



ROUNDTABLE: Remembering Robert Jervis

September 5, 2022

Table of Contents

1. "Introduction: The Stunning Impact of Bob Jervis" by Francis J. Gavin
2. "Robert Jervis: A Leader in the Study of Leaders" by Don Casler and Keren Yarhi-Milo
3. "Robert Jervis, International Relations Theory, and the Question of Ethics" by James W. Davis
4. "The Importance of System Effects to Grand Strategy" by Stacie Goddard
5. "Bob Jervis' Impact on Understanding Cyber Conflict" by Jason Healey
6. "Robert Jervis on Political Psychology" by Rose McDermott
7. "Jervis on Intelligence" by Joshua Rovner
8. "Robert Jervis and the Nuclear Question" by Marc Trachtenberg

Summary

In this roundtable, our contributors look back on the life and work of Robert Jervis. A towering figure in international relations, Jervis made crucial contributions to multiple academic fields as well as the U.S. government. He is remembered for his scholarly work as well as his generosity as a teacher, mentor, and colleague.

1. Introduction: The Stunning Impact of Bob Jervis

Francis J. Gavin

I first met Bob Jervis at a small workshop at the University of Virginia in the early 2000s. Like countless others, I had been a fan of his work long before then and had no idea what it would be like to interact with the great man in person. Around this time, Bob had published an article in the *Journal of Cold War Studies* asking the question, “Was the Cold War a security dilemma?”¹ I must have read the piece three or four times — Bob could, at times, be obscure — and realized he was arguing that the Cold War was *not* caused by the security dilemma. This stunned me. So, during our first meeting, I gathered my courage and asked, “If the Cold War is not a security dilemma, then what is? Do you actually believe the security dilemma exists?”

Bob responded with that wry smile and twinkle in his eye that, as I came to know him, conveyed a wonderful combination of intellectual firepower, curiosity, generosity, and downright mischief. As was his style, he did not concede my point, but instead followed up with questions for me! This began a pattern between us. Several years later, Bob gave the Jack Ruina Memorial lecture at MIT, entitled something like “The Nuclear Revolution Will Not Be Televised,” in which he spent almost an hour arguing *against* his classic, *The Meaning of the Nuclear Revolution*.² It was breathtaking to behold — he could not only

¹ Robert Jervis, “Was the Cold War a Security Dilemma?” *Journal of Cold War Studies* 3, no. 1 (Winter 2001): 36–60, <https://www.jstor.org/stable/e26925094>.

² Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1989). The lecture series is hosted by the Security Studies Program at MIT. “Ruina Nuclear Age Dinner,” MIT Security Studies Program, accessed Sept. 1, 2022, <https://ssp.mit.edu/about/ruina-dinner>.

make powerful, persuasive arguments about the world; he was able to supply the best arguments against his own widely held views better than anyone else.

As is clear from this excellent roundtable, no scholar of international relations has shaped a wider array of crucial subjects than Robert Jervis. Each of the contributors in this roundtable is a leading expert in their subject and praise Bob's pioneering work. What is most striking about the roundtable is the wide-ranging and diverse nature of the subjects to which Bob contributed. His sheer output alone is extraordinary, to say nothing of his theories and insights that are widely used. But when one considers the range and breadth of his signal contributions — to psychology and decision-making, intelligence, nuclear issues, to how states perceive and misperceive each other — the sum total is stunning.

There are certain themes and connections that tie this wide-ranging corpus together.³ I would highlight a few. First, as Marc Trachtenberg points out, Bob was not dogmatic. He recognized that political life is complex and uncertain and that we need intellectual frames and theories to help us make sense of the world. That does not mean we should be married to these theories or be surprised when their predictions come up short. He was what Isaiah Berlin called an “intellectual fox,” interested in many things, and not, like many of his colleagues, a hedgehog who relied on one overriding theory to explain the world.⁴ Social and political life is complex, non-linear, and produces unexpected and not

³ Colin Kahl had a far more impressive summary of the themes tying together Bob's work, which he laid out in a recent *Horns of a Dilemma* podcast, “Remembering Bob Jervis,” which can be found here

<https://warontherocks.com/2022/07/remembering-robert-jervis-part-i/> and here

<https://warontherocks.com/2022/07/remembering-robert-jervis-part-ii/>.

⁴ Isaiah Berlin, *The Hedgehog and the Fox: An Essay on Tolstoy's View of History* (London: Weidenfeld & Nicolson, 1953).

easily predicted outcomes, a point he made in what I believe was his most underappreciated book, *System Effects*.⁵

Which leads to a second point: In many ways, Bob's sensibility was more like a historian than a political scientist. Like a historian, he loved complexity, was fascinated with uncertainty, reveled in paradoxes and dilemmas, recognized perspective, focused on decision-making, and was very sensitive to context. And literally no one consumed more documents from the *Foreign Relations of the United States* series than Bob Jervis. When I pointed this out to him, that he was secretly a historian, he bristled. Bob admired and respected history but was very proud to be a political scientist. We had a long-running argument about which discipline was more normative. He often complained (correctly) that historians can let their moral judgments affect their research and writing, which he claimed political scientists avoided. I liked to kid him that, to my mind, all of defensive realism, of which he was a great proponent, was a sly but ultimately normative reaction to the Vietnam War — Bob and other defensive realists were grateful for the restraining power of nuclear deterrence, if only to prevent American decision-makers from making even worse, more dangerous choices than they did in Southeast Asia. To be fair, few social scientists were more aware of the description-prescription problem in policy analysis than Bob, and no one was more honest about their own preferences and prejudices. He got a kick out of his international relations colleagues who emphasized structural explanations that left little room for human agency in their analyses but were constantly criticizing policymakers for making wrong-headed decisions.

