

CAN WE PREDICT A U.S.-CHINA WAR?

War and Peace: Towards a Predictive Model



AUGUST 2022
JULIAN ANDERSON
Janderson51@gwu.edu

Chapter 1: Why Wars Start

Introduction

Why do wars start? How do we avoid them? These are the fundamental questions that international relations theorists and practitioners have puzzled over for a millennium. Famous historian Thucydides attempted to understand the underlying causes of the Peloponnesian War, remarking that "the truest explanation...I believe to have been the growth of the Athenians to greatness which brought fear to the Lacedaemonians and forced them to war." But despite the central nature of these questions to the field of international relations, systematic answers remain elusive. Even with modern technology, incredible amounts of data, and complex algorithms, the holy grail of any science – the power of prediction – is still out of reach. Russia's invasion of Ukraine on February 24, 2022, was a striking reminder of our collective failure to accurately predict and prevent the outbreak of war, even between two highly developed countries.

Many experts correctly predicted that Russian President Vladimir Putin would invade

Ukraine², while others – including myself – predicted that he would not.³ Still others predicted

¹ Warner, R., trans. 1972. Thucydides: History of the Peloponnesian War. London.

² Madhani, Aamer, and Matthew Lee. 2022. Biden predicts Russia will invade Ukraine, warns Putin. January 19. https://apnews.com/article/antony-blinken-jen-psaki-vladimir-putin-sergey-lavrov-congress-1df536e9a832830dc3bae2e89aef4116; Politico Magazine. 2022. Will There Be a War Over Ukraine? 13 Putin Watchers Weigh In. January 26. https://www.politico.com/news/magazine/2022/01/26/russia-ukraine-putin-experts-00000019; Blanes, Irene Entringer Garcia, Ryan Powers, Susan Peterson, and Michael J. Tierney. 2022. "Poll: Will Russia Invade Ukraine?" Foreign Policy, January 31. https://foreignpolicy.com/2022/01/31/poll-russia-ukraine-invasion-crisis-biden-response/; Dempsey, Gaia. 2022. 900+ Forecasters on Whether Russia Will Invade Ukraine. February 18. https://metaculus.medium.com/900-forecasters-on-whether-russia-will-invade-ukraine-f8b36f7dee0f.

³ Yilmaz, Harun. 2022. No, Russia will not invade Ukraine. February 9. https://www.aljazeera.com/opinions/2022/2/9/no-russia-will-not-invade-ukraine; Ullman, Harlan. 2022. Why Putin won't invade Ukraine. February 16. https://www.atlanticcouncil.org/blogs/new-atlanticist/why-putin-wont-invade-ukraine/; Downer, Alexander. 2022. There are four things to suggest Russia won't invade Ukraine. January

the Russia-Ukraine War almost a decade in advance⁴, but their explanations for why the war started seem to have flaws.⁵ Chairman of the Joint Chiefs of Staff, Mark Milley, correctly predicted that Putin would invade Ukraine, but seriously missed the mark on how the war would unfold. He reportedly told U.S. congressional leaders that Ukraine would "fall in 72 hours", but as of 6 months later, the war is still ongoing.⁶ Some of the systemic problems with foreign affairs predictions have to do with built-in incentives, where catastrophic thinking is rewarded.⁷ But the predictive capabilities of experts in general have been increasingly questioned by academia, with at least one study finding that experts do little better than random chance – and sometimes worse.⁸ Prediction is therefore a perilous path for anyone in international relations. Yet, it is still a necessary exercise, without which foreign policy practitioners may succumb to analysis paralysis and indecision. World leaders will increasingly rely on such predictions as the geopolitical environment drifts towards great power competition.

The nature of the current world order, one characterized predominantly by deep disarray, stands in stark contrast to the utopian vision of Francis Fukuyama. He argued in 1992 that

_

^{30.} https://www.afr.com/policy/foreign-affairs/there-are-four-things-to-suggest-russia-won-t-invade-ukraine-20220127-p59rst; McIntyre, Jamie. 2021. As Putin keeps the world guessing, experts bet he won't invade Ukraine. December 16. https://www.washingtonexaminer.com/restoring-america/patriotism-unity/defense-national-security/as-putin-keeps-the-world-guessing-experts-bet-he-wont-invade-ukraine; Brennan, David. 2022. Russia Is Unlikely To Invade Ukraine Soon, but Other Attacks Are Possible. January 25. https://www.newsweek.com/russia-unlikely-invade-ukraine-soon-other-attacks-possible-donbas-cyber-1672641; Meger, Sara. 2022. WHY RUSSIA ISN'T ABOUT TO INVADE UKRAINE SOON. February 15. https://pursuit.unimelb.edu.au/articles/why-russia-isn-t-about-to-invade-ukraine-soon.

⁴ Mearsheimer, John J. 2014. "Why the Ukraine Crisis Is the West's Fault." Foreign Affairs, September/October. https://www.mearsheimer.com/wp-content/uploads/2019/06/Why-the-Ukraine-Crisis-Is.pdf.

⁵ Cirincione, Joe. 2022. What's Missing from Mearsheimer's Analysis of the Ukraine War. Harvard Kennedy School Belfer Center for Science and International Affairs. July 29. https://www.russiamatters.org/analysis/whats-missing-mearsheimers-analysis-ukraine-war.

⁶ Carafano, James Jay. 2022. Why Gen. Milley's Ukraine War Prediction Missed by a Mile. April 8. https://www.heritage.org/defense/commentary/why-gen-milleys-ukraine-war-prediction-missed-mile.

⁷ Drezner, Daniel W. 2021. "Wonks Gone Wild." Foreign Policy, January 15.

https://foreignpolicy.com/2021/01/15/foreign-policy-predictions-always-bad-worst-international-relations-rewards-catastrophic-thinking/.

⁸ Tetlock, Philip E., and Dan Gardner. 2015. Superforecasting: The Art and Science of Prediction. Crown.

history ended with the triumph of Western liberal democracy, a prediction which is now mocked for its astounding (though surely admirable) naïveté. 2022, it may seem, is a lot more like 1914 than 1992. The rise of China and growing strategic security competition with the U.S. has doomsayers winning debates. Books and articles abound with doom and gloom, including the collapse of democracy, a resurgence of great power competition, and the end of the Western-led liberal international order. From renewed U.S.-Russia competition to the looming threat of U.S.-China war, great power competition is back and here to stay. Dishearteningly, international relations experts will be called upon to make new predictions in a world only more perilous to the predictive enterprise.

But improving our ability to predict and prevent war is not a futile task. Great strides have been made in developing forecasting models that use statistical analysis of variable data inputs to assess the risk of civil war, political violence, and dyadic conflict. An astronomical amount of data collected by the Correlates of War Project has allowed deeper insight into the causes and consequences of conflict than at any other time in history. Additionally, the pessimistic predictions that pervade the field do not always reflect empirical reality. Fukuyama and other political science experts are right to point out a key trend in the decline of the number and severity of interstate wars since 1945. Whether the ongoing conflict in Ukraine is part of a

-

⁹ Fukuyama, Francis. 1992. The End of History and the Last Man. Free Press.

¹⁰ Swaine, Michael D. 2019. "A Relationship Under Extreme Duress: U.S.-China Relations at a Crossroads." Carnegie Endowment for International Peace, January 16. https://carnegieendowment.org/2019/01/16/relationship-under-extreme-duress-u.s.-china-relations-at-crossroads-pub-78159.

¹¹ Mearsheimer, John J. 2018. The Great Delusion: Liberal Dreams and International Realities. Yale University Press.

¹² D'Orazio, Vito. 2020. "Conflict Forecasting and Prediction." International Studies (Oxford Research Encyclopedias).

¹³ Spagat, Michael, and Stijn van Weezel. 2019. "The Decline of War Since 1950: New Evidence." Lewis Fry Richardson: His Intellectual Legacy and Influence in the Social Sciences 129-142. https://link.springer.com/chapter/10.1007/978-3-030-31589-4_11.

new trend or just an aberration, it is too soon to say. Time will tell if the decidedly pessimistic attitude of many experts bears out.

Will war break out between the U.S. and China over Taiwan or the South China Sea? Could the war in Ukraine expand to include direct confrontation between the U.S. and Russia? Conflicts between North and South Korea, India and Pakistan, and Israel and Iran are no less plausible than a Ukraine-Russia conflict was a year ago. In a world verging on environmental destruction, we have no time for conflict. Humanity needs to save itself from the climate change we wrought on the planet. In the immortal words of comedian and social commentator George Carlin, "the planet is fine, the people are f—!" Every time conflict or the immediate threat of conflict occurs, oil prices rise and OPEC's stranglehold on the global economy deepens. Inflation increases, and governments are hounded by their constituents to subsidize oil prices and halt attempts to transition to renewable energy. It is no controversy to point out that war is corrosive to combating climate change. The key question is how to prevent conflict.

In this paper, I present the perception square model, which is a predictive model of war. I will demonstrate that the model has the power to explain the vast majority of dyadic wars in history. Importantly, it can also explain why some crises never reached the level of armed conflict. Through this model, I aspire to give foreign policy practitioners the analytical tools necessary to predict the risk of a dyadic war with a high degree of accuracy and determine the course of action with the best chance to avoid conflict.

