced over what happened,

> You very much want to make that transition, at that time to say, "I did it, I was there."
> But after my lieutenant was wounded, I became much more careful. You see the results
> of these things, and you see it's not a game . . . . Those are real explosions.

The first engagement with combat loss dampens that initial undisciplined initia-
tive. What is left is something more moderated, but also more professional. This
process of learning through combat was further highlighted by that same sergeant
who turned to an incident during Operation Protective Edge where an inexperienced
officer from another unit wanted to enter a tunnel,

> I'm not afraid of death, I have no problem going into a tunnel, I have no problem doing
> these things. But I know what the implications are . . . . I told him, "listen sweetie
> [Hamud-Hebrew], you go in there and you're risking your life . . . I'm not putting you
> down in there, I'm not doing anything for you until I get permission from above."

The soldiers serving in *Samur*, and the earlier Gaza Division, adapt to the post-
heroic contexts of tunnel warfare by stressing the individualistic and perhaps even
iconoclastic demands of their work. They do this, as experiences of combat teach
them to be more careful and discerning in the ways in which they employ that
individual warrior ethos.

Conclusion

This exploratory article has used contemporary Israeli tunnel warfare as a case study
in which to extract some analytic generalizations surrounding the ways in which, a
warrior ethos—or actions of human insight and agency on the battlefield—adapts
itself to the post-heroic approach to warfare which currently characterizes IDF
operations. We suggest that tunnel combatants actively push back against the risk
averse post-heroic emphasis on technological reliance, distance warfighting, and
professionalized doctrines. In analyzing this process through in-depth interviews
with tunnel combatants, we found soldiers acting impulsively, humorously, and at
times even making dire mistakes. Yet their adaptive efforts represent a cumulative
learning process that aids them in developing, what they see, as a working tactical
approach to tunnel warfare.

Marcus (2019) has argued that the IDF achieved "tactical success" (p. 2) in their
long-term fight against Hamas' tunnel operations precisely because of their ability to
adapt human capital to technological solutions.[2] The implication here is that a post-
heroic warrior ethos manifests itself in the ability to improvise uses of technological
power which then enable a depersonalized engagement with the enemy. This pre-
liminary research among the officers and enlisted commanders tasked with battling
the tunnel threat suggests a somewhat different model. It is the warrior ethos itself—
the desire to personally experience combat—that influences how and when soldiers
make tactical use of distancing technology in and around the tunnel environments.

As Rafi Milo's actions in entering a Hezbollah tunnel with his senior staff demonstrates, a classical warrior ethos is still well at work within post-heroic contexts, and this preliminary insight can potentially have far-reaching consequences for better understanding the place of tunnel warfare in future conflicts.

We suggest that future research may benefit by zeroing in on the larger strategic and political implications of the ways in which human imagination, pathos, and folly become part and parcel of the post-heroic methods that are ultimately meant to mitigate these factors. That is, to take seriously the role of human initiative in deploying and utilizing technological means and professional doctrines in contemporary warfare, specifically in small unit operations. In a related sense, scholar might further focus not just on issues of combat motivation but also look to the complicated issue of combat effectiveness within post-heroic conflicts. In what ways does the human element in post-heroic warfare lend itself to effective (or ineffective) warfighting? That is, on the small-scale level, one might inquire as to whether the reliance on technology and professional doctrines ultimately generate more tactical problems than it solves? Finally, we would urge a more quantitative analysis of the human element in tunnel warfare. In this context how is "combat stress" experienced by the tunnel combatants and measured by the military itself in ways that lend to combat efficiency? Tunnel warfare is one central component in the growing importance of urban warfare in asymmetrical and post-heroic contexts. This article demonstrates why it is incumbent on both scholars of armed forces and society as well as military practitioners themselves to better understand the human element—alongside other technological and doctrinal concerns—in these kinds of conflicts.

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Notes

1. The concept of post-heroic warfare is in many ways epistemologically rooted in a Clausewitzian understandings of *Vernichtungsschlacht* (the Integral Battle of Destruction) or

the final and ultimate victory that comes as the outcome to consistent and regular battles (Naveh, 2013).

2. To be sure Marcus falls short of defining "tactical success," and the official critique on the part of the Israeli State Comptroller of the IDF's operations in its 2014 conflict with Hamas in Gaza, calls into question the nature of that "success" (Israel Comptroller Report, 2014). The authors express no professional opinion regarding the supposed "successes" or "failures" of Israel's tunnel warfare capabilities.

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