

The Law of Oxygen

The First Principle of Warfare

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February 2, 2025

Executive Summary

This paper introduces the **Law of Oxygen**, a unifying principle that states: *victory in war depends on securing one's own essential lifelines while denying them to the adversary*. Drawing on historical campaigns—from Napoleon's invasion of Russia to modern cyber and economic warfare—the paper argues that controlling the “oxygen” of conflict, whether in the form of physical supplies, public support, or digital infrastructure, often proves more decisive than purely tactical or technological superiority.

- **Conventional Warfare:** Successful armies relentlessly protect their own logistical lines (fuel, ammunition, food) while targeting the enemy's, turning combat into a contest of endurance.
- **Irregular Warfare:** Insurgencies thrive on intangible “oxygen” such as population support, sanctuaries, and favorable narratives. Cutting these lifelines can be more effective than large-scale offensives.
- **Modern Multi-Domain Battlespace:** Today's militaries must safeguard both physical and digital oxygen, from supply convoys to critical cyber and financial networks. Even advanced weapons collapse if denied connectivity, data, and resources.

By examining key historical failures and triumphs, this paper provides actionable guidance for military leaders and policymakers. It underscores that **warfare is not merely about firepower but about systematically suffocating an adversary's capacity to function**, all while fortifying one's own. The lessons here are intended to shape strategic planning, doctrinal development, and operational execution across multiple domains of future conflict.

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Introduction

In military strategy, certain critical elements act as the *oxygen* of war—indispensable enablers that allow armies, insurgencies, or nations to sustain conflict. Just as living beings cannot survive without oxygen, no military campaign or violent movement endures without continuous lifelines in the form of supplies, resources, popular support, information, or other vital inputs. The *Law of Oxygen* is a strategic principle positing that victory often favors the side that secures its own lifelines while suffocating those of the adversary. A force cut off from its sources of strength will weaken and ultimately collapse, whereas one that preserves or replenishes these essentials can endure and prevail. This concept reflects a core truth understood by soldiers and statesmen through history: to defeat an enemy, one must deprive it of the means that breathe life into its warfighting capacity.

This paper examines the Law of Oxygen through a historical and theoretical lens, then considers its modern implications. We first review how, in conventional warfare, controlling or severing logistical and material supply lines has decided conflicts—from Napoleon’s campaigns to twentieth-century blockades. We then explore how irregular warfare and insurgencies similarly depend on less tangible oxygen (such as civilian support or external sanctuary), drawing on perspectives from Mao Zedong and contemporary counterinsurgency doctrine. Finally, we discuss how this principle extends to the modern multi-domain battlespace, including information networks and financial systems, and we outline key takeaways for today’s military strategists and policymakers. Throughout, we maintain a clear strategic focus: understanding and exploiting the Law of Oxygen provides commanders and decision-makers a powerful framework to choke the enemy’s strength while preserving one’s own, thereby tipping the scales of conflict in one’s favor.

Conventional Warfare: Cutting the Enemy’s Lifelines

In conventional warfare, logistics and supply lines are the literal lifeblood of armies. Commanders from antiquity to the modern era have understood that destroying an enemy’s supplies or denying its reinforcements can be as decisive as winning on the battlefield. Napoleon Bonaparte famously observed that “an army marches on its stomach,” underscoring that no strategy succeeds without ample food and provisions.¹ In other words, an army without nourishment or supply cannot march, let alone fight. It is no surprise, then, that cutting an opponent’s supply lines has long been a core strategic method. A well-worn adage holds that while *amateurs talk strategy, professionals talk logistics*, highlighting that seasoned military

planners focus first on sustaining their own forces and strangling the enemy's sustainment.⁷

History provides powerful examples of this principle. In 1812, Napoleon's Grande Armée pushed deep into Russia, winning battles yet stretching its logistical tether to the breaking point. The further Napoleon advanced, the more he moved away from his bases of supply, eroding his combat power with each step. Carl von Clausewitz later analyzed this failure and introduced the concept of a "culminating point" of victory, beyond which an attacking force's strength irreversibly dwindles.⁹ Napoleon's campaign reached that point—his army, exhausted and starved of supplies and shelter, could advance no further and was eventually devastated by counterattack and the Russian winter. Clausewitz warned that every reduction in one side's strength effectively increases the relative strength of the other; once Napoleon's forces lost their logistical oxygen, their initial victories turned to ruin.⁹ This lesson – that an ostensibly superior force can be defeated by patiently choking off its sustenance – reverberated throughout 19th-century military thought.