¹⁴ Carlin, George. 1992. The Planet is Fine. Brenda Carlin and Jerry Hamza. April 24. https://genius.com/George-carlin-the-planet-is-fine-annotated.

¹⁵ Wang, Yijun, Meiyun Wei, Usman Bashir, and Chao Zhou. 2022. "Geopolitical risk, economic policy uncertainty and global oil price volatility—an empirical study based on quantile causality nonparametric test and wavelet coherence." Energy Strategy Reviews 41. doi:https://doi.org/10.1016/j.esr.2022.100851.

¹⁶ Klare, Michael T. 2022. Cooperation to Fight Climate Change, Not War. May 24. https://www.thenation.com/article/world/ukraine-climate-change-war/.

Why Do Wars Start? A Brief Review of the Literature

"The fault, dear Brutus, is not in our stars

But in ourselves" – William Shakespeare (Shakespeare, 1599)¹⁷

"Conflict is in our nature" is a common refrain among those who seek to explain the phenomena of conflict. It is surely true that throughout the history of our species, tribe has fought tribe – for food, territory, mates, and perhaps even for pleasure. 18 Humans are not alone in our capacity for violence; chimpanzees have shown similar instinctive warlike tendencies. ¹⁹ This set of explanations based on human nature regard the structure of individuals – our genetic and psychological predispositions – as a key factor. There are two other common structural arguments: the structure of societies and the structure of the international system. Famous French philosopher Jean-Jacques Rousseau argued that human nature is fundamentally good, but society corrupts the individual and is thus responsible for conflict. Liberal international relations theorists harken back to this liberal tradition when they argue that democratic states are less likely to go to war with other democracies than illiberal states because of democratic constraints. Through rule of law, consent by the governed, and the social contract, order is brought to society and interstate relations. The last structural argument depicts war as the consequence of an anarchical international system where states must compete in a dog-eat-dog world. Because states always have latent offensive military capability and can never be sure about the present or

¹⁷ Shakespeare, W. (1599). Julius Caesar.

¹⁸ Seemangal, Robin. 2016. The Earliest Evidence of Violent Human Conflict Has Been Discovered. January 20. https://observer.com/2016/01/the-earliest-evidence-of-violent-human-conflict-has-been-discovered/.

¹⁹ Surbeck, M., Girard-Buttoz, C., Boesch, C., Crockford, C., Fruth, B., Hohmann, G. 2017. "Sex-specific association patterns in bonobos and chimpanzees reflect species differences in cooperation." Royal Society Open Science 4. doi:doi:10.1098/rsos.161081.

future intentions of other states, they will compete for hegemony as the only way to ensure survival. Accordingly, realists argue that the history of war can best be described as the "Tragedy of Great Power Politics", which is also the title of the seminal work by John Mearsheimer.²⁰

Despite their seemingly strong arguments for explaining conflict, none of these theories about the structure of individuals, societies, or interstate relations can explain why a *specific* war happened *when* it did between two *particular* states. Even the argument that anarchical international relations push states to compete for dominance lacks explanatory power when it comes to specific wars, because it fails to explain why states chose conflict over a more efficient negotiated outcome. In sum, all three types of structural theories fail to explain why states chose war instead of a better alternative. 'Will there be war between state X and state Y?' is a more specific question that this paper seeks to answer. While the question of why intrastate (or civil) wars occur is an interesting and deeply complex one, attempting to answer that question is not within the purview of this paper and deserves its own treatment. This paper will focus solely on why interstate wars happen. To do so, we must turn to rationalist explanations for war.

Rationalist Explanations for War

James D. Fearon's "Rationalist Explanations for War" is possibly the best review of those arguments to date.²¹ Fearon argues that the "central puzzle" of conflict is that "war is costly and risky, so rational states should have incentives to locate negotiated settlements that all would prefer to the gamble of war."²² Any theory trying to explain why war occurs must therefore

²⁰ Mearsheimer, John J. 2001. The Tragedy of Great Power Politics. W.W. Norton & Company.

²¹ Fearon, James D. 1995. "Rationalist explanations for war." International Organization (MIT Press) 49 (3): 379-414.

²² Ibid.

demonstrate why states fail to reach "ex ante (prewar) bargains."²³ In the article, he finds that five rationalist arguments commonly cited in literature to answer that question, which include: 1) anarchy, 2) expected benefits greater than expected costs, 3) rational preventative war, 4) rational miscalculation due to lack of information, and 5) rational miscalculation or disagreement about relative power, either do not answer the question or lack explanatory power. They each fail to answer the question of why states failed to locate a mutually preferrable settlement.

Instead, Fearon proposes three causal logics that do explain war on rationalist terms: 1) private information about and incentives to misrepresent relative capabilities and resolve, 2) commitment problems, and 3) issue indivisibilities.

Fearon explains that leaders have *private information* about their country's military capabilities and willingness to fight, which they have an *incentive to misrepresent* when bargaining to get a better deal.²⁴ This bargaining situation is somewhat akin to the prisoner's dilemma, in which both states could benefit if they chose the mutually beneficial option, but cheating has greater utility and therefore both states cheat. Both states are likely to misrepresent their bargaining positions, even if both states doing so raises the risk of war. Fearon uses the example of the Russo-Japanese war in 1904 to illustrate this argument, showing that Japan's private information about its offensive strategy, its knowledge of Russia's military weaknesses in Northeast Asia, and Russia's failure to compromise because of its own private information resulted in conflict.

The *commitment problems* argument arises from the fact that states cannot know other states' current or future intentions and cannot guarantee their own will not change in the future.

²⁴ Ibid.

²³ Ibid.

Given those unknowns, making promises to abide by an agreement routinely lack credibility. The most efficient and mutually preferrable bargains may demand states make promises they cannot guarantee. A commonly cited and highly influential example of this is the Munich Agreement between British Prime Minister Neville Chamberlain and Adolf Hitler, in which territorial accommodations given to Nazi Germany were proclaimed as creating "peace for our time". Of course, Hitler broke that agreement less than a year later when he initiated World War II. From then on, anyone arguing for any kind of accommodation to a peer competitor were seen as foolish and potentially traitorous. Preventative war, Fearon argues, therefore stems from a commitment problem, since a defensive state has a strong incentive to preemptively strike before the belligerent gains the capability to win a conflict.

Lastly, Fearon argues that *issue indivisibilities* help explain conflict, though he acknowledges this argument is weaker than the first two. Issue indivisibilities occur when states fail to locate a mutually preferrable settlement because the bargaining range has been narrowed by the very nature of the issue. For example, two states who both have claims to the throne of a third state, as Great Britain, France, and other European powers did during the War of the Spanish Succession. They cannot divide the throne into halves. However, that does not mean the issue isn't fungible, meaning there is some amount of territorial or monetary concessions that would be equivalent. Certain issues like sovereignty and great power status may be more difficult to find a negotiated solution around, but that doesn't mean mutually preferrable bargains do not exist or aren't readily available. Despite the longstanding sovereignty dispute over

_

²⁵ Euro Docs. 2018. Neville Chamberlain's "Peace For Our Time" speech. August 6. https://eudocs.lib.byu.edu/index.php/Neville_Chamberlain%27s_%22Peace_For_Our_Time%22_speech.

²⁶ Fearon, James D. 1995. "Rationalist explanations for war." International Organization (MIT Press) 49 (3): 379-414.

Taiwan, scholars like Charles L. Glaser have offered a Grand Bargain solution, trading U.S. defense of Taiwan for China's commitment to peaceful resolution of territorial disputes in the South China Sea.²⁷ The best arguments provided for why the Grand Bargain may fail arise from a commitment problem rather than issue indivisibility. China has every incentive to renege on any agreements over the South China Sea once their sovereign control over Taiwan is complete. Thus, wars that may seem at first to result causally from issue indivisibilities tend to actually result from commitment problems.

But, as Fearon points out, there are problems with the rationalist explanation for war. Because "anarchy and private information plus incentives to misrepresent are constant features of international politics", one might conclude from that logic that negotiations to avoid war *always* invariably fail.²⁸ Yet, we know that is not true. Thus, rationalist explanations for war are in a sense too strong. They fail to explain why war is sometimes averted. For some situations to result in war and others to result in peace, certain factors must "lead the mechanisms to produce one outcome rather than another in particular settings."²⁹ Given private information plus incentives to misrepresent, commitment problems, and issue indivisibilities, what explains the occurrence of conflict and peace in particular situations? How do we identify whether a situation is likely to result in conflict, and how might we change the situation to reduce the likelihood of war? Building on the contributions of the rationalist tradition, this article will seek to answer those questions. In sum, I argue that war is the result of rationalist causal logics acting upon different perception-interactions. Put plainly, wars happen primarily because leaders' perceptions

²⁷ Glaser, Charles L. 2015. "Time for a U.S.-China Grand Bargain." Quarterly Journal: International Security, July.

