

Will Hamas Be Better Prepared during its Next Confrontation With Israel?

Insights on Hamas' Lessons from Operation Protective Edge

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Operation Protective Edge (July 7-August 26, 2014) was the longest and most complex military challenge in a continuing cycle of violence between the State of Israel and Hamas since the organization's inception in 1987. It is still too early to assess the achievements and the results of the military campaign, which are still not sufficiently clear for either side, and to determine whether Israel succeeded in achieving its primary aim of establishing long-term deterrence.

Throughout the campaign, Hamas used all its capabilities, employing numerous types of weaponry and diverse methods of warfare from the outset. These included rocket fire (short-range, medium-range, and long-range) into Israel; the use of underground tunnels to carry out attacks infiltrating into Israeli territory and to support Hamas' infrastructure throughout the Gaza Strip; the employment of unmanned aerial vehicles (UAVs, also known as drones); maritime infiltration attempts by commando forces; urban warfare; and more.

Hamas learns from every confrontation or round of warfare with Israel, effectively implementing the results in its methods of operation during each new round of fighting. Hamas learns first and foremost from its own experience on the battlefield, but also from other terrorist organizations

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that have fought against Israel, such as Hizbollah, and from the accumulated knowledge and experience of state actors such as Iran and Syria.

Hamas acquired knowledge from Operation Protective Edge on three levels: at the strategic level, in its geopolitical context; the military level, in terms of its strength and buildup; and at the operative level, in terms of using its military force. Assumingly, the organization will implement this knowledge in its next round of fighting with Israel. The lessons learned by Hamas can provide Israel with understanding as to how the IDF can be prepared for future military confrontations with the group. This article examines the knowledge that Hamas acquired during the fifty days of fighting in the summer of 2014, concluding with a general assessment, and insight from Israel's perspective.

Keywords: Hamas, Operation Protective Edge, Gaza Strip, lessons, Iran, Egypt, Palestinian Authority, Israel, cyber warfare, weapons, tunnels, rockets.

Introduction

On July 7, 2014 Hamas launched a heavy rocket attack on Israel's cities and communities, dragging the IDF into the longest military campaign ever engaged in between the two parties. Hamas entered the campaign at an unprecedented political-diplomatic and economic low point.¹ Two important factors motivated the organization to launch rockets into Israel, and initiate the military confrontation. The first was Operation Brother's Keeper, launched by the IDF following the abduction and murder of Israeli teenagers Naftali Frenkel, Eyal Yifrach, and Gil-Ad Shaer in June 2014. It is doubtful that Hamas' political leadership in Gaza knew about the planned abduction, and even if it did know, it is reasonable to assume that it was not interested in the scenario that developed – the murder of the three teens – during the extremely sensitive period following its agreement with Fatah to establish a Palestinian unity government. As a result of this event, the already rocky relationship between Hamas and the Palestinian Authority further deteriorated. The second factor was the IDF's discovery of, and major strike against, an attack tunnel in Kerem Shalom, adjacent to the southern part of Gaza and resulting in the deaths of members of Hamas' military wing.²

Beyond these immediate factors – which for Hamas constituted the straw that broke the camel's back, and caused them to fire rockets into Israel and spark a wide-scale military confrontation with the IDF – other,

more profound, and deep-seated reasons included the group's internal deterioration and regional isolation, and a genuine concern among Hamas' leadership for losing control over the Gaza Strip. These reasons, which will be discussed in greater detail below, led Hamas to conclude that it had nothing to lose, and that the only remaining option was to provoke a war in an effort to ensure its future.³ From Hamas' perspective, launching the rockets into Israel was a form of "politics by other means," and the decision to embark upon a new round of fighting was a choice not between war and peace, but rather between war and slow strangulation. According to Hamas' assessment, such a war could relieve the pressure on Gaza by placing the burden on Israel, even if the likelihood of the war's actual success was low.⁴

On the eve of Operation Protective Edge, Hamas found itself in a severe geopolitical crisis, which had begun just a few months after the conclusion of Operation Pillar of Defense (November 2012). In July 2013, Egyptian President Mohamed Morsi was removed from power by the Egyptian military and replaced by Abdel Fattah el-Sisi. The Muslim Brotherhood, which had been the major political supporter of Hamas' government in the Gaza Strip, was outlawed in Egypt, and Hamas became an undesirable entity in the country.⁵ The new Egyptian regime was determined to block and destroy the smuggling tunnels between the Sinai Peninsula and the Gaza Strip, which had served as Hamas' primary source of income. The systematic destruction of these tunnels, in addition to Egypt's frequent closure of the Rafah border crossing – the Gaza Strip's exit to the outside world – resulted in a deep economic crisis in the Strip; the most concrete expression of this crisis was the Hamas government's inability to pay the salaries of more than 40,000 employees of its public institutions.⁶

At the beginning of 2014, the Hamas leadership became aware that its governance in the Gaza Strip had weakened and was unstable, and that it was unable to meet the needs of Gaza's economy – most importantly, by paying the salaries of thousands of local Palestinian government employees. In April 2014, this understanding led the Hamas leadership to sign a reconciliation agreement with the Palestinian Authority and to establish a unity government;⁷ this measure failed to bring about the salvation the organization longed for, and Hamas became the target of criticism among its own supporters.⁸ The bitterness among Gazans continued to intensify, and soon the voices of other Palestinian groups in the Gaza Strip could be heard charging that Hamas had abandoned the path of "resistance" (*muqawama*).⁹ The troubling feeling that the rug was being pulled out from

under Hamas led the organization to believe that in order to improve its position, the security situation vis-à-vis Israel would have to deteriorate. This mood, in conjunction with the more immediate factors discussed above, led Hamas to launch its rocket attack against Israel on July 7, 2014.

After the fifty days of fighting during Operation Protective Edge, Hamas was left bruised and battered. The rebuilding of the Gaza Strip has not progressed at the pace and scale as Hamas had expected at the conclusion of the campaign. Moreover, the economic situation in Gaza remains severe, despite the investments that have started to arrive; the grave humanitarian crisis could lead to public protest and threaten Hamas' rule. At the same time, the group's ability to control the other armed factions operating in the Gaza Strip and to prevent them from violating the cease-fire continues to deteriorate.

At this point in time, no change in Hamas' policy toward Israel is discernable; the armed struggle remains a central component of the organization's doctrine. That being the case, another round of fighting between the two parties appears to be only a matter of time. Hamas is well aware of this fact and is currently processing and implementing the knowledge gained from Operation Protective Edge, and at an increasing pace. Hamas' ability to derive knowledge becomes quicker and more effective from one round of fighting to the next. Between Operation Cast Lead (December 2009 – January 2009) and Operation Protective Edge, Hamas' military capability improved immeasurably, both qualitatively and quantitatively, as its military wing, the Izz ad-Din al-Qassam Brigades, continues to develop new ways of fighting against Israel. In its next clash with Israel, Hamas presumably will be better prepared and more dangerous than in the past. It continues to prepare itself well for this confrontation, and is in the process of rehabilitating and rebuilding its military force and infrastructure. Its leadership understands that these efforts may take an extended period of time and may require the organization to humble itself and refrain temporarily from taking action.

This article aims to provide insights and assessments of the knowledge acquired by Hamas during Operation Protective Edge, and to examine the major methods of action that the organization can be expected to employ during the next round of fighting with Israel. This knowledge will be considered at three levels: first, the strategic level, revolving primarily around the impact of inter-Arab regional processes on Hamas; second, the military level, relating to the processes of augmenting Hamas' military

strength and its kinetic and cybernetic buildup; third, at the operative level, relating to the use of this force, and the lessons that the Izz ad-Din al-Qassam Brigades may have learned from the battle. Just as Hamas learns from experience, the State of Israel and the IDF must also derive and internalize lessons from Operation Protective Edge and immediately implement them. Doing so will enable the IDF to deal more effectively and efficiently with Hamas and the other terrorist organizations during the next round of hostilities, and to bring about a quicker and more decisive conclusion to the fighting.

The Strategic Level

Hamas began Operation Protective Edge at an unprecedented political low point since having seized control of the Gaza Strip in 2007, and at the height of its isolation in the international arena in general and the inter-Arab regional arena in particular. Following Abdel Fattah el-Sisi's seizure of power in Egypt in July 2013, Egypt – which had been Hamas' most important source of support during the rule of the Muslim Brotherhood – became the group's bitter enemy. The new Egyptian regime's expressed its hostility toward Hamas primarily by destroying the smuggling tunnels between the Sinai Peninsula and the Gaza Strip, and periodic closing the Rafah border crossing. In the months following Operation Protective Edge, the Egyptian regime continued maneuvers to delay the negotiations that had been agreed upon at the end of the fighting in an attempt to prevent Hamas from achieving any gains.

