

Thucydides' Traps in the 21st Century: Determinants of World War III

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Abstract

This paper examines the concept of Thucydides' Trap and its relevance to 21st-century international relations, focusing on the determinants that could precipitate a third world war. Drawing on historical precedents, theoretical frameworks, and contemporary geopolitical analysis, we identify key risk factors—including great power rivalry, technological disruption, nuclear and cyber escalation, resource scarcity, and the erosion of global norms—that shape the prospects for large-scale conflict in our era.

The paper ends with “The End”

1 Introduction

The specter of great power war has returned to the forefront of international relations scholarship. The concept of *Thucydides' Trap*, popularized by Graham Allison, posits that when a rising power threatens to displace an established hegemon, the structural stress often leads to war. In the 21st century, the U.S.-China rivalry, Russia-NATO tensions, and the proliferation of disruptive technologies have revived concerns about the determinants of global conflict.

The contemporary international system faces unprecedented challenges that compound traditional security dilemmas. Unlike previous eras of great power competition, today's geopolitical landscape is characterized by deep economic interdependence, nuclear arsenals capable of civilization-ending destruction, and emerging technologies that blur the boundaries between peace and war. The speed of information flows, the compression of decision-making timelines, and the potential for cascading crises across multiple domains create conditions where miscalculation could have catastrophic consequences.

This paper analyzes whether the structural conditions that produced conflict in past power transitions are present today, and whether new factors unique to the 21st century increase or decrease the probability of major war. We examine historical patterns of power transition, assess contemporary great power relationships through the lens of Thucydidean dynamics, and identify the technological, environmental, and institutional factors that may determine whether rising tensions escalate into systemic conflict.

2 Theoretical Framework: Thucydides' Trap

Thucydides, chronicling the Peloponnesian War, observed: “It was the rise of Athens and the fear that this instilled in Sparta that made war inevitable.” Allison’s analysis of 16 historical cases found that 12 resulted in war when a rising power challenged a ruling one. The key mechanisms include:

- **Structural Tension:** Power transitions create insecurity and competition.
- **Perception and Misperception:** Mutual suspicion and misreading of intentions.
- **Alliance Dynamics:** Entanglements with third parties increase escalation risk.
- **Behavioral Triggers:** Assertive actions by rising or ruling powers can spark conflict.

The theoretical foundation of Thucydides’ Trap rests on power transition theory, which holds that international systems are most unstable when the distribution of power is shifting. When a rising state approaches parity with the dominant power, both face strategic uncertainties that can lead to preventive war, preemptive strikes, or conflicts over spheres of influence. The ruling power may be tempted to contain or suppress the challenger while it still holds advantages, while the rising power may become impatient and seek to accelerate its ascent through assertive or aggressive policies.

Power transition theory, developed by Organski and expanded by scholars such as Gilpin and Mearsheimer, emphasizes that the danger lies not merely in power shifts themselves but in the dissatisfaction of rising powers with existing international rules and norms. When a challenger perceives the status quo as illegitimate or constraining, and when the hegemon views accommodation as unacceptable decline, the conditions for conflict mature. The security dilemma intensifies as each side’s defensive preparations appear threatening to the other, creating spirals of mistrust and arms buildup.

Beyond structural factors, psychological and perceptual elements play crucial roles. Leaders on both sides operate under conditions of uncertainty about intentions, capabilities, and resolve. Historical analogies, domestic political pressures, and organizational biases shape threat assessments and policy choices. Small incidents can be interpreted as harbingers of larger ambitions, while conciliatory gestures may be dismissed as tactical deception or weakness. The challenge for statesmanship lies in managing these perceptual dynamics while addressing legitimate security concerns.

3 Historical Precedents

Period/Case	Ruling Power	Rising Power	War?
Ancient Greece	Sparta	Athens	Yes
Early 20th c.	United Kingdom	Germany	Yes
Cold War	United States	Soviet Union	No
16th c.	Habsburgs	Ottoman Empire	Yes
Late 15th c.	Portugal	Spain	No

Table 1: Selected Historical Power Transitions and Outcomes

Historical analysis reveals that power transitions are dangerous but not inevitably fatal. The cases that ended in war typically featured several aggravating factors beyond mere power shifts. In the Peloponnesian War, Athens' aggressive expansion into Spartan spheres of influence, combined with Spartan fears of losing its preeminent position in Greece, created a toxic mixture that minor incidents could ignite. The rigid alliance systems meant that localized disputes drew in major powers, limiting diplomatic flexibility.