²⁸ Fearon, James D. 1995. "Rationalist explanations for war." International Organization (MIT Press) 49 (3): 379-

²⁹ Ibid.

of each other are incompatible with peace. I propose a perception square model that identifies the perception-interaction conditions in which Fearon's rationalist causal logics are likely to operate strongly and others weakly. By identifying these conditions, I aspire to make progress towards a predictive model of war and peace. This model can robustly explain past wars, anticipate future wars, and provide tools to help us avert wars before they happen.

The second chapter of this article will introduce the basic perception square model and defend its underlying assumptions. The third chapter will analyze the basic model and explain how it solves the key problem with Fearon's rationalist explanations for war. In the fourth chapter, I will develop the advanced version of the model, relaxing certain assumptions and solving key weaknesses of the basic model. In the fifth chapter, I will address challenging historical cases and discuss the methods by which the model can be applied to future cases. Finally, the sixth chapter will apply the model to the potential for a war between the U.S. and China over Taiwan. Based on the model, I will assess the likelihood of a Sino-American war, evaluate proposed policy responses, and identify policies which the model predicts are the most likely to avert war.

Chapter 2: The Basic Model

Assumptions of the Basic Model

The basic perception equilibrium model rests upon three key assumptions of the rationalist tradition: 1) war is always *ex post* more costly and risky than a negotiated solution, 2) leaders are rational, 3) the key factors rational leaders consider are the utility of war and the likelihood of success.

1) War is always ex post more costly and risky than a negotiated solution.

The first assumption needs no further defense other than to point to a long history of underestimating the costs of conflict. Inevitable uncertainties mean war is always a gamble – no state can be 100 percent certain they will win and at what cost. The implication of the first assumption is that states will always attempt to bargain, negotiate, or make demands before attempting war. As the saying goes, "war is politics by other means."³⁰

2) Leaders are rational.

The second assumption is at first glance difficult to substantiate. Certainly, leaders are shaped by social-cultural processes, pathologies, and ideologies. The actions of historical figures betray complex cognitive biases and gargantuan failures of reasoning such that the idea of rational leaders may be consigned as an artifact of the Enlightenment era.³¹ Even within realist theories of international relations, scholars disagree on how to define rationality.³² Yet, we

³⁰ 1918. Chapter 1: What is War? Vol. 1, in On War, by Carl von Clausewitz, translated by Col. J.J. Graham. Kegan Paul, Trench, Trubner & C.

³¹ Kahler, Miles. 1998. "Rationality in International Relations." International Organization (The IO Foundation and the Massachusetts Institute of Technology) 52 (4): 919-941.

³² Więcławski, Jacek. 2020. "Considering Rationality of Realist International Relations Theories." Chinese Political Science Review 5: 111–130.

currently have no model that identifies how to predict those subjective grooves of the human mind. Additionally, the nature of politics and international relations means leaders are constantly working towards goals, even if that goal is just to stay in power. As long as leaders consistently attempt to reason towards the best strategy to achieve their goals, they are constrained by a form of rationality we can model. Furthermore, if we can isolate and examine specific ideologies or social/cultural predispositions that help explain a leaders' deviation from rationality, we can factor that into the model to make better predictions about international outcomes. This is a form of "bounded rationality", where individuals behave rationally *according to their worldview*.³³

Strict rationality assumes that two rational individuals looking at the same information should arrive at the same conclusion. Bounded rationality assumes that two rational individuals with the same worldview looking at the same information should arrive at the same conclusion. Can someone ever be considered 'irrational' if we only look at bounded rationality? Drinking battery acid is wholly irrational because one will surely die from doing so and experience great pain. However, if one is convinced that battery acid is a magical elixir which, if drunk, sends people straight to heaven, then doing so is perceived as a rational choice. If one believes that battery acid is a magical elixir and decides not to drink it, their worldview and behavior are in contradiction. In bounded rationality, that is the prime form of irrationality. Thus, when it comes to leaders in international affairs, we can expect they will choose the best strategies to achieve their desired outcomes according to their worldview, which will influence their choice of both strategies and desired outcomes.

-

³³ Jones, Bryan D. 1999. "Bounded Rationality." Annual Review of Political Science 2: 297-321.

3) The key factors rational leaders consider are the utility of war and the likelihood of success.

The third assumption logically follows from the second. If rational leaders choose the best strategies to achieve their desired outcomes according to their worldview, then war is a calculation of the utility of war and the likelihood of success. These two variables – whether a leader believes they can win and whether they believe it is worth fighting – are actually aggregates of many other variables. Evaluations of military capability, the military capability of the adversary, the human, economic, social, reputational, and political costs of war, the potential political benefit from war, estimates of both countries' resolves, among many other factors all go into determining both aggregate variables. However, the minor variables may be difficult if not impossible to estimate, and leaders may arrive at different conclusions while looking at the same information because of different worldviews. Let alone the fact that those variables would have to be computed for every possible conflict between every two states. The only variables that arise to public knowledge are often the aggregates themselves.

Leaders rarely make statements about minor variables, but often make statements about the country's military capability and resolve, attempting to send costly signals about both to other states. These signals involve leaders either tying hands by "creating audience costs that would be suffered if the leader backed down", or sinking costs by taking "actions that are costly for the state to take in the first place but do not affect the relative value of fighting versus acquiescing in a challenge".³⁴

_

³⁴ Fearon, James D. 1997. "Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs." The Journal of Conflict Resolution (Sage Publications, Inc.) 41: 68-90.

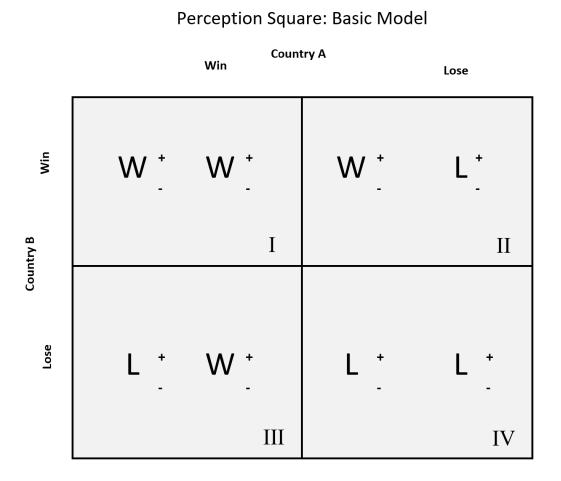
By their nature, these costly signals are almost always public (for example, announcing the mobilization of military forces, supporting legislation or resolutions that call for military action, which stake a politician's political reputation on a given issue) and for the purpose of convincing the adversary of your state's military capability and resolve. During the Cuban Missile Crisis, President John F. Kennedy announced the deployment of a military blockade (in his words, a "quarantine") of Cuba to the American public and gave orders to destroy any ship attempting to pass through. This is a classic example of tying hands, creating high audience costs for backing down. JFK mobilizing military forces for the blockade, raising the readiness of nuclear forces to DEFCON 2, and sending nuclear-armed B-52s into the air within striking distance of the Soviet Union exemplifies sinking costs. The possibility of an invasion of Cuba and military action against the Soviet Union were critical in convincing Soviet First Secretary Nikita Khrushchev to negotiate.

While a state's likelihood of success and the utility of war often lie on a spectrum, both positions are ultimately a binary. Leaders must decide whether to fight, and thus decide one way or another whether they can win and whether fighting is worth it. By analyzing and interpreting the statements and actions of leaders, we can ascertain what a leader believes about whether they can win a war and whether they believe it is worth fighting.

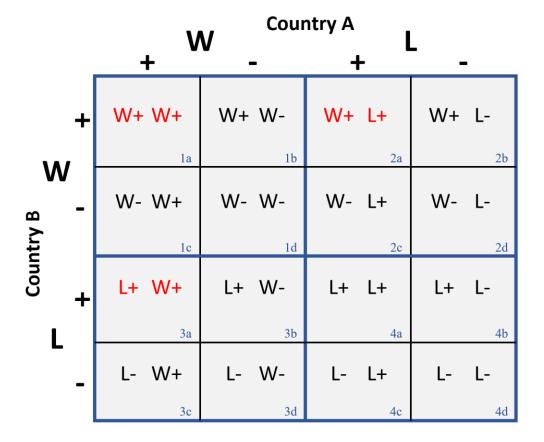
Introduction to the Basic Model

Given those three assumptions, we can create a system categorization model that places states on a chart based on their perceptions of those two variables: whether they believe they can win and whether they believe it is worth fighting. The win/lose binary will be noted as the letters W and L, respectively, and the worth fighting/not worth fighting binary will be noted as the signs

+ and -, respectively. Thus, there are four possible combinations for a single state: W+ (believes they will win and is worth fighting), W- (will win but not worth fighting), L+ (will lose but worth fighting), and L- (will lose and not worth fighting). Looking at two states interacting, there are a total of 16 possible dyadic situations shown in the model below, divided up into boxes I, II, III, and IV.



However, each box can be further subdivided into four possible outcomes. This is shown in the figure below. Red perception situations are ones that result in conflict.



