How, precisely, shall Israel endure in a relentlessly chaotic Middle East? This is a bewilderingly complex and nuanced question. Still, it is plain that Jerusalem’s nuclear forces and posture will become increasingly important to national survival. Certain, as well, is that under an assortment of more or less credible circumstances, even those that may be unwanted or inadvertent, this endurance could sometime concern the actual use of nuclear weapons.

How might this most unwelcome circumstance come to pass? Traditionally, scholars and strategists would respond to this sort of query in expressly regional or geographic terms, thereby highlighting the particular areas or individual states that seemingly pose the greatest threat. For Israel, of course, the most obvious locus of impending nuclear concern remains Iran, including the related prospect of future nuclear terror attacks by Iranian proxies, e.g., Hezbollah.

With this Shiite militia terror scenario in mind, it should become evident that an enemy nuclear attack upon Israel could take various very different forms, and could - either singly, or in
some calculated combination - be carried out plausibly by ship, automobile, or Ryder truck. Significantly, this sort of aggression would not necessarily call for enemy ballistic missiles as delivery vehicles.

How shall Israel best prevent its presence in any conflict involving nuclear weapons, whether as war, or "merely" as terrorism? Optimally, Jerusalem would be able to undertake certain timely and capable preemptions wherever needed, thus substantially diminishing any conspicuous risks of nuclear engagement. Under international law, at least in principle, such defensive first-strikes could conceivably qualify as authoritative expressions of "anticipatory self-defense." Still, the primary obstacles, going forward, will not be narrowly jurisprudential. Rather, for the IDF, these barriers will be broadly operational, or specifically tactical.

This understanding brings Israel to the overriding need for coherent nuclear strategy and doctrine, a complicated requirement that must include, *inter alia*, a counter-value targeted nuclear retaliatory force that would be (1) recognizably secure from enemy first-strikes; and (2) recognizably capable of penetrating any such enemy's active defenses. To meet this imperative security expectation, the IDF would be well-advised to continue with its selective sea-basing (submarines) of designated portions of its nuclear deterrent force. To meet the equally important requirements of penetration-capability, it will have to stay well ahead of all pertinent enemy air defense refinements.

Iran recently debuted the *Bavar* 373 missile. Replacing the S-300, it is allegedly able to track over 100 targets simultaneously, and is equipped with long-range ground to air missiles. It follows that Israeli planners will need to ensure that their own strategic retaliatory forces are always able to get through any such modernized Iranian defenses, and that the Iranian leadership is always made fully aware of this particular Israeli ability.

From the standpoint of making sure that relevant enemy states will have no meaningful doubts about Israel's capacity to launch "assuredly destructive" retaliations for certain aggressions, Jerusalem will soon need to consider a partial and possibly incremental end to its longstanding policy of "deliberate nuclear ambiguity." By selectively beginning to remove the "bomb from the basement," Israel's planners would then be able to better enhance the credibility of their country's indispensable nuclear deterrence posture. However counter-intuitive, mere possession of nuclear forces can never automatically bestow credible nuclear deterrence.

Why? It is also always necessary that would-be aggressors (e.g., an already-nuclear Iran)
believe that Israel (1) has the willingness to launch these nuclear forces in retaliation; (2) has nuclear forces that are sufficiently invulnerable to their own now-contemplated first-strike attacks; and (3) has nuclear forces that can always be expected to penetrate their own deployed ballistic-missile and certain corollary air defenses. Israel, therefore, will soon benefit from releasing certain broad outlines of strategic information that support the perceived utility and security of its retaliatory forces.

This information, released solely to enhance Israeli nuclear deterrence, would center upon the *targeting, hardening, dispersion, multiplication, basing*, and *yield* of selected Israeli nuclear forces. *Si vis pacem, para bellum atomicum.* "If you want peace, prepare for nuclear war."

Of course, Israel must protect itself against Iran or any other potential nuclear aggressor not only by maintaining a credible nuclear deterrent force, but also by fielding assorted and appropriately intersecting elements of national defense. In this connection, an integral core of Israel's multi-layered active defenses is the *Arrow* or "*Hetz."* Still, even the successfully-tested *Arrow* could never achieve a sufficiently high probability of intercept to adequately protect Israeli civilians. Its main purpose will likely be the protection of Israel's nuclear deterrent, not, as more generally believed, the security of "soft" human targets.

During Israel's recent *Operation Protective Edge, Iron dome,* intercepting relatively tolerable and small conventional *Hamas* rockets did not need to work perfectly 100% of the time. On the other hand, an active defense system deployed against incoming Iranian nuclear missiles would have to be entirely leak-proof. *Arrow,* therefore, would need to be successful 100% of the time.

Such a perfect level of interception, of course, is not possible.

Once it is faced with a recognizable nuclear adversary in Tehran, Israel will need to convince its Iranian adversary that it possesses both the will and the capacity to make any intended Iranian nuclear aggression more costly than gainful. Yet, no Israeli move from deliberate ambiguity to nuclear disclosure could help in the case of an irrational nuclear enemy, in Tehran, or anywhere else. For dealing with irrational enemies, those enemies that would not value their own continued national survival more highly than any other preference, or combination of preferences, even preemption could already be too late.

Eschatology may matter. To the extent that an Iranian leadership might authentically subscribe to certain end-times visions of the Shiite apocalypse, Iran could sometime cast aside all rational behavior. Were this to happen, Iran could then effectively become a nuclear suicide-bomber
in macrocosm. This riveting and thoroughly unprecedented prospect is highly improbable. But it is
not altogether unimaginable.

