

Crossing the Threshold: The Untold Nuclear Dimension of the 1967 Arab-Israeli War and Its Contemporary Lessons

Forty years ago, war dramatically transformed the Middle East. Six memorable days, known by Israelis as the Six-Day War and by Arabs and others as the 1967 war, redrew the landscape of the Arab-Israeli conflict in fundamental ways. In those six days, Israel defeated three Arab armies, gained territory three times its original size, and became the dominant military power in the region. From a nation that perceived itself as fighting for its own survival, Israel became an occupier.

In recent years, new historical research has taught us more about the war and its profound impact on the psyche of Israelis and Arabs alike.¹ Yet, one important aspect of the war and the crisis that preceded it has remained obscure and largely untold: the nuclear dimension of the war. On this issue, both sides still seem to bond together by layers of taboo, silence, and secrecy.

Some bits and pieces of additional historical information have emerged in recent years that permit a more comprehensive and daring reconstruction of the nuclear aspect of the 1967 war, at least on the Israeli side. This new evidence indicates that prior to that war, Israeli leaders were still unsure about their ultimate goals for the program and deeply concerned about world reaction if they were to move for-

ward. The May 1967 crisis, however, also was a critical turning point in Israel's nuclear history. It was then, in a crash and improvised initiative, that Israel assembled nuclear devices to be ready for the unthinkable.

This narrative not only allows us to understand the past better, but also it may suggest insights into the dynamics of nuclear proliferation, including possible implications for Iran's nuclear program. It is likely that Iran today, like Israel before the 1967 war, has taken important technological steps toward a nuclear weapons capability but has delayed making the essential political decision to move forward with such arms. Creative diplomacy may still be able to prevent Tehran from going nuclear.

In the year prior to the 1967 war, Israel was moving fast toward wrapping up separate research and development efforts on fissile material production and weapons design and nearing a complete nuclear option. This convergence brought the Israeli nuclear project to a major junction that required a new set of political decisions. For all previous nuclear proliferators, this phase had ended with a full-yield nuclear test. Such a test not only demonstrated technical capability but also indicated that the state has made a nuclear commitment; testing was a membership claim to the nuclear club, a way to acknowledge the state's new international status and remove political ambiguity.

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Israel was in a position to conduct a full-yield nuclear test in the second half of 1966, had its leaders so chosen. Had Israel conducted a test that year, even a so-called peaceful nuclear explosion, it could have declared itself the world's sixth nuclear state, and subsequently, it could have joined the nuclear Nonproliferation Treaty (NPT) as a declared nuclear-weapon state. As a matter of international law, there was nothing illegal about following that path; China and France had just done it a few years earlier. Israel's strategic situation and unique relationship with the United States, however, made it fundamentally different from previous proliferators. Because of these considerations, Israel's political leadership was profoundly hesitant about the degree of its nuclear intentions and commitment.

One thing was clear: Prime Minister Levi Eshkol ruled out conducting a nuclear test on political grounds. "Do you think that the world would congratulate us for our achievement?" Eshkol used to ask sarcastically of those people around him who entertained the idea of a test. He had good reasons to reject a test outright.

First, Eshkol knew that a nuclear test would be a blatant violation of Israel's "nonintroduc-

tion" commitment, the pledge that Israel would not be the first to introduce nuclear weapons to the Middle East. This formula had been used orally in 1962 by Israel's first leader, David Ben Gurion, and then a year later by Deputy Minister of Defense Shimon Peres, who used it in a response to a query from President John F. Kennedy. Eshkol, in a memorandum of understanding he signed with the United States in March 1965, made it the cornerstone of U.S.-Israeli relations. Israel left the exact meaning of "nuclear introduction" vague, and the United States did not press hard for clarifications; but in those days, nonintroduction meant, at the minimum, nontesting, nonpossession, and nonproduction of nuclear weapons.²

In addition, Eshkol was aware that the superpowers were leading negotiations on a global treaty aimed at preventing the proliferation of nuclear weapons. Conducting a nuclear test would not only be a catastrophe for U.S.-Israeli bilateral relations, relations that Eshkol had placed so much political capital to cultivate, but also an act of defiance against the entire world community.

Furthermore, the nonintroduction pledge meant more than a pledge to the United States. It reflected an Israeli consensus on

the nation's nuclear program. In the eyes of Eshkol's closest political allies, in particular Ministers Yisrael Galili and Yigal Allon, both of whom had strong views on the nuclear issue, the nonintroduction pledge was not viewed as a concession to the United States but a genuine Israeli strategic interest, that Israel's own ultimate interest lay in opposing the introduction of nuclear weapons to the Middle East. They thought that Israel should keep ahead of the Arab countries in nuclear research but should avoid initiating any move that would nuclearize the region. It is likely that was Eshkol's view as well.