The Anglo-German rivalry preceding World War I demonstrates how structural tensions can be amplified by arms races, alliance entanglements, and domestic political dynamics. Germany's rapid industrialization and naval buildup challenged British maritime supremacy, while Germany's geographic position and encirclement fears drove aggressive military planning. Neither side wanted general war, but the complex mobilization schedules, offensive military doctrines, and crisis decision-making processes created conditions where a Balkan crisis spiraled into continental conflagration.

Conversely, the Cold War power transition illustrates that major war can be avoided even under conditions of intense ideological rivalry and nuclear brinkmanship. Several factors contributed to this outcome, including nuclear deterrence, the gradual institutionalization of crisis management mechanisms, recognition of mutual vulnerability, and periods of détente that created space for accommodation. The case suggests that structural pressures can be managed through conscious statecraft, arms control agreements, economic interdependence, and diplomatic channels that provide alternatives to military confrontation.

The varying outcomes across historical cases indicate that while power transitions create risks, war is not predetermined. Leadership choices, institutional arrangements, third-party mediators, and the specific issues at stake all influence whether tensions escalate or stabilize. Understanding what distinguished peaceful from violent transitions provides insights for managing contemporary great power relationships.

4 Contemporary Great Power Competition

4.1 US-China Rivalry

- **Economic Competition:** Decoupling, technology bans, and industrial policy.
- **Military Buildup:** PLA modernization, US Indo-Pacific deployments.
- **Technological Race:** AI, quantum computing, 5G standards.
- **Flashpoints:** Taiwan Strait, South China Sea.

The relationship between the United States and China represents the most consequential power dynamic of the 21st century. China's economic rise over the past four decades has been unprecedented in speed and scale, lifting it from a poor developing nation to the world's second-largest economy and a technological peer competitor in many domains. This transformation has fundamentally altered global power distributions and challenged American primacy in the Asia-Pacific region.

Economic competition has intensified as both nations pursue technological self-sufficiency and supply chain resilience. The United States has implemented export controls on advanced semiconductors, restricted Chinese technology companies' access to American markets, and mobilized allies to limit China's role in critical infrastructure. China has

responded with its own industrial policies aimed at achieving breakthroughs in core technologies, reducing dependence on foreign inputs, and creating alternative technology standards. This mutual decoupling carries risks of fragmentation in the global economy and reduces the stabilizing effects of economic interdependence.

Military dimensions of the rivalry have grown more acute as China has modernized the People's Liberation Army and expanded its operational reach. China's anti-access and area-denial capabilities challenge American military advantages in the Western Pacific, while growing Chinese naval power extends Beijing's ability to project force into previously contested waters. The United States has responded by strengthening alliances with Japan, South Korea, and Australia, increasing forward deployments, and developing new operational concepts for potential conflict scenarios. Both sides are engaged in comprehensive military modernization that spans conventional forces, missile systems, space capabilities, and cyber operations.

Taiwan remains the most dangerous flashpoint in US-China relations. Beijing views Taiwan as a core interest and has never renounced the use of force for reunification, while the United States maintains a policy of strategic ambiguity combined with arms sales and implicit security commitments. China's growing military capabilities raise questions about whether Beijing might attempt forcible reunification, while American debates over explicit security guarantees could alter Taiwan's status quo calculations. Any crisis over Taiwan would carry immense escalation risks given the vital interests both powers perceive to be at stake.

4.2 Russia-NATO Dynamics

- **Ukraine War:** Proxy conflict with global escalation risk.
- **NATO Expansion:** Security dilemmas and regional instability.

The Russia-NATO relationship has deteriorated to its lowest point since the Cold War, driven by fundamentally incompatible visions of European security order. Russia views NATO expansion into former Soviet territories as an existential threat that encroaches on its sphere of influence and security buffer. NATO members counter that sovereign nations have the right to choose their security arrangements, and that enlargement has been defensive in response to Russian aggression. This clash of perspectives has produced recurring crises and now direct military confrontation.

The war in Ukraine that began with Russia's invasion in 2022 has transformed European security and demonstrated the continued potential for major conventional warfare. While NATO has avoided direct military intervention, member states have provided extensive military and economic support to Ukraine, effectively making the conflict a proxy war between Russia and the Western alliance. The war has reinforced NATO cohesion, prompted previously neutral states to seek membership, and led to significant increases in defense spending across Europe. Russia has responded by deepening ties with China, Iran, and North Korea while threatening nuclear escalation if its core interests are threatened.