For a while, Hamas appeared to have found a new patron in the wealthy country of Qatar. This relationship emerged after the group's leadership took refuge in the Gulf emirate following its expulsion from Syria in disgrace in 2012, and after losing the support of the Muslim Brotherhood in Egypt. Hamas' honeymoon with Qatar, however, ended with the reconciliation agreement between the Gulf emirate and Egypt during the second half of December 2014. Preliminary signs that the relationship between Hamas and Qatar was about to rupture were visible already before Operation Protective Edge concluded. In the ceasefire agreement, Hamas was forced to concede Qatar's patronage in light of the united front of Israel, Egypt, and Saudi Arabia that was opposed to endowing the emirate with any standing whatsoever in the agreement. The agreement of Hamas' Political Bureau Chief Khaled Mashal to leave Qatar as a result of the ceasefire was an insult to the Qatari emir's dignity. This development, in conjunction

with heavy pressure exerted by Saudi Arabia and the other Gulf states, resulted in a volte-face by Qatar in relation to its policy vis-à-vis Hamas, Egypt, and the other Gulf states.¹⁰

In this context, Hamas learned a major geostrategic lesson that the diplomatic isolation it had long been suffering, and which had grown even more intensive since Operation Protective Edge ended, could not continue. That is, if Hamas wanted to rebuild its image in the eyes of the Palestinian public in the Gaza Strip and the West Bank and among other Palestinian factions in Gaza, or if it wanted to replenish its depleted weapons stores and rebuild its military infrastructure, which had been severely damaged by IDF attacks, it would have to end its isolation. From Hamas' perspective, the group needed to secure the support of a different regional, diplomatic actor.

To this end, Hamas cast its eyes toward Iran. Hamas leaders understood that Iran was the only actor that could help them extricate themselves from the deep pit in which they found themselves after Operation Protective Edge. Hamas looked to Iran despite that their relationship had ruptured following Hamas' support for the opponents of Bashar al-Assad in Syria's civil war, raging since 2011, and the subsequent expulsion of Khaled Mashal and his close associates from Damascus in early 2012. Up until their falling-out, Iran had supported Hamas for years by transferring hundreds of millions of dollars to the Gaza Strip; providing comprehensive military training and knowledge; and establishing the infrastructure for Gaza's independent production of weapons, primarily rockets.

From the end of Operation Protective Edge onward, and more intensively following the Egyptian-Qatari reconciliation, senior Hamas officials voiced resolute declarations regarding the group's wish to renew relations with Iran. These declarations soon translated into action, when a delegation headed by Muhammad Nasr, a member of Hamas' political bureau, officially visited Tehran on December 8–9, 2014 and met with senior Iranian officials. At the end of the visit, Nasr maintained that Hamas "is very interested in strengthening its age-old relations with Iran and is making special efforts to do that."¹¹ Mashal's deputy, senior Hamas official Moussa Abu Marzouk, effectively articulated the group's desire to return to Iran's warm embrace, and praised Iran as "the only country that has stood beside Hamas and provided the resistance movement with financial, weaponry and training assistance."¹² Another delegation, headed by senior Hamas official Jamal Issa, visited Iran on January 6, 2015 and met with the country's deputy

foreign minister.¹³ According to a statement by Osama Hamdan, who is responsible for Hamas' foreign relations, the visits of these two delegations apparently were intended to lay the groundwork for a visit to Iran by Khaled Mashal, although a date for this visit has yet to be announced.¹⁴ At the beginning of January 2015, Hamdan also announced the official renewal of relations between Hamas and Iran, and the fact that the two parties had overcome their various disagreements.¹⁵

If Iran also had not been interested in renewing close relations with Hamas, this process never would have taken place.¹⁶ The Iranian willingness to renew ties with Hamas stems from Tehran's ambitions to enhance its standing in the region, and is intended to send a signal to other actors in the arena (and perhaps also the United States) that it still has an influence on the Israeli-Palestinian conflict.¹⁷ The Iranian desire for warmer relations with Hamas also was reflected in reports about Tehran's resumption of funding to the organization.¹⁸ Under Iranian pressure, it is possible that Hamas will need to pay lip service of some kind to the Syrian regime in order to regain the patronage of Tehran. This could be discerned in statements made by Moussa Abu Marzouk at the end of 2014, when he denied Bashar al-Assad's accusations that Hamas had abandoned Syria. In this context, Abu Marzouk stated that, "the movement opposes any activity on the part of any of its members against the Syrian state, and will distinguish itself from anyone who takes any action against the regime."¹⁹

The opportunity to share knowledge and expertise between Hamas and Hizbollah, which occurred prior to the crisis in relations with Iran, has also led to the increasingly warm relations between Iran and Hamas. Some of the knowledge implemented by Hamas in its last round of fighting previously had been applied by Hizbollah in its clashes with Israel. We can assume that Hizbollah will be interested in learning from Hamas as many in-depth insights as possible regarding the actions, tactics, and modes of operation of the IDF during Operation Protective Edge, as well as those of Hamas itself. It is possible, and even reasonable to assume that the learning and knowledge-sharing process will take the form of a tripartite effort by Iran, Hizbollah, and Hamas.

The moderate Arab countries, particularly Jordan, Saudi Arabia, and Egypt, whose relationship with Hamas is discussed above, do not view favorably the strengthening of relations between Iran and Hamas. This relationship is likely to have a negative impact on these countries, as a result of Hamas' close affiliation with the Muslim Brotherhood, in their

fight against the impact of the Brotherhood within their borders, and the fear of terrorist attacks being carried out on their soil.²⁰ In this context, it is important to note that the detention of members of Hamas' military infrastructure in the West Bank in September 2014 revealed that many Hamas activists were recruited in Jordan where they underwent military training under the supervision of its military wing, the Izz ad-Din al-Qassam Brigades.²¹

Hamas' diplomatic isolation and weak condition must be considered in conjunction with its problematic relations with the Palestinian Authority and its leader Abu Mazen, which deteriorated following the establishment of the Palestinian reconciliation government in June 2014. The tensions intensified further after Operation Protective Edge, as reflected in the mutual levelling of accusations: Hamas attacked the Palestinian Authority for failing to transfer funds to pay the salaries of government employees in the Gaza Strip and for preventing the rebuilding from moving forward, whereas Fatah spokespeople accused Hamas of causing the failure of the rebuilding of Gaza and "tainting the atmosphere of reconciliation."²² The placing of explosive devices beside the homes of ten senior Fatah officials in Gaza in early November 2014 marked a particularly low point in relations.²³

As a result of the situation at the regional, internal organizational, and inner-Palestinian levels following Operation Protective Edge, Hamas' leadership apparently has no desire or interest in renewing hostilities with the IDF.²⁴ The organization's leadership learned from the last round of fighting with Israel that it cannot permit itself – at least not in the near future – to enter into another confrontation with Israel on the same scale as it did in the summer of 2014.²⁵ The rebuilding of the Gaza Strip will take an extended period of time, as will the rehabilitation of Hamas' military infrastructure and the building up and replenishing of its weapons so that it can reach a level of readiness comparable to that which it enjoyed during Operation Protective Edge. At the same time, we must also remember that waiting, even for a long period of time, is a drop in the bucket when compared to realizing the Islamic fundamentalist ideology of Hamas, which is decisively opposed to the existence of the State of Israel.

The Military Level

Following Operation Pillar of Defense in 2012, Hamas prepared itself for an asymmetrical confrontation with Israel, focusing on several central components: rocket capability, an intricate tunnel network (an attack

network vis-à-vis Israel, and an internal network within Gaza for a variety of operative uses), a ground assault force, and to a lesser extent, the use of naval and air capabilities. During Operation Protective Edge, Hamas made use of all of these components, and in each case, claimed to have experienced both successes and failures. We can assume that at the end of the fighting, the officers and members of the Izz ad-Din al-Qassam Brigades began a process of study and inquiry so that they could reach the next round of fighting with Israel with a better-prepared force, despite the difficulties created for them by Israel and Egypt.²⁶

The destruction of Hamas' attack tunnels into Israeli territory constitute a fundamental issue, and their rebuilding is a major goal of the organization, toward which it has been working since the end of the fighting. Hamas sustained a lethal blow during Operation Protective Edge, with the destruction of thirty-two attack tunnels, fourteen of which infiltrated Israeli territory.²⁷ In just five days, the IDF wiped out years of digging and concrete reinforcement. Hamas regards the attack tunnels as a central component of its doctrine of warfare and recognizes their strategic importance, even though the results of their use during Operation Protective Edge were not directly proportional to the importance that the organization ascribes to them; although attacks from within the tunnels took a heavy toll on Israel in terms of the number of soldiers killed, their potential for death and destruction was not fully actualized according to Hamas' expectations.²⁸

Hamas recognizes that the large number of tunnels and the scale of their use strategically surprised Israel, despite the fact that the Israeli defense establishment has known about the threat of the tunnels for many years.²⁹ Hamas also recognizes that Israel does not have the capacity to contend with these tunnels through prevention and preliminary thwarting tactics, while an adequate solution for dealing with this threat has not yet been found elsewhere in the world. It is therefore quite likely that the Izz ad-Din al-Qassam Brigades will continue to dig attack tunnels into Israeli territory in an effort to surprise Israel once again, enact a heavy toll in casualties, and resonate regionally and internationally.³⁰

The events of Operation Protective Edge have proven to Hamas that the tunnels deter and intimidate the civilian population in the Gaza envelope, and that Israel regards the tunnels and their destructive potential as a strategic threat. Indeed, the tunnels infiltrating Israeli territory constituted one of the most important and creative factors contributing to both the sense of insecurity within the settlements adjacent to the border fence and the

decision of many residents to leave the area during the war.³¹ Hamas military wing spokesman, Abu Hamza has even stated that, “the next campaign will be conducted on the threshold of Ashkelon and the Negev,”³² perhaps hinting at Hamas’ intention to make more extensive use of the tunnels in the next confrontation and to conduct operations within Israeli territory on a more substantial scale than it did during Operation Protective Edge.