The strategy of **strangulation** by cutting off resources reappeared in subsequent wars with even greater effect. During the American Civil War, the Union's Anaconda Plan aimed to encircle and suffocate the Confederacy by blockading its coasts and seizing control of the Mississippi River, thereby severing the South's commerce and supply lines.² This prolonged constriction of "oxygen" contributed significantly to the Confederacy's collapse, as Southern armies and civilians alike suffered growing shortages. In World War I, the Allied naval blockade of the Central Powers became a massive exercise in denying the enemy sustenance. Vital imports of food and war materiel were cut off. By the end of the war, Germany was economically prostrate and its population malnourished; the German Board of Public Health famously estimated that over 750,000 German civilians had died from starvation and disease due to the blockade.⁸ While combat raged on the fronts, the slow suffocation of Germany's economy and home front exemplified the Law of Oxygen on a grand scale – the Allied victory was achieved not only by battlefield valor but by systematically **denying the enemy the means to endure**.

The same logic guided Allied strategy in World War II. The Western Allies' combined bombing and naval blockade campaigns targeted critical resources fueling the Axis war machine. For example, Germany's synthetic oil plants and transportation networks were pounded from the air, drastically curtailing the fuel available for Nazi tanks and aircraft by 1944. In the Pacific, American submarine warfare devastated Japan's merchant fleet, severing the maritime lifelines that brought oil, iron, and food to the home islands. Deprived of these inputs,

Axis forces steadily lost the ability to resist: tanks sat immobilized for lack of fuel, factories lay idle without raw materials, and rations dwindled for soldiers and civilians. A modern army that cannot fuel its vehicles, load its guns, or feed its troops is effectively incapacitated. Thus, through relentless logistical attack, the Allies choked the Axis powers into defeat.

These cases demonstrate a clear strategic axiom: if an adversary is denied access to the physical necessities of war, its capacity to fight collapses. Cutting off the enemy's **physical oxygen** – be it food, ammunition, fuel, or industrial resources – can achieve what costly battles might not. This approach often turns war into a contest of endurance and attrition, favoring the side that can better protect its own lifelines while systematically strangling those of its enemy. Having illustrated the Law of Oxygen in conventional war, we now turn to a different arena of conflict where the same principle applies in more subtle forms: irregular warfare and insurgency.

Irregular Warfare: Insurgency and Oxygen of Support

In irregular warfare and insurgencies, the critical lifelines are more psychological and social, but no less crucial. Rather than depots of ammunition or fuel, guerrillas and terrorist groups draw their “oxygen” from the support of the population, the availability of sanctuaries, and the power of their narrative. Revolutionary leaders have long recognized that without a sympathetic base of civilians, an insurgency cannot survive. Mao Zedong famously wrote that *the people are to the guerrilla fighters as water is to fish*—the populace provides the medium in which insurgents move, hide, and thrive.¹⁰ Villagers give food, intelligence, recruits, and moral legitimacy to the guerrilla cause. If that popular support is drained away, the insurgents lose their protective sea and can be “caught” or exterminated. For this reason, counterinsurgency campaigns consistently seek to separate rebels from the people. As British General Sir Gerald Templer stressed during the Malayan Emergency, “the answer [to the insurgency] lies not in pouring more troops into the jungle, but in the hearts and minds of the people.”⁵ Winning the hearts and minds of the populace meant denying the communist guerrillas the local support they depended on. Indeed, modern Western counterinsurgency doctrine considers the population the central **center of gravity** in such conflicts. Protecting civilians, addressing their grievances, and earning their trust can rob an insurgency of the indispensable shelter and cooperation it needs to operate. Historical campaigns from Malaya to Iraq and Afghanistan demonstrate that when the mass of the people turns against an insurgency, its days are numbered; deprived of recruits, information, and concealment, the insurgents slowly suffocate.

Beyond direct local support, insurgent movements also require broader political and informational oxygen. Insurgents gain strength from inspiring ideology, propaganda victories, and the perception of momentum or legitimacy. They often seek to provoke overreactions or atrocities by the government, hoping to garner publicity and sympathy. As UK Prime Minister Margaret Thatcher observed regarding terrorism, “publicity itself is the oxygen of violent political movements”. She argued that free societies should find ways “to starve the terrorist and the hijacker of the oxygen of publicity on which they depend”.⁶ In practical terms, this means denying extremists the propaganda victories they crave. Similarly, insurgencies are fueled by grievances and ungoverned spaces. Endemic corruption, repression, or lawlessness in a region provides the air in which rebellion germinates. Conversely, improving governance and cutting off insurgent propaganda can suffocate an insurgency’s appeal. In 2009, for example, the NATO Secretary General noted that establishing good governance “would suck the oxygen out of the insurgency” in Afghanistan, underlining that effective government can remove the societal conditions that militants exploit.⁴