Then, of course, there was the Egyptian factor. Eshkol knew that an Israeli test would be disastrous from a regional point of view. It would surely bring to an end all the friendly probes he was trying to initiate to the Arab world. In fact, it could well provoke Egypt into an all-out war, as Egyptian leader and Arab nationalist Gamal Abdul Nasser had publicly threatened in early 1966 and as many Israelis feared.

Putting the test issue aside, Israel needed to figure out its response to a set of complicated issues involving the future of its nuclear project:



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Palestinians surrender to Israeli soldiers in June 1967 in the occupied territory of the West Bank during the so-called Six-Day War, which took place June 5-10, 1967.

- What should be the strategic role of the nation's nuclear option for the post-research and development period? What was Israel's real desire: to possess nuclear weapons secretly or to obtain the political assets that nuclear weapons could buy?
- Could the nuclear program be used as a bargaining chip in a larger political deal, either with the United States or Egypt? Should Israel pursue such a bargain?
- What does Israel actually mean when it commits itself to nonintroduction of nuclear weapons? Was this a genuine Israeli interest or just a convenient formula to deflect U.S. pressure?
- How should Israel operationalize its nuclear option? Should it include weaponization and deployment?
- Should Israel move the Dimona nuclear infrastructure to a mode of production? Would that be compatible with the declaratory stance of nonintroduction?
- What should be the future of the missile project?

In 1966-1967, Israel had no clear-cut answers to these questions. Ben Gurion had left those long-term issues unsettled for years, even untouched; now the project was approaching the threshold point, and they had to be addressed. The challenge was to find the right balance between the two opposite horns of the state's nuclear dilemma, between technological resolve and political caution. In a way, it was a moment of truth for the national nuclear project.

Of course, the project's leaders pushed for moving forward. For them, it was almost inconceivable to bring the project to a pause at such a critical junction. The very ethos of the project, as they understood it, was that the nuclear option meant an operational capability available for the existential moment of last resort. Freezing the program in a nondeployable mode was unthinkable. Israel must retain a real nuclear option, not something virtual and amorphous.

New historical evidence suggests that Eshkol and some of his political and military

associates saw things differently. It appears that Eshkol was hesitant, ambivalent, and cautious. During 1965-1967, Eshkol, along with the leadership of the Israel Defense Forces (IDF), increasingly worried about the potential Egyptian reaction to the completion of the Dimona complex, especially if the Egyptians concluded that Israel was indeed getting the bomb. Israel was especially concerned about a scenario of an Egyptian surprise aerial attack on the facilities. In "Eshkol, Give the Order!," a new study based on exclusive IDF archival



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Israeli Prime Minister Levi Eshkol, a staunch opponent of Israeli nuclear testing, would rhetorically ask those in favor of tests, "Do you think that the world would congratulate us for our achievement?"

material, Israeli historian Ami Gluska revealed how deeply engraved those concerns were among the IDF leadership.³ Specifically, they were concerned that Dimona's lack of international "legitimacy" would tempt Egypt to attack it while making it difficult for Israel to respond. In a top-level meeting in 1965, IDF Chief of Staff General Yitzhak Rabin expressed this very concern: "If Egypt bombs Dimona, and we want to wage a war, we could be issued an ultimatum from the entire world."⁴

Although Nasser's threats of "preventive war" were not perceived as practical in the eyes of Israeli senior intelligence officers, an attack aimed solely at Dimona was something else. It was viewed as a realistic threat.⁵ In late 1966, Rabin cited concerns over a possible Egyptian attack on Dimona to explain why Israel should limit its military actions against Syria. "There is one vital object in the south," Rabin reminded his colleagues, "which is an ideal object for a limited attack, and of which Egypt may have the support of the entire world."⁶

Those concerns were most critical in shaping the fundamental Israeli perceptions and responses when Egypt massed troops on the Sinai peninsula in May 1967.⁷ One could not understand the gravity with which Israel viewed this move without taking into account Israeli apprehensions that the Dimona nuclear complex may have been the motivation for the crisis and that Egypt was planning to attack it.⁸ There were high-altitude reconnaissance flights over Dimona on May 17 and May 26 that the Israeli air force was unable to intercept, and those flights had dramatic effects on Israeli perceptions of the situation.⁹ Indeed, Egypt may have been very close to launching an aerial attack on Dimona on May 26 or May 27, but it was called off by Nasser on a few hours' notice.¹⁰