Another insight Hamas gained in the aftermath of Operation Protective Edge is the need to continue expanding and bifurcating the network of tunnels beneath the Gaza Strip. The tunnel network served a number of purposes, which in retrospect, contributed significantly to Hamas’ ability to survive the fifty days of hostilities, and gave its forces considerable cool-headedness in how they conducted the fighting.³³ The tunnels were used for storing and transporting weapons; carrying out ambushes against IDF forces using suicide terrorists in an effort to cause as many casualties as possible, and particularly to abduct soldiers; launching rockets from hidden sites and firing a “daily dose” of rockets into Israel; withdrawing troops; and perhaps the most important purpose of all – protecting its fighting forces from Israeli air and ground force attacks, especially Hamas’ central command of the military wing and the senior members of the political leadership. This final use of the tunnels facilitated the organization’s functioning and continuity over the course of the campaign. Hamas can therefore be expected to utilize the tunnels during the next round of fighting with Israel.

In the course of Operation Protective Edge, Hamas and the other Islamic groups in the Gaza Strip fired a total of 4,564 rockets of various ranges, reflecting the importance of rocket power from Hamas’ perspective.³⁴ The ongoing rocket fire throughout the entire period of fighting severely damaged and disrupted the daily routine of Israeli citizens, undermining their sense of security. Even though the Iron Dome system almost completely neutralized the organization’s ability to damage and destroy Israeli lives and property, it did not solve the problem of rockets being fired into Israel. Indeed, Hamas now understands that even if it failed to cause death and injury to the Israeli civilian population as it had hoped at the outset of the campaign, its success in forcing millions of citizens into bomb shelters on a daily basis and in harming the Israeli economy were nonetheless significant accomplishments. Although Hamas did not achieve military victory over the State of Israel, its use of rockets during Operation Protective Edge and its “battle of attrition” enabled Hamas to claim a narrative of victory, based

on its success in standing up to “the strongest army in the Middle East,” and to assert a victory of sorts from the perspective of Gaza’s civilian security.

Two additional insights from Operation Protective Edge have reinforced Hamas’ decision to continue producing large quantities of rockets, to improve their accuracy, and to increase their range. Hamas understands that its success at disrupting the civil aviation in Israel for a period of two days during the military operation by firing rockets toward Ben Gurion Airport has the potential to harm the morale of Israeli society, and, more importantly, cause significant economic damage to the state of Israel.³⁵ The second insight regards the effectiveness of Hamas’ rockets; the massive rocket launchings carried out against the settlements of the Gaza envelope during Operation Protective Edge (in conjunction with the threat of the tunnels) caused virtually all their residents to abandon the region.³⁶ As far as Hamas’ criteria for success are concerned, the abandonment of the settlements was a major achievement.

With insights and knowledge gained from Operation Protective Edge, Hamas can be expected in the next round of fighting with Israel to fire heavier volleys of rockets at Ben Gurion Airport, as well as at the nuclear reactor in Dimona, the refineries in Haifa, the Ashdod Port, and other such strategic targets. From Hamas’ perspective, striking a strategic facility – even if only a partial hit or if the attack fails to cause substantial damage – would constitute a significant, if not symbolic, achievement.

Due to the difficulty of smuggling goods into the Gaza Strip, Hamas has armed itself with rockets primarily through independent production. Indeed, from Hamas’ position, the renewed strengthening of relations with Iran should facilitate Iranian assistance in rocket production and in establishing the complex infrastructure needed to improve the accuracy and range of its rockets. Just a few months after the end of Operation Protective Edge, Hamas began conducting test firings apparently aimed at improving the performance of its rockets, indicating the reactivation of their local assembly line.³⁷ If the organization did not intend on firing rockets during its next confrontation with Israel, it would not have undertaken efforts to conduct frequent test firings.³⁸

During and even prior to Operation Protective Edge, Hamas also used a variety of advanced, precise, and effective weaponry, including the most advanced guided anti-tank missiles, the Russian-made Fagot, Konkurs, and Kornet; SA-7, SA-18, and SA-24 shoulder-launched anti-aircraft missiles,³⁹ also produced by Russia; and unmanned aerial vehicles

(UAV). Hamas also established an air unit that operated UAVs during the fighting, albeit with relatively little success. In this area the organization has the potential to make the greatest quantum leap, particularly given the technological developments in this realm. The gradual drop in the price of these technologies has accelerated the increase in the destructive power, range, and accuracy of various aerial weapons.⁴⁰ Iran, which possesses advanced capabilities in the field of UAVs, has already provided Hamas with assistance in this field and can be expected to continue doing so, especially as their relationship grows closer. It can be assumed that, among other things, Hamas will make use of UAVs during its next confrontation with Israel in order to carry out suicide missions or reconnaissance missions to identify targets for rocket or mortar fire. The use of UAVs serves as a suitable alternative to the launching of rockets, with the aim of increasing the potential of causing death and destruction in Israeli territory.

Despite the siege on the Gaza Strip and the Egyptian authorities' forceful policy against the smuggling tunnels, it is only a matter of time and creative thinking until Hamas finds alternative smuggling routes and manages to bring large quantities of high quality weapons into Gaza. Doing so will help the group maximize the number of casualties among IDF soldiers in the next round of fighting with Israel, and their accomplishments will lend to a victorious narrative within Gazan public opinion. For this reason, Hamas is expected to invest great efforts in building up and arming its forces with a variety of advanced missiles, including guided anti-tank missiles, shore-to-ship missiles, and shoulder-launched anti-aircraft missiles. Hamas will also strive to strengthen its air defense system, despite recognizing the superiority of the Israeli air force, as the successful interception of a plane or helicopter, or a direct hit on an Israeli naval vessel, also would generate a story of victory, which it long has been hoping to achieve.

Hamas' modes of warfare during Operation Protective Edge also included cyber warfare. Since Operation Cast Lead, during which Hamas carried out limited cyberattacks, the group's capabilities in this realm has improved markedly. During Operation Protective Edge, this improvement was noticeable by the significant increase in the number of cyberattacks carried out against Israel, which accompanied the entry of ground forces into the Gaza Strip.⁴¹ Hamas began Operation Protective Edge with greater preparedness in the internet and cybernetic arena than in previous rounds of fighting, in part as a result of its having sent personnel abroad to undergo training in the realm of cyberattacks.⁴² Hamas possibly could

begin outsourcing future cyberattacks against Israel using groups within the world of organized crime who are motivated solely by financial profit, as well as independent terrorist groups that specialize in the cyber arena and operate under state auspices.⁴³ Hamas did not succeed in implementing cyber strategies against Israel during Operation Protective Edge.⁴⁴ Still, it can be expected to continue investing in tools and the ability to intensify its cybernetic activity so that during its next round of fighting with Israel, it will be able to disrupt Israeli civilian and military infrastructure, which rely almost completely on internet communications systems.

The Operative Level

Operation Protective Edge furnished additional evidence of the asymmetrical war underway between the IDF and the military wing of Hamas. Although the group concluded the operation bruised and battered, considering the campaign from the perspective of the concept of “resistance,” in which it believes and which guides its operations, provides a different perspective. Indeed, in the eyes of Hamas, its success in conducting a complex, intensive fifty-day military campaign against the IDF is an impressive accomplishment – one that Hamas can boast about, particularly to the population of Gaza, and that might secure political profit vis-à-vis Iran and Hizbollah, its old-new allies, as well as some of the Arab states. It is reasonable to assume that Hamas will not dramatically change its doctrine of warfare in the lead up to the next confrontation with Israel; rather it will attempt to improve and strengthen this doctrine, while internalizing and applying the lessons learned during Operation Protective Edge.⁴⁵

As for its rocket fire, Hamas can be expected to conduct an analysis of the intercepting capabilities of the Iron Dome, quite likely in conjunction with Iran and Hizbollah. By analyzing the system, Hamas may be able to improve the operation of its rocket launches and even, however slightly, the percentage of hits and casualties within built-up areas in Israel in the next round of fighting, in contrast to the meagre results achieved by Hamas during Operation Protective Edge.