It is time to systematize our present inquiry about nuclear weapons and nuclear war in the
Middle East. What, then, are the precise circumstances under which Israel could find itself involved
with any actual nuclear weapons use? To suitably answer this most basic question, it will be most
productive to respond within already well-established canons of logical analysis and dialectical
reasoning. Accordingly, here are four pertinent and plausibly intersecting narratives or scenarios that
best "cover the bases": Nuclear Retaliation; Nuclear Counter Retaliation; Nuclear Preemption; and
Nuclear War fighting.

(1) Nuclear Retaliation

Should an enemy state or alliance of enemy states launch a nuclear first-strike against Israel,
Jerusalem would respond, assuredly, and to whatever extent possible, with a nuclear retaliatory
strike. If enemy first-strikes were to involve other forms of unconventional weapons, sometimes
known as chemical or biological Weapons of Mass Destruction (WMD), Israel might launch a nuclear
reprisal. This would depend, in large measure, upon Jerusalem's expectations of follow-on
aggression, and on its associated calculations of comparative damage-limitation.

If Israel were to absorb a massive conventional attack, a nuclear retaliation could still not be
ruled out, especially if: (a) the Islamic state aggressors were perceived to hold nuclear, and/or other
unconventional weapons in reserve; and/or (b) Israel's leaders were to believe that non-nuclear
retaliations could not prevent annihilation of the Jewish State. A nuclear retaliation by Israel could be
entirely ruled out only in those circumstances where enemy state aggressions were clearly
conventional, "typical" (that is, sub-existential, or consistent with previous historic instances of
Arab/Islamic attack in both degree and intent), and exclusively hard-target directed (that is, directed
only toward Israeli weapons and military infrastructures, not at "soft" civilian populations).
(2) **Nuclear Counter retaliation**

Should Israel feel compelled to preempt enemy state aggression with conventional weapons, the target state(s) response would largely determine Jerusalem's next moves. If this response were in any way nuclear, Israel would expectedly turn to nuclear counter retaliation. If this retaliation were to involve other weapons of mass destruction, Israel might then also feel pressed to take an escalatory initiative. Any such initiative would reflect the presumed need for what is normally described in more formal strategic parlance as "escalation dominance."

All would depend upon Jerusalem's judgments of enemy state intent, and on its calculations of essential damage-limitation. Should the enemy state response to Israel's preemption be limited to hard-target conventional strikes, it is unlikely that the Jewish State would move on to nuclear counter retaliations. If, however, the enemy conventional retaliation were plainly "all-out," and also directed toward Israeli civilian populations, and not just to Israeli military targets, an Israeli nuclear counter retaliation could not be ruled out.

It would appear that such a counter retaliation could be ruled out only if the enemy state's conventional retaliation were entirely proportionate to Israel's preemption, confined exclusively to Israeli military targets, circumscribed by the legal limits of "military necessity" (a limit routinely codified in the law of armed conflict), and accompanied by various explicit and verifiable assurances of non-escalatory intent.

(3) **Nuclear Preemption**

It is very implausible that Israel would ever decide to launch a preemptive nuclear strike. Although circumstances could arise wherein such a strike would in fact be perfectly rational, it is nonetheless unlikely that Israel would ever allow itself to reach these utterly dire circumstances. Moreover, unless the nuclear weapons involved were somehow used in a fashion consistent with the laws of war, this form of preemption would represent an especially serious violation of relevant international law.

Even if such consistency were possible, the psychological/political impact on the entire world community would be exceedingly negative and far-reaching. In essence, this means that an Israeli nuclear preemption could only be expected (a) where Israel's Arab/Islamic enemies had acquired
nuclear and/or other weapons of mass destruction judged capable of annihilating the Jewish State; (b) where these enemies had made it clear that their military intentions paralleled their capabilities; (c) where these enemies were believed ready to begin an active "countdown to launch;" and (d) where Jerusalem believed that Israeli non-nuclear preemptions could not possibly achieve the needed minimum levels of damage-limitation - that is, levels consistent with physically preserving the state.

(4) Nuclear Warfighting

Should nuclear weapons ever be introduced into actual conflict between Israel and its many enemies, either by the Jewish State, or by an Arab/Islamic foe, nuclear warfighting, at one level or another, would ensue. This would be true so long as: (a) enemy first-strikes against Israel would not destroy Jerusalem's second-strike nuclear capability; (b) enemy retaliations for an Israeli conventional preemption would not destroy Jerusalem's nuclear counter retaliatory capability; (c) Israeli preemptive strikes involving nuclear weapons would not destroy Arab/Islamic second-strike nuclear capabilities; and (d) Israeli retaliation for enemy conventional first-strikes would not destroy Arab/Islamic nuclear counter retaliatory capability.

It follows that in order to satisfy its essential survival requirements, Israel must now take reliable steps to ensure the likelihood of (a) and (b) above, and also the corollary unlikelihood of (c) and (d).

In all cases, Israel's nuclear strategy and forces must remain oriented to deterrence, and never to actual warfighting. With precisely this in mind, Jerusalem has likely already taken steps to reject any discernible reliance upon tactical or relatively low-yield "battlefield" nuclear weapons, and also any corresponding plans for counter-force targeting doctrines. To Israel, nuclear weapons can only make sense for deterrence ex ante, not for revenge ex post.

Looking over this purposefully comprehensive delineation of scenarios that could lead Israel to future involvement in some regional military use of nuclear weapons, including the prospect of nuclear terrorism, Jerusalem will need to steadily refine and systematize its underlying strategic doctrine. To be sure, little of this demanding conceptual effort will help to mitigate or diminish the now
daily aggressions of terrorist rocket assaults, but it will become indispensable to the even more
overriding goal of preventing existential harms. In the final analysis, Israel's leaders will be
well-advised to follow the timeless counsel of ancient Chinese military theorist, Sun-Tzu's *The Art of
War*: "Subjugating the enemy's army without fighting must always be the true pinnacle of
excellence."

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