There are other indications of Israeli apprehensions on the nuclear issue. In the year and a half prior to the Six-Day War, Mossad Chief General Meir Amit promoted the establishment of a direct, secret channel with Egypt. It started as a humanitarian effort—releasing Israeli imprisoned spies—but Amit was pushing to turn the probe into a channel for diplomacy aimed at transforming relations between the two states. Although the nuclear issue was not the trigger that led to the Ikaros initiative (the Mossad code name for that probe) in 1966, there is little doubt that it was a stimulating factor in Amit's overall interest. By 1966, Amit knew that Israel was fast approaching the nuclear threshold and understood the grave implications of a nuclearized Middle East. He was troubled that the advent of Israel's nuclear capability could lead potentially to war or to the Soviet Union enfolding Egypt in its nuclear umbrella.

Amit recognized that the period from 1966 to 1968 was a critical time, perhaps the last chance for Israel to reach out to Egyptian leaders on the nuclear issue before the situation became irreversible. The Ikaros initiative could have been put to the test when Amit was invited for a secret visit to Cairo, including a possible meeting with Nasser, but the Eshkol government was afraid to take the risk. Amit continued with efforts to keep Ikaros alive until the 1967 war but without much success.¹¹

Another indication of Israel's nervousness on the nuclear issue came from a different direction. In December 1966, a major industrial accident occurred in one of the "hottest" areas in the Dimona complex. An employee was killed, and a sensitive working area was contaminated. It took weeks of cleanup to decontaminate the area. The accident left Israel's nuclear chiefs shaken, including Eshkol. A month later, in a cable to Washington, U.S. Ambassador Wal-

worth Barbour reported that he never saw Eshkol so uncertain about the future of the nuclear project, suggesting that it was time for innovative diplomacy on the nuclear issue. In correspondence in March 1967, Barbour dismissed U.S. intelligence reports that asserted Israel was only weeks from the bomb and noted that Dimona was “not running at full blast.”¹²

The nuclear project was at a historical junction, and it was simply unthinkable for its leaders that, **at such a national dire moment, when Israel was facing existential threats, they would sit idle and do nothing.**

The final evidence is extracted from an interview I conducted in 1996 with Dr. Floyd Culler, the team leader of most of the U.S. annual visits at Dimona in the mid- to late 1960s. In that interview, Culler revealed that, at the end of his last visit at Dimona in April 1967, Professor Amos De-Shalit, the official Israeli host, took him aside to raise with him some “nonconventional” ideas how to prevent nuclearization in the Middle East. Culler refused to tell me what exactly those ideas were but noted that he wrote a special report on the topic to the Department of State. De-Shalit presented his ideas as “private,” but Culler took it as if de-Shalit had launched a balloon trial on behalf of Eshkol.¹³

The general picture from the bits and pieces of evidence is that Israel was quickly reaching the threshold point, but its political leadership was still unsure whether doing so would really serve its true interests. I believe Eshkol was open to political solutions that would have allowed him not to do so.

Then came the crisis of May 1967, which dramatically changed the nuclear situation in the Middle East. As the likelihood of war intensified and some Israelis contemplated the need to have temporary burial sites for thousands, even tens of thousands, of Israeli casualties in case of an Egyptian attack, Israel did something it never had done previously. Israeli teams assembled virtually all the components, including the handful of nuclear cores it had, into improvised but operational explosive devices. Preliminary contingency plans were even drawn up for how such improvised devices could be used in a manner that would demonstrate nuclear capability short of a military use. An unpopulated site was even cho-

sen. The idea behind it was highly indicative of Israel’s anxious state of mind in those days of May and June 1967. If all else failed and Israel’s national existence would be in peril, the state would still have its doomsday capability.

Given that the capability was real, there was an inevitable need to contemplate the circumstances under which it could be used

or, more accurately, the circumstances under which decision makers would be willing to consider using it. Clearly, such contingencies were incompatible with IDF plans for war that were based on aerial preemption followed by an Israeli armor attack deep into the Sinai. Efforts to rationalize atomic use illustrated the eeriness involved in thinking about the unthinkable. They involved doomsday scenarios of a colossal failure of the IDF and a decisive strategic surprise by Egypt, say, massive use of missiles tipped with chemical warheads against Israeli cities.