Hamas learned two major lessons about the functioning of the Iron Dome batteries during Operation Protective Edge. One is that the system cannot defend the entire territory of the State of Israel, and does not provide a solution for short-range missiles or mortar shells with ranges of five-to-seven kilometers or less.⁴⁶ Hamas may also reach the conclusion that, like every missile defense system, the Iron Dome system has a saturation point

beyond which it cannot provide coverage, leading to the conclusion that rockets fired at close range may be able to penetrate the system's defensive envelope.⁴⁷ Indeed, during Operation Protective Edge, Hamas was already firing heavy volleys, most likely for the purpose of testing the Iron Dome's saturation point.

The limitations of the Iron Dome's interception batteries left many parts of Israel without protection during Operation Protective Edge.⁴⁸ In order to defend all of the populated areas of Israel and its strategic facilities, Israel will need to equip itself with a few dozen batteries. The high cost of the system's intercepting missiles (Tamir) severely limits Israel's ability to arm itself with the quantity of batteries and intercepting missiles necessary for providing hermetic coverage of the country's populated areas during prolonged hostilities. Such a situation would leave some areas undefended, and enable Hamas to exploit this breach for the firing of heavy, dense volleys of rockets at various ranges.⁴⁹

Given the small number of Iron Dome batteries, Hamas understands that in the next round of fighting with Israel, it will need to fire at a dispersed number of targets. This will force Israel to saturate the Iron Dome's batteries and focus its defensive system on specific targets, enabling Hamas to increase the accuracy of the rockets it launches. Hamas can therefore be expected to launch heavy and dense rocket volleys against Israel's civilian population, and more precise rockets and missiles against strategic targets. The group is expected to increase the effectiveness of its launches and the chances of hitting its targets, which translates into increased killing and more severe property damage.⁵⁰ In an effort to disperse its targets and saturate the Iron Dome's batteries, Hamas may seek the assistance of its allies to fire rockets into Israel from the north and the south.⁵¹

Hamas can be expected to continue its efforts to accumulate as large a stock of high quality, precise, and longer-range rockets and missiles as possible, despite their high cost and the great difficulties involved in smuggling them into the Gaza Strip. In terms of strategic targets, the possibility of a rocket striking a gas production facility could be very damaging.⁵² Although Hamas' rocket system is not precise and has extremely slim chances of striking such a facility, from the lessons learned during Operation Protective Edge, the organization may conclude that the massive launching of dozens of rockets against such a production facility may increase the chances of hitting it. This is significant, as striking a gas

production facility could cause heavy damage and paralyze gas production for an extended period of time.

The cross-border attack tunnels into Israel and the network of infrastructure tunnels beneath the Gaza Strip are another major operational component of Hamas' military wing. Undoubtedly Hamas is now studying and rethinking the tactical use of its tunnels. The organization did not optimally use its attack tunnels during Operation Protective Edge, and the lesson learned in preparation for the next round of fighting will probably have to do with the timing of their use and maximal actualization of their destructive potential. As already noted, Hamas can be expected to continue digging attack tunnels across the border with Israel. Yet given the time necessary to dig tunnels and the difficulties involved in acquiring the quantities of concrete required for their reinforcement, Hamas' efforts could focus on digging a relatively small number of highly effective routes. The goal of this strategy would be to reach, when the time comes, what it regards as the ultimate achievement – the abduction of a live Israeli soldier (or, on a lower scale, the abduction of corpses) for the purpose of negotiating the release of its own prisoners.

The infrastructure tunnels, which were dug as a bifurcated network deep beneath the Gaza Strip, constituted a key component of Hamas' ability to conduct ongoing fighting during Operation Protective Edge, and they proved to be extremely effective. These tunnels helped Hamas' command staffs and supreme command to move around freely from region to region without the fear of being discovered. That almost the entire senior chain of command and political leadership of Hamas remained intact at the end of the operation highlighted the importance of the infrastructure tunnels.⁵³ As a lesson to be taken from the campaign, the organization almost certainly will rehabilitate the infrastructure tunnels that were damaged or destroyed, and will continue to develop the tunnel network as vigorously as possible.

Hamas entered Operation Protective Edge after learning and assimilating lessons from earlier rounds of fighting with Israel, as well as lessons learned from Hizbollah from its experience fighting against the IDF, particularly during the Second Lebanon War.⁵⁴ As a result, Hamas' tactical units within the battalions were more effective and aggressive than in previous confrontations with the IDF. The group's military wing understood that, in addition to the use of advanced weaponry, the use of standard, non-technologically advanced weapons and basic methods of warfare also would be extremely effective and deadly. Indeed, Hamas made widespread

use of sniper fire, landmines, machine guns, mortar shelling, the planting of dense zones of improvised explosive devices, and attempts to lure IDF forces into kill zones. Using these methods and weapons, Hamas succeeded in exacting a heavy price on Israel, killing sixty-seven soldiers – more than in any previous clash between the two parties in the past eight years.⁵⁵

Hamas took advantage of the breach in the Iron Dome's defense range by firing thousands of mortar shells, which caused 25 percent of all the Israeli casualties in Operation Protective Edge, disrupted the lives of the inhabitants of the Gaza envelope, and resulted, among other things, in the local population's mass flight from the region. The absence of an early warning system for mortar fire and of an operative solution to intercept them contributed to Hamas' increasing use of this weapon.⁵⁶ Whether or not a defensive solution is found, Hamas can be expected to make substantial use of mortar fire against the settlements of the Gaza envelope in the next round of fighting, in an effort to cause the local population to flee. Hamas can also be expected to aim mortar fire at IDF assembly and deployment points, in order to cause as high a number of military casualties as possible.

During Operation Protective Edge, Hamas failed to damage Merkava tanks and Namer armored personnel carriers with its guided anti-tank missiles. The organization recognizes the IDF's supremacy in defending its armored vehicles, primarily by means of the new active "Trench Coat" defense system, which proved itself during the fighting.⁵⁷ As a result, the Izz al-Din al-Qassam Brigades used the guided anti-tank missiles against vulnerable infantry forces who did not have protection against anti-tank missiles in an effort to cause as many deaths and injuries as possible.⁵⁸ It is reasonable to assume that Hamas will also apply this lesson in future fighting against the IDF.

Hamas surprised the IDF during Operation Protective Edge by undertaking a number of military operations, whose results indicate that they had not yet fully evolved into effective operational tactics. In the next round of fighting, the Izz al-Din al-Qassam Brigades can be expected to make repeated use of the same "surprises" with the primary aim of instilling constant fear within the Israeli population, although it is possible that some of these operations will also succeed in harming lives and property. These surprises may include the infiltration of Hamas naval commandos,⁵⁹ the more widespread use of unmanned aerial vehicles (for reconnaissance and/or for attack/suicide missions), and possibly also drones.

Hamas continues to train and conduct large-scale military exercises, implementing the knowledge acquired from the discovery of its infiltration into Israel during Operation Protective Edge in order to be better prepared during its next confrontation with Israel. Hamas does so primarily through urban warfare training, in order to improve its ability to attack IDF positions and abduct soldiers, live or dead. In this framework, Hamas' military wing conducted a large military exercise on December 18, 2014, which included light weapons fire, the firing of anti-tank missiles and mortar shells, and the use of naval forces.⁶⁰ Hamas' National Security forces also conducted a final officers' training course exercise, simulating the charge and conquest of an Israeli military position.⁶¹

Within the framework of the knowledge incurred from Operation Protective Edge, Hamas has also established a "Popular Army."⁶² On November 7, 2014, in the Jabalia refugee camp in the Gaza Strip, Hamas' military wing declared the establishment of the Popular Army's first battalion, consisting of 2,500 fighters. According to senior Hamas official Muhammad Abu-Askar, the new body is "aimed at preparing young Palestinians for any possible attack on the part of Israel."⁶³ The Popular Army appears to serve as an auxiliary semi-military force in order to expand the future mobilization potential of the Izz ad-Din al-Qassam Brigades and to bolster popular support for Hamas among the Gazan population. From Hamas' perspective, this militia can be used as a tool to taunt the IDF in the media in the event that those mobilized are killed during the hostilities, and as a means of facilitating accusations against Israel for the killing of uninvolved teenagers and young adults.⁶⁴

