

Speed Kills Stability: Technology's Role in Modern Escalation

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Source: Newsahoot²

Introduction

In 2022, Russian early-warning radars over Ukraine picked up an incoming swarm - not missiles, but cheap Turkish Bayraktar TB2 drones, feeding data in real time through Starlink satellites. Moscow had just minutes to respond as AI-guided strikes shrank the classic OODA loop - observe, orient, decide, act - from minutes to seconds, turning calm planning into frantic scrambling.

Fast-forward to today, hypersonic weapons like Russia's Kinzhal (hitting Mach 10+), autonomous killer drones, and lightning-fast cyber-attacks are upending strategic stability. They are squeezing decision timelines that once held deterrence together, speeding up escalation in ways Cold War thinkers like Thomas Schelling never dreamed of - warning times drop from hours to heartbeats, mistakes snowball, and the old mutual assured destruction starts to crack.

This commentary breaks down how hypersonic, AI autonomy, and cyber-space operations flip the stability-instability paradox on its head, encouraging risky probes that can spiral out of control. Drawing on historical lessons, today's tech dynamics, real-world examples from Ukraine

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² <https://www.newsahoot.com/discussion/the-role-of-technology-in-modern-warfare-help-or-hinder>

to the Indo-Pacific, and practical fixes, we'll see speed not just as an advantage, but as fuel for potential disaster.

Stability Before Speed

The Cold War era forged a precarious but enduring strategic stability, anchored in mutual assured destruction (MAD) and deliberate decision architectures that allowed leaders a breathing room amid nuclear brinkmanship. Treaties like the 1972 Strategic Arms Limitation Talks (SALT I) and subsequent START accords capped warhead counts and delivery systems, while the Moscow-Washington hotline - installed after the 1962 Cuban Missile Crisis - ensured rapid de-escalatory communication, stretching warning times for intercontinental ballistic missiles (ICBMs) to 20–30 minutes. This framework relied on observable, predictable trajectories, enabling satellite surveillance and calculated restraint; as Thomas Schelling argued, stability hinged on "the threat that leaves something to chance," where slow escalation ladders deterred rash launches.



Source: Z-Axis³

Central to this was U.S. Air Force Colonel John Boyd's OODA loop (Observe, Orient, Decide, Act), which was developed in the 1970s from Vietnam War observations. Boyd posited that victory stems from cycling through these phases faster than adversaries, disrupting their coherence – however, in nuclear contexts, deliberate slowness preserved stability. Attrition-based firepower models gave way to agility, but Cold War doctrine emphasized human judgment over haste. Boyd's insight warned that outpacing foes wins battles, but in grand strategy, unchecked speed invites catastrophe.

By contrast, today's "hyper-war," technologies obliterate those buffers. Hypersonic weapons exemplify the shift: Russia's air-launched Kh-47M2 Kinzhal reaches Mach 10, maneuvering

³ <https://www.zaxis.page/p/speed-versus-stability>

unpredictably to slash warn times to 3–7 minutes - far below from human decision cycles.⁴ Similarly, China's DF-17 glide vehicle evades defenses, compressing response time from 15–30 minutes for ballistic missiles to mere heartbeats, fueling "use it or lose it" dilemmas. In Ukraine, Turkish Bayraktar TB2 drones, loitering via Starlink for real-time feeds, collapsed Russian OODA loops to minutes, destroying tanks and even aiding the Moskva cruiser sinking which demonstrates how cheap UAVs export speed to tactical edges, inverting stability for aggressors.⁵

This evolution marks a profound scenario. Cold War stability presumed symmetric powers with verifiable arsenals; now, asymmetric proliferation - drones to non-state actors, hypersonic to rising challengers - accelerates inadvertent escalation. Boyd's loop, once a tactical master-piece, unmask a strategic vice: when all sides operate inside each other's tempo, restraint evaporates, propelling us from calculated deterrence to reflexive chaos.⁶ As hypersonic races intensify amid U.S.-China-Russia rivalries, the baseline crumbles – demanding that we should reclaim tempo control before speed destroy us all.

Military Domain: Technology and the Logic of Rapid Escalation

Modern military technologies are reshaping conflict in ways that privilege speed over strategy, reaction over reflection, and automation over human judgment. This transformation is steadily eroding the foundations of deterrence and crisis stability that defined international security for decades.

Historically, strategic stability depended on time. During the Cold War, even at moments of extreme tension, leaders retained hours or days to assess information, verify intentions, and calibrate responses. Today, emerging technologies are dramatically shrinking those decision windows. Amy Zegart warns that artificial intelligence, cyber capabilities, and autonomous systems are “compressing warning time and increasing the risk of miscalculation,” making traditional crisis management far more difficult.⁷ The faster conflicts move, the less room exists for diplomacy or de-escalation.