⁵ Robert Jervis, *System Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton University Press, 1997).

This leads to a third characteristic of his: his fascination with how and why individuals and organizations make the choices they do. So much of his work exposed how individual and collective biases and incentives shaped how decisions were made. In the process, he was able to take many of his insights on individual behavior and deftly apply them to institutions, emphasizing how blind spots, cultures, and habits drove how they functioned.

Which leads to a fourth theme of Bob's work — a willingness, even an enthusiasm, to engage with those entrusted with making hard decisions. Even as he was critical of the American foreign policymaking culture — for example, in his book *The Illogic of American Nuclear Strategy*⁶ — he empathized with the challenges they face and, unlike many of his colleagues, did not engage in simplistic Monday morning quarterbacking.⁷ He also did the work: writing reports for the intelligence community and serving as an advocate for openness on the CIA Historical Advisory Board. And as a recent *Horns of a Dilemma* podcast revealed, he mentored and trained perhaps more national security officials, both Democrats and Republicans, than any other professor of international relations.⁸

This leads me to a final point, which is that Bob took the business of international relations and American foreign policy very seriously. He was very affable and generous and avoided conflict (often to a fault). But in a world with nuclear weapons, where a crisis could spin out of control and lead to war — even nuclear war — he felt that he had a deep obligation to apply his enormous intellect and curiosity to understanding war and peace.

⁶ Robert Jervis, *The Illogic of American Nuclear Strategy* (Ithaca, NY: Cornell University Press, 1984).

⁷ See Jervis' surprising and rather empathetic evaluations in *Why Intelligence Fails: Lessons from the Iranian Revolution and the Iraq War* (Ithaca, NY: Cornell University Press, 2011).

⁸ *Horns of a Dilemma*, "Remembering Robert Jervis."

Not for his own advancement, but to make his students, his readers, and the world a little smarter, a little less likely to stumble into disaster. While the world remains a dangerous, troubled place, we are all a little smarter, and a little wiser, for his efforts to make sense of it.

Francis J. Gavin is the Giovanni Agnelli Distinguished Professor and the director of the Henry A. Kissinger Center for Global Affairs at the School of Advanced International Studies in Johns Hopkins University. He serves as chair of the editorial board of the Texas National Security Review.



2. Robert Jervis: A Leader in the Study of Leaders

Don Casler and Keren Yarhi-Milo

Our mentor and friend Robert Jervis was undoubtedly among the most influential political scientists of the last half-century. His contributions to the field of international relations are both legion and legendary. From unpacking the dynamics of the security dilemma to explaining the meaning of the nuclear revolution, Jervis' scholarship either established the foundation or set the standard for central research agendas in international security.⁹ What made his body of work all the more remarkable, however, is that alongside his obvious interest in the big, macro-level forces shaping the dynamics of war and peace was a passion for, or even an obsession with, the micro-level factors operating inside of leaders' heads — specifically, the common biases and heuristics that affect how decision-makers process information. From his earliest publications to some of his most recent articles, Jervis taught us not just that perceptions and leaders were worthy of study in their own right, but also that by integrating leaders' perceptions into our theories, we could understand and explain many of the otherwise puzzling vagaries of international politics.

As we drafted our contribution to this roundtable in April 2022, it felt almost pedantic to point out that leaders are important actors in international affairs. Many parts of Ukraine are in tatters as a result of Russia's "special military operation," launched by Russian President Vladimir Putin on February 24 to "demilitarize" and "de-Nazify" its

⁹ Robert Jervis, "Cooperation Under the Security Dilemma," *World Politics* 30, no. 2 (January 1978): 167–214, <https://doi.org/10.2307/2009958>; and Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1989).

southeastern neighbor.¹⁰ Both before the invasion began and ever since, much ink has been spilled attempting to analyze Putin’s rationale and motives: Is he a strategic genius or a grievance-driven madman? Coldly rational or mentally unbalanced? An omnipotent force of personality who faces no serious threats to his rule or a weak strongman confronting standard political and economic constraints?¹¹ Meanwhile, analysts have attributed blame for Russia’s initial stumbles on the battlefield to Putin’s misconceptions about the likelihood of Ukrainian resistance to the invasion while reporting that Putin’s domineering, paranoid leadership style has led his advisers to conceal the true state of the war from him.¹²

By the same token, commentators have lauded Ukrainian President Volodymyr Zelensky’s performance as both a war leader and political communicator, going so far as to speculate that his prior experience as a comedian who played a fictional Ukrainian president on

¹⁰ Anton Troianovski and Neil MacFarquhar, “Putin Announces Start to ‘Military Operation’ Against Ukraine,” *New York Times*, Feb. 23, 2022, <https://www.nytimes.com/2022/02/23/world/europe/ukraine-russia-invasion.html>.