In this basic model, each state only perceives their own letter and sign, and not those of their adversary. The basic model assumes states have no knowledge of their adversary's letter and sign. A state's negotiating and conflict behavior is therefore determined by their perceptions of only those two variables. A state who believes they can win and that it is worth fighting (W+) will make demands on another state, attempting to achieve their goal (territorial or monetary concessions, for example) through negotiations. In the basic model, A W+ country's negotiations with another state fail 50 percent of the time. W+ and L+ states will reject the W+ country's demands because they believe war is preferable to accepting the demands. W- and L- states will accept some or all of the demands because they believe war is not worth fighting. Thus, in the basic model, a W+ country must exist for war to occur. When a W+ country's negotiations fail, they resort to conflict to achieve their goals.

The basic model assumes that countries' perceptions completely determine negotiating behavior. Under the basic model, a W+ state will always go to war if their demands are rejected. W+ and L+ states will always reject demands. L- and W- states will always accept demands. Of course, this is an unrealistic assumption because perceptions can be updated during bargaining. States can take actions to signal their military capability and resolve in order to deter adversaries, and that has some chance of success not taken into account by the model. In the advanced model, the perception predetermination assumption will be relaxed and perception updating accounted for.

In the basic model, "winning" and "losing" are subjective and will change depending on the situation being considered. During the Russo-Japanese war of 1904, Japan did not entertain the idea of invading and conquering Russia; it was never considered a possibility. For Japan, victory was not conquering Russia, but instead crippling its military such that it had no will to fight in Northeast Asia.³⁵ Japan succeeded in that goal to devastating effect. President Lyndon B. Johnson never believed he could defeat North Vietnam during the Vietnam War, but he did believe fighting could bring Ho Chi Minh to the negotiating table, and ultimately protect the survival of an independent South Vietnam.³⁶ He failed to achieve that goal, but it was his perceived win condition.

-

³⁵ Streich, Philip, and Jack S. Levy. 2016. "Information, Commitment, and the Russo-Japanese War of 1904–1905." Foreign Policy Analysis (International Studies Assocation) 12: 489-511. doi:10.1111/fpa.12058.

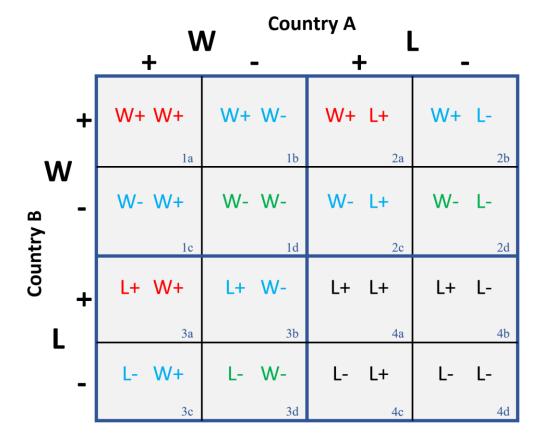
³⁶ Valenti, Jack. 2001. LBJ's Unwinnable War. November 28.

https://www.washingtonpost.com/archive/opinions/2001/11/28/lbjs-unwinnable-war/5f1a55d2-1f39-45b3-960d-5f6391f0442b/.

Chapter 3: Analysis of the Basic Model

Analysis of the Basic Model

The 16 possible situations are divided into the four smaller squares. Of these 16 possibilities, 3 lead to conflict: W+W+, W+L+, and L+W+. These war outcomes are defined as perception disequilibria. The other 13 possibilities result in peace: W+W-, W-W+, W-W-, W+L-, L-W+, W-L+, L+W-, W-L-, L-W+, L+L+, L+L-, L-L+, L-L-. The basic model measures stability by the number of sign changes or letter changes that separate the perception situation from conflict. The most stable perception situations are those that are farthest away from a W+W+ or W+L+ situation. Countries can change their perceptions over time as their military capability and resolve changes. Consequently, six situations are one sign change away from conflict and are at great risk of entering a disequilibrium: W+W-, W-W+, W+L-, L-W+, W-L+, and L+W-. Three situations are two sign changes away from conflict: W-L-, L-W-, and W-W-. Four situations require a letter change to result in disequilibrium and are therefore the most stable equilibria: L+L+, L+L-, L-L+, and L-L-. These are all in box 4. In the figure below, war outcomes are red, unstable situations that require only one sign change are light blue, semi-stable situations that require two sign changes are in light green.



Sign changes are much more likely to happen than letter changes. Sign changes involve moving within a box, whereas letter changes involve moving between boxes. Sign changes are about resolve and whether a war is worth fighting. However, for a country to move from W to L or L to W, something dramatic must change to cause a country to believe they could no longer win. One example of this is the U.S. achieving a nuclear monopoly by dropping atomic bombs on Hiroshima and Nagasaki in 1945. Until the USSR acquired nuclear capabilities four years later, Soviet leader Joseph Stalin believed the USSR could not win a war in Europe against the U.S. Yet, when the USSR achieved nuclear capabilities, the U.S. lost its nuclear monopoly and could not guarantee nuclear escalation dominance in the European theater. The U.S. changed letters from W to L, and the whole perception situation became LL.

For comparison, one example of a sign change in history was negotiations that led to the attack on Pearl Harbor and U.S. involvement in World War II. Japan was content to expand its empire into Southeast Asia and Manchuria in the 1930s-early 1940s, mostly unimpeded by other great powers. However, on August 1, 1941, the U.S. established an oil embargo on Japan to deter Japanese imperial expansion in Southeast Asia. In negotiations, the U.S. demanded Japan leave its territorial holdings in both Indochina and China, including Manchuria. While Japan may have been willing to give up its aims in Indochina, it was not willing to give up its entire empire. As a result of the embargo, Japan lost 88 percent of its imported oil. With the risk to its empire and the U.S. unwilling to negotiate more lenient terms, Japanese leaders began to believe that war was worth fighting. According to Yoshimichi Hara, Japanese President of the Imperial Privy Council,

"If we were to give in, we would give up in one stroke not only our gains in the Sino-Japanese and Russo-Japanese wars, but also the benefits of the Manchurian Incident. This we cannot do...But it is clear that the existence of our country is being threatened, that the great achievements of the Emperor Meiji would all come to naught, and that there is nothing else we can do." ³⁸

Thus, Japan underwent a sign change from W- to W+, precipitating World War II in the Pacific.

 $^{^{37}}$ Record, Jeffrey. 2009. "JAPAN'S DECISION FOR WAR IN 1941: SOME ENDURING LESSONS." Strategic Studies Institute, U.S. Army War College.

³⁸ Ibid.

The Basic Model and Rationalist Bargaining Theory

The basic model builds off Fearon's contributions to explain why countries are able to locate mutually preferrable negotiated settlements in some situations but not in others. More precisely, the basic model identifies the perception conditions under which Fearon's rationalist causal logics operate stronger or weaker. Fearon's causal logics are the weakest in LL perception situations, which are therefore incredibly stable. In WL or LW situations, Fearon's causal logics have moderate strength, and are therefore relatively unstable. Fearon's causal logics are the strongest In WW situations, which are therefore incredibly unstable.

This section explains in detail the theoretical support and empirical evidence for the relationship between different perception situations and Fearon's casual logics. First, LL situations are the most stable because:

Private information and incentives to misrepresent are less of a problem.

1) LL situations erode all offensive military strategies.

By their nature, offensive strategies distort negotiations because they increase your bargaining power but cannot be revealed transparently without decreasing your bargaining power. States have an incentive to misrepresent the strength of their bargaining power and prewar situation, so a state merely claiming that a secret offensive strategy gives them a stronger negotiating position cannot be believed. But in an LL situation, especially one guaranteed by nuclear mutually assured destruction, no amount of clever battle tactics, bomber strikes, or tank battalion maneuvers can ensure nuclear retaliation fails. First strike scenarios on Russia or China have been simulated by experts and counterforce plans proposed, but no plan has ever been

shown to completely eliminate the risk of total nuclear annihilation.³⁹ This is despite changes in technology that make hardening and concealment less effective strategies.⁴⁰ States are risk adverse and seek to protect their survival, which a nuclear second strike existentially threatens. It is possible that future technological leaps in artificial intelligence, quantum mechanics, and ballistic missile defense will enable countries to eliminate their adversary's second-strike capabilities. However, technology can always fail. As long as a second strike has even a 1% chance of success, offensive strategies hold less weight in LL situations.

Nuclear deterrence isn't the only way to achieve LL, but it is the most common way in the 21st century. No state currently (publicly) uses bioweapons for deterrence. While it is theoretically possible for conventional deterrence to result in LL, it is still less stable than nuclear deterrence because offensive strategies have more likelihood of success against conventional retaliation.

2) LL situations are more transparent.

In LL situations, misrepresentations of a states' capabilities and resolve are less likely and other states are less likely to believe they are misrepresented. Because nuclear aggression existentially threatens a states' survival, a state with nuclear weapons can be assumed to, and no doubt will, use nuclear weapons in retaliation. The willingness of a state to use nuclear weapons in a second strike is almost indisputable, so the threat is extremely credible. In the events leading to World War I, Russian diplomats conveyed to German ambassadors that Russia would retaliate

https://www.theatlantic.com/magazine/archive/2001/10/jfks-first-strike-plan/376432/.