⁴ Shane Mason, “Hypersonic Weapons: Tactical Uses and Strategic Goals,” War on the Rocks, November 12, 2019, <https://warontherocks.com/2019/11/hypersonic-weapons-tactical-uses-and-strategic-goals/>.

⁵ “Turkish-Made Bayraktar TB2 Drones Play Important Role in Ukraine.” T2COM G2 Operational Environment Enterprise, May 22, 2025. <https://oe.tradoc.army.mil/product/turkish-made-bayraktar-tb2-drones-play-important-role-in-ukraine/>.

⁶ Chun, Clay. “John Boyd and the ‘ooda’ Loop (Great Strategists).” War Room - U.S. Army War College, September 16, 2023. <https://warroom.armywarcollege.edu/podcasts/boyd-ooda-loop-great-strategists/>.

⁷ Zegart, Amy. “Cheap Fights, Credible Threats: The Future of Armed Drones and Coercion.” *Journal of Strategic Studies* 43, no. 1 (February 28, 2018): 6–46. <https://doi.org/10.1080/01402390.2018.1439747>.



Source: TRENDS⁸

Artificial intelligence now sits at the heart of this transformation. Armed forces are weaving AI into everything from intelligence assessments and target identification to battlefield planning. These systems can process data faster than any human team, spot patterns that might otherwise go unnoticed, and compress decision-making timelines dramatically. But that speed comes with consequences. When technology promises faster, sharper insights, military thinking can begin to favor acting first rather than waiting. The logic shifts subtly: if you can see earlier and strike sooner, hesitation may feel like vulnerability. In that way, AI doesn't just make operations more efficient - it can also reshape strategic instincts, nudging doctrines toward preemptive action in ways that may heighten instability rather than reduce it.

A report by the U.S. National Security Commission on Artificial Intelligence cautions that AI-enabled systems could “accelerate the speed and scale of warfare beyond human control,” potentially pushing commanders toward automated responses in moments of crisis.⁹ When machines are tasked with making split-second judgments, the risk of accidental escalation rises sharply.

Hypersonic weapons further destabilize this environment. Traveling at more than five times the speed of sound and capable of unpredictable maneuvers, hypersonic missiles drastically reduce reaction times for targeted states. Defense analysts argue that such weapons undermine deterrence by creating “use-it-or-lose-it” pressures on early-warning systems.¹⁰ In a crisis, leaders may feel compelled to strike first simply because waiting is no longer viable.

⁸ https://trendsresearch.org/insight/the-strategic-implications-of-ai-in-defense-redefining-the-future-of-global-security/?srsltid=AfmBOoraa_c_UUa5ZhCL6-wXF-dFdcfg6Oif2C6tW--hAoY-EU_-ljUT

⁹ National Security Commission on Artificial Intelligence, *Final Report* (Washington, DC: U.S. Government Printing Office, 2021), 97.

¹⁰ Acton, James M. “Hypersonic Weapons Explainer.” Carnegie Endowment for International Peace, December 5, 2025. <https://carnegieendowment.org/posts/2018/04/hypersonic-weapons-explainer>.

Cyber warfare compounds these dangers. Unlike conventional military actions, cyberattacks are instantaneous, difficult to attribute, and often ambiguous in intent. Thomas Rid notes that cyber operations thrive in a gray zone between war and peace, where uncertainty about responsibility makes escalation more likely rather than less.¹¹

Autonomous weapons systems may represent the most serious test yet for strategic stability. Armed drones, robotic combat vehicles, and AI-driven defense networks are no longer just tools that assist human operators - they are increasingly able to detect, select, and strike targets with minimal or, in some cases, no direct human intervention. That shift unsettles long-standing norms. The International Committee of the Red Cross has cautioned that handing life-and-death decisions to algorithms risks eroding the moral judgment and political accountability that traditionally restrain the use of force. When a machine makes the critical choice to fire, responsibility can become diffuse, and the human pause - the moment of doubt, deliberation, or reconsideration - may disappear.

As these systems spread, two dynamics converge. First, the barrier to initiating force may quietly lower: if casualties to one's own forces are minimized and decisions are automated, the political cost of action can feel reduced. Second, the tempo of conflict accelerates. Interactions between autonomous systems unfold at machine speed, potentially outpacing meaningful human supervision. In such an environment, escalation can become less a matter of conscious strategy and more a byproduct of code reacting to code - a deeply destabilizing prospect in crises where seconds can shape history.

Collectively, these technologies are transforming the strategic environment from one governed by deterrence and deliberation to one driven by algorithms and automation. They reward the actor who moves fastest rather than the one who acts most wisely. As strategist Paul Scharre observes, the emerging era of "machine-speed warfare" risks creating conflicts that unfold too quickly for diplomacy to intervene.¹²

The central danger is not any single technology, but the cumulative effect of all of them: a security ecosystem in which crises escalate at digital speed while political institutions still operate at human speed. In such a world, stability becomes increasingly fragile and war increasingly possible by accident rather than intention.