¹¹ Timothy Frye, *Weak Strongman: The Limits of Power in Putin’s Russia* (Princeton, NJ: Princeton University Press, 2021); Anton Troianovski, “Vladimir Putin: Crafty Strategist or Aggrieved and Reckless Leader?” *New York Times*, Feb. 18, 2022, <https://www.nytimes.com/2022/02/18/world/europe/putin-russia-ukraine.html>; and Kimberly Marten, “President Putin’s Rationality and Escalation in Russia’s Invasion of Ukraine - PONARS Eurasia,” PONARS Eurasia, March 9, 2022, <https://www.ponarseurasia.org/president-putins-rationality-and-escalation-in-russias-invasion-of-ukraine/>.

¹² Henry Foy and John Paul Rathbone, “Intelligence Failures Hamper Russia’s Ukraine Mission,” *Financial Times*, March 1, 2022, <https://www.ft.com/content/ba440d90-boba-4a73-a138-9cb1229b6cac>; and Michael Birnbaum, et al., “U.S. Says Putin Being Misled, as Ukraine Refugee Tally Hits 4 Million,” *Washington Post*, March 30, 2022, <https://www.washingtonpost.com/national-security/2022/03/30/ukraine-putin-misled-russia/>.

television may have made him just the man for the job.¹³ While it is much too soon to say how the conflict will play out, it is also difficult to deny that Zelensky's forceful and charismatic leadership has rallied Ukrainians to the cause of defending their homeland — or at least, it is easy to imagine the counterfactual in which Ukraine's resistance might not have been so effective, or have existed at all, under a different leader.¹⁴

Bucking the Academic Trends

However obvious these facts may appear to us today, the field of international relations did not always regard leaders as major characters in the stories that we tell about conflict and cooperation. Indeed, scholarship in the dominant realist tradition has historically sidelined the role of individuals — what we usually refer to as the “first image” — in seeking to understand state behavior. From a structural or neorealist perspective, states are no different from billiard balls: closed, impermeable, sovereign units whose internal characteristics (including their leaders' personalities and prior experiences) are far less important than their relative military, economic, and political power to our understanding

¹³ Franklin Foer, “A Prayer for Volodymyr Zelensky,” *The Atlantic*, Feb. 26, 2022, <https://www.theatlantic.com/ideas/archive/2022/02/volodymyr-zelensky-ukraine-president/622938/>; Travis M. Andrews and Ashley Fetters Maloy, “Zelensky's Past as an Entertainer May Have Prepared Him for His Most Crucial Role,” *Washington Post*, Feb. 28, 2022, <https://www.washingtonpost.com/arts-entertainment/2022/02/28/zelensky-paddington-dancing-with-the-stars/>; and Maureen Dowd, “Zelensky and Trump: Two Performers, One Hero,” *New York Times*, March 5, 2022, <https://www.nytimes.com/2022/03/05/opinion/zelensky-ukraine-trump.html>.

¹⁴ James D. Fearon, “Counterfactuals and Hypothesis Testing in Political Science,” *World Politics* 43, no. 2 (1991): 169–95, <https://doi.org/10.2307/2010470>; and Robert Jervis, “Do Leaders Matter and How Would We Know?” *Security Studies* 22, no. 2 (2013): 153–79, <https://doi.org/10.1080/09636412.2013.786909>.

of international affairs.¹⁵ In this view, because humans are categorically selfish, stupid, and aggressive (or else, because human nature is fixed and unchangeable), their individual behavior cannot independently be a major explanation for war because such an account lacks falsifiability. Even after acknowledging that statesmen may behave differently under different conditions, scholars such as Kenneth Waltz focused their attention on the causal impact of the conditions themselves (i.e., the “third image”) as part of a theoretical and methodological bet that much about world politics could be explained with just a few variables.¹⁶ And while realists have had their fair share of internecine spats in the intervening years, there is still broad consensus that because all states share the same goals in terms of seeking security under anarchy, we should expect them to pursue relative gains, if not maximize their power, and furthermore, that the people who comprise these states understand the game of power politics in which they are engaged.¹⁷

Such was the intellectual environment into which Jervis’ early scholarship entered during the late 1960s and early 1970s. Structural theories were very much in vogue, not just because of their apparent applicability to the core phenomenon of interest at the time — the bipolar competition between the United States and the Soviet Union — but also due to a broader trend in American political science toward the reformulation of our diffuse scholarly pursuits into intellectually coherent research agendas, à la the vision articulated

¹⁵ Arnold Wolfers, *Discord and Collaboration: Essays on International Politics* (Baltimore, MD: Johns Hopkins Press, 1962).