As far as can be determined, these improvised activities were not a response to any specific political or military request that came from the top, surely not in a response to any specific operational need. These steps were taken because it would have been inconceivable not to take them. The nuclear project was at a historical junction, and it was simply unthinkable for its leaders that, at such a national dire moment, when Israel was facing existential threats, they would sit idle and do nothing. If the capability could be made available, it must be made available.

In the minds of the project’s leaders, the actual assembly of all the components into one system was momentous because it signified that Israel had become a nuclear power.¹⁴ From their perspective, it was also an irreversible moment. They could not conceive a future Israeli prime minister who would give up this capability for any political assets, except perhaps a real peace. Indeed, while Eshkol may have kept open the option to sign the NPT until mid-1968, he never did do. His successor, Prime Minister Golda Meir, ultimately decided not to join the treaty and Israel’s retention of these

weapons was firmly established.¹⁵

The Israeli nuclear situation in 1966-1967 is intriguing because of the apparent tension between technology and politics, between technical capability and political commitment. Judging by technology, Israel was reaching the nuclear threshold and appeared to have made a commitment to possess nuclear weapons.

Yet, this was not the case. Politically, Israel in 1966-1967 was still far from making a firm political commitment to nuclear weapons, let alone on nuclear strategy. Not only was Eshkol reluctant to take the nuclear plunge, but he was apparently leaning to keep the option open yet not necessarily to go beyond it. At that time, Eshkol probably thought that the country would eventually sign the NPT and position itself on the non-nuclear side of the threshold rather than on the nuclear side. Israel was ambivalent, hesitant, and sitting on the fence on the nuclear issue; the Israeli nuclear case was still undetermined. I would even make the counterfactual suggestion that had the 1967 war not broken, and the NPT had been presented for signature in that year and not a year later, Israel would have signed the NPT and opted for a substantial nuclear infrastructure, including nuclear power, but not pursued nuclear weapons. Technology is important and provides options to policymakers, but in itself, it does not determine the course of action.

This account is at odds with the realist picture of the dynamics of nuclear proliferation. Realists often refer to Israel as the purest case of nuclear proliferation, a case of a state determined to go nuclear because of security reasons, a case where soft issues such as prestige, domestic, or bureaucratic politics play a very limited role. The realist picture tends to view the state in deterministic and monolithic terms.

As the Israeli case shows, this realist picture is no more than a poor caricature of the real world of nuclear proliferation. The reality of nuclear proliferation is inherently fluid, tentative, fuzzy, and ultimately undeterministic in its nature. Key proliferation decisions are never solid commitments. It takes states many years, often a decade and longer, to establish full nuclear weapons capability. Given the time frame and complexity of the proliferation reality, decisions tend to be tentative, hesitant, and reversible.

Moreover, states can even complete the research and development phase without forming such clarity, as the Israeli case in 1966-1967 illustrates. By that time, Israel still had no clue how far it would be able to go, how far the



Israel's controversial Dimona nuclear reactor began operations in 1964.

world would allow it to go, or how far it would like to go for its own sake. After Israel crossed the nuclear threshold, however, after the dramatic events in late May 1967, the situation changed. At that point, it became much more difficult, perhaps close to impossible, for Israel to roll back what it had achieved.

I would dare to suggest that these historical lessons may be of some relevance when we consider the current Iranian nuclear situation. It would be a mistake to think about Iran's nuclear ambitions as irreversible.

One can reasonably make the case that Iran's nuclear project today is at a similar juncture to Israel in 1963, before it started to operate the Dimona reactor. Iran is commonly believed to be two to three years away from the ability to produce weapons-grade fissile material on an industrial scale, a threshold that Israel crossed sometime in 1966. If Israel in a world without the NPT and without political and economic sanctions was hesitant about its nuclear future, Iran today should be viewed with an even stronger sense of uncertainty and indeterminism.

Notwithstanding the obvious domestic differences between Israeli democracy and Iranian theocracy, Iran's governing system is more similar to Israel than Iraq was under Saddam Hussein in terms of its national decision-making process. In Iran, significant decisions cannot be made by a sheer dictate without some degree of public support or without considerable consensus within the national elite.¹⁶ Although there is a great and visible popular support in Iran for the notion that it has the right to full industrial enrichment, there is no public support for producing nuclear weapons,

nor for leaving the NPT. Furthermore, hurtful sanctions could make more Iranians realize that they would pay a price for defying world opinion on the nuclear issue.