In addition to the military tactics employed by Hamas during Operation Protective Edge, the group also adopted a defensive strategy incorporating successful media tactics. This integrated strategy, described as "the victim doctrine,"⁶⁵ involved the launching of rockets and using weaponry from within densely populated areas of the Gaza Strip, with the intent to force Israel to respond, whereas the civilian population in Gaza was turned into live, "human shields."⁶⁶ Hamas operatives concealed themselves in the center of neighborhoods in the Gaza Strip and turned them into battle sites; they positioned command posts in hospitals and residential homes, stored rockets in educational institutions, and shot them from within mosques, hospitals, and schools. In this manner, the military wing of Hamas forced Israel to return fire to the sources, resulting in the death and injury of many innocent civilians. In practice, Hamas turned the

inhabitants of the Gaza Strip into their own Iron Dome of sorts; Hamas caused injury to an uninvolved population in service of the ultimate aim of the victim doctrine: to create international pressure on Israel, and increase the country's isolation and delegitimization by exerting diplomatic, media, and legal pressure, as well as leveling accusations against Israel of use of disproportional force.⁶⁷

Hamas combines use of the victim doctrine - an integral component to the operation of its force - with a media campaign and diverse psychological warfare, leading to the portrayal of the inhabitants of Gaza as the "victims of Israeli aggression" in the international media. The group understands that this is an effective approach that causes the international media to focus more on the Palestinian victims than on the circumstances in which they died or on victims in other parts of the Middle East, such as Syria and Iraq, thereby garnering greater support for its cause. In this way, Hamas maximizes the suffering of the inhabitants of the Gaza Strip for the sake of its own public relations. Given its success in conveying the message of the "victim," Hamas will almost certainly operate in a similar manner in its next confrontation with Israel, despite the immense suffering and destruction this approach has caused to the people of Gaza.

Conclusion

This article explored the knowledge and insights that Hamas most likely gained during fifty days of fighting in Operation Protective Edge. On the geopolitical, strategic level, the organization has understood that it cannot be left in the Middle East arena without the support of a dominant regional actor, and therefore, Hamas has pinned its hope on Iran to help rearm and build up its military force. Once again Iran is taking its protégé in the Gaza Strip under its wing, thereby completing a strategic process aimed at (almost) completely surrounding Israel with its emissaries in Lebanon, the Golan Heights, and the Gaza Strip.

Most likely, Hamas will not dramatically change its overall doctrine of warfare; it will continue rebuilding its force in order to gain strength and further develop its rocket capabilities, improve its abilities to carry out cross-border actions, and arm itself with high quality advanced weaponry. It is feasible that if the group keeps its head down for a few years and refrains from heating up the region, in the next round of fighting it will be prepared, well equipped, and in a position to cause maximum damage to Israel. Presumably, Hamas will continue to invest in its military force,

protection, and survivability, enabling the organization to be prepared for more extended fighting than during Operation Protective Edge. Hamas can also be expected to improve its rocket-firing regime and the tactical use of attack tunnels into Israeli territory.

Hamas would not consciously have drawn Israel into a new round of fighting in the summer of 2014 had it not felt that it was backed into a corner and that its rule in the Gaza Strip was in danger. Indeed, continuing its control remains one of its top priorities, along with its desire to seize the leadership of the Palestinians from the Palestinian Authority and the Fatah movement. The Hamas leadership does not take into consideration the death and destruction suffered by the inhabitants of the Gaza Strip during the fifty days of fighting of Operation Protective Edge, as well as in previous rounds of fighting with Israel. In their opinion, the damage to civilian infrastructure, the massive destruction of residential homes, and the tens of thousands of displaced inhabitants are outcomes that can be accommodated, as long as the group continues its control in the Gaza Strip and its rule remains stable. It is therefore incumbent upon Israel to consider using force and military might in the next round of fighting in order to compel Hamas to face the horns of the dilemma regarding the survival of its regime. When Hamas feels that the ground beneath its feet is secure and not threatened, the dilemma is not tangible, and it continues to shoot, launch rockets, and fight. Israel, therefore, must make Hamas face the dilemma; Israel must ask itself whether it intends on toppling Hamas' regime not only through rhetorical means, but also through the appropriate use of force.

From Israel's perspective, the parameter of time is important. The longer the fighting continues, the more accustomed Hamas grows to the realities, the more "achievements" (from its perspective) it secures, and the more difficult it becomes for Israel to achieve its goals. The targets attacked by the IDF in the Gaza Strip during Operation Protective Edge met the criteria of international law, which raises the question of whether Israel could have achieved what it did in a shorter time. Concentrating the blow within a period of a few days could have great psychological value, and presumably, the number of injured and killed and the damage on both sides would have been less. Had the IDF caused the same damage in a shorter period of time already at the outset of the fighting, the nature of the battles might have been different, and Hamas' defeat might have been reached more swiftly and clearly. Thus, the bombing by the Israeli

air force of multi-story buildings in the Gaza Strip during the initial days of the fighting instead of in the final days could have had an impact on Hamas' conscience and its resolution to continue the fighting.

In addition, the IDF must find a solution for one of Hamas' intrinsic advantages: its intimate knowledge of the Gaza Strip. The commanders of the Izz ad-Din al-Qassam Brigades never leave the borders of the Gaza Strip and constitute a "center of knowledge" regarding the region. In an area as small and densely populated as Gaza, this constitutes a major advantage, and renders the organization's system of learning extremely effective. In contrast, due to various constraints, the IDF does not leave its experienced brigade and battalion commanders in the field for extended periods of time, and the military echelon must also consider its position on this issue.

The survival of the senior military command of the Izz ad-Din al-Qassam Brigades and of Hamas' political leadership after fifty days of fighting raises an important question about the conception of Israeli security and the building of the IDF forces. The IDF's conception of building a force, which has fundamentally changed in recent decades and places great emphasis on the defensive component, demands a separate in-depth analysis. Defensive systems, such as the Iron Dome, designed to intercept mortar shells, and the system currently being developed to detect tunnels, are undoubtedly important, life-saving factors that can provide political and military decision makers with the patience, space, and time needed to effectively plan and operate under less pressure; yet they do not win wars. A decisive military achievement requires offensive actions, including those that lead to "beheading the snake." The State of Israel must examine the relative proportion of its investments in defensive systems vis-à-vis the development of offensive systems and maneuvers, which, in a focused and wise manner, can inflict severe damage to Hamas' senior military command and political leadership. Such modern conceptions and systems could bring about a swifter and more decisive conclusion to the next campaign.

In preparation for the next military campaign, Hamas expectedly will strive to manufacture and smuggle into the Gaza Strip more precise rockets, to be launched at strategic targets within Israel. Such action will force the IDF to divert some of its existing Iron Dome batteries to the defense of these targets, leaving fewer batteries to defend Israel's cities and settlements. Decision makers must therefore make clear to the Israeli population the importance of passive defense, and the fact that the active defense systems

preferably will be operated to meet the needs of the IDF's offensive force and to maintain the functioning of essential strategic systems.

Upon engaging Israel in Operation Protective Edge, Hamas believed it would successfully change the situation in the Gaza Strip and force Israel into an arrangement that would follow the hostilities. Following the campaign, however, the organization emerged bruised and battered from the mighty blow it had sustained and from the failure to bring about the change it had sought. Nonetheless, from its perspective, Hamas' military wing can be credited with a number of achievements. First of all, Hamas still rules the Gaza Strip and has managed to preserve its political and military leadership. Moreover, the organization survived fifty days of fighting and reclaimed its position as the leader of the "resistance" movement. Other achievements include its success in firing rockets at Tel Aviv and northern Israel and forcing millions of Israelis into bomb shelters on a daily basis; undermining the sense of security of Israeli civilians and causing most inhabitants of the Gaza envelope to abandon their homes during the hostilities; disrupting civil aviation in Israel via Ben Gurion Airport; and, by means of the "victim doctrine," bringing about the establishment of a UN commission of inquiry to investigate whether Israel committed war crimes in the Gaza Strip during Operation Protective Edge.

Despite its successes, Hamas was also forced to fight alone against the IDF, and failed to open a second front during the entire period of fighting. In preparation for the next confrontation with Israel, Hamas is trying to overcome this situation by rehabilitating and strengthening its relations with potential allies in the north and the south, including Hizbollah and radical Islamic groups in the Sinai Peninsula and Lebanon, and by strengthening its infrastructure in the West Bank and in Jordan. It is undertaking these efforts in order to open at least one additional active front against Israel, even if only at low intensity, in the event of another confrontation as this will make it more difficult for the IDF to fight Hamas in the Gaza Strip.

In order to delay the next round with Hamas, Israel must undertake two necessary steps. First, Israel must prevent the group's military buildup by means of standard and advanced weaponry and the raw materials that may be used for their production. This effort poses Israeli decision makers with a complex dilemma: on the one hand, there is a genuine need to bring essential materials and equipment into the Gaza Strip for the purpose of rebuilding homes and infrastructure damaged during Operation Protective Edge; on the other hand, Hamas is known to confiscate some building materials

and equipment that reach Gaza in order to dig tunnels and build other military infrastructure. Second, Israel must improve the dire economic and humanitarian conditions in the Gaza Strip. Israel has already undertaken a number of steps in this direction: allowing agricultural exports from Gaza to enter the Palestinian Authority, which Israel had prohibited prior to the hostilities of the summer of 2014; examining the possible entry of workers from Gaza into Israel; and authorizing construction inputs for the civilian sector in the Gaza Strip. These and other necessary steps may not only ease the suffering of the local inhabitants, but also might reinforce the sense of survival of the Hamas regime. In such a situation, devoid of a concrete threat to its rule, it can be assumed that Hamas will not be in any hurry to return to the battlefield.

