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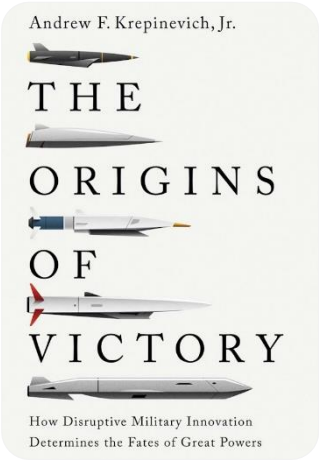

Andrew F. Krepinevich, *The Origins of Victory: How Disruptive Military Innovation Determines the Fates of Great Powers* (New Haven: Yale University Press, 2023).

Reviewed by Shah Muhammad

Emerging technologies are driving transformative shifts in the character of warfare, underscoring the urgent need to evolve operational concepts and military strategies. In *The Origins of Victory*, Andrew F. Krepinevich provides a scholarly and insightful exploration of this critical subject. Drawing on his expertise in the higher echelons of the U.S. Department of Defense, Krepinevich essentially argues that militaries that master new technological revolutions are likely to have a decisive edge over their rivals.

The book is divided into two parts. In the first, the author constructs his arguments within the framework of the reconnaissance-strike complex. Reconnaissance refers to the ISR (intelligence, surveillance, and reconnaissance) or scouting forces of a military, while strike represents the combat forces. Krepinevich argues that technology-driven Revolutions in Military Affairs (RMA) enhance the effectiveness of this complex, as militaries aim to optimise their scouting and strike capabilities to gain a decisive advantage. The United States (US) military spearheaded a revolution in precision warfare during the First Gulf War, demonstrating its global dominance in the reconnaissance-strike complex through precision-guided munitions, stealth aircraft, and advanced battle networks (p. 8). However, Krepinevich argues that the growing scouting and strike capabilities of China and Russia

have increasingly challenged US supremacy in the precision warfare domain. Additionally, to keep pace with disruptive variations in the character of warfare, militaries prioritise speed, range and precision as compared to armour and firepower of the weapons systems (p. 41). In the same part, Krepinevich casts an analytical glance at emerging technologies such as Artificial Intelligence (AI), additive manufacturing, quantum computing and synesthetic biology. For instance, he offers a commentary on AI-enabled swarms which could integrate scouting, command and control, and strike elements, thus materialising the prospect of an AI-driven reconnaissance-strike complex (p. 94).

The second part of the book examines four case studies to uncover common patterns of achieving strategic advantage on the battlefield. The first case explores how the British Royal Navy, in the late 19th century, proactively addressed the emerging threats of submarines and torpedoes by developing innovative capabilities, thereby ensuring its continued dominance in naval warfare. Krepinevich next examines the German military's adoption of mechanisation and aviation during the interwar period, which culminated in the devastatingly effective Blitzkrieg strategy. This mechanised and concentrated air-land assault shattered Allied defences, delivering significant German victories in the early years of World War II. The author highlights that Blitzkrieg's success stemmed primarily from Germany's emphasis on speed and range, contrasting with France's reliance on armour and firepower (p. 287).

The third case focuses on the U.S. Navy's recovery after the losses at Pearl Harbor. By revitalising its battleships and aircraft carrier task forces, the Navy achieved major victories in World War II, reshaping naval warfare. Finally, Krepinevich explores how the U.S. Air Force adapted after its setbacks in the Vietnam War, shifting its focus to speed, range, and precision rather than firepower. This transformation culminated in Operation Desert Storm, a landmark of the precision warfare revolution. The campaign decisively neutralised Iraq's integrated air defence system, solidifying American aerial superiority and redefining the modalities of modern aerial warfare (p. 393).

The book is well-researched and coherently written, drawing extensively from the works of past military strategists. Its strength lies in its avoidance of a reductionist view of military technologies. Instead, the author frames technologies as enablers and stresses key factors essential for maximising their strategic potential: a guiding vision, extended tenure for senior officials, new operational concepts, and exercises.

A guiding vision provides military strategists with a clear, forward-thinking direction, while the extended tenure of senior military officials ensures continuity in implementing military revolutions. New operational concepts enable militaries to adapt to the evolving character of warfare by informing analysis, wargaming, and experimentation, while also offering insights for developing new doctrines and structural reforms (p. 406). For example, the British Royal Navy in the late 19th Century adopted the operational concept of Flotilla Defence, employing smaller, more agile vessels to counter the torpedo threat. Similarly, Germany focused on mobility and maneuverability over positional warfare to amplify the impact of Blitzkrieg during World War II. In the precision warfare era exemplified by Operation Desert Storm, the US adopted a strategy of suppressing, rather than bypassing, Iraq's integrated air defence system, ensuring the success of its aerial campaigns.

On the other hand, there are a few glaring shortcomings that afflict the comprehensive nature of the book. There is no mention of robotics in the chapter on emerging technologies. The author could have discussed emerging trends in this regard while highlighting the US military's large-scale robotic exercises under Project Convergence which have been underway since 2020. Moreover, since the book was published in 2023, the author fails to touch upon the ongoing Russia-Ukraine War. The preliminary commentary on the technological aspects of this war could have significantly widened the reception of this book amongst different circles.

All in all though, it is a well-articulated and scholarly work that does not deviate from its central premise. It is highly recommended to the students as well as scholars and practitioners of military strategy.

Shah Muhammad has done MPhil in Peace and Conflict Studies from the National University of Sciences and Technology (NUST), Islamabad. His research interests include emerging technologies, national security, defence modernisation and global governance.