¹⁶ Kenneth Waltz, *Man, the State, and War: A Theoretical Analysis* (New York: Columbia University Press, 1959); and Kenneth N. Waltz, *Theory of International Politics* (Long Grove, IL: Waveland Press, 1979).

¹⁷ See, for example, John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: Norton, 2001); and Charles L. Glaser, *Rational Theory of International Politics: The Logic of Competition and Cooperation* (Princeton, NJ: Princeton University Press, 2010).

in Imre Lakatos's seminal 1970 article, "Falsification and the Methodology of Scientific Research Programmes."¹⁸ While research in the Waltzian vein advanced deductive propositions on how the material (i.e., military and economic) determinants of power shaped state behavior, Jervis' inductively derived insight was that *perceptions* of power could be equally important, and perhaps even more important, than material factors in explaining why, how, and whether states were able to pursue their goals. Building on the sociology of Erving Goffman, Jervis realized that the ways in which states assessed others, presented themselves, and attempted to maintain these *images* represented a huge locus of statecraft that the discipline was otherwise ignoring. For instance, as Jervis points out to the reader in the first few pages of *The Logic of Images*, the objective military balance between the superpowers could hardly explain why Soviet leaders in October 1962 abruptly revised their estimate of the risks that the United States was willing to run in keeping surface-to-surface missiles out of Cuba.¹⁹

Yet, Jervis's contributions in *The Logic of Images* were hardly limited to codifying what most policymakers would readily affirm: that perceptions of a state's capabilities or intentions can create their own realities.²⁰ Jervis also gave us a framework for understanding why states pursue seemingly ephemeral goals such as cultivating good will, garnering prestige, or saving face even when these pursuits might be at odds with

¹⁸ William C. Wohlforth, "Gilpinian Realism and International Relations," *International Relations* 25, no. 4 (2011): 499–511, <https://doi.org/10.1177/0047117811411742>.

¹⁹ Robert Jervis, *The Logic of Images in International Relations* (New York: Columbia University Press, 1970), 5.

²⁰ For example, NSC-68, the essential statement of America's containment policy during the Cold War, acknowledged this reality explicitly. See John Lewis Gaddis, *Strategies of Containment: A Critical Appraisal of American National Security Policy During the Cold War* (New York: Oxford University Press, 1982), chap. 3.

“objective” considerations of power and interest. He argued that there are rewards for doing so, in terms of (rather cheaply) influencing the psychological environments and policies of other actors in the international system. By foregrounding the ambiguity inherent in much of state behavior, Jervis not only advanced a novel theory of deception in international relations, but also gave us the conceptual tools of signals — “statements or actions the meaning of which are established by tacit or explicit understanding among the actors” — and indices — “statements or actions that carry some inherent evidence that the image projected is correct because they are believed to be inextricably linked to the actor’s capabilities or intentions” — to categorize the ways in which states seek to project desired images.²¹ Whereas Jervis suggested that indices were of immediate use in diagnosing a state’s “type” (its inherent character or disposition), signals were by definition issued to influence the receiver’s image of the sender. He was thus among the first (along with his friend and mentor, Thomas Schelling) to recognize that signals could only be credible if accompanied by some sort of costly words or deeds.²² It would be hard to understate the impact that this insight has had on the field: It has served as the basis for most subsequent studies of reputation, audience costs, and interstate bargaining, just to name a few examples.²³

²¹ Jervis, *The Logic of Images in International Relations*, 18–19.

²² James D. Fearon, “Robert Jervis and Perspectives on the Security Dilemma,” *H-Diploe | ISSF Tribute to the Life, Scholarship, and Legacy of Robert Jervis: Part I*, 46–48, <https://issforum.org/ISSF/PDF/ISSF-Jervis-Tribute-1.pdf>.

²³ James D. Fearon, “Domestic Political Audiences and the Escalation of International Disputes,” *American Political Science Review* 88, no. 3 (September 1994): 577–92, <https://doi.org/10.2307/2944796>; Jonathan Mercer, *Reputation and International Politics* (Ithaca, NY: Cornell University Press, 1996); Andrew H. Kydd, *Trust and Mistrust in International Relations* (Princeton, NJ: Princeton University Press, 2005); and Branislav L. Slantchev, “Military Coercion in Interstate Crises,” *American Political Science Review* 99, no. 4 (2005): 533–47, <http://www.jstor.org/stable/30038963>.