Nonetheless, we must not have illusions and not be mistaken: despite the heavy price it paid during Operation Protective Edge, Hamas is currently engaged in preparations for the next war. Fighting Israel, even as part of its doctrine of resistance, is one of Hamas' tools for the strategic change it yearns to bring about so that it can continue its rule of the Gaza Strip and establish itself as a key actor in the arena – one that is more powerful than the regime of Abu Mazen and the Palestinian Authority.

Operation Protective Edge created unprecedented regional and geopolitical opportunities for Israel. The Egyptian regime's hostility toward Hamas, perhaps best reflected in the late February 2015 Cairo court ruling that classified Hamas in its entirety (both the military wing and the political leadership) as a terrorist organization, paved the way for the Israeli government to intensify its security cooperation with Egypt in an effort to thwart Hamas' renewed military buildup and the rebuilding of its military infrastructure. Moreover, in addition to its security cooperation with Egypt, which promotes the development of strategic relations between Israel and el-Sisi's regime, the Israeli government is currently facing a rare and even more challenging window of opportunity for forging a new constellation of regional relations with the pragmatic Sunni Arab states (Egypt, Saudi Arabia, Jordan, and most of the Gulf states), who, along with Israel, currently share one major interest – the struggle against the Islamic State organization. Another important unifying interest of all of these countries is the prevention of a nuclear Iran. For this reason, Israel should seek to transform the present reality by taking advantage of the timing and the current window of opportunity vis-à-vis these Arab states

to initiate a broad regional process aimed at promoting common interests and bolstering its regional and international standing.

Notes

- 1 On the eve of Operation Protective Edge, however, Hamas was at the height of its military strength. During the entire period between the end of Operation Cast Lead in early 2009 and the beginning of Operation Protective Edge, Hamas intensively engaged in a military buildup, including the digging of a massive network of tunnels crisscrossing the entire Gaza Strip for the purpose of meeting the needs of launching rockets, stockpiling weapons, and transporting equipment and fighters; the digging of attack tunnels into Israeli territory; and the local production of thousands of rockets with different ranges.
- 2 Harel Chorev, "The Road to Operation Protective Edge: Gaps in Strategic Perception," *Israel Journal of Foreign Affairs* 8, no. 3 (2014): 9-24. http://www.academia.edu/8785479/The_Road_to_Operation_Protective_Edge_the_Gaps_in_Strategic_Perceptions.
- 3 Udi Dekel, "Operation Protective Edge: Strategic and Tactical Asymmetry," in *The Lessons of Operation Protective Edge*, eds. Anat Kurz and Shlomo Brom (Tel Aviv: Institute for National Security Studies, 2014), pp. 13-20.
- 4 Ishaan Tharoor, "4 Reasons Hamas Has Not Lost the War in Gaza," *Washington Post*, August 6, 2014, <http://www.washingtonpost.com/blogs/worldviews/wp/2014/08/06/4-reasons-hamas-has-not-lost-the-war-in-gaza>.
- 5 "Egyptian Court Outlaws the Muslim Brotherhood," *Haaretz*, September 23, 2013, <http://www.haaretz.co.il/news/world/middle-east/1.2125181>.
- 6 Avi Issascharoff, "Despair in Gaza is Much Less Comfortable," *Walla*, June 12, 2014, <http://news.walla.co.il/item/2754817>.
- 7 Avi Issascharoff, "An Historic Palestinian Achievement: Reconciliation, Unity, and Elections," *Walla*, April 23, 2014, <http://news.walla.co.il/item/2739752>.
- 8 Hamas hoped that after signing the agreement and establishing the unity government, the Palestinian Authority would pay the salaries of tens of thousands of public employees. Ultimately, however, this never came to pass.
- 9 Chorev, "The Road to Operation Protective Edge."
- 10 Amir Tibon, "Reconciliation between Qatar and Egypt: Israel Considers the Implications for Hamas," *Walla*, December 24, 2014, <http://news.walla.co.il/item/2813646>.
- 11 "Hamas Keen to Bolster Iran Ties," *Tansim News*, December 12, 2014, <http://www.tasnimnews.com/English/Home/Single/584122>.
- 12 "Hamas Stresses Expansion of Ties with Iran," *Fars News Agency*, December 12, 2014, <http://english.farsnews.com/newstext.aspx?nn=13930921000206>.

- 13 The official purpose of the delegation's visit was to take part in the twenty-eighth Islamic Unity Conference. At the end of the meeting, the Iranian deputy foreign minister said that "Iran's relations with the Hamas movement are strong." See Yoni Ben-Menachem, "Increasingly Close Relations between the Hamas Movement and Iran," *News 1*, January 8, 2015, <http://www.news1.co.il/Archive/003-D-98872-00.html>.
- 14 "Hamas Chief Likely to Visit Iran: Official," *Tansim News*, December 10, 2014, <http://www.tasnimnews.com/english/Home/Single/584576>.
- 15 Ahmad al-Amin, "Hamdan Yakad Tajawaz Khalafat Hamas wa-Iran," *Al Jazeera*, January 2, 2015, <http://www.aljazeera.net/home/print/f6451603-4dff-4ca1-9c10-122741d17432/c0e6584b-0f91-438d-acd9-2ba1b69d5271>.
- 16 Until now, few members of the Iranian leadership have made public statements regarding the renewal of relations with Hamas. Nasser al-Sudani, the head of the Palestine committee in the Iranian parliament, was quoted, however, in the Hamas journal *al-Risala* as saying that "even during the period of cooling in relations between Hamas and Tehran, Iran did not stop its military aid to Gaza. It now intends to strengthen relations and continue financial aid." Al-Sudani also was quoted as saying, "Iran considers Hamas as the front line in the struggle against Israel. The destruction of Israel will only be facilitated by arming the Palestinians, in the Occupied West Bank as well." See Amira Hass, "Iran Official Tells Hamas Daily: Willing to Arm West Bank Palestinians too," *Haaretz*, December 21, 2014, <http://www.haaretz.com/news/diplomacy-defense/.premium-1.632943>.
- 17 Fatima Ahmad Alsmadi, "What is behind Hamas-Iran Rapprochement?" *Al Jazeera*, December 16, 2014, <http://www.aljazeera.com/indepth/opinion/2014/12/hamas-iran-rapprochement-2014121694023735679.html>.
- 18 Amir Bohbot, "After an Extended Rift: Iran Has Started Transferring Funds to Hamas," *Walla*, February 1, 2015, <http://news.walla.co.il/item/2825109>.
- 19 Abu Marzouk also stated that "what most saddens our brother Abu al-Walid [Khaled Mashal] in leaving Syria is the good relations that the Hamas movement has enjoyed with Bashar al-Assad and the Syrian regime for many years, which Hamas has not forgotten and on which Hamas has not turned its back. The movement is not leaving [its friend], but rather praises and thanks Syria." See "Abu Marzouk Raddan `ala al-Assad: Hamas Iltizamat al-Hiyad fi'l-Izmat al-Suriyya," *Palinfo*, December 21, 2014, <http://www.palinfo.com/site/pic/newsdetails.aspx?itemid=168644>.
- 20 According to the Israeli General Security Services, over the past two years, terrorist operatives from the Gaza Strip have expanded their activities aimed at carrying out attacks abroad, particularly in Saudi Arabia and Egypt. See "Terrorist Activity at the Inter-Regional Range," General Security Services, December 25, 2013, <http://www.shabak.gov.il/publications/study/Pages/251213.aspx>.