Beyond Ukraine, Russia-NATO tensions manifest in multiple domains including cyber operations, information warfare, military exercises near borders, and strategic nuclear postures. The breakdown of arms control architecture, including the collapse of the Intermediate-Range Nuclear Forces Treaty and uncertainty around New START extension, removes constraints and stabilization mechanisms. The potential for miscalculation

increases as forces operate in close proximity with limited communication channels and high states of alert.

5 Determinants of World War III

5.1 Vector Graphic: Thucydides' Trap Mechanism

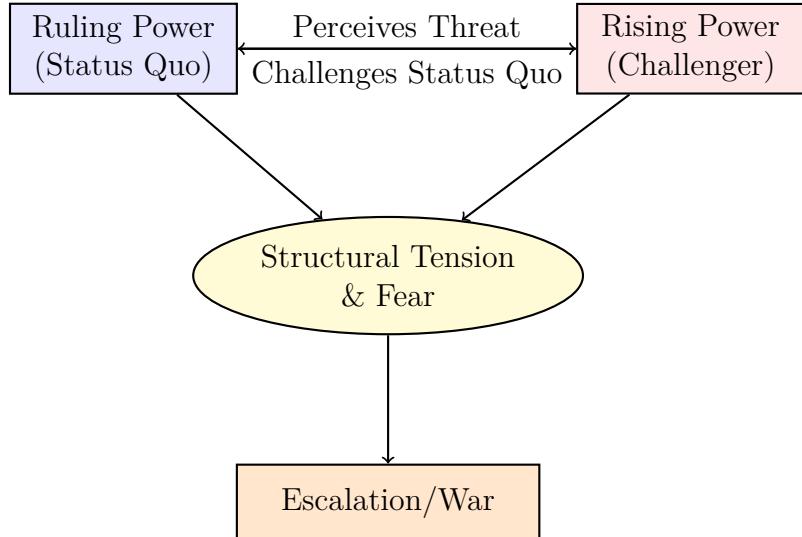


Figure 1: Mechanism of Thucydides' Trap

5.2 Key Risk Factors

1. Great Power Rivalry: US-China, Russia-NATO, regional powers.

The return of explicit great power competition marks a fundamental shift from the post-Cold War unipolar moment. Multiple powers now contest for influence, markets, technology leadership, and regional dominance. These competitions occur not only between the United States and its challengers but also involve regional powers such as India, Turkey, Iran, and Saudi Arabia pursuing their own spheres of influence. The multipolar nature of contemporary competition creates complex alignment patterns where partnerships shift based on specific issues, increasing unpredictability and reducing the stabilizing effects of clear bloc structures.

2. Nuclear Weapons: Escalation risks, AI/cyber vulnerabilities.

Nuclear weapons fundamentally shape great power competition by creating mutual vulnerability and catastrophic consequences for miscalculation. While nuclear deterrence prevented direct superpower war during the Cold War, the contemporary nuclear environment presents new challenges. The integration of artificial intelligence into early warning systems and decision-making processes introduces possibilities for automated responses or false alarms. Cyber vulnerabilities in command and control systems raise concerns about unauthorized launch or strategic miscalculation during crises. Additionally, the development of tactical nuclear weapons and ambiguous doctrines about their use blur the firebreak between conventional and nuclear conflict.

3. Cyber Warfare: Attacks on critical infrastructure, information operations.

Cyberspace has emerged as a contested domain where peacetime operations blur into conflict, and attribution challenges enable deniable aggression. State and state-sponsored actors routinely penetrate adversary networks, conduct espionage, and pre-position capabilities for potential wartime disruption. Attacks on critical infrastructure such as electrical grids, financial systems, or communication networks could cripple societies without kinetic warfare. Information operations seek to manipulate public opinion, undermine democratic processes, and erode societal cohesion. The difficulty of establishing clear red lines in cyberspace, combined with the potential for rapid escalation from digital to physical domains, creates dangerous ambiguities about what constitutes acts of war.

4. Technological Disruption: AI, autonomous weapons, rapid escalation.

Emerging technologies are transforming warfare in ways that compress decision timelines and create new escalation risks. Artificial intelligence enables autonomous weapons systems that can select and engage targets without human intervention, raising concerns about accountability and the potential for unintended escalation. Hypersonic weapons that can strike targets anywhere on Earth within minutes undermine strategic stability by creating use-it-or-lose-it pressures on nuclear forces. Quantum computing threatens to break current encryption methods, potentially exposing military communications and command systems. The race to deploy these technologies before fully understanding their strategic implications increases the likelihood of destabilizing breakthroughs and arms race dynamics.