Nothing is inevitable at this point about the Iranian bomb, and it would be a grave mistake to perceive it as such. At the same time, the West must be resolute not to allow Iran to establish "facts on the ground" as a perceived negotiating tactic for, as the Israeli case shows, once established, such capabilities are difficult if not impossible to reverse. **ACT**

ENDNOTES

1. Michael B. Oren, *Six Days of War* (New York: Oxford University Press, 2002); Tom Segev, *1967: Israel, the War and the Year That Transformed the Middle East* (New York: Henry Holt, 2007).
2. Indeed, in his speech in the Knesset in May 1966, Prime Minister Levi Eshkol confirmed that interpretation when he stated plainly that Israel had no nuclear weapons.
3. Ami Gluska, *Eshkol, Give the Order!* (Tel Aviv: Ministry of Defense, 2004) (in Hebrew).
4. *Ibid.*, p. 71. IDF Chief of Staff General Yitzhak Rabin's statement sounds off-course to contemporary readers, but it reveals how Israelis thought about the nuclear project in those days. Ironically, Israel took the initiative 16 years later and attacked the Iraqi Osiraq reactor, which was under International Atomic Energy Agency safeguards.
5. There was even some vague concern as to possible Soviet reaction to the discovery that Israel was approaching the nuclear threshold. In retrospect, it appears that Israel should have been even more concerned about Soviet reaction to Dimona. In a new book, Israeli researchers Isabella Ginor and Gideon Remez make a circumstantial case that the Soviets in-

stigated the false reports that led to the Six-Day War as part of a larger plot aimed at Israel's nuclear program. Isabella Ginor and Gideon Remez, *Foxbats Over Dimona* (New Haven: Yale University Press, 2007).

6. Gluska, *Eshkol, Give the Order!*, p. 71.
7. *Ibid.*, pp. 70-71, 73, 225, 227-230, 234, 244, 245, 250-251, 253, and 285.
8. Gluska, *Eshkol, Give the Order!*, pp. 300-301 and 495, n. 17. In *Foxbats Over Dimona*, Ginor and Remez make a claim that those reconnaissance flights were made by Soviet MiG-25s (Foxbats) flown by Soviet pilots.
9. Gluska, *Eshkol, Give the Order!*, pp. 227-230, 300-303, and 495, n. 17. The second flight, on May 26, was reported to Israeli decision makers as they were attending a special cabinet meeting. During a consultation between Eshkol and Rabin, following the first report, Rabin told Eshkol that Israeli intelligence intercepted "a strange and worrisome transmission indicating possible coordination between interceptors and bombers." The high-altitude flight was initially interpreted as a possible prelude to a full aerial attack on Dimona. Decades later, a participant in that cabinet meeting revealed the sense of shock among the ministers when they were notified that "a squadron" of Egyptian aircraft was flying over Dimona.
10. Egyptian Chief of Staff General Muhammad Fawzi alluded to an Egyptian aerial attack in his memoirs. See William B. Quandt, *Peace Process* (Washington, D.C.: Brookings Institution, 1993), p. 512, n. 38; Gluska, *Eshkol, Give the Order!*, pp. 288-289 and 492-493, nn. 51-52.
11. Meir Amit, *Head to Head: A Personal View of Great Events and Clandestine Operations* (Or Yehuda: Hed Artzi, 2000) (in Hebrew); Ronen Bergmann, "Peace, Try After: How Peace Was Missed on the Eve of the Six Day War," *Yediot Achronot*, June 6, 2005 (interview with Meir Amit).
12. Walworth Barbour letter to Rodger Davies, March 9, 1967, *Foreign Relations of the United States, 1964-68*, Vol. XVIII, p. 391.
13. Floyd Culler, interviews and correspondence with author, May-June 1996. Culler declined in 1996 to specify the details of the de-Shalit message but suggested that I talk to him again a few years later. Culler died in late 2004.
14. One of them recalls, as he told me decades later, that he proposed after the war to seize the moment and to conduct a test with one of those cores. His proposal was never seriously considered. "It was a total taboo to them," he recalled years later. It shows the strength of nuclear caution at the political level, but one can only speculate the outcome had that proposal been accepted.
15. Avner Cohen and William Burr, "Israel Crosses the Threshold," *Bulletin of the Atomic Scientists*, Vol. 62, No. 3 (May/June 2006), pp. 22-30.
16. Michael Herzog, "Iranian Public Opinion on the Nuclear Program: A Potential Asset for the International Community," *Policy Focus*, No. 56 (Washington, D.C.: Washington Institute for Near East Policy, June 2006).