

Research Statement

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In my research, I examine issues of international security, focusing on the role of nuclear weapons in international politics. Specifically, I am interested in analyzing how nuclear states communicate credibility and enforce commitments in three contexts: 1) demonstrations of resolve, 2) crisis escalation, and 3) nuclear nonproliferation. My dissertation studies demonstrations of resolve in the context of U.S. extended deterrence on the Korean Peninsula; all empirical elements of my dissertation are already published or currently under review. While most previous work in the nuclear policy realm has been limited by studying very few cases at the state level, I use large-N survey experiments, computational text analysis of archival sources, and tools for small-N causal inference to gain new insights on these topics. I couple these methods with detailed case studies and other qualitative approaches. My research agenda explores the dynamics of nuclear weapons, crisis politics, and conflict studies. In particular, I am interested in continuing to study these subjects in relation to pressing issues in contemporary U.S. foreign policy.

Dissertation: The Risks of Nuclear States' Signals of Resolve

My dissertation studies how nuclear states manage the dual nuclear foreign policy goals of 1) reassuring allies that nuclear proliferation is not necessary for their security and 2) deterring adversaries from using or acquiring nuclear weapons. Traditionally, these aims are accomplished through demonstrations of states' resolve to use their nuclear arsenals in defense of allies or against adversaries. Existing literature posits that the main challenge for nuclear states lies in making these demonstrations sufficiently credible. I examine the conditions under which demonstrations of resolve succeed, arguing that, while insufficiently credible demonstrations of resolve can fail to reassure allies and deter adversaries, *overly* credible demonstrations of resolve can also backfire. This backfire effect occurs in two critical, but underappreciated, ways. First, while nuclear states' demonstrations of resolve are designed to reassure their allies of defense commitments, they can create fears of entrapment in precipitous nuclear conflicts. In this way, demonstrations of resolve can drive nuclear states' allies to seek independent sources of security, including acquiring nuclear weapons. Second, demonstrations of resolve can escalate crises by posing threats that cause adversaries to respond aggressively. I test these arguments using a least-likely case: nuclear security on the Korean Peninsula.

To examine the effectiveness of demonstrations of resolve meant to reassure allies, I use survey experiments to test public reactions to these demonstrations.¹ In an article published at the *Journal of Conflict Resolution*—and which is attached to this application as a writing sample—I show that South Korean citizens perceive U.S. demonstrations of resolve as threatening. I fielded two waves of online survey experiments on representative samples of 4,323 South Koreans in 2018 and 2019. The evidence shows that—although South Korea is often considered the U.S. ally most in need of a nuclear security guarantee—the U.S. nuclear security guarantee doesn't effectively reassure South Koreans. Instead, it creates concerns among South Korean citizens about being entrapped into a precipitous conflict. By varying the strength of the U.S. nuclear security guarantee in vignette survey experiments, I find that credible U.S. security guarantees *increase* support for the acquisition of nuclear weapons. Mediation analysis reveals respondents want to avoid becoming embroiled in a U.S.-driven conflict with North Korea and see

¹ Sukin, Lauren. "Credible Nuclear Security Commitments Can Backfire: Explaining Domestic Support for Nuclear Weapons Acquisition in South Korea." *Journal of Conflict Resolution*, Vol. 64, No. 6, (2020): 1011–1042.

proliferation as a way to shift nuclear responsibility on the Korean Peninsula away from the United States. This finding upends the conventional understanding of nuclear security guarantees, which views these guarantees as *substitutes* for nuclear proliferation. Moreover, this finding shows a new and significant risk of resolve; even if demonstrations of resolve are intended to reassure allies, they can backfire, causing those allies to fear reliance and seek independent security mechanisms, including the acquisition of nuclear weapons.

