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Industrial War and Network War:
Operational Logics in the Russia–Ukraine War and the U.S.–Israel–Iran Conflict

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Abstract

This working paper compares the Russia–Ukraine war and the 2026 U.S.–Israel–Iran conflict as two distinct operational logics of contemporary warfare. Russia's campaign largely reflects a traditional interstate model centered on territorial control, frontline attrition, and strategic strikes against national infrastructure. By contrast, Iran's strategy resembles a network-oriented approach designed to impose systemic pressure on a globally deployed military power. The paper therefore compares the conflicts not in terms of military capability or political objectives, but in terms of the operational structures through which military pressure is applied.

Iran's operational logic illustrates several emerging characteristics of modern warfare: cumulative pressure generated through repeated missile and drone strikes, systemic targeting of operational nodes rather than national territory, and cross-regional strain imposed on alliance-based military architectures. The comparison does not suggest that Iran possesses greater military capability than Russia. Instead, it highlights how contemporary conflict increasingly involves attempts to disrupt distributed military ecosystems rather than achieve decisive territorial victory.

Three conclusions follow. First, modern conflict increasingly favors cost-imposition strategies over decisive battlefield outcomes. Second, operational nodes, such as bases, radar systems, logistics hubs, and communications infrastructure, are becoming central strategic targets. Third, globally deployed powers are most vulnerable not to isolated battlefield defeats but to sustained cross-regional pressure that strains alliance systems and force allocation.

Keywords: Industrial warfare; Network warfare; Cost-imposition strategy; Operational nodes; Military infrastructure networks; Cross-regional strategic pressure

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1. Two Wars, Two Logics of Conflict

The Russia–Ukraine war and the ongoing U.S.–Israel–Iran conflict illustrate two distinct operational logics of contemporary warfare.

Russia's campaign in Ukraine largely reflects the dynamics of conventional interstate war. Despite the extensive use of drones, missiles, and electronic warfare, the central operational objective remains closely tied to territorial control and sustained battlefield attrition. Russian operations have focused on seizing or defending territory while conducting repeated strikes against Ukraine's national infrastructure, including energy grids, transportation systems, and urban areas. These actions are intended to weaken Ukraine's national resilience and degrade its capacity to sustain long-term resistance (Biddle, 2004; Freedman, 2017; Wu, 2025).

Iran's approach in the current conflict reflects a different strategic logic. Rather than concentrating exclusively on Israeli territory or attempting to strike the U.S. homeland directly, Iranian operations appear designed to impose operational pressure on the broader U.S. regional military network (Wu, 2026a).

This strategy involves sustained pressure on U.S. bases across the Middle East, repeated missile and drone strikes that force continuous air-defense operations, and escalation dynamics that generate wider economic and logistical disruptions. The objective is therefore not territorial conquest but the gradual accumulation of systemic stress within an adversary's operational architecture.

In simplified terms, Russia's campaign reflects industrial warfare centered on territorial competition, whereas Iran's strategy resembles a node-to-network approach aimed at imposing systemic pressure on distributed military infrastructure (Cebrowski & Garstka, 1998; Arquilla & Ronfeldt, 2001).

Importantly, this comparison focuses on operational logic rather than strategic intent. Russia's campaign represents an offensive war aimed at territorial control, whereas Iran's actions occur largely within a retaliatory or defensive context. The argument of this article therefore does not compare the political objectives of the two conflicts but instead examines the operational structures through which military pressure is applied. The comparison therefore does not attempt to equate the overall character of the two wars. Rather, it focuses on how different actors apply military pressure within distinct operational environments.