³⁹ Kaplan, Fred. 2001. JFK's First-Strike Plan. October.

⁴⁰ Lieber, Keir A., and Daryl G. Press. 2017. "The New Era of Counterforce: Technological Change and the Future of Nuclear Deterrence." International Security 41 (4): 9-49. doi:https://doi.org/10.1162/ISEC_a_00273.

if Germany and Austria-Hungary attacked Serbia. 41 However, German diplomats and military leaders did not believe their Russian counterparts and thought they were bluffing. They believed Russia would of course say they would defend Serbia, but when push came to shove, they would stay out of it. History proved they were wrong. Such events are far less likely when states are in an LL situation because if an adversary says they will use nukes to protect their state's survival, you can guarantee they will, and you cannot take the risk they will not because it existentially threatens your own state's survival. Of course, this doesn't solve the credibility problem of nuclear umbrellas, where one state claiming they will use nuclear weapons to protect another state. Those claims still lack credibility. But during the Cold War, when the U.S. claimed it would defend Western Europe with nuclear weapons from the Soviet Union, the USSR took those threats seriously. Even a conventional or limited nuclear war was considered an unacceptable outcome.⁴² Gambling that a state isn't serious about using nuclear weapons is extremely risky and threatens your own state's survival, making it less likely to occur. Germany tried to call Russia's bluff in WWI. LL situations make it less likely that states will try to call each other's bluffs, reducing the risk of conflict.

Commitment problems are also less of a problem.

1) Security-related promises are more credible

In LL situations, it is easier for states to guarantee certain promises. For example, states can more easily promise not to attack each other, because such promises are backed by threats of nuclear force. Such promises lack credibility when considering only conventional deterrence.

⁴¹ Fearon, James D. 1995. "Rationalist explanations for war." International Organization (MIT Press) 49 (3): 379-

⁴² Lebow, Richard Ned, and Janice Gross Stein. 1995. "Deterrence and the Cold War." Political Science Quarterly (The Academy of Political Science) 110: 157-181. https://www.jstor.org/stable/2152358.

2) LL expands the bargaining range

In LL situations, agreements that expand one state's military capability or future bargaining power do not actually increase the danger of one state losing a war to another. Even ceding territory or making huge concessions to conventional military capability do not much change the balance of power. As long as it doesn't threaten a state's second-strike capability, those concessions become negotiable. Commitment problems arising from using increased future bargaining power to further erode a state's security are dampened. Similarly, the likelihood that one state will exploit such concessions for revisionist aims that threaten your state's security are less likely because nuclear weapons guarantee your security. Interestingly, while LL expands the bargaining range, it also reduces incentives to negotiate in the first place. This is because states whose security is guaranteed by nuclear weapons and are satisfied with the status quo have no incentive to engage in negotiations. Negotiations are always backed by an implicit threat: "if we don't come to an agreement, I will do something you probably won't like." That implicit threat is incredible to a state with nuclear weapons as long as the negotiations are about a state's vital security interests. This can have repercussions for stability in LL situations, which will be covered later in this paper.

Issue indivisibilities are less of an issue.

The only issues that are indivisible in an LL situation are a state's sovereignty and security. All other issues are made fungible by the aforementioned expanded bargaining range, where small shifts in the balance of power do not threaten a state's existential security. Issue indivisibilities are generally not strong as per analysis by Fearon, but in LL situations they are still weaker.

WL, LW, and WW Situations

In WL, LW, and WW situations, instability is far worse and private information with incentives to misrepresent, commitment problems, and issue indivisibilities are stronger. In those situations, bargaining is distorted and the bargaining range is narrowed by three major problems that stem from the rationalist causal logics.

1) W state's offensive strategy distorts bargaining.

For a state to believe they can win a war, they must have some strategy they believe will be successful. As discussed earlier, Japan's strategy against Russia in 1904 was to engage in a surprise attack against Russian forces in Port Arthur, crippling their military in Northeast Asia and making it impossible for Russia to quickly launch a counteroffensive. However, this offensive strategy increases Japan's bargaining power without increasing the credibility of their bargaining position. Japan cannot simply state that it has a superior strategy that beats Russia to convince them to make concessions because such a claim is incredible – there is nothing to distinguish it from a bluff. However, if Japan were to tell Russia of their plans, they would be compromised by Russia preparing against a surprise strike on Port Arthur and Japan would cause it to lose the increased bargaining power it had gained.

In a WW situation, both states have this distortion. In a WL or LW situation, the impact is lessened because the gap in balance of power is wider, but the W state still cannot reveal its offensive strategy. Doing so would backfire in a number of ways. Offensive strategies are top secret and are rarely used during bargaining for good reason. First, the L state being told another

⁴³ Fearon, James D. 1995. "Rationalist explanations for war." International Organization (MIT Press) 49 (3): 379-414.

country is planning to attack them will likely increase their resolve and galvanize its population to prepare for an attack – increasing the costs on the W state. Even just telling the L state of such plans could be seen as an act of aggression by the L state worthy of a defensive preemptive strike, risking the W state's security. This potential backlash effect leads into the second problem:

2) L states have a strong incentive to misrepresent.

An L state cannot be sure of the intentions of another state, so they have a strong incentive to misrepresent and overstate their military capabilities and resolve. This is not much different from a school kid puffing up their chest to avoid being bullied by older kids. In an anarchical international system, it may be difficult to tell whether another state has genuine security interests or is just looking to pick a fight with a weak opponent. An L state that bows down to stronger states and concedes much is liable to eventually negotiate away its own territory and sovereignty – an existential risk for any state. In an anarchic international system governed by the survival of the fittest state, L- states who lack resolve do not survive for very long. To prevent that outcome, even L- states that do not believe fighting is worth it will still make a show of resolve – a bluff – to ward off predatory states. This narrows the bargaining range in WL situations by decreasing the bargains an L state is willing to make.

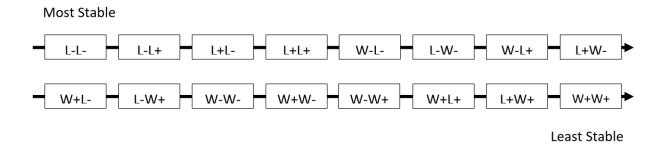
W states are not exempt from incentives to misrepresent. Even in a WW situation, W states may have an incentive to overstate their resolve and capabilities to increase their bargaining range. However, the distortion effect on negotiations is stronger from an L state because such bluffs exhibit a greater credibility gap.

3) Following from the second observation, W states will not find another state's resolve credible.

A W state, knowing that another state has strong incentives to misrepresent, is not likely to believe their claims about military capability or resolve. As in a poker game, no player will listen to another who loudly boasts that they cannot be beat and should fold right away.

Similarly, W states will ignore such warnings from L states – even if it is not a bluff. L states overstating their resolve narrows the bargaining range, but W states disbelieving statements of resolve narrows the bargaining range further.

The complete perception-situation stability spectrum from L-L- to W+W+



In this section, I have endeavored to demonstrate how the three rationalist causal logics that explain conflict operate differently across the perception-situation spectrum. They create a generalized three-step ladder of instability: LL is the most stable, WL and LW are less stable, and WW is the least stable. However, there is a further subdivided spectrum where the more sign and letter changes needed to get to war, the more stable the situation is and the less influence the three rationalist causal logics have.

Historical Examples of the Basic Model

Using the 16 perception situations from the model laid out on a spectrum, we can show how examples of specific wars from history characteristically fit each situation. Some are

theoretically possible, but I know of no such war or crisis that can serve as an exemplar of that perception situation.

L-L-, L-L+/L+L-

No known historical cases that fit the model. This is most likely because such situations never arise to the level of a crisis, and thus never receive much attention by scholars for historical analysis. One example of this could be Nicaragua-Costa Rica relations. Nicaragua and Costa Rica are relatively similar in population and economy, but despite close geographic proximity, they have never fought a war against each other. Costa Rica has not had a military since the country abolished it in 1949, making it an obvious candidate for an L- designation. Meanwhile, Nicaragua's armed forces ranked 122 out of 142 in a 2022 global power index.⁴⁴

L+L+

The Cold war in Europe between the U.S. and USSR. Both countries believed that attacking the other would result in the use of nuclear weapons, so neither believed they could win a war in that theater of conflict. However, since both were willing to retaliate if attacked, the resolve variable for both is positive (+). Historically, there has been some controversy on this subject. Some U.S. analysts believed during the Cold War that Soviet leadership saw a nuclear war as winnable based on aspects of Soviet nuclear doctrine. However, this perspective has been refuted by interviews with key Soviet military officers and defense officials shortly after the

⁴⁴ GFP. 2022. 2022 Nicaragua Military Strength. https://www.globalfirepower.com/country-military-strength-detail.php?country_id=nicaragua.