My dissertation also assesses the backfire effect of demonstrations of resolve intended to deter adversaries. To illustrate how even low-level demonstrations of resolve are surprisingly threatening, I study North Korea's rhetorical threats against its adversaries.² In a project currently under review, I construct an original dataset of all available English-language articles produced by the official Korean Central News Agency from 1997 to 2016. This research represents the first use of topic modelling to systematically identify threats made by North Korea against its adversaries. These threats are frequent and often extreme, but any individual threat is unlikely to be acted on. However, changes in the *volume* of North Korea's threats at any given time are predictive of belligerent actions such as missile and nuclear tests. That is, by pairing my threat data with data from the Center for Strategic and International Studies on North Korean militarized actions, I show that changes in the *volume* of threats can be used to predict provocations. In this way, even North Korea's lowest-level demonstrations of resolve—threatening propaganda—constitute meaningful signals of the intent to escalate. This work contributes to the literatures on demonstrations of resolve and threat construction, and it raises questions about current understandings of deterrence and “cheap talk.”

To further investigate the micro-foundations of the backfire effect of resolve, I build on survey experiments appearing in work published at *Peace and Conflict*.³ Two conjoint survey experiments in the United States and in South Korea, with respective representative samples of 3,027 and 2,242 respondents, investigate how support for U.S. nuclear use varies based on signals of an adversary's intent to escalate a conflict to the nuclear level. Respondents are given vignettes in which a nuclear state (either Russia or North Korea) undertakes a conventional invasion (of either a NATO member or South Korea). Respondents are randomly assigned a scenario as well as a treatment in which the invading power either threatens to use nuclear weapons in the invaded territory or promises nuclear restraint. I find that direct nuclear threats do not deter support for U.S. intervention but instead increase support among both U.S. and South Korean citizens for preemptive nuclear strikes against the adversary. This points to a key shortcoming associated with demonstrations of resolve; in crisis scenarios, these demonstrations can fail to deter and can instead cause adversaries to escalate.

My dissertation shows that adversaries' demonstrations of resolve are perceived as threatening by both citizens *and* states. A chapter that stems from a co-authored paper forthcoming at *Journal of Conflict Resolution* seeks to understand how U.S. military exercises with South Korea affect North Korean behavior and rhetoric.⁴ Because these routine exercises demonstrate military capabilities, much of the existing literature would predict that these exercises should *deter* adversaries. Instead, using a novel dataset of South Korean joint military exercises as well as the aforementioned North Korean threat and provocation data, this chapter shows that North Korea is not deterred by, but instead escalates in response to, joint military

² Sukin, Lauren. “North Korea's Rational Threat-Making: Using Propaganda to Understand North Korean Threat Perception.” 2020. Under Review.

³ Sukin, Lauren. “Experimental Evidence on Situational Determinants of Support for Nuclear Use in Response to Threats of Nuclear Retaliation.” *Peace and Conflict: Journal of Peace Psychology*, Vol. 26 No. 3, (2020): 336-339.

⁴ Bernhardt, Jordan and Lauren Sukin. “Joint Military Exercises and Crisis Dynamics on the Korean Peninsula.” 2020. Forthcoming at *Journal of Conflict Resolution*.

exercises. Moreover, it is not the case that North Korea simply uses all exercises as opportunities to advance an aggressive agenda. Instead, North Korea escalates more when confronted with more concretely threatening military exercises, such as those that are larger, closer to North Korea, or that involve field maneuvers. Our findings suggest North Korea evaluates the specific military risks associated with each exercise and responds strategically to higher-risk exercises with more escalatory behavior. Joint exercises do not deter North Korea but, instead, North Korea perceives them as threatening signals necessitating reactive demonstrations of resolve.

Taken together, the components of my dissertation combine original data collection with diverse methodologies including survey experiments, text analysis, and causal inference in order to understand the backfire effect of resolve, which causes credible threats to fail to reassure allies and deter adversaries. While my dissertation focuses on nuclear security in the Korean context, the broader book project will incorporate a series of case studies to address how this theory generalizes to other environments. My other research projects continue to develop the themes of resolve, crisis escalation, threat construction, and nuclear proliferation that are explored in my dissertation, as discussed below.