Perception and Misperception

From positing that perceptions mattered, Jervis moved seamlessly to studying *whose* perceptions were important. His subsequent analytic moves in *Perception and Misperception* not only advanced the notion that leaders were the appropriate level or unit of analysis, but also detailed the numerous ways in which common psychological biases affect individuals' ability to process information, form and change their beliefs, and maintain images of other actors in predictable ways that could be subjected to systematic study. Along the way, Jervis was careful to outline, while also gently dismissing, possible objections to his core point that decision-making was itself an important explanatory variable in international relations. First, all states do not, in fact, respond similarly to the same external situations. Even in cases of "objectively" extreme danger, there may be internal disagreements about what constitutes appropriate action: Prior to World War II, Churchill sounded the alarm about German aggression soon after Hitler took power, while Chamberlain did not reach similar conclusions until March 1939. Second, despite ostensible similarities in conduct among states that share certain internal features, an approach grounded in domestic politics is better at explaining continuity in state behavior than change therein. Change often occurs when leaders die or are replaced, leaving us with some of history's great imponderables. Would FDR have taken a more conciliatory line with the Soviet Union than Truman? Would JFK have ordered American combat troops into Vietnam as Johnson did? Third, even though governments comprise various organizations with their own parochial and role-based policy preferences, competition between bureaucratic interests often boils down to clashes over competing values whose

true sources lie elsewhere. Where officials sat did not predict where they stood with regard to Berlin, the Korean War, or Cuba.²⁴

As Jervis then argued, it was difficult or impossible to explain states' policy choices and associated outcomes without making reference to decision-makers' beliefs about the world and their images of others, which, in his view, stemmed more from a standard set of biases and heuristics than from individuals' emotions, personalities, or underlying dispositions. Elevating cognition as a proximate cause of behavior opened the door to new and innovative generalizations, grounded in well-established psychological tendencies, about how people draw conclusions under conditions of ambiguity. That, in turn, helped us to understand how intelligent and well-meaning statesmen could so badly misapprehend the world around them. In *Perception and Misperception*, he enumerated several sources of biased perceptions: Individuals crave cognitive consistency; interpret evidence based on what happens to be top-of-mind; learn only selectively from history; fiercely resist attitudinal change; see others' behavior as more calculated and autonomous than it truly is; overestimate their own importance in influencing or being targeted by others' policies; engage in wishful thinking; and seek to avoid cognitive dissonance by minimizing the degree to which they are internally conflicted about a given course of action.

While Jervis' subsequent scholarship drifted away from a major or exclusive focus on political psychology and toward topics such as the Cold War, the influence of nuclear weapons on world politics and American national security strategy, and systems theory, his work on perception and leaders continued (and continues!) to shape research across

²⁴ Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976), 17-27.

the discipline.²⁵ At last count, *Perception and Misperception* had more than 8,600 citations on Google Scholar, encompassing a diverse series of topics ranging from research design to wartime bargaining to the dynamics of normative shifts and associated political change, just to name a few examples.²⁶ More personally for the two of us, Jervis' research on the psychology of signaling and perception inspired and deeply influenced our own scholarship, providing the raw materials for arguments that one or both of us have advanced on how leaders and organizations assess adversaries' intentions and resolve, why leaders and their advisers want to fight for reputation during crises, and when qualities such as empathy can promote cooperation by helping states and leaders ameliorate the security dilemma.²⁷

²⁵ Robert Jervis, *The Illogic of American Nuclear Strategy*, *The Illogic of American Nuclear Strategy* (Ithaca, NY: Cornell University Press, 1985); Jervis, *The Meaning of the Nuclear Revolution*; and Robert Jervis, *System Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton University Press, 1998).

²⁶ Gary King, Robert O. Keohane, and Sidney Verba, *Designing Social Inquiry: Scientific Inference in Qualitative Research*, *Designing Social Inquiry* (Princeton, NJ: Princeton University Press, 1994); James D. Fearon, "Rationalist Explanations for War," *International Organization* 49, no. 3 (Summer 1995): 379-414, <https://www.jstor.org/stable/2706903>; and Martha Finnemore and Kathryn Sikkink, "International Norm Dynamics and Political Change," *International Organization* 52, no. 4 (Autumn 1998): 887-917, <https://www.jstor.org/stable/2601361>.

²⁷ Keren Yarhi-Milo, *Knowing the Adversary: Leaders, Intelligence, and Assessment of Intentions in International Relations* (Princeton, NJ: Princeton University Press, 2014); Marcus Holmes and Keren Yarhi-Milo, "The Psychological Logic of Peace Summits: How Empathy Shapes Outcomes of Diplomatic Negotiations," *International Studies Quarterly* 61, no. 1 (2017): 107-22, <https://doi.org/10.1093/isq/sqw034>; Keren Yarhi-Milo, *Who Fights for Reputation: The Psychology of Leaders in International Conflict* (Princeton, NJ: Princeton University Press, 2018); Keren Yarhi-Milo, Joshua D. Kertzer, and Jonathan Renshon, "Tying Hands, Sinking Costs, and Leader Attributes," *Journal of Conflict Resolution* 62, no. 10 (2018): 2150-79, <https://doi.org/10.1177/0022002718785693>; Joshua D Kertzer, Jonathan Renshon, and Keren Yarhi-Milo, "How Do Observers Assess Resolve?," *British Journal of Political Science*, June 2019, 1-23, <https://doi.org/10.1017/S0007123418000595>; Don Casler, *Credible to Whom? The Organizational Politics of*