- 21 "Broad Hamas Military Infrastructure Thwarted in the West Bank," General Security Services, November 27, 2014, <http://www.shabak.gov.il/publications/publications/pages/newitem271114.aspx>.
- 22 Fatah spokesman Ahmed Assaf even referred to Hamas as "a contractor and mercenary of the Muslim Brotherhood." See Yoni Ben-Menachem, "Hamas Distancing Itself from Fatah and Thwarting Reconstruction in the Strip," *News 1*, November 23, 2014, <http://www.news1.co.il/Archive/003-D-97641-00.html>.
- 23 Although no organization claimed responsibility for the explosions and Hamas quickly distanced itself from the event, Fatah directed its accusations at Hamas, claiming that the attacks were meant to prevent a Fatah rally in memory of Yasser Arafat. See Avi Issascharoff, "To Prevent Rally for Arafat: Hamas Blows up Homes of Fatah Officials in Gaza," *Walla*, November 7, 2014, <http://news.walla.co.il/item/2799740>. On March 9, 2015, the Palestinian Authority arrested some fifty Hamas members in the West Bank. See Avi Issascharoff, "After the Calls to Halt Coordination as Well: PA Carries out Wave of Arrests among Hamas Activists," *Walla*, March 9, 2015, <http://news.walla.co.il/item/2836426>.
- 24 Yossi Melman, "Why Is Netanyahu Refusing to Reveal Documents from Government Meetings during the War?" *Maariv*, October 3, 2014, <http://www.maariv.co.il/news/new.aspx?pn6Vq=11&0r9VQ=GGDEE>. Saleh al-Arouri, a member of Hamas' political bureau, told the organization's journal *al-Risala* that, "the movement has no interest in starting a new campaign against Israel, but if one develops, the loss will be much greater than in Protective Edge." Al-Arouri also said that Hamas would not "create a war with the enemy, but if Israel forces war on us, we will fight and surprise them." See Jack Khoury, "Senior Hamas Official: We Have No Interest in Starting Another Clash with Israel," *Haaretz*, December 22, 2014, <http://www.haaretz.co.il/misc/article-print-page/1.2518488>.
- 25 Immediately following the end of the fighting on August 27, 2014, Hamas spokesman Sami Abu Zahari said that, "Hamas' current priority is to rebuild the Strip, to rehabilitate the capabilities of 'resistance,' and to make political use of its military victory." See "News on Terrorism and the Palestinian-Israeli Conflict (August 26 – September 2, 2014)," Meir Amit Intelligence and Terrorism Information Center, Israeli Intelligence Heritage and Commemoration Center, <http://www.terrorism-info.org.il/he/articleprint.aspx?id=20709>. At a Gaza conference of a research institute operating under the auspices of Hamas' security services, Marwan Issa, head of Hamas' military wing, said that, "the military wing has the ambition, the capability, and the belief to go all the way. We are not currently striving for a confrontation with Israel, but we are continuing to work to ensure that we are strong in every future confrontation." See Elior Levy, "Head of Hamas' Military Wing in Rare Public Statement: 'We Are Continuing

- to Produce Rockets,” *Ynet*, March 3, 2015, <http://www.ynet.co.il/articles/0,7340,L-4632265,00.html>.
- 26 Hamas continues to search for creative ways to smuggle weapons into the Gaza Strip and will do everything in its power to bring in diverse, high quality weaponry in order to replenish the stock of weapons at its disposal. At the same time, the measures taken by the Egyptian regime against the smuggling tunnels from the Sinai Peninsula into the Gaza Strip have posed significant difficulties to Hamas’ “arms race.” For example, on December 31, 2014, the governor of the northern Sinai Peninsula declared that Egypt would begin to expand its buffer zone with the Gaza Strip in the Rafah area, which extends a length of five kilometers to a depth of one kilometer. See Adnan Abu Amer, “Egypt’s Buffer Zone Expansion Hurts Hamas’ Arms Supplies,” *Al-Monitor*, January 9, 2015, <http://www.al-monitor.com/pulse/originals/2015/01/egypt-buffer-zone-gaza-humanitarian-crisis-hamas.html#>.
 - 27 Jeremy Binnie, “IDF Detail the Damage Inflicted on Gaza Militants,” *IHS Jane’s Defense Weekly*, August 8, 2014, <http://www.janes.com/article/41657/idf-detail-the-damage-inflicted-on-gaza-militants>.
 - 28 In four of the six infiltrations, Izz ad-Din al-Qassam Brigade fighters succeeded in engaging IDF forces, killing a total of eleven soldiers. The most successful tunnel attack took place on July 29, 2014, when a Hamas team successfully infiltrated an IDF post near Nahal Oz and killing five soldiers. In the course of these infiltrations, Hamas fighters did not succeed in abducting a live Israeli soldier or a soldier’s body. See David Horovitz, “Israel Might Have Won; Hamas Certainly Lost,” *Times of Israel*, August 6, 2014, <http://www.timesofisrael.com/israel-might-have-won-hamas-certainly-lost/>.
 - 29 Gidi Weitz, “Hamas Has Three or Four More Still Unidentified Tunnels That Reach Kibbutzim in the Gaza Envelope,” *Haaretz*, September 4, 2014, <http://www.haaretz.co.il/misc/iphone-article/.premium-1.2424697>.
 - 30 “Tunnel Work in Gaza Resumes,” *MEMRI*, October 26, 2014, http://www.memri.org.il/cgi-webaxy/sal/sal.pl?lang=he&ID=107345_memri&act=show&dbid=articles&dataid=3727. Palestinian sources in Gaza have said that the emergence of a black market for cement brought into Gaza via Israel enabled the organization to successfully acquire cement for military uses, such as casting concrete slabs used as siding for the attack tunnels. See Elior Levy, “Hamas Rebuilds Attack Tunnels with Cement from Israel,” *Ynet*, December 19, 2014, <http://www.ynet.co.il/articles/0,7340,L-4605402,00.html>.
 - 31 Residents also left as a result of the firing of rockets and the mortar shells throughout the war.
 - 32 This statement was made during an assembly of the Izz ad-Din al-Qassam Brigades held in Gaza in late November 2014. See Melman, “Why Is Netanyahu Refusing to Reveal Documents from the Government Meetings during the War?”

- 33 Jonathan D. Halevy, "The Attack Tunnels as a Strategic Weapon in the Hands of Hamas," The Jerusalem Center for Public Affairs, August 3, 2014, <http://jcpa.org.il/המנהרות-ההתקפיות-כנשק-אסטרטגי-בידי-חמ/2014/08/>.
- 34 According to data provided by the IDF spokesperson, 3,417 rockets landed in open areas inside Israel, 224 landed in built-up areas inside Israel, 188 landed inside the Gaza Strip, and 735 were intercepted by the Iron Dome system.
- 35 Sapir Peretz-Zilberman, "US and European Airlines Have Halted Flights to Israel," *Globes*, July 22, 2014, <http://globes.co.il/news/article.aspx?did=1000957389>.
- 36 Jeffrey White, "The Combat Performance of Hamas in the Gaza War of 2014," *CTC Sentinel*, September 29, 2014, <https://www.ctc.usma.edu/posts/the-combat-performance-of-hamas-in-the-gaza-war-of-2014>.
- 37 Ashraf Al-Hur, "Isra'il Takud Ilaq Nashata Hamas Saruhan Tajribiyyan min Ghaza tujaha al-Bahr," *al-Quds al-Arabi*, October 23, 2014; Yoav Zitun and Elior Levy, "Hamas is Picking up the Pace: Four Rockets Fired into the Sea in the Past Two Days," *Ynet*, November 20, 2014, <http://www.ynet.co.il/articles/0,7340,L-4594119,00.html>.
- 38 According to official Israeli sources, since September 16, 2014, Hamas has fired dozens of long-range rockets that landed at sea and detected by the Iron Dome radar system. See "Hamas is Rebuilding Attack Tunnels and Launching a New Generation of Rockets," *Ynet*, January 19, 2015, <http://www.ynet.co.il/articles/0,7340,L-4616781,00.html>.
- 39 "The Izz al-Din al-Qassam Brigades' Weapons and Units," *MEMRI*, September 2, 2014, <http://www.memri.org/report/en/print8132.htm>.
- 40 T.X. Hammes, "Israel and the Demise of 'Mowing the Grass,'" *War on the Rocks*, August 19, 2014, <http://warontherocks.com/2014/08/israel-and-the-demise-of-mowing-the-grass>.
- 41 Daniel Cohen and Danielle Levin, "Operation Protective Edge: The Cyber Defense Perspective," in *Lessons of Operation Protective Edge*, eds. Kurz and Brom, pp. 59-64.
- 42 For example, in August 2014, the Israeli General Security Services revealed that it had detained a Hamas operative by the name of Majdi Mafarja who, during interrogation, admitted to having been recruited and trained in Malaysia for carrying out cyberattacks and encrypting letters. See Amir Bohbot, "Permitted for Publication: Hamas Terrorist Network Planning to Topple the PA Uncovered," *Walla*, August 19, 2014, <http://news.walla.co.il/item/2776711>.
- 43 Cohen and Levin, "Operation Protective Edge: The Cyber Defense Perspective"; Tal Pavel, "Past, Present, and Future: Hamas' Online Activity during Operation Protective Edge," *Calcalist*, August 17, 2014, <http://m.calcalist.co.il/internet/articles/0.7340.L-3638550.00.html>.
- 44 Cohen and Levin, "Operation Protective Edge: The Cyber Defense Perspective."