Crisis Escalation

In addition to my dissertation, I have several projects focusing on interstate crises. The first paper in this stream considers the role of nuclear superiority in crises. Nuclear superiority has been theorized to have either a positive effect on the probability of victory during crises or to have no effect at all. A co-authored paper currently under review—and which has been presented at several invited talks—introduces an alternative argument into the nuclear superiority debate: that the size of the disparity between states' nuclear arsenals affects the usefulness of nuclear superiority during crises.⁵ While nuclear superiority is correlated with victory in symmetric crises—those between states with similarly sized nuclear arsenals—nuclear superiority provides a disadvantage in asymmetric crises. In these asymmetric cases, inferior nuclear states face very high stakes; escalation risks a nuclear exchange, but inferior states also cannot risk backing down to credible threats by superior adversaries. Because of this, inferior states are able to escalate crises, bidding up the risk of nuclear war. As a result, they can deter their superior opponents. We test this argument in two ways. First, we present a series of historical case studies exploring the dynamics of symmetric and asymmetric crises. We complement this qualitative analysis with small-N data from the International Crisis Behavior project that we analyze using a novel causal analysis method—a non-parametric approach that uses randomization inference to estimate standard errors for dyadic data. This method helps to overcome limitations posed by the small size of the dataset. Ultimately, the analysis demonstrates that the effect of nuclear superiority on crisis victory decreases as the disparity between the arsenal sizes of competing states increases.

In a second paper on crisis escalation,⁶ I study the balance of power between states and its effect on public support for conflict. The conflict literature has long thought that a favorable balance of power is a strong indicator of the likelihood of success in a conflict. Given that domestic actors prefer “winnable” wars, military superiority should be correlated with increased support for military action, to the extent that it provides meaningful strategic advantages. Using data from two waves of conjoint survey experiments fielded in 2019 and 2020 on a total representative sample of 8,015 Americans, I test the effects of military superiority on public support for conflict and find evidence for the mechanism by which superiority is thought to operate. However, I also find that a substantial minority of respondents support conflicts that

⁵ Fanlo, Abby and Lauren Sukin. “The Illogic of Nuclear Superiority: A Review Essay.” 2020. Under Review.

⁶ Sukin, Lauren. “The Balance of Power and Public Support for Conflict.” 2020. Working Paper.

they do not think can be won. I show that these respondents are motivated by the logics of preventive war and retributive justice.

A third paper is a work in progress that employs a co-authored survey of the American public's support for conflict in the context of cyber operations, providing one of the first experimental tests of the theoretical literature on cyber operations.⁷ A conjoint survey experiment will test how various characteristics of military operations—such as attribution, pace, and scale—may differentiate attitudes about retaliation against cyber and kinetic attacks. Our findings will identify specific conditions under which the use of cyber operations may result in retaliation and escalation. This project will contribute to the literature on the escalation of crises, expanding current theory on crisis dynamics into the new cyber domain.

The final paper in this research stream delves further into *when* and *why* states resort to the use of force during political crises.⁸ A co-authored project with a Stanford Law professor, this paper analyzes an original dataset of the contents of UN member states' "Article 51 Communications" from 1945-2018. These documents are formally submitted to the UNSC and include states' legal justifications for the use of force. Using dictionary-based computational text-analysis, this paper assesses the contents of the communications, finding that new and contested legal doctrines for the use of force have developed over time in response to the changing international security environment. When contested claims are used, they are accompanied by *extralegal* justifications, such as references to regional security or economic prerogatives, in an attempt to capture UNSC members' support. This research reveals the evolving nature of global governance on the use of force and demonstrates member states' commitments to maintaining reputations for legality in the use of force. Moreover, by defining the acceptable legal rationales for the use of force, this project identifies certain conditions under which states may more likely to escalate during crises.