5. Resource Scarcity & Climate Change: Competition over water, food, energy.

Environmental stresses are reshaping geopolitical competition and creating new sources of conflict. Climate change drives migration flows, reduces agricultural productivity in vulnerable regions, and intensifies competition over freshwater resources. Rising sea levels threaten coastal population centers and military installations. Arctic ice melt opens new shipping routes and access to natural resources, creating strategic competition in previously inaccessible regions. Energy transitions create new dependencies on critical minerals for batteries and renewable technology, shifting resource geopolitics away from fossil fuels toward rare earth elements and lithium. These environmental and resource pressures overlay traditional security competition, creating additional flashpoints and reducing cooperation on global challenges.

6. Economic Interdependence: Weaponization of trade, sanctions.

While economic interdependence has traditionally been viewed as a pacific force, contemporary practice demonstrates how economic ties can be weaponized for coercive purposes. Major powers increasingly employ trade restrictions, technology embargoes, financial sanctions, and supply chain manipulation as tools of strategic competition. The United States has leveraged the centrality of the dollar in international finance to impose extraterritorial sanctions, while China has used market access and rare earth exports as coercive instruments. This weaponization of economic interdependence reduces its stabilizing effects and creates incentives for states to pursue self-sufficiency in critical sectors, potentially fragmenting the global economy into competing blocs.

7. Democratic Backsliding: Political instability, rise of nationalism.

Domestic political trends within major powers influence their foreign policy behavior and crisis management capabilities. Rising nationalism, populist movements, and democratic backsliding in several countries have empowered leaders who employ aggressive rhetoric and confrontational policies to mobilize domestic support. Authoritarian consolidation reduces institutional checks on executive decision-making during crises. Information ecosystems fragmented by social media and disinformation make it harder to build domestic consensus for compromise or de-escalation. Political polarization within democracies can paralyze foreign policy and create opportunities for adversaries to exploit divisions. These domestic political dynamics reduce the quality of strategic decision-making and increase the likelihood of miscalculation.

8. Escalation Mechanisms: Misperception, compressed decision timelines.

Modern crises unfold at speeds that challenge human decision-making capacities. The integration of automated systems, the global reach of surveillance capabilities, and instant communication create environments where initial incidents can rapidly spiral beyond control. Military doctrines emphasizing speed and preemption can create pressures to act before full information is available or diplomatic alternatives are exhausted. Compressed timelines reduce opportunities for deliberation, consultation with allies, or signal interpretation. Combined with the complexity of modern military operations across multiple domains simultaneously, these escalation mechanisms increase the probability that limited conflicts could expand into systemic wars despite the absence of intent for such outcomes.

5.3 Vector Graphic: Risk Factors and Escalation Pathways

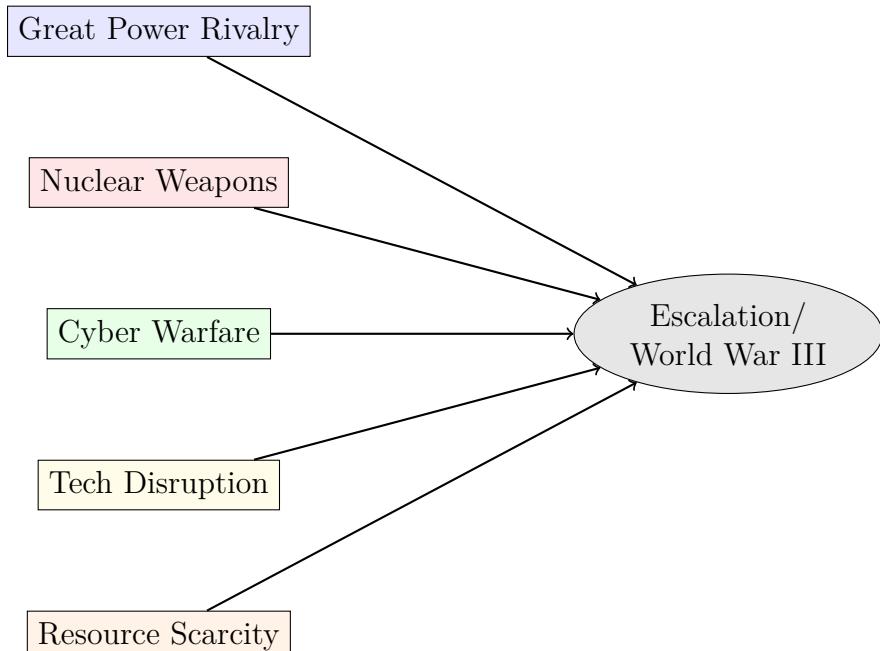


Figure 2: Determinants and Escalation Pathways to Major War

6 Discussion: Stabilizing and Destabilizing Factors

- **Stabilizing:** Strong alliances, arms control, economic integration.
- **Destabilizing:** Tech arms races, weak institutions, shifting alliances.