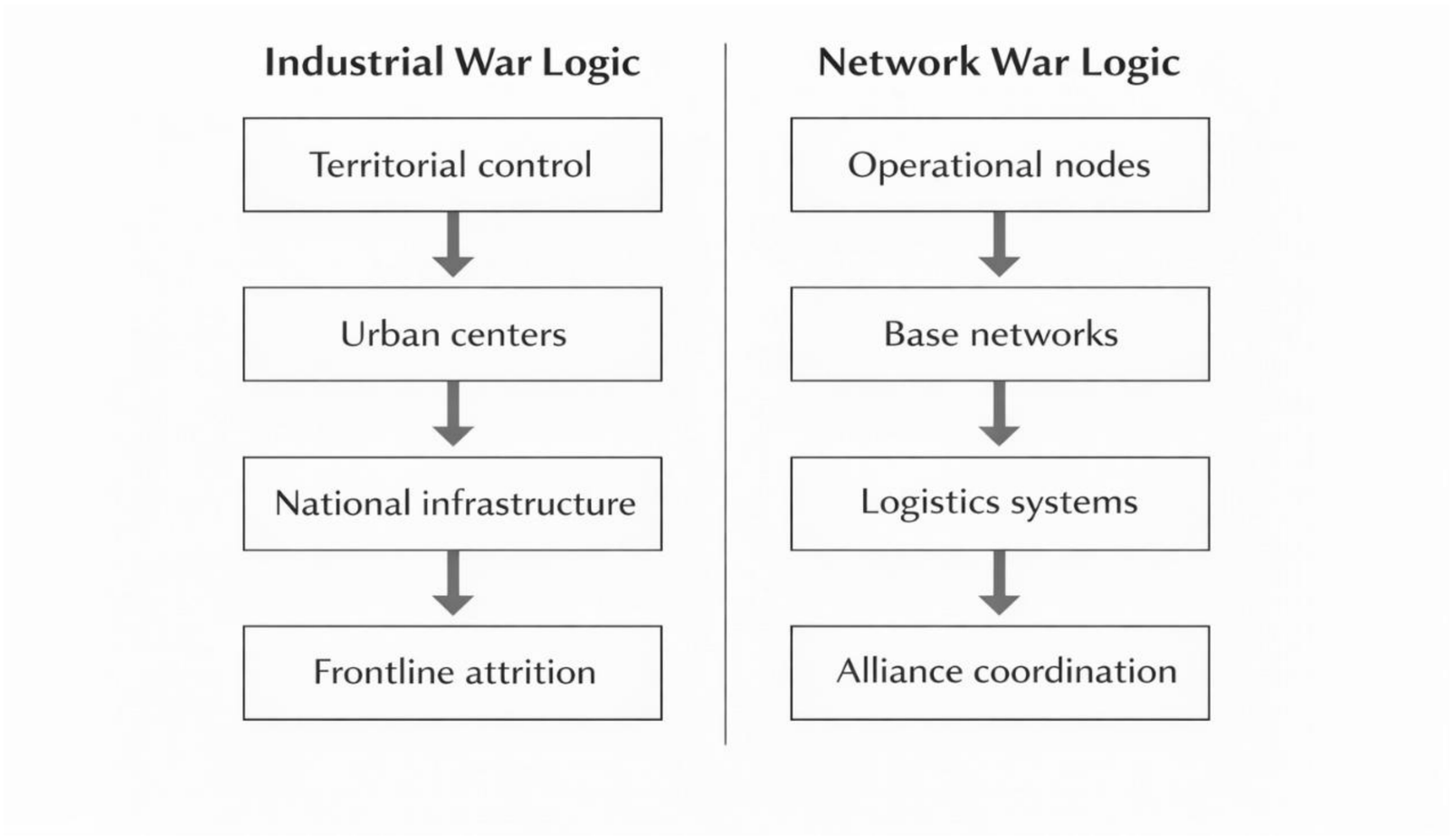

Figure 1. Industrial War vs Network War

Industrial warfare traditionally focuses on territorial control and the destruction of urban and industrial infrastructure, reflecting the strategic logic of industrial-era military competition centered on geography and massed force.

By contrast, network warfare prioritizes operational nodes, distributed bases, logistics systems, and alliance coordination mechanisms. Military advantage derives less from territorial conquest than from the ability to disrupt interconnected operational networks.

2. Power Asymmetry and Operational Logic

The divergence between these two operational logics is best understood through the lens of relative power asymmetry.

Russia entered the war in Ukraine as a major conventional military power capable of conducting large-scale ground operations and attempting territorial conquest. Its campaign therefore reflects the operational logic of industrial warfare, in which military success is traditionally measured through the control of territory and the destruction of national infrastructure.

Iran, by contrast, confronts a globally deployed military superpower whose homeland is largely beyond direct military reach. Under such conditions, attempts at territorial conquest or direct strategic defeat are structurally infeasible. Instead, weaker or geographically constrained actors often pursue strategies designed to impose costs and systemic pressure on the adversary's operational network.

This strategic adaptation reflects a broader pattern observed in asymmetric conflicts. When adversaries lack the capacity to defeat a stronger opponent through conventional territorial warfare, they may instead focus on disrupting operational nodes, imposing economic and logistical strain, and generating cumulative pressure across distributed military systems.

The contrast between Russia and Iran therefore illustrates how relative power positions shape not only strategic choices but also the operational structure through which warfare is conducted, as shown in **Table 1**.