Nuclear Proliferation

My newest line of research focuses on nuclear nonproliferation and, in particular, on nuclear states' approaches to nonproliferation among their allies. Traditional logic suggests states are expected to enforce international agreements against their adversaries, but that enforcement against allies is less strategic and therefore rare. In fact, some scholars argue states have actively encouraged allies to proliferate. I argue this approach is based on incomplete proliferation data and misunderstands incentive-based nonproliferation policies. Taking these factors into account, it is evident that not only do states enforce nonproliferation more often in their allies, but also that tools previously thought to encourage proliferation actually have a nonproliferation effect.

The first component of this project shows that states have incentives to enforce nonproliferation among their allies.⁹ States are held responsible for the actions of their allies. This creates higher reputation costs if a state fails to respond to potential proliferation in an ally than if it had failed to respond to potential proliferation in a state with which it had only a weak relationship. To test this claim, I create a new dataset of actual and suspected proliferation attempts and responsive nonproliferation policies. I draw upon archival and secondary sources, and I build upon original breakout-timeline analysis that first appeared in a solo-authored 2016 *Nonproliferation Review* article.¹⁰ This new dataset updates previous nuclear proliferation

⁷ Hedgecock, Kathryn, Leah Matchett, and Lauren Sukin. "The Distinctiveness of Cybersecurity and Public Support for Cyber Retaliation." Work in Progress.

⁸ Sukin, Lauren and Allen Weiner. "Self-Defense and Justifications for the Use of Force." 2020. Working Paper.

⁹ Sukin, Lauren. "Strategies of Nuclear Nonproliferation towards Allies of Nuclear States." Work in Progress.

¹⁰ Sukin, Lauren. "Beyond Iran: Containing Nuclear Development in the Middle East." *Nonproliferation Review* Vol. 22, No. 3-4, (2016): 379-400.

datasets, which end in 2000 and exclude suspected or intended, but not actualized, nuclear programs. This data demonstrates that states enforce nonproliferation among their allies at higher rates than among neutral states. Moreover, using an original dataset of U.S. presidential speeches on nuclear weapons, I will show that nonproliferation rhetoric directed at allies emphasizes themes related to reputation costs, such as mutual responsibility, nonnuclear norms, and global governance.

A complementary project studies an incentive-based nonproliferation tool: nuclear cooperation agreements.¹¹ The traditional approach to nuclear proliferation has focused on “demand-side” explanations that suggest a state’s characteristics and environment determine its likelihood of building a nuclear arsenal. Some research has questioned this “demand-side” focus, arguing that “supply-side” explanations about states’ technical capabilities play an important role in nuclear proliferation. Several quantitative studies on the supply side of proliferation have shown that states that receive nuclear assistance are more likely to begin nuclear programs and to successfully proliferate than states that do not receive such assistance. However, this approach ignores a selection effect. I argue that nuclear exporters may be more likely in the first place to extend assistance to “high-risk” nuclear importers that are interested in proliferation. Nuclear exporters may determine that such states will inevitably acquire some amount of nuclear technology; the exporter will prefer that this happen within the confines of an agreement they design. Once an agreement is in place, it allows exporters to constrain their partners’ technical capabilities and resources, to more effectively implement additional nonproliferation policies, and to detect nuclear pursuit. As a result, high-risk states are *less likely* to proliferate if they receive nuclear assistance than if they do not. Nuclear states therefore use this incentive-based nonproliferation tool to prevent proliferation in their allies. I test this theory using my updated proliferation dataset and show that, for high-risk states, nuclear assistance is correlated with lower rates of nuclear proliferation. I will also collect an original dataset of the text of nuclear cooperation agreements in order to assess the differences between agreements offered to low-risk and high-risk states; this strategy will allow me to more precisely study the mechanisms through which nuclear assistance can be used to restrain nuclear proliferation.

Conclusion

Broadly focused on nuclear weapons, my research investigates themes related to crisis bargaining and escalation, global governance, and alliance dynamics. I use a broad range of methodological approaches, with a particular interest in survey experiments and text-as-data methods. Future work will continue to build on these themes and skills. For drafts of published and working papers, please visit laurensukin.com.

¹¹ Sukin, Lauren. “Nuclear Cooperation Agreements as a Nonproliferation Tool.” Work in Progress.