Insurgents and terrorists also rely on external enablers as their oxygen. Safe havens across borders, financial networks, and foreign sponsorship can keep an insurgency alive even when it is hard-pressed locally. Throughout the Cold War and after, proxy forces and guerrillas frequently survived thanks to a lifeline of arms, money, and sanctuary provided by sympathetic regimes or diaspora communities. Cutting off these lifelines has been a priority for counterinsurgent strategists: sealing borders to block infiltrations, interdicting supply routes (such as the Ho Chi Minh Trail during the Vietnam War), and cracking down on funding sources. When insurgents are denied external reinforcement and funding, they become isolated and far easier to defeat. In sum, irregular warfare validates the Law of Oxygen just as powerfully as conventional war. The form of oxygen differs—intangible popular support and legitimacy rather than fuel and bullets—but the law remains the same. Victory is achieved by asphyxiating the insurgency’s lifelines while safeguarding or strengthening the government’s own support. With both conventional and irregular conflicts illustrating this principle, we turn to how the Law of Oxygen manifests in today’s strategic environment and what it implies for modern military and policy decisions.

Modern Implications: Multi-Domain Oxygen

In the twenty-first century, the Law of Oxygen extends into new domains of warfare that are just as decisive as bullets and bombs. Modern militaries rely on complex networks of communications, information, energy, and finance – all of which can become critical choke

points. Today's warfighters must consider not only physical supplies but also the **digital and economic oxygen** that powers military operations. For example, command-and-control systems, satellite communications, and intelligence networks are the nervous system of a modern force. Disrupting these can be as crippling as blowing up an ammunition convoy. A cyber attack that collapses an adversary's power grid or communications network can paralyze their ability to coordinate, essentially suffocating their command structure. Electronic jamming of radar and radio can blind and deafen an enemy on the battlefield, rendering them unable to "breathe" in the information space. The advent of *network-centric warfare* highlighted how vital connectivity and data are to combat effectiveness; a force cut off from its data links and sensors is fighting in the blind. As one NATO study succinctly put it, air and information superiority in war are akin to oxygen – when you have it, you don't notice, but when you lack it, it's the only thing you need.⁴ The side that secures dominance in the electromagnetic spectrum and cyberspace effectively grabs the oxygen mask, leaving its opponent gasping for situational awareness.

Economic and financial warfare have also become central to strategic competition, reflecting the same principle. Nations increasingly use sanctions, trade controls, and financial blacklisting to choke off the resources that fuel an adversary's military or political ambitions. Cutting access to the global banking system, for instance, can starve rogue regimes or terrorist networks of the funds required to equip fighters and buy arms. Counterterrorism efforts since 2001 have aggressively targeted the financial lifelines of extremist groups, seeking to "starve the terrorists of their financial oxygen."³ Without money, even the most fanatical group cannot pay fighters, acquire weapons, or execute complex plots. In state conflicts, economic sanctions aim to erode the adversary's war-making capacity over time – much as the Allied blockades did in earlier eras, but via global markets and currency flows rather than naval squadrons. A contemporary example is the pressure campaign against Iran's nuclear program, which explicitly focuses on cutting off Iran's access to oil revenues and international finance, thereby weakening its economy and forcing strategic concessions. Similarly, Russia's war in Ukraine has been met with concerted Western sanctions to impair Moscow's ability to fund and supply its military campaign. In effect, these measures are attempts to suffocate an opponent's grand strategic oxygen – the economic strength that underpins long-term military power.

The modern battlespace is thus multi-dimensional, but the Law of Oxygen provides a unifying logic across all dimensions. Whether through cyber warfare, electronic warfare, information operations, or economic coercion, the objective is consistent: **identify what**

the enemy cannot survive without, and deny it to them. At the same time, modern strategists must ensure their own side's critical systems remain resilient. This means hardening and diversifying logistics, protecting communications and energy grids, securing alliances and access to resources, and winning the battle of narratives. The competitions of the future will likely be won by those who better safeguard their oxygen—be it fuel and food or data and capital—while adeptly strangling the flow of oxygen to their rivals. With these contemporary considerations in mind, we now distill the key lessons of the Law of Oxygen and its significance for military leaders and policymakers.