¹¹ Rid, Thomas. "Cyber War Will Not Take Place." *Journal of Strategic Studies* 35, no. 1 (February 2012): 5–32. <https://doi.org/10.1080/01402390.2011.608939>.

¹² Scharre, Paul. *Army of none: Autonomous Weapons and the future of war*. New York: W.W. Norton & Company, 2019.

Speed as the Hidden Engine of Instability

Look across military strategy, economic rivalry, and everyday social life, and a single pattern emerges: everything is speeding up. The details differ, but the force behind them is the same “time is being compressed”. Weapons react in seconds, financial markets shift in milliseconds, and information circles the globe instantly. Governments, however, still deliberate, negotiate, and legislate at a human pace. That growing mismatch between machine-speed systems and human-speed institutions is quietly becoming one of the most powerful sources of instability in the world today.

The problem is not simply that new technologies are powerful or disruptive. Societies have adapted to transformative inventions before - from the printing press to nuclear weapons. What makes the current moment different is velocity. Klaus Schwab describes this era as the “Fourth Industrial Revolution,” marked by innovations that evolve “at an exponential rather than linear pace.”¹³ Political systems designed for gradual change are struggling to cope with innovations that mature before laws, norms, and ethical frameworks can even be debated.

In the military realm, compressed decision times push leaders toward worst-case assumptions and rapid retaliation. In the economic sphere, fast-moving innovation cycles encourage protectionism and technological arms races. In the social sphere, digital platforms reward instant outrage while punishing patience and nuance. These are not separate problems; they are variations of the same dilemma - human institutions built for deliberation confronting technologies built for speed.



Image generated by Google Gemini, 2026.

¹³ “Accelerating the Global Transition to a Bio-Based Economy: The Strategic Role of Policy.” World Economic Forum. <https://www.weforum.org/publications/accelerating-the-global-transition-to-a-bio-based-economy-the-strategic-role-of-policy/31/>.

History offers warnings about such mismatches. Political scientist Thomas Homer-Dixon argues that complex societies become fragile when the rate of change overwhelms their ability to adapt. Stability requires feedback loops, learning processes, and institutional memory—all of which need time. When events unfold too quickly, those stabilizing mechanisms break down. The result is a world prone to overreaction, miscalculation, and cascading crises.

Technology has also altered perceptions of risk. Because actions can now be executed instantly, decision-makers feel pressure to respond immediately rather than carefully. As sociologist Hartmut Rosa notes, modern societies are trapped in a cycle of “social acceleration,” where speed becomes an end in itself rather than a means to better outcomes. In such a system, restraint begins to look like weakness and caution like incompetence.

Crucially, this dynamic affects not only governments but also citizens. Public opinion forms at digital speed, often before facts are known. Markets punish hesitation. Militaries fear falling behind. Every actor is pushed to move faster simply to keep up with others. What emerges is a global environment that rewards impulsiveness and penalizes reflection.

Understanding instability through the lens of speed reframes the challenge of governance. The core issue is not a shortage of technology but a shortage of time - time to think, verify, negotiate, and compromise. As historian Yuval Noah Harari warns, humanity is “gaining power faster than it is gaining wisdom.” Without mechanisms to slow decision-making and manage technological tempo, the world risks drifting into a permanent state of high-speed crisis.

Stability in the digital age therefore requires more than new tools; it requires new rhythms. The fundamental question of modern politics is deceptively simple: how can societies reintroduce deliberation into systems designed for instant reaction? Until that question is answered, acceleration itself will remain the most dangerous technology of all.

Conclusion

Technological progress has always reshaped politics and society, but never before has it done so at today’s speed. The central argument of this commentary is simple: instability in the modern world is increasingly a function of acceleration. When weapons act faster than diplomacy, markets evolve quicker than regulation, and information spreads more rapidly than truth, crises become inevitable. The challenge of the twenty-first century is therefore not merely to innovate, but to govern innovation wisely.

Mitigating these risks requires deliberate efforts to slow critical processes without stifling progress. In the military domain, this means strengthening human oversight of autonomous systems, establishing international norms for artificial intelligence, and creating crisis-management mechanisms that prevent automated escalation. Economic stability demands updated global rules for technology trade, greater transparency in digital supply chains, and safeguards against the destabilizing effects of algorithmic finance. At the societal level,

governments and technology companies must prioritize algorithmic accountability, digital literacy, and protections against the viral spread of disinformation.

Most importantly, policymakers must recognize that speed itself has become a strategic variable. Effective governance in the digital age will depend on building institutions capable of imposing pauses—ethical, legal, and procedural guardrails that allow judgment to catch up with technology. Innovation should be guided not only by what is possible, but by what is manageable.

The goal is not to halt technological change, but to align it with human values and political stability. Without such alignment, the world will continue to lurch from one high-speed crisis to the next. Stability in the age of acceleration ultimately requires a simple but difficult choice: learning to move forward more thoughtfully, even when technology urges us to move faster.