⁴⁵ Lebow, Richard Ned, and Janice Gross Stein. 1995. "Deterrence and the Cold War." Political Science Quarterly (The Academy of Political Science) 110: 157-181. https://www.jstor.org/stable/2152358.

⁴⁶ Pipes, Richard. 1977. Why the Soviet Union Thinks It Could Fight & Win a Nuclear War. July. https://www.commentary.org/articles/richard-pipes-2/why-the-soviet-union-thinks-it-could-fight-win-a-nuclearwar/.

Soviet Union fell. According to chapter 3 of the *Soviet Intentions 1965-1985* report, "Evolution of Soviet Strategy", the Soviet General Staff in command of military strategy and policy understood that the Soviet Union was unlikely to survive a nuclear war and that it was not a risk worth taking. According to the Chief of the General Staff Sergei Akhromeev, the report states that "the employment of nuclear weapons had to be avoided if at all possible". Additionally, Soviet nuclear experts and intelligence analysts believed that both the Soviet political and military leadership "would probably have entered negotiations in order to avert an outbreak of nuclear war". Soviet plans for a nuclear first strike were theoretical at best and the Soviet political leadership "never discussed the possibility of launching a first strike", putting to rest any notion of an aggressive Soviet nuclear doctrine. The report concludes that "the majority of U.S. officials and experts were correct in noting both the Soviet intention to avoid nuclear war and Soviet plans to fight if deterrence failed".

Soviet nuclear doctrine before 1980 did include the possibility of preemption, but preemption does not equate with first strike. Preemption depicted a scenario where the USSR would launch because they believe NATO is about to order a nuclear strike. Preemption was considered because Soviet leadership was uncertain about the reliability of a second strike. Missile silos and command and control networks could be damaged if the Soviet Union was struck first before it could retaliate.

_

⁴⁷ Hines, John G., Ellis M. Mishulovich, and John F. Shull. 1995. Soviet Intentions 1965-1985 Volume I An Analytical Comparison of U.S.-Soviet Assessments During the Cold War. BDM Federal, Inc., Office of the Secretary of Defense. https://russianforces.org/files/Soviet%20Intentions%201965-1985%20Vol.%201.pdf.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ Ibid.

⁵¹ Ibid.

In total, the report confirms what U.S. intelligence analysts had already believed about Soviet intentions: that the main objective of Soviet nuclear policy was "to protect the security of the homeland, to deter nuclear war but to wage it successfully should deterrence fail, to project an image of military strength commensurate with the position of a great world power, and to support foreign policy aims if only by checking strategic forces of potential opponents".⁵² The Soviet belief that they would lose a nuclear war, but that retaliation was necessary, is strong evidence that USSR was an L+ state during the Cold War.

L+L+ predicts an extremely stable situation, yet the Cuban Missile Crisis and the Berlin Crisis occurred when both sides had nuclear weapons. Any accurate reading of history would point out the Cuban Missile Crisis was a minute away from total nuclear annihilation. That seems to challenge the model, but I will respond to this argument in Chapter 3 when I further develop the model with the advanced version.

W-L-/L-W-

The U.S. and the United Kingdom during the Suez Crisis. Before World War II, the UK was the predominant power in the world with 57 colonies. However, by the end of WWII, the U.S. had far surpassed Great Britain as the global hegemon with a nuclear monopoly. Additionally, the U.S. and Great Britain would soon butt heads over decolonization in Egypt. When negotiations over arms supply and control of the Suez Canal broke down, Egyptian leader Abdel Gamal Nasser nationalized the Suez Canal Company. On October 29, 1956, a joint operation between Israel, Britain, and France initiated the Suez War. The British and French felt

⁵² Central Intelligence Agency. 1973. Soviet Nuclear Doctrine: Concepts of Intercontinental and Theater War. Office of Strategic Research, CIA Historical Review Program, Central Intelligence Agency Directorate of Intelligence. https://www.cia.gov/readingroom/docs/DOC_0000268107.pdf.

that loss of the Suez Canal would entail loss of all their influence in the Middle East. The U.S. under the Eisenhower administration refused to help and worked against Anglo-French military action, feeling that siding with the British and French would cause the newly decolonized world to turn away from the West and into the arms of the USSR. Eisenhower suspended oil supplies to Britain and France, which was "decisive in finally forcing Britain and France to withdraw their troops from Egypt on December 21, 1956". Despite Britain and France's extremely high stakes, they did not turn their guns towards the U.S. and instead conceded to U.S. power, effectively forfeiting what remained of their empires in the Middle East. Great powers have gone to war for less. They couldn't, or chose not to, challenge the U.S. Thus, their bargaining perception position was L-, whereas the U.S. was W-: unwilling to engage in conflict but strongly believing that the U.S. could force Britain and France to back down.

W-L+/L+W-

The U.S. and Britain over the Monroe Doctrine in 1823. The Monroe Doctrine says that the U.S. would oppose, militarily if necessary, any European power seeking to intervene in the affairs of countries in the Western Hemisphere. While the U.S. was willing to fight European powers to defend the Monroe Doctrine, believing it to be core to its national security interests, the U.S. navy in 1823 could not compete with France, Spain, and especially the British. The U.S. had no power to enforce decolonization in the hemisphere, yet still showed willingness to do so. This marks the U.S. as L+. However, the British were unwilling to fight the U.S. over the Monroe Doctrine, because despite knowing that the British would win if they contested the

⁵³ Hideki, Kan. 2013. "The Making of "an American Empire" and US Responses to Decolonization in the Early Cold War Years." https://src-h.slav.hokudai.ac.jp/coe21/publish/no33_ses/Chapter%206.pdf.

Monroe Doctrine, the British felt that it suited their interests.⁵⁴ The British Navy was actually the greatest enforcer of the Monroe Doctrine, as Britain disliked the idea of other countries having empires and thought that decolonization of Latin America could help boost British trade.⁵⁵

L-W+/W+L-

Japan and China in 1915. On January 18, 1915, the Japanese government issued their Twenty-One Demands, which if accepted, would give Japan special privileges over China. The demands include governance over Manchuria, control over key infrastructure like harbors and railways, and influence over China's financial and political affairs. On May 7, Chinese President Yuan Shikai capitulated to Japan's ultimatum and accepted all demands but the last one. China was L- because they believed their bargaining position was extremely weak and couldn't afford a conflict, whereas Japan was W+ because they were willing to go to war if China did not accept their demands.⁵⁶

Other examples of L-W+ include China and the U.S. during the first, second, and third Taiwan Strait Crises and Iraq-Iran in April 1969 in a dispute over the Shatt al-Arab.

W-W-

The Moroccan Crisis 1905-06 between Germany and France over Sudan. In a dispute over Sudanese sovereignty and colonial control by European powers, Kaiser Wilhelm II of Germany declared his support for the Sultan of Sudan. Angering the French and British, German

https://www.cfr.org/blog/china-japan-and-twenty-one-demands.

⁵⁴ Low, A. Maurice. 1914. "The Attitude of Europe toward the Monroe Doctrine." The Annals of the American Academy of Political and Social Science (Sage Publications, Inc.) 54: 99-106.

 $https://www.jstor.org/stable/pdf/1012575.pdf?refreqid=excelsior\%3A2abb85870724fff7175b80c86eb48b78\&ab_segments=\&origin=.\\$

⁵⁵ Smith, Peter H. 1996. Talons of the Eagle: Dynamics of U.S.-Latin American Relations. Oxford University Press.

⁵⁶ Huang, Yanzhong. 2015. China, Japan, and the Twenty-One Demands. January 21.

Chancellor Count Bernhard von Bülow threatened, war, though this was actually a bluff.⁵⁷ Kaiser Wilhelm II did not want war, stating just before the crisis that "my study of history hasn't encouraged me to strive for world domination. In the empire of which I dream, the German emperor will be trusted by other countries and must be seen as a honest and peaceful neighbour".⁵⁸ Bluffing signals a W- state by accepting the risk of escalation, but demonstrating the desire to avoid conflict. Similarly, France wanted to avoid war but was unwilling to give up its control of Sudan. Both France and Germany mobilized their militaries, though neither pushed for war. In the end, support of France by Britain, Russia, Italy, Spain, and the U.S. in the Algeciras Conference forced Germany to accept a compromise unkind to German interests. Still, the crisis was defused.

W+W-/W-W+

The Second Moroccan Crisis in 1911. In the lead up to the crisis, Germany engaged in gunboat diplomacy, sending the German SMS Panther to Morocco's Atlantic port. The goal was to extract territorial concessions from French expansion in Morocco. As in the first Moroccan crisis, Germany settled for less than they hoped for. When Britain denounced Germany's gunboat diplomacy tactics, sent battleships to Morocco, and threatened war if Germany pushed for greater concessions, Germany backed down. Britain could not allow German control over Morocco's Atlantic port. David Lloyd George, Chancellor of the Exchequer of Britain, issued the "Mansion House" speech where he declared that "if Britain is treated badly where her interests are vitally affected, as if she is of no account in the cabinet of nations, then I say emphatically that peace at that price would be a humiliation intolerable for a great country like ours to

⁵⁷ Massie, Robert K. 1992. Dreadnought, Britain, Germany and the Coming of the Great War. Ballantine Books.