Humility and Understanding

Despite the immense nuance, explanatory power, and generative nature of Jervis' hypotheses on misperception and the role of leaders, however, he both emphasized and exuded humility in how these phenomena ought to be studied and how he went about his scholarship. For starters, his thorough understanding of psychology and deep knowledge of historical events left him with tremendous appreciation for the cognitive limitations and time pressures under which the subjects of his work were operating. But far from seeking to absolve leaders of responsibility for their actions, Jervis simply stressed that we could not judge most policymakers too harshly. They were generally good, if flawed, people making the best with what they were given. Jervis was himself exceedingly humble regarding what his work on leaders could tell us about international politics. Whatever the shortcomings inherent in other levels of analysis, Jervis freely admitted that “[t]he question of the extent to which leaders matter in international politics is as familiar as it is difficult to answer.”²⁸ The essay from which this quotation is drawn models the sort of circumspection that we all ought to observe in our scholarship — though perhaps only someone who was so profoundly in touch with the perils of confirmation bias could argue so convincingly against the position and body of work that he had spent decades building. Nevertheless, Jervis served up clear-eyed skepticism about the study of leaders, diagramming the theoretical issues at stake while calling out the methodological

Credibility in International Relations, Doctoral Thesis, Columbia University, 2022, <https://doi.org/10.7916/ashr-6z46>; and Don Casler and Dylan Groves, “Perspective Taking Through Partisan Eyes: Cross-National Empathy, Partisanship, and Attitudes Toward International Cooperation,” Working Paper, 2022, https://www.dropbox.com/s/gsu2xt5dg2a6psw/PTinIR_accepted.pdf?dl=0.

²⁸ Jervis, “Do Leaders Matter and How Would We Know?” 154.

limitations of even well-structured comparisons and counterfactuals. His remarkably self-effacing conclusion, based on a review of evidence from post-Cold War American presidents, is that we cannot clearly infer that individual differences among these leaders play a large role in explaining the arc of U.S. foreign policy during this period.

Ultimately, Jervis admitted in his later years that he was hardly opposed to the parsimony and simplicity of structural theories, but simply felt that political psychology was essential for reconciling these accounts with the empirical realities of the profound richness and complexity of human — and by extension state — behavior. Reflecting on this matter in the introduction to *How Statesmen Think*, Jervis reiterated what is perhaps his most basic, yet revelatory, insight: Because developments in international politics are often quite ambiguous, understanding how people form beliefs, interpret their environments, and make decisions is critical — particularly since different individuals can (and do) look at the same situation and reach different conclusions about what is happening or what to do next, which confounds standard theories of rational choice. Whereas naïve observers would equate international politics with chess or poker, Jervis thought these comparisons were entirely misguided, as both games feature a standard set of rules that are set ahead of time, moves that are made out in the open, and a common understanding among participants of how to play. Jervis' preferred analogy instead drew on the Akira Kurosawa film *Rashomon*, in which each character views both the situation and everyone else's behavior quite differently from one another yet fails to realize that others do not share his or her understanding. To Jervis, the “*Rashomon* effect” was not just a bug but also a feature of world politics. It was not some random deviation from rationality to be explained away but rather a core dynamic that leaders were mostly

incapable of escaping.²⁹ Indeed, as a scholar of the Cold War, Jervis was acutely aware of how the *Rashomon* effect encouraged the deep mutual misperceptions that the United States and Soviet Union harbored toward one another.³⁰ With a new Cold War of sorts seemingly brewing these days, Jervis would probably be disappointed to know that his work on perception and leaders remains as relevant as ever.

Don Casler is a postdoctoral research associate at the Watson Institute for International and Public Affairs and an incoming assistant professor at the University of Illinois at Urbana-Champaign. He holds a Ph.D. in political science from Columbia University and was previously a Hans J. Morgenthau Fellow in Grand Strategy at the University of Notre Dame's International Security Center. His research focuses on international relations, bureaucratic politics, and political psychology. His scholarship has been published or is forthcoming in the Journal of Conflict Resolution, the Journal of Politics, and World Politics.

Keren Yarhi-Milo is the dean of Columbia University's School of International and Public Affairs and a professor of political science and international and public affairs. An expert in international security, crisis decision-making, and political psychology, Dean Yarhi-Milo is the author of two award-winning books and numerous academic articles. Her work bridges the academic and policy worlds, drawing on cutting-edge insights from psychology, organizational theory, and behavioral economics to explore the complicated contexts that

²⁹ Robert Jervis, *How Statesmen Think: The Psychology of International Politics* (Princeton, NJ: Princeton University Press, 2017).

³⁰ Robert Jervis, "Was the Cold War a Security Dilemma?" *Journal of Cold War Studies* 3, no. 1 (January 2001): 36-60, <https://doi.org/10.1162/15203970151032146>.

surround decision-making, signaling, and perception in international relations. Most recently, she received an award from the International Studies Association recognizing her “significant contribution to the study on international security.” Before becoming dean, Yarhi-Milo served as the director of SIPA’s Arnold A. Saltzman Institute of War and Peace Studies, where she launched several ambitious initiatives to elevate the school’s academic offerings and engagement with the world’s most pressing challenges. Dean Yarhi-Milo joined the Columbia faculty after a decade at Princeton University, where she rose to become a tenured associate professor of politics. She earned her Ph.D. at the University of Pennsylvania and a B.A., summa cum laude, from Columbia’s School of General Studies.