Table 1 Power Asymmetry and Operational Logic of Warfare

Relative Power Position	Dominant Warfare Logic	Operational Focus
Great Power	Industrial Warfare	Territorial control, infrastructure destruction
Constrained Power	Network Warfare	Operational nodes, distributed military networks

3. The Cost-Imposition Strategy

One of the most important dynamics observed in the U.S.–Israel–Iran conflict is the emergence of a cost-imposition model driven by repeated missile and drone exchanges.

The strategic significance of this model lies not primarily in the success rate of individual strikes but in the cumulative probability of successful penetration over time. Even when air defense systems intercept a large proportion of incoming threats, repeated attack waves gradually increase the likelihood that high-value targets will eventually be struck.

This dynamic reflects a structural asymmetry between offensive and defensive systems. Missile defense interceptors typically involve very high per-engagement costs, while offensive systems, particularly drones and medium-range ballistic missiles, can often be deployed in larger numbers at significantly lower cost. Such asymmetries have long been recognized in strategic studies as a central driver of cost-imposition strategies (Posen, 1984; Freedman, 2017).

The resulting strategic environment creates a sustained cost imbalance. Defenders must maintain continuous, high-cost interception operations, while attackers benefit from the gradual accumulation of probabilistic risk across repeated strike cycles. Over time, this dynamic shifts the strategic burden toward the defending side.

This mechanism can be illustrated through a simple probabilistic model as follows:

$$Q = 1 - (1 - p)^n \tag{3.1}$$

Where:

- p : probability of single-strike penetration.
- n : number of attack attempts.
- Q : cumulative probability of at least one successful penetration.

Even low-probability strikes accumulate risk over repeated attack cycles, eventually increasing the likelihood of defensive failure.

In this sense, prolonged missile exchanges may favor the attacker even when most incoming threats are intercepted. Strategic advantage does not necessarily emerge from immediate destructive effects but from the gradual exhaustion of defensive resources and the accumulation of probabilistic breakthroughs. Similar dynamics have been discussed in analyses of decision-centric warfare and operational cost-imposition strategies (Clark, Patt, & Walton, 2021).

Table 2. Offense–Defense Cost Asymmetry in Missile Exchanges in the U.S.–Israel–Iran Conflict

System	Approximate Cost
Iranian drone	$20,000 – $50,000
Iranian ballistic missile	$200,000 – $1,000,000
Patriot interceptor	$3,000,000 – $5,000,000
THAAD interceptor	$12,000,000+

Table Note: Estimates are scenario-based approximations derived from the Middle East Conflict Cost Monitor (MCCM) daily updates (Days 1–10) and are used illustratively rather than as precise accounting values (AIPAMS Analytical Platform, 2026).

These cost differences illustrate the structural asymmetry between offensive and defensive systems. While defensive interceptors may successfully destroy incoming threats, each interception often requires a significantly higher financial expenditure than the cost of the attacking system. Over time, this imbalance can generate a strategic dynamic in which the defender faces escalating operational costs even when interception success rates remain high.

4. Base Targeting and Network Warfare

Another notable feature of the current U.S.–Israel–Iran conflict is the increasing emphasis on base infrastructure and operational nodes as primary targets.

Rather than prioritizing strikes against cities or civilian infrastructure, Iranian operations have increasingly focused on military installations and support systems across the region. These targets include radar sites, communications infrastructure, logistics depots, command-and-control facilities, and forward-deployed bases that form part of the broader U.S. operational network.

The objective of such strikes is not necessarily large-scale physical destruction but systemic disruption. When critical nodes within a military network are degraded or temporarily disabled, even limited physical damage can generate disproportionate operational consequences by disrupting coordination, logistics, and command processes. These disruptions can propagate across the network, producing cascading operational effects.

In this sense, attacks on operational nodes function as a form of network warfare. Military advantage derives less from territorial conquest than from the ability to disrupt the connectivity and coordination mechanisms that sustain an adversary's operational system. Targeting nodes within a distributed military network may therefore generate greater operational leverage than striking urban infrastructure, whose political and economic effects are often diffuse and delayed.

This approach contrasts with the dominant operational pattern observed in Russia's campaign in Ukraine. While Russian forces have conducted extensive strikes against Ukrainian energy infrastructure and military facilities, their broader strategy has remained oriented toward degrading national infrastructure and weakening Ukraine's territorial resilience rather than disrupting a larger transnational military network (Freedman, 2017).

5. The External Architecture of U.S. Power

A key insight emerging from the current conflict is that U.S. strategic power derives not only from homeland capabilities but from its global military architecture.