⁵⁸ Koehler, Verlag von K. F. 1922. Kaiser Wilhelm II. Ereignisse Und Gestalten 1878-1918.

endure".⁵⁹ These statements were backed by the Prime Minister and Foreign Secretary Sir Edward Grey. Britain was therefore a W+ state in this situation and Germany was a W- state, having pushed for concessions but backed down without a fight.

L+W+/W+L+

Spanish-American War in 1898. In the prelude to war, U.S. President William McKinley originally sought peaceful settlement with Spain over Cuban independence. Reports of Spanish brutality in Cuba galvanized U.S. public support for Cuban independence. However, an explosion that sank the USS Maine docked in Havana Harbor, quickly pinned on Spain despite an unknown cause, placed immense pressure on McKinley to go to war. On April 20, 1898, McKinley demanded Spain withdraw from Cuba and Congress authorized McKinley to use military force. On April 21, Spain severed diplomatic relations with the U.S. and the U.S. initiated military action in Cuba. By 1898, the Spanish empire was a shadow of its former self and knew they would lose. 60 Their ships were far inferior and could not hope to reinforce their colonial holdings in Puerto Rico, Philippines, and Cuba. Still, Spain fought because its government, with a monarchy and prime minster, believed their domestic political situation would be in danger if they gave away Cuba at the negotiating table.⁶¹ Cuba was so symbolically important that they would only give it up over the dead bodies of Spanish soldiers.⁶² Those are distinguishing markers of an L+ state. McKinley and Congress' ultimatum for Spain to leave Cuba or fight marks the U.S. as a W+ state in this perception situation.

⁵⁹ Wilson, Keith. 1972. "The Agadir Crisis, the Mansion House Speech, and the Double-Edgedness of Agreements." Historical Journal 15: 513-532.

⁶⁰ Ojeda, Jaime de. 2011. The Spanish-American War of 1898: a Spanish View. June 22. https://www.loc.gov/rr/hispanic/1898/ojeda.html.

⁶¹ Offner, John. 1998. "Why Did the United States Fight Spain in 1898?" OAH Magazine of History (Oxford University Press) 12: 19-23.

⁶² Ibid.

Other examples include the Gulf War with Iraq and Kuwait, Falkland Islands War 1982 between Argentina and the Falklands, and the Iran-Iraq War.

W+W+

The Vietnam War between the U.S. and Vietnam beginning in 1964. Both the U.S. and Vietnam believed they could win and that it was worth fighting. Ho Chi Minh, supported by the USSR and China, believed that he could beat America's superior technology and firepower by having a stronger will to fight. Essentially, Ho Chi Minh engaged in a strategy of attrition: he believed that he could defeat the U.S. by inflicting more casualties than Americans were willing to afford, even though the Viet Cong would take far more casualties. He once said, "In the end, the Americans will have killed ten of us for every American soldier who died, but it is they who will tire first."63 Yet, leaders in the Johnson administration, with the single exception of Under Secretary of State for Economic and Agricultural Affairs George Ball, believed the war to be winnable. Despite some commentary arguing that President Lyndon B. Johnson believed the war to be unwinnable, the U.S. was, in fact, W+. According to the Special Assistant to LBJ, Jack Valenti, Johnson never had a traditional notion of victory. According to Valenti, Johnson believed that the U.S. could inflict substantial enough casualties on North Vietnam to force Ho Chi Minh to the negotiating table.⁶⁴ In a piece in the Washington Post, Valenti recounts that Johnson told him "I can't just quit and run. And I don't want to keep going on. So I have to get Ho to the table. I've got to keep trying". 65 Valenti argues that Johnson's goal was negotiation,

⁶³ Record, Jeffrey. 2009. "JAPAN'S DECISION FOR WAR IN 1941: SOME ENDURING LESSONS." Strategic Studies Institute, U.S. Army War College.

⁶⁴ Valenti, Jack. 2001. LBJ's Unwinnable War. November 28. https://www.washingtonpost.com/archive/opinions/2001/11/28/lbjs-unwinnable-war/5f1a55d2-1f39-45b3-960d-5f6391f0442b/.

⁶⁵ Ibid.

and "winning" meant a negotiated settlement between the U.S., North Vietnam, and South Vietnam. Dean Rusk, Secretary of State under LBJ, confirmed this perspective, remarking in a 1971 interview that "I thought that when we had established a position in Vietnam which would be clearly impossible for them to overrun militarily that then the chances were very high that they would pull back — maybe only for a time — but pull back or take part in some serious negotiation". ⁶⁶ However, the LBJ administration failed to anticipate a much higher breaking point than expected, leading to a failed strategy and an eventual communist victory.

Conclusion

Despite historical examples that support the basic model, it is not sufficient to explain the occurrence and frequency of conflict. The basic model assumes that every disequilibrium (for example, W+L+ or W+W+) leads to war. It therefore fails to incorporate factors that can lead to even these perception situations resulting in peace. War is not guaranteed even in disequilibrium, which opens the door to discussing actions and specific policy that can avoid a war outcome.

The basic model fails in three ways. First, it relies solely on pre-war, pre-bargaining perceptions which do not take into account the possibility of **updating perceptions** based on new information. Second, it does not assume **prior beliefs** nations may have about their adversaries, which can affect the likelihood of updating perceptions. Third, it does not assume **future perceptions**, which can affect present behavior. Finally, some may identify a fourth way that the model fails, that LL perception situations are not as stable as the model suggests. This

⁶⁶ Mueller, John E. 1980. "The Search for the "Breaking Point" in Vietnam: The Statistics of a Deadly Quarrel." International Studies Quarterly (Wiley) 24: 497-519.

https://www.jstor.org/stable/2600287?seq=1#metadata_info_tab_contents.

seems to be strongly substantiated by the Cuban Missile Crisis, during which both the U.S. and the USSR threatened use of nuclear weapons. However, I will discuss in the next chapter how the basic model actually solves this problem.

The next chapter will cover the advanced model and use challenging historical cases to test its explanatory power. That chapter will be released at a later date, so stay tuned for the next part of the article.

Bibliography

- Blanes, I. E., Powers, R., Peterson, S., & Tierney, M. J. (2022, January 31). Poll: Will Russia Invade Ukraine? *Foreign Policy*. Retrieved from https://foreignpolicy.com/2022/01/31/poll-russia-ukraine-invasion-crisis-biden-response/
- Brennan, D. (2022, January 25). *Russia Is Unlikely To Invade Ukraine Soon, but Other Attacks Are Possible*. Retrieved from Newsweek: https://www.newsweek.com/russia-unlikely-invade-ukraine-soon-other-attacks-possible-donbas-cyber-1672641
- Carafano, J. J. (2022, April 8). Why Gen. Milley's Ukraine War Prediction Missed by a Mile.

 Retrieved from The Heritage Foundation:

 https://www.heritage.org/defense/commentary/why-gen-milleys-ukraine-war-prediction-missed-mile
- Carlin, G. (1992, April 24). *The Planet is Fine*. (B. Carlin, & J. Hamza, Producers) Retrieved from Genius: https://genius.com/George-carlin-the-planet-is-fine-annotated
- Central Intelligence Agency. (1973). Soviet Nuclear Doctrine: Concepts of Intercontinental and Theater War. CIA Historical Review Program, Office of Strategic Research. Central Intelligence Agency Directorate of Intelligence. Retrieved from https://www.cia.gov/readingroom/docs/DOC_0000268107.pdf
- Cirincione, J. (2022, July 29). What's Missing from Mearsheimer's Analysis of the Ukraine War. (Harvard Kennedy School Belfer Center for Science and International Affairs) Retrieved from Russia Matters: https://www.russiamatters.org/analysis/whats-missing-mearsheimers-analysis-ukraine-war
- Clausewitz, C. v. (1918). Chapter 1: What is War? In *On War* (C. J. Graham, Trans., Vol. 1). London: Kegan Paul, Trench, Trubner & C.
- D'Orazio, V. (2020). Conflict Forecasting and Prediction. International Studies.
- Dempsey, G. (2022, February 18). 900+ Forecasters on Whether Russia Will Invade Ukraine. Retrieved from https://metaculus.medium.com/900-forecasters-on-whether-russia-will-invade-ukraine-f8b36f7dee0f
- Downer, A. (2022, January 30). *There are four things to suggest Russia won't invade Ukraine*. Retrieved from Financial Review: https://www.afr.com/policy/foreign-affairs/there-are-four-things-to-suggest-russia-won-t-invade-ukraine-20220127-p59rst
- Drezner, D. W. (2021, January 15). Wonks Gone Wild. *Foreign Policy*. Retrieved from https://foreignpolicy.com/2021/01/15/foreign-policy-predictions-always-bad-worst-international-relations-rewards-catastrophic-thinking/
- Euro Docs. (2018, August 6). *Neville Chamberlain's "Peace For Our Time" speech*. Retrieved from Harold B. Lee Library:

