



Response to Changes in the Strategic Environment

From Star Wars to Iron Dome: The Controversy over Israel's Missile Defense

by Uzi Rubin

Effi Melzer Publishing, 2019

319 pages [in Hebrew]

Meir Elran

Uzi Rubin's new book is based on his doctoral dissertation, entitled "The Degree of Flexibility of the Defense Establishment in Israel in Comprehending the Changes in Its Strategic Environment: Active Defense as a Test Case." This academic title is more illustrative of the core issues discussed than the actual title given to this important book, which focuses on the less-than-adequate flexibility that Rubin discerns within the IDF's strategic planning processes. This is enlightening because Rubin, a former senior figure at the Ministry of Defense (MOD), possesses intimate familiarity with the IDF's deliberations pertaining to force buildup and the translation of the changing multidimensional threats against Israel into practical critical responses.

The book includes a literature review and two main chapters. The first surveys the history of the controversy within Israel over missile defense, from the Lavi fighter jet program, to Israel's joining the United States Star Wars

defense initiative, through the Iraqi missile attacks during the First Gulf War, and up to the development of the Arrow, David's Sling, and Iron Dome active defense systems. The second chapter discusses the book's central issue: Did the IDF respond adequately to the missile and rocket threat confronting Israel? The book also contains two informative appendices—one addressing the invention of missile boats by the Israeli Navy, and the second addressing the invention of Unmanned Aerial Vehicles (UAV) by the IDF's Intelligence Directorate and Air Force.

The book poses its basic question at two levels of discussion. The first deals with the adaptive capacities of Israel's defense establishment to revolutionary changes in Israel's strategic environment. The second analyzes this question through test cases relating to the IDF's opposition to the development and deployment of active defense systems against the high-trajectory weapons threat.

In Rubin's well-founded and research-based opinion, the key to deciphering this critical matter lies in the organizational-bureaucratic domain, which often creates an unacceptable level of "passionate conflicts" concerning the development of major defense projects, including in Israel. As the author concludes, "A new project, regardless of its importance, is always the enemy of existing projects." Hence, for Rubin, the main question is: "How capable are the IDF and the entire defense establishment in foreseeing the changes in the security environment, in defining what needs to be done, and in implementing it in time?" These questions are discussed thoroughly in the book, mainly in the context of building the three-tier active missile defense system against high-trajectory weapons in light of the IDF's difficulty to understand, accept, and adopt (against its will) the needed operational response for the defense of the civilian front in Israel.

Rubin proposes two seemingly conflicting answers to these questions. On the one hand, from the process prism, the IDF "failed to discern in time the changes in the strategic

environment, represented by the appearance of missiles and rockets in the region; failed to define in time the new responses needed in the realm of force buildup; and demonstrated inadequate capacities in implementing these changes.” On the other hand, in operational terms of actual outcomes, the opposite result was achieved: “The civil defense establishment realized the regional change in time, rapidly defined the needed change in force buildup, and immediately implemented this change whenever it was technologically possible.”

The author seeks to bridge this ostensible contradiction by using models of concurrent conservative and innovative approaches in government organizations. His conclusion is that “in the instance of the active defense systems, the innovative civilian echelons prevailed over the rigid and conservative military echelons, enabling the civilian and technology defense establishment to exhibit remarkable adaptive capacity.”

To validate this conclusion, the author provides a clear and in-depth review of the history of the development of the missile threat and of the formation of Israel’s sophisticated active defense system since the early 1960s. Based on this analysis, he offers several important insights. First, there was a long delay between the appearance of ballistic missiles in the region—which Rubin calls “a revolutionary environmental change”—and Israel’s recognition that they indeed constitute a real threat that requires an adequate defensive response. Even after the launch of terror rockets, the IDF adhered to its conservative approach that rejected the defensive method and exclusively adhered to the offensive response to high-trajectory threats. On the other hand, the Ministry of Defense advocated a defensive approach and initiated active defense projects, despite IDF opposition.