This architecture consists of a dense network of forward-deployed bases, alliance partnerships, maritime logistics routes, missile defense systems, intelligence platforms, and supporting infrastructure. Such globally interconnected systems resemble what scholars describe as networked power structures, in which strategic influence derives from control over critical nodes within complex security and economic networks (Farrell & Newman, 2019).

While the U.S. homeland remains difficult to strike directly, this globally distributed posture contains numerous potential pressure points. Forward bases, logistical hubs, air-defense installations, and communications networks represent critical nodes within the broader operational system.

The strategic vulnerability of globally deployed powers therefore lies not only in force dispersion but also in the dependence of that dispersion on allied access, logistics, and uninterrupted coordination. Disruptions at key nodes may not produce decisive battlefield outcomes, but they can generate ripple effects across the operational network by affecting air-defense coverage, logistical flows, command coordination, and alliance operations across an entire theater.

Recent discussions regarding the potential redeployment of air-defense systems between regions illustrate this dynamic. When one theater requires additional defensive resources, other regions may experience reduced coverage. Such redistribution pressures can create uncertainty among allies and complicate global force allocation.

The broader implication is that regional conflicts may generate cross-regional strategic consequences. Military pressure applied in one theater can reshape deterrence dynamics in other regions by influencing perceptions of U.S. availability, alliance commitments, and operational capacity (Wu, 2026b).