- $https://eudocs.lib.byu.edu/index.php/Neville_Chamberlain\%27s_\%22Peace_For_Our_Time\%22_speech$
- Fearon, J. D. (1995, Summer). Rationalist explanations for war. *International Organization*, 49(3), 379-414.
- Fearon, J. D. (1997, February). Signaling Foreign Policy Interests: Tying Hands versus Sinking Costs. *The Journal of Conflict Resolution*, 41, 68-90.
- Fukuyama, F. (1992). The End of History and the Last Man. Free Press.
- GFP. (2022). 2022 Nicaragua Military Strength. Retrieved from https://www.globalfirepower.com/country-military-strength-detail.php?country_id=nicaragua
- Glaser, C. L. (2015, July). Time for a U.S.-China Grand Bargain. *Quarterly Journal: International Security*.
- Hideki, K. (2013). The Making of "an American Empire" and US Responses to Decolonization in the Early Cold War Years. Retrieved from https://src-h.slav.hokudai.ac.jp/coe21/publish/no33_ses/Chapter%206.pdf
- Hines, J. G., Mishulovich, E. M., & Shull, J. F. (1995). Soviet Intentions 1965-1985 Volume I An Analytical Comparison of U.S.-Soviet Assessments During the Cold War. BDM Federal, Inc. Office of the Secretary of Defense. Retrieved from https://russianforces.org/files/Soviet%20Intentions%201965-1985%20Vol.%201.pdf
- Huang, Y. (2015, January 21). *China, Japan, and the Twenty-One Demands*. Retrieved from Council on Foreign Relations: https://www.cfr.org/blog/china-japan-and-twenty-one-demands
- Jones, B. D. (1999, June). Bounded Rationality. Annual Review of Political Science, 2, 297-321.
- Kahler, M. (1998, Autumn). Rationality in International Relations. *International Organization*, 52(4), 919-941.
- Kaplan, F. (2001, October). *JFK's First-Strike Plan*. Retrieved from The Atlantic: https://www.theatlantic.com/magazine/archive/2001/10/jfks-first-strike-plan/376432/
- Klare, M. T. (2022, May 24). *Cooperation to Fight Climate Change, Not War*. Retrieved from The Nation: https://www.thenation.com/article/world/ukraine-climate-change-war/
- Koehler, V. v. (1922). Kaiser Wilhelm II. Ereignisse Und Gestalten 1878-1918.
- Lebow, R. N., & Stein, J. G. (1995, Summer). Deterrence and the Cold War. *Political Science Quarterly*, 110, 157-181. Retrieved from https://www.jstor.org/stable/2152358
- Lieber, K. A., & Press, D. G. (2017). The New Era of Counterforce: Technological Change and the Future of Nuclear Deterrence. *International Security*, *41*(4), 9-49. doi:https://doi.org/10.1162/ISEC_a_00273

- Low, A. M. (1914, July). The Attitude of Europe toward the Monroe Doctrine. *The Annals of the American Academy of Political and Social Science*, *54*, 99-106. Retrieved from https://www.jstor.org/stable/pdf/1012575.pdf?refreqid=excelsior%3A2abb85870724fff71 75b80c86eb48b78&ab_segments=&origin=
- Madhani, A., & Lee, M. (2022, January 19). *Biden predicts Russia will invade Ukraine, warns Putin*. Retrieved from AP News: https://apnews.com/article/antony-blinken-jen-psaki-vladimir-putin-sergey-lavrov-congress-1df536e9a832830dc3bae2e89aef4116
- Massie, R. K. (1992). *Dreadnought, Britain, Germany and the Coming of the Great War.*Ballantine Books.
- McIntyre, J. (2021, December 16). *As Putin keeps the world guessing, experts bet he won't invade Ukraine*. Retrieved from Washington Examiner: https://www.washingtonexaminer.com/restoring-america/patriotism-unity/defense-national-security/as-putin-keeps-the-world-guessing-experts-bet-he-wont-invade-ukraine
- Mearsheimer, J. J. (2001). The Tragedy of Great Power Politics. W.W. Norton & Company.
- Mearsheimer, J. J. (2014, September/October). Why the Ukraine Crisis Is the West's Fault. *Foreign Affairs*. Retrieved from https://www.mearsheimer.com/wp-content/uploads/2019/06/Why-the-Ukraine-Crisis-Is.pdf
- Mearsheimer, J. J. (2018). *The Great Delusion: Liberal Dreams and International Realities*. Yale University Press.
- Meger, S. (2022, February 15). WHY RUSSIA ISN'T ABOUT TO INVADE UKRAINE SOON. Retrieved from University of Melbourne: https://pursuit.unimelb.edu.au/articles/whyrussia-isn-t-about-to-invade-ukraine-soon
- Mueller, J. E. (1980, December). The Search for the "Breaking Point" in Vietnam: The Statistics of a Deadly Quarrel. *International Studies Quarterly*, 24, 497-519. Retrieved from https://www.jstor.org/stable/2600287?seq=1#metadata_info_tab_contents
- Offner, J. (1998, Spring). Why Did the United States Fight Spain in 1898? *OAH Magazine of History*, 12, 19-23.
- Ojeda, J. d. (2011, June 22). *The Spanish-American War of 1898: a Spanish View*. Retrieved from Library of Congress: https://www.loc.gov/rr/hispanic/1898/ojeda.html
- Pipes, R. (1977, July). Why the Soviet Union Thinks It Could Fight & Win a Nuclear War.

 Retrieved from Commentary: https://www.commentary.org/articles/richard-pipes-2/why-the-soviet-union-thinks-it-could-fight-win-a-nuclear-war/
- Politico Magazine. (2022, January 26). *Will There Be a War Over Ukraine? 13 Putin Watchers Weigh In*. Retrieved from Politico: https://www.politico.com/news/magazine/2022/01/26/russia-ukraine-putin-experts-00000019

- Record, J. (2007). Beating Goliath: Why Insurgencies Win (First Edition ed.). Potomac Books.
- Record, J. (2009). *JAPAN'S DECISION FOR WAR IN 1941: SOME ENDURING LESSONS*. U.S. Army War College, Strategic Studies Institute.
- Seemangal, R. (2016, January 20). *The Earliest Evidence of Violent Human Conflict Has Been Discovered*. Retrieved from Observer: https://observer.com/2016/01/the-earliest-evidence-of-violent-human-conflict-has-been-discovered/
- Shakespeare, W. (1599). Julius Caesar.
- Smith, P. H. (1996). *Talons of the Eagle: Dynamics of U.S.-Latin American Relations*. Oxford University Press.
- Spagat, M., & Weezel, S. v. (2019, November 15). The Decline of War Since 1950: New Evidence. *Lewis Fry Richardson: His Intellectual Legacy and Influence in the Social Sciences*, 129-142. Retrieved from https://link.springer.com/chapter/10.1007/978-3-030-31589-4_11
- Streich, P., & Levy, J. S. (2016). Information, Commitment, and the Russo-Japanese War of 1904–1905. *Foreign Policy Analysis*, 12, 489-511. doi:10.1111/fpa.12058
- Surbeck, M. G.-B. (2017). Sex-specific association patterns in bonobos and chimpanzees reflect species differences in cooperation. *Royal Society Open Science*, 4. doi:doi:10.1098/rsos.161081
- Swaine, M. D. (2019, January 16). A Relationship Under Extreme Duress: U.S.-China Relations at a Crossroads. *Carnegie Endowment for International Peace*. Retrieved from https://carnegieendowment.org/2019/01/16/relationship-under-extreme-duress-u.s.-china-relations-at-crossroads-pub-78159
- Tetlock, P. E., & Gardner, D. (2015). Superforecasting: The Art and Science of Prediction. Crown.
- Thucydides: History of the Peloponnesian War. (1972). (R. Warner, Trans.) London.
- Ullman, H. (2022, February 16). *Why Putin won't invade Ukraine*. Retrieved from Atlantic Council: https://www.atlanticcouncil.org/blogs/new-atlanticist/why-putin-wont-invade-ukraine/
- Valenti, J. (2001, November 28). *LBJ's Unwinnable War*. Retrieved from The Washington Post: https://www.washingtonpost.com/archive/opinions/2001/11/28/lbjs-unwinnable-war/5f1a55d2-1f39-45b3-960d-5f6391f0442b/
- Wang, Y., Wei, M., Bashir, U., & Zhou, C. (2022, April 25). Geopolitical risk, economic policy uncertainty and global oil price volatility—an empirical study based on quantile causality nonparametric test and wavelet coherence. *Energy Strategy Reviews*, 41. doi:https://doi.org/10.1016/j.esr.2022.100851

- Więcławski, J. (2020, February 5). Considering Rationality of Realist International Relations Theories. *Chinese Political Science Review*, 5, 111–130.
- Wilson, K. (1972). The Agadir Crisis, the Mansion House Speech, and the Double-Edgedness of Agreements. *Historical Journal*, *15*, 513-532.
- Yilmaz, H. (2022, February 9). *No, Russia will not invade Ukraine*. Retrieved from Al Jazeera: https://www.aljazeera.com/opinions/2022/2/9/no-russia-will-not-invade-ukraine