The contemporary international system exhibits both stabilizing and destabilizing characteristics that will shape whether great power tensions escalate toward major war. Understanding these countervailing forces is essential for developing policies to manage competition and reduce conflict risks.

Strong alliance systems provide both deterrence and reassurance when functioning effectively. NATO's collective defense commitment and the US alliance network in Asia create costs for aggression while providing frameworks for coordination and burden-sharing. These alliances also create pathways for diplomatic engagement and crisis management. However, alliance systems can also create entanglement risks where local conflicts draw in major powers, as occurred in World War I. The challenge lies in maintaining credibility for deterrence while avoiding automatic escalation mechanisms that eliminate decision-making flexibility during crises.

Arms control and confidence-building measures have historically reduced risks by establishing communication channels, creating transparency, and limiting the most destabilizing weapons systems. The collapse of the INF Treaty and uncertainty around future strategic arms agreements removes important constraints on nuclear competition. However, new forms of arms control addressing cyber weapons, autonomous systems, and space militarization could provide stabilizing frameworks if negotiable. The difficulty lies in verifying compliance with agreements covering emerging technologies and overcoming the deep mistrust that characterizes current great power relationships.

Economic integration continues to provide some moderating influence on great power competition despite its weaponization. Complete economic decoupling would impose enormous costs on all parties, creating domestic political constraints on the most aggressive policies. However, the stabilizing effects diminish as powers pursue strategic autonomy in critical sectors and as economic ties are increasingly viewed through security lenses. The question is whether sufficient interdependence remains to discourage escalation or whether fragmentation proceeds to the point where economic costs no longer constrain security competition.

International institutions and norms provide forums for diplomacy and frameworks for managing disputes, but their effectiveness has eroded. The United Nations Security Council is paralyzed by great power divisions, while other multilateral institutions struggle with declining respect for established rules. The erosion of norms against territorial conquest, interference in elections, and use of chemical weapons signals a more permissive environment for aggression. Strengthening institutions and defending norms requires collective action that seems increasingly difficult to achieve in a fragmenting international order.

Technology arms races represent particularly destabilizing dynamics as states compete to develop breakthrough capabilities before adversaries. The fear of falling behind drives rapid deployment of systems before their strategic implications are fully understood or appropriate governance frameworks are established. This creates first-mover advantages that reward speed over prudence and make arms control more difficult. Managing technological competition while maintaining adequate security will require unprecedented cooperation between rivals who have little trust in each other's intentions.

7 Conclusion

The 21st century is marked by a convergence of structural, technological, and political risks that echo the dynamics of Thucydides' Trap. While history does not dictate inevitability, the interplay of great power rivalry, disruptive technologies, and fragile global norms demands vigilant management to avoid escalation to World War III.

The contemporary international system exhibits many of the warning signs that preceded previous great power wars, including power transitions, security dilemmas, arms races, rigid alliances, and compressed decision timelines. The addition of nuclear weapons, cyber capabilities, and emerging technologies creates new pathways to catastrophic escalation that did not exist in earlier eras. Environmental stresses and resource competition add further pressures that overlay traditional security concerns.

Yet war is not inevitable. The recognition of mutual vulnerability, the catastrophic consequences of modern warfare, and the deep economic integration of the global system provide powerful reasons for restraint. Leadership choices, institutional innovations, and diplomatic engagement can manage the competitive dynamics without resorting to military confrontation. The challenge for statecraft in this era is to acknowledge the reality of competition while establishing guardrails that prevent escalation, maintaining deterrence while creating space for accommodation, and addressing legitimate security concerns without triggering the spiral dynamics that make conflict self-fulfilling.

The coming decades will test whether humanity has learned from the catastrophic failures of the 20th century or whether the structural pressures of power transition will once again overwhelm the institutions and norms meant to preserve peace. The outcome depends not on impersonal historical forces alone but on the decisions made by leaders, the quality of strategic thinking, the resilience of diplomatic channels, and the willingness to prioritize long-term stability over short-term advantage. Escaping Thucydides' Trap in the 21st century requires not only understanding the mechanisms that lead to war but also the sustained commitment to the difficult work of managing competition peacefully.

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