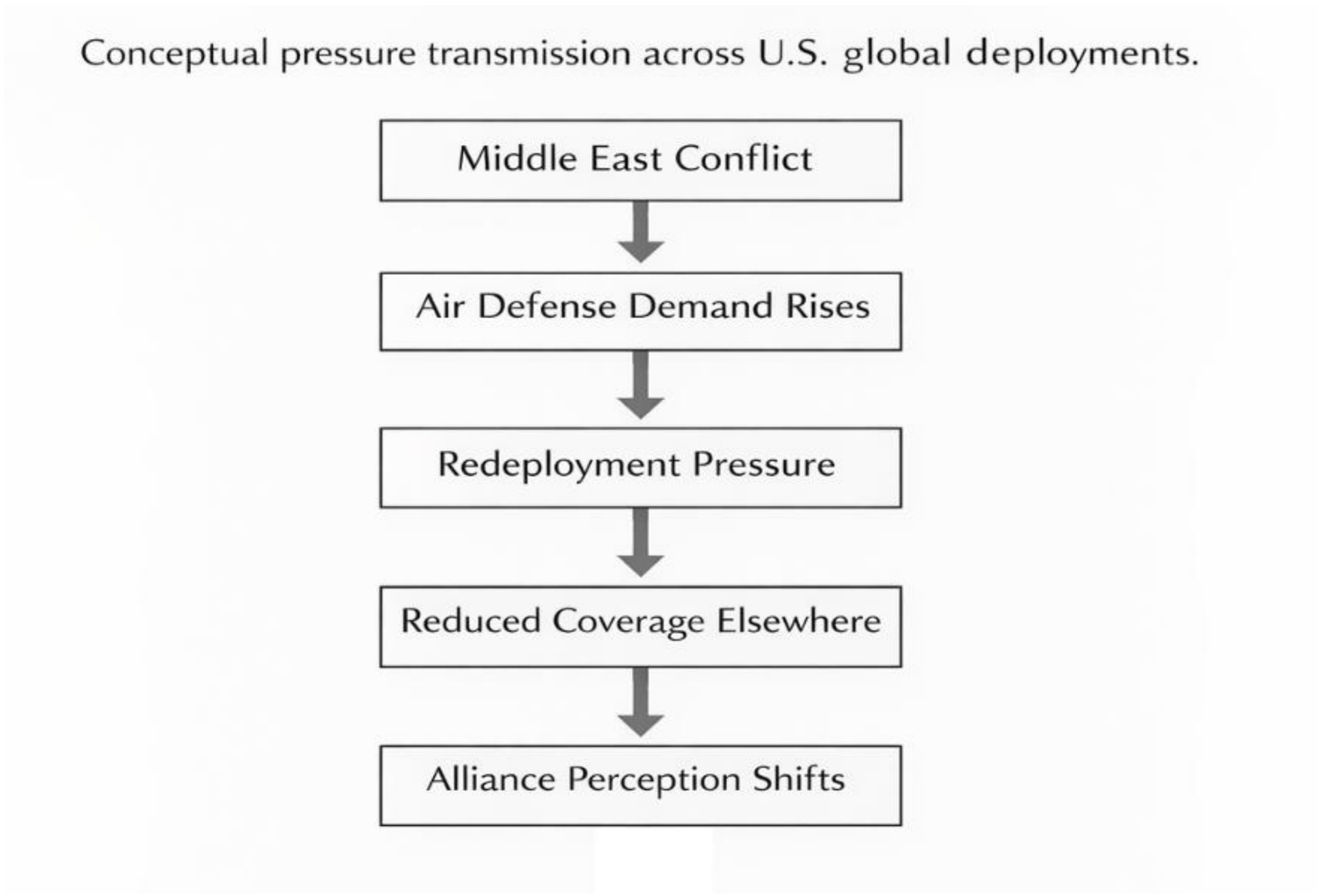

Figure 2. Cross-Regional Strategic Strain

This mechanism shown in **Figure 2** illustrates how localized military pressure can generate cascading strategic consequences across a globally deployed military network.

6. Operational Implications for Industrial Warfare

For industrial-era military doctrines, the most significant lesson from the U.S.–Israel–Iran conflict may lie less in specific weapon systems than in broader operational philosophy.

The Russia–Ukraine war has demonstrated the continued relevance of large-scale industrial warfare, particularly in conflicts centered on territorial control and sustained frontline attrition. At the same time, the dynamics observed in the U.S.–Israel–Iran conflict highlight several emerging patterns that may become increasingly important in conflicts involving technologically advanced and networked military systems.

Three strategic insights follow.

First, modern warfare may increasingly rely on cumulative pressure rather than purely deterministic battlefield destruction. Sustained operational tempo, such as repeated missile or drone waves, can gradually impose strategic pressure even when individual strikes achieve limited immediate effects. Over time, repeated attacks increase the probability of defensive failure while imposing continuous operational and financial burdens on the defending side.

Second, the most strategically valuable targets may increasingly be systemic nodes rather than urban centers. Military bases, logistics hubs, radar installations, communications infrastructure, and command systems represent the connective tissue of modern military operations. Disrupting these nodes can produce cascading operational effects that extend far beyond the scale of the initial strike.

Third, globally deployed powers are particularly vulnerable when they must sustain high-intensity commitments across multiple theaters simultaneously. Cross-regional pressure can strain alliance coordination, complicate force allocation decisions, and introduce uncertainty among partners regarding long-term security guarantees.

Taken together, these dynamics suggest that the strategic center of gravity in modern warfare may increasingly lie not in territorial conquest alone but in the ability to impose systemic stress on distributed operational networks.

Conclusion

The comparison between Russia's campaign in Ukraine and Iran's operational approach in the 2026 U.S.–Israel–Iran conflict highlights broader transformations in the operational structure of contemporary warfare. While both conflicts involve missile strikes and military escalation, their operational logics differ significantly. These differences point to several structural shifts in how military power is exercised in the twenty-first century.

First, the primary objective of military pressure appears to be shifting from territorial conquest toward systemic disruption. Industrial-era warfare emphasized the capture or destruction of cities, infrastructure, and territory. By contrast, network-oriented operations increasingly target operational nodes within military systems, including bases, logistics hubs, and command structures.

Second, strategic vulnerability is shifting from territorial exposure to network dependence. Modern military alliances rely on geographically dispersed bases, logistics corridors, and support systems. While these networks enable global force projection, they also create numerous operational nodes that can be targeted to impose cumulative pressure on the system.

Third, asymmetric strategy is shifting from battlefield confrontation to cost imposition. Actors that lack the capacity for territorial conquest may instead seek to raise the operational cost of sustaining military deployments. Repeated missile or drone strikes against bases, supply nodes, or regional facilities can generate sustained economic and operational strain without requiring decisive battlefield victories.

Fourth, escalation dynamics are shifting from single-theater conflict to cross-regional interaction. Because alliance basing networks and logistical systems are geographically distributed, military actions in one theater may affect deterrence perceptions and security commitments in other regions.

Fifth, the sources of military advantage are shifting from individual platforms to system architecture. In industrial warfare, the effectiveness of specific weapons platforms often determined battlefield outcomes. In network-oriented warfare, advantage increasingly depends on the resilience, redundancy, and coordination of the broader operational system.

Taken together, these developments suggest that the strategic center of gravity in contemporary conflict may be moving away from territorial battlefields toward the distributed infrastructures that sustain military operations. Understanding the structure and vulnerability of these operational networks will therefore become increasingly important for analyzing escalation dynamics and strategic stability in future conflicts.

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