- 45 This doctrine is based on three lines of defense. The first line of defense is located approximately one kilometer from the border fence and is meant to serve as a “kill zone” for IDF ground forces, consisting of explosive devices, landmines, and mortar fire among other means. Its aim is to delay the IDF forces from entering the Gaza Strip and cause as many casualties as possible. Located on the outskirts of the major cities of Gaza City, Khan Younis, and Rafah, the second line of defense aims to prevent the IDF from entering these cities, with mortar fire, high-trajectory weapons fire, anti-tank missile fire, sniper fire, and other means. The third line of defense is located within the cities themselves, and relies upon the extensive network of tunnels dug by Hamas, from which fighters emerge to engage in ambushes, abduction attempts, sniper fire missions, and booby trapping of houses. See Yoram Cohen and Jeffrey White, “Hamas in Combat: The Military Performance of the Palestinian Islamic Resistance Movement,” *Policy Focus, Washington Institute for Near East Policy*, no. 97, October 2009, <http://www.washingtoninstitute.org/policy-analysis/view/hamas-in-combat-the-military-performance-of-the-palestinian-islamic-resista>.
- 46 Yiftah Shapir, “Rocket Warfare in Operation Protective Edge,” in *Lessons of Operation Protective Edge*, eds, Kurz and Brom, pp. 43-50.
- 47 The saturation point was not publicized by the manufacturer of the system.
- 48 At the time of writing, it has been publicized that there are nine Iron Dome batteries in Israel.
- 49 Shapir, “Rocket Warfare in Operation Protective Edge.”
- 50 Yiftah Shapir, “Lessons from the Iron Dome,” *Military and Strategic Affairs* 5 no.1 (May 2013): 81-94.
- 51 Such rocket fire could originate from Hizbollah in Lebanon and Syria, Palestinian organizations in southern Lebanon, or radical Islamic groups in the Sinai Peninsula. See “Operation Protective Edge: Update No. 7,” Meir Amit Intelligence and Terrorism Information Center, Israeli Intelligence Heritage and Commemoration Center, July 17, 2014, <http://www.terrorism-info.org.il/he/articleprint.aspx?id=20678>.
- 52 At the conclusion of Operation Protective Edge, Hamas reported having launched two rockets at an Israeli gas production facility located approximately nineteen miles off the coast of Gaza. The IDF spokesman neither confirmed nor denied this report. See Simon Henderson, “Rocket Fire on Israeli Gas Platforms Could Escalate Gaza Fighting,” *Washington Institute for Near East Policy*, August 20, 2014, <http://www.washingtoninstitute.org/policy-analysis/view/rocket-fire-on-israeli-gas-platforms-could-escalate-gaza-fighting>.
- 53 Two exceptions were senior brigade commanders from Hamas’ military wing, Raed al-Attar, commander of the Rafah region, and Muhammad Abu Shamaleh, commander of the southern Gaza Strip, both who were killed on August 21, 2014, forty-six days after the beginning of the operation. An attempt was also made on the life of Muhammad Deif, the head of Hamas’

- military wing, although at the time of writing his fate was still unclear. See Yoav Zitun and Ilana Curiel, "This is How Senior Hamas Officials Were Assassinated: Documentation of the Bombing," *Ynet*, August 21 2014, <http://www.ynet.co.il/articles/0,7340,L-4561803,00.html>.
- 54 Hamas organized its military force in a hierarchal manner and divided it into brigades and battalions, with each brigade possessing artillery (rockets and mortars), anti-tank, engineering, infantry, and air defense units, similar to the structure of Hizbollah's military force. Each unit possesses autonomous operative capability.
 - 55 White, "The Combat Performance of Hamas"; Raphael Cohen and Gabriel Scheinmann, "The Grim Lessons of Protective Edge," *The American Interest*, August 31, 2014, <http://www.the-american-interest.com/2014/08/31/the-grim-lessons-of-protective-edge/>; Robert Beckhusen, "Hamas' Battle Tactics Are Getting Better," *War Is Boring*, October 9, 2014, <https://medium.com/war-is-boring/hamas-battle-tactics-are-getting-better-940415d29b38>.
 - 56 Although the Iron Dome can intercept mortar shells in practice, the IDF chooses not to launch intercepting missiles at mortar shells and to direct them at rockets alone as a result of the extremely high cost of the system's intercepting missiles.
 - 57 As of July 30, 2014, the Trench Coat system had intercepted anti-tank missiles fired against fifteen Merkava Mark IV tanks of the 401st Armored Brigade. See Amir Bohbot, "fifteen Tanks Saved: Iron Dome over the Tanks in Gaza," *Walla*, July 30, 2014, <http://news.walla.co.il/item/2770561>.
 - 58 Noah Browning, "Hamas Guerrilla Tactics are Tailored to Israel's Ground War," *Reuters*, July 23, 2014 <http://www.businessinsider.com/hamas-guerrilla-tactics-are-tailored-to-israels-ground-war-2014-7>.
 - 59 IDF forces thwarted the attempted infiltration of the Hamas naval commandos at Zikim Beach on the second day of Operation Protective Edge. See Shachar Rupp, "Attack of the Hamas Naval Commandos Thwarted," IDF website, July 9, 2014, <http://www.idf.il/1133-20887-he/Dover.aspx>. See also Alex Fishman, "An Alternative to the Terror Tunnels from the Strip: Attacks from the Sea," *Yedioth Ahronoth*, March 12, 2015.
 - 60 The exercise was conducted on the ruins of the former Jewish settlements of Nisanit and Dugit. See Amir Bohbot, "Hamas Conducts Its Largest Military Exercise since Operation Protective Edge," *Walla*, December 18, 2014, <http://news.walla.co.il/item/2811759>.
 - 61 The National Security forces are one of the internal security services operating under the auspices of Hamas in the Gaza Strip. The exercise was conducted at a training facility of the Izz ad-Din al-Qassam Brigades in the southern Gaza Strip. On December 27, 2014, Hamas' military wing also publicized a video of ten armed members simulating an attack on IDF positions near the border with Israel, the abduction of a soldier from one position, and of bodies of other soldiers from another position. See "Exercises Conducted by Hamas and the National Security Forces Simulated

- the Conquest of an IDF Position near the Strip and a Soldier's Abduction," Meir Amit Intelligence and Terrorism Information Center, Israeli Intelligence Heritage and Commemoration Center, December 29, 2014, <http://www.terrorism-info.org.il/he/article/20750>.
- 62 Preparations for establishing this force began less than one month after the conclusion of Operation Protective Edge, with a call by the Izz ad-Din al-Qassam Brigades to mobilize as many civilian volunteers as possible for the "Popular Army." Volunteers underwent a basic military course, which included primarily learning how to fire various types of weapons. See "Media elements associated with Hamas recently reported that the Izz ad-Din al-Qassam Brigades have started preparations to establish what is referred to as a 'popular army.'" Meir Amit Intelligence and Terrorism Information Center, Israeli Intelligence Heritage and Commemoration Center, September 30, 2014, <http://www.terrorism-info.org.il/he/articleprint.aspx?id=20716>.
 - 63 "Hamas: We Will Establish a Popular Army to Liberate the Al-Aqsa Mosque," *Maariv*, November 8, 2014, <http://www.maariv.co.il/news/new.aspx?pn6Vq=E&0r9VQ=GIGHM>.
 - 64 "Hamas Presents the First Battalion of the Popular Army, which is Meant to Assist Members of the Military Wing during a Clash with Israel," Meir Amit Intelligence and Terrorism Information Center, Israeli Intelligence Heritage and Commemoration Center, September 30, 2014, <http://www.terrorism-info.org.il/he/article/20727>.
 - 65 Gabi Siboni, "Military Lessons for Hamas from Operation Protective Edge," *Israel Defense*, July 13, 2015, <http://www.israeldefense.co.il/en/content/military-lessons-hamas-operation-protective-edge>. Although this is not a new doctrine, and was already used during previous rounds of fighting, it was improved and expanded upon during Operation Protective Edge.
 - 66 On July 8, 2014, in an interview with al-Aqsa TV, Hamas spokesman Sami Abu Zahari called for civilians of the Gaza Strip to serve as human shields against attacks of the Israeli air force. Abu Zahari mentioned an attack that had taken place that day on the home of a Palestinian family during which civilians stood before Israeli fighter planes in order to "defend their homes and their rights with their blood and a bare chest." Abu Zahari maintained that "this method has already proven itself to be effective against the occupation," and, on behalf of the Hamas movement, called on the inhabitants to "adopt" it. See "Hamas Spokesman Encourages Gazans to Serve as Human Shields: It's Been Proven Effective," *MEMRI TV*, July 8, 2014, <http://www.memritv.org/clip/en/4340.htm>.
 - 67 "During Operation Protective Edge, Hamas Again Used Civilians as Human Shields To Prevent an Attack on the Home of a Terrorist Activist by the Israeli Air Force," Meir Amit Intelligence and Terrorism Information Center, Israeli Intelligence Heritage and Commemoration Center, July 7, 2014, <http://www.terrorism-info.org.il/he/article/20669>.