Second, the defense establishment launched five missile defense projects since 1988 (Arrow, Nautilus, David’s Sling, Arrow 3, and Iron Dome). All except the Nautilus (high-energy

laser) project were successfully developed and deployed. None was an IDF initiative, unlike many other main weapon systems. In fact, the IDF waged a fierce campaign against the launch of the Arrow and Iron Dome. The IDF ended its opposition to these two projects once it became clear that they would not significantly affect its military budget. The US financial assistance to these projects made the difference.

The author’s conclusion is that “in the instance of the active defense systems, the innovative civilian echelons prevailed over the rigid and conservative military echelons, enabling the civilian and technology defense establishment to exhibit remarkable adaptive capacity.”

Third, the IDF, like other militaries, usually takes a conservative approach toward new technologies that can affect the architecture of war and require substantial changes in force buildup and deployment. This reflects its principled opposition to the very role of defense (even active defense), and it represents the instinctive opposition of hierarchical organizations to ideas from the outside.

In contrast to the IDF, presented in the book as a “hierarchical organization” with “inherent conservatism” and strong motivation to oppose the intervention of the political echelon in matters that are perceived to be within its purview, Rubin presents the “innovation from below” as exercised by the MOD’s Directorate of Defense Research & Development and the defense industries. Rubin proposes that in this rivalry the civilian “entrepreneurship” triumphed over the IDF’s “conservatism.”

Rubin’s book is interesting, highly relevant, and important for understanding the paradoxes inherent in the challenges Israel faces in responding to current-generation threats, which focus on high-trajectory weapon systems and their ramifications for the civilian front. The picture portrayed in this book reflects the IDF’s difficulty in adapting

to the evolving strategic reality. At issue is a polar shift from confrontations between states and large standing military formations to hybrid, multidimensional engagements, in which the civilian front (on both sides) is the principal target. Consequently, the mission of defending the civilian fabric (population, critical infrastructure, and society at large) needs to become paramount. This requires an entirely different allocation of attention, resources, and preparations. There is a need to add advanced practical military and civilian defense capacities to the dimensions of deterrence and offense, which traditionally have been viewed in Israel as the key components of the military response to threats. It also applies the construction of robust civilian resilience for the purposes of bouncing back and removing the consequences of the attack, as is expected to take place in a future major confrontation.

Rubin's book is interesting, highly relevant, and important for understanding the paradoxes inherent in the challenges Israel faces in responding to current-generation threats, which focus on high-trajectory weapon systems and their ramifications for the civilian front.

Rubin correctly points to the technological and operational success of the rocket and missile defense systems and gives due credit to the civilian defense establishment. However, the problem is more than techno-operational, and incurs broad and profound consequences for the core of Israel's national security. One can understand from Rubin's book that the IDF as well as the political echelon—even after adopting the defensive components and

integrating the three-tier active defense systems as part of the IDF's force buildup—have still not fully internalized the evolving security reality and have failed to translate the challenging threats against the civilian center into a full, firm, and adequate conceptual and practical response.

At issue here is the transition from a confrontation between states to hybrid confrontations with sub-state adversaries that rely on striking the civilian front, primarily with high-trajectory weapon systems. The Israeli response to this type of threat needs to integrate, in a balanced manner, the military's offensive force buildup with a strengthening of the civilian front. This should entail an updated balance between the offensive and the defensive components, including active (and passive) defense systems. In this respect, Rubin's basic diagnosis remains valid: the IDF is still struggling with the current strategic reality that continues to challenge its conceptual conservatism and its organizational rigidity.

Uzi Rubin's main contribution in this book is to provide a warning signal, which is particularly needed now as the IDF seeks to promote a new five-year buildup plan designed primarily to provide a systemic military response to the current strategic threats.

Brig. Gen. (ret.) Dr. Meir Elran is a senior research fellow at INSS, where he heads the Homeland Security research program. During his IDF service, he served in the Military Intelligence Directorate. Dr. Elran is the founder and head of the MA program in national security in the department of public policy at Sapir Academic College and teaches at the University of Chicago's Committee on International Relations.