3. Robert Jervis, International Relations Theory, and the Question of Ethics

James W. Davis

To this war of every man against every man, this also is consequent; that nothing can be unjust. The notions of right and wrong, justice and injustice, have there no place. Where there is no common power, there is no law; where no law, no injustice. Force and fraud are in war the two cardinal virtues.

–Thomas Hobbes³¹

Although he certainly did not welcome the election of Donald Trump in 2016, Robert Jervis recognized the opportunity it presented for scholars of international relations.³² The new president espoused policies that were radically different from those of Barack Obama. Thus, even though little in America’s external environment had changed, a Trump presidency was akin to an experiment and would provide evidence to help answer a question central to Jervis’ scholarship: Is international relations a realm of compulsion or does it leave room for choice?

With one foot firmly in the realist — or as our British colleagues would say, Hobbesian — camp, Jervis was aware of the constraints under which leaders make foreign policy choices. Yet, he did not think that the relevant constraints were limited to the

³¹ Thomas Hobbes, *Leviathan* (London: Collier Macmillan, [1651] 1962), 101.

³² Robert Jervis, “President Trump and International Relations Theory,” in *Chaos in the Liberal Order: Trump’s Presidency and International Politics in the Twenty-First Century*, ed. Robert Jervis, et al. (New York: Columbia University Press), 3–7.

international system, or that the international system was always so unforgiving as to eliminate all room for choice. In admitting that leaders often enjoy a range of choices, however, Jervis opened the door to the critical evaluation of their policies. At a minimum, and with the benefit of hindsight, we can ask ourselves whether, in light of the leader's goals, different choices likely would have produced better results. Political science then is no longer merely explanatory, but also takes on a normative aspect. Moreover, to admit that the state's survival is not always at risk implies that leaders sometimes have the freedom to pursue values other than survival. This suggests that, when thinking about political ethics, consideration should be given both to the leader's goals and the strategies he or she adopts to secure them.

To understand Jervis' approach to questions of political responsibility, or indeed, political ethics, requires first coming to terms with the limits of our theoretical and empirical efforts to establish generalizable cause-and-effect relationships. As scholars of international relations, we often confront the embarrassing fact that decision-makers behave in ways that contradict our models. For some, this is evidence of the futility of social science or indeed its irrelevance to policymaking. Given the weakness of our theories, can we really offer advice on the best strategy for preserving the state's values and achieving its goals? A further problem arises from the fact that, apart from those rare occasions when the state's survival is at stake, decision-makers face the challenge of deciding which goals to pursue and at what cost. A central tragedy of politics is found in the fact that pursuing one value often comes at the expense of others. Unfortunately, though certainly not value free, international relations theory is ill suited as a guide to decision-makers contemplating which values to prioritize over others.

The following discussion proceeds in three steps. First, I will address what Jervis regarded to be the inherent limits of international relations theory for explaining (or indeed, predicting) behavior. Second, I will discuss the tensions between explanation and prescription. Finally, I will highlight how Jervis sympathized with the specific challenges faced by foreign policy decision-makers without absolving them of responsibility when their choices led to contemptible results.

The Limits of Explanatory Theory³³

Jervis was committed to the proposition of international relations theory, and many of his contributions to our theoretical understanding of international politics are both foundational and seminal. Though not always the first to articulate them, his systematic analyses of central concepts and mechanisms in the field — including the security dilemma, the spiral and deterrence models, or mutual assured destruction — remain unavoidable starting points for any serious discussion of international security.³⁴ Nonetheless, he was aware of the inherent limits of the theoretical enterprise.

³³ Rereading some of his publications for this tribute, I was struck by the fact that Jervis preferred the term “descriptive theory” and wonder whether this reflected a sober assessment of our ability to ultimately explain political outcomes. See, for example, Robert Jervis, *How Statesmen Think: The Psychology of International Politics* (Princeton, NJ: Princeton University Press, 2017), 126–27.

³⁴ Among other contributions, see Robert Jervis, “Cooperation Under the Security Dilemma,” *World Politics* 30, no. 2 (1978): 167–214, <https://doi.org/10.2307/2009958>; Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976), 58–116; and Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1989), chap. 3.

Among the challenges confronting the theorist is the fact that we live in a probabilistic world where many of the relevant events — e.g., shifts in polarity, power transitions, major wars between nuclear powers — are rare, or even hypothetical. Naturally occurring data is often scarce, and when available, suspect, because the relevant documentation was provided by biased agents or observers. Even if the documentary record were unbiased, the outcomes of interest arose in specific contexts that were the products of historical developments. Hence, the chronology matters. In addition, the cases we study may not be causally independent of one another. This presents important challenges for both statistical and case-study analysis.³⁵ Lacking a normal distribution, we cannot calculate the mean. Hence, we are likely to over-interpret the importance of isolated events, both when developing and testing theory.³⁶

Jervis further recognized the methodological challenges presented by the fact that the international system is highly complex. Because complex systems are characterized by multiple and cross-cutting interconnections as well as mechanisms of positive and negative feedback, causal relationships often are neither linear nor additive, and the full range of effects caused by any particular action are extremely difficult to isolate and measure. When actions produce multiple and durable effects, they change the parameters

³⁵ In statistical analysis, the problem leads to spurious significant results and heteroskedasticity. For case study design, the problems begin with delineating the historical bounds of the cases to be analyzed.