Conclusion: Strategic Lessons of the Law of Oxygen

Across eras and domains, the Law of Oxygen reveals a timeless strategic truth: victory in conflict tends to favor the side that most effectively preserves its own critical lifelines and disrupts those of its opponent. For military leaders and national security policymakers, this principle offers several clear lessons. First, one must rigorously **identify the enemy's sources of strength** – the key supplies, support networks, and systems without which their war effort cannot continue. These sources may be tangible (fuel pipelines, supply convoys, industrial centers) or intangible (public support, communications links, financial assets), but in all cases they are high-value targets. By concentrating strategy on severing these sinews, a commander can erode the adversary's capacity at its roots rather than only fighting its symptoms on the battlefield. Second, one must **protect and sustain one's own oxygen**. This means prioritizing logistics and resiliency: ensuring supply lines are secure, stockpiles ample, alliances and home front support intact, and critical systems defended against attack. A force that keeps itself well-supplied and connected while denying the same to the enemy will progressively tip the balance in its favor.

Third, the Law of Oxygen underscores that many conflicts become contests of endurance and will. Especially when a quick knockout blow is elusive, the side that can **suffocate its opponent over time** – through blockade, attrition, or cutting off support – will prevail where brute force alone might not. Strategic patience and a focus on cumulative effects can be as important as dramatic maneuvers. Policymakers should therefore integrate military, economic, and diplomatic actions to systematically exhaust an opponent. Blockades, sanctions, psychological operations, and coalition-building all serve to tighten the noose on an adversary's vital needs. By attacking an enemy's ecosystem of support from multiple angles, one accelerates the collapse of its fighting ability and resolve.

Finally, the Law of Oxygen reminds us of the elemental importance of securing “air” for our

own side. No matter how advanced our weapons or clever our plans, without food for the soldiers, fuel for the tanks, electrons flowing in the circuits, and legitimacy in the eyes of the people, our strategy will gasp for life. Thus, leaders must constantly ask: *Are we protecting our lifelines as effectively as we are targeting the enemy's?* A sound strategy balances both sides of the equation.

In sum, the metaphor of oxygen provides a powerful lens to evaluate and execute strategy. It distills warfare to its essential enablers of action. Those who command the oxygen of the battlefield – sustaining their forces and strangling their foe's support – gain a decisive advantage. From Napoleon's failure in the snows of Russia to the counterinsurgencies of the 21st century, the combatant who cannot breathe cannot fight. The Law of Oxygen, applied with insight and rigor, helps ensure that when the moment of decision comes, it is the enemy who finds himself gasping, out of air and out of options.

Key Takeaways

- **Takeaway 1:** Identify and deny critical lifelines. Whether oil refineries, satellite networks, or financial flows, an adversary’s ability to sustain operations hinges on these resources.
- **Takeaway 2:** Protect your own “oxygen.” Proactive defense of logistics lines, communications, and alliances is essential to remain combat-effective under pressure.
- **Takeaway 3:** Combine strategic patience with multi-pronged pressure. Squeezing an opponent’s lifelines—through direct strikes, sanctions, or cyber disruption—often outlasts any single battle or engagement.
- **Takeaway 4:** Mind the intangibles. In irregular warfare, popular support, sanctuaries, and favorable narratives serve as critical “oxygen” just as vital as physical supplies.
- **Takeaway 5:** Adapt to modern domains. Digital and economic warfare (sanctions, trade restrictions, data denial) are potent tools for “suffocating” an enemy’s strategic capacity without direct confrontation.

Falsification Check

To challenge the Law of Oxygen framework, critics must demonstrate one of the following:

1. **Contradict the Core Premise:** Provide empirical or logical evidence that supply denial (whether physical or intangible) does *not* degrade an enemy’s combat power or capacity to function.
2. **Prove Effective Adaptation:** Show that forces can consistently operate and prevail despite losing the resources the Law of Oxygen deems critical (e.g., intact supply lines, public support, or information infrastructure).

Yet both lines of argument run counter to well-documented historical and contemporary cases, in which militaries and insurgencies have repeatedly collapsed once their essential lifelines were cut. Until such counterexamples are convincingly established, the Law of Oxygen remains a robust framework for understanding why controlling an adversary’s “oxygen” is decisive in war.

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- [7] Martin Van Creveld. *Supplying War: Logistics from Wallenstein to Patton*. Cambridge University Press, Cambridge, 1977. Frequently credited with popularizing the statement linking amateurs to strategy and professionals to logistics.
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- [9] Carl von Clausewitz. *On War*. J. J. Weber (Leipzig), 1832. Multiple modern editions exist; referencing original publication.
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Acknowledgments

This work reflects a collaborative effort: the human author originated and refined the ideas, while generative AI systems assisted with drafting, formatting, and synthesis. The intent is not personal recognition but to contribute these insights to shared human knowledge, making them as accessible as possible for strategists and policymakers.

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