³⁶ For discussions of the various issues raised in this paragraph, see Robert Jervis, “Realism, Game Theory, and Cooperation,” *World Politics* 40, no. 3 (1988): 317–49, <https://doi.org/10.2307/2010216>; Jervis, “Causation and Responsibility in a Complex World,” in *Back to Basics: State Power in a Contemporary World*, ed. Martha Finnemore and Judith Goldstein (Oxford: Oxford University Press, 2013), 313–38; and Jervis, *How Statesmen Think*, 63–84, 123.

of the system in which they operate. Consequently, equivalent actions adopted at a later point may lead to different results.³⁷

Taken together, these issues imply that international relations theory will often be weak, and when it does lead to powerful generalizations, the generalizations nevertheless will be vague.³⁸ Thus, it should come as no surprise when outcomes appear to contradict our theories. Though the problem may reside in our assumptions and the postulated relationships among supposed variables, Jervis' understanding of human psychology led him to recognize that when leaders fail to behave as predicted, the temptation for the theorist to shift from description to prescription will be strong.³⁹

The Inevitability of Prescription

The tensions between theorists' explanatory ambitions and the impulse to prescribe frequently are exposed when states and leaders fail to behave as expected. Thus, Hans Morgenthau's critique of idealistic foreign policies makes little sense in light of his assertion that international politics is governed by objective laws. John Mearsheimer's critique of the influence of domestic interest groups on U.S. foreign policy would be beside the point if his theoretical arguments about the irrelevance of states' domestic politics to their foreign policies were always confirmed. And Jervis' own forceful argument that "MAD is a fact, not a policy," would not have been necessary, if leaders in

³⁷ Robert Jervis, *Systems Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton University Press, 1997).

³⁸ Jervis, "Realism, Game Theory, and Cooperation," 326.

³⁹ Jervis, *How Statesmen Think*, 128.

Washington and Moscow had accepted the proposition that mutual, secure second-strike capability diminished the relevance of the nuclear balance between the superpowers.⁴⁰

When confronted with behavior that appeared inconsistent with the objective features of a situation, Jervis often turned to political psychology for explanations. His goal, however, was more ambitious: Understanding the processes of perception might help leaders avoid misperceptions and perhaps lead to less international conflict. “Political psychology,” he wrote, “at least as it deals with international politics, tends to be normatively inflected and reformist.”⁴¹ As the examples above indicate, this tendency is not limited to approaches that are self-consciously psychological. Even if they aim to be purely analytic, theories that purport to tell us how others will behave — including how others will react to us — lend themselves to prescription.⁴²

Sometimes, however, it is the empirical record (or lack thereof) that necessitates the shift to a normative theory. In the nuclear era, when global Armageddon is not only thinkable but possible, the need for normative theory is as obvious as it is disquieting. Luckily, we don’t have a normal distribution on which to build theories of the origins or outcomes of wars between states with large nuclear arsenals. Nonetheless, the Cold War confronted decision-makers with a series of nuclear crises for which theory was indispensable as a

⁴⁰ Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, 3rd ed. (New York: Alfred A. Knopf, 1963); John J. Mearsheimer and Stephen M. Walt, *The Israel Lobby and U.S. Foreign Policy* (New York: Farrar, Straus, and Giroux, 2007); John J. Mearsheimer, *The Tragedy of Great Power Politics* (New York: W.W. Norton, 2001); and Robert Jervis, *The Illogic of American Nuclear Strategy* (Ithaca, NY: Cornell University Press, 1985).

⁴¹ Jervis, *How Statesmen Think*, 125.

⁴² Jervis, *How Statesmen Think*, 128.

guide.⁴³ Jervis was certainly right when he suggested that statesmen are less interested than scholars in methodological debates about the relative strengths of deductive versus inductive theory building. But he was also right to point out that strategies were likely to misfire if the theories and models informing policy failed to anticipate leaders' choices when confronted with the prospect of nuclear war, or indeed escalation, if deterrence failed.⁴⁴

Yet even when the empirical record is favorable, we are inclined toward prescription because our theories are neither powerful nor precise enough to provide a clocklike understanding of international relations. If we could, prescription would be unnecessary.⁴⁵ Freedom of action arises because political systems are not only complex, but open, and political laws indeterminate.⁴⁶ The freedom of decision-makers to remain ignorant of our findings or indeed outright reject them is a precondition for any effort to evaluate and judge their choices. But caution is called for, because this situation allows for the emergence of a methodological paradox. To the extent that decision-makers come to understand the processes and outcomes captured by our theories, they may also begin

⁴³ For Bernard Brodie, strategy and theory were interchangeable concepts. See Bernard Brodie, "Why Were We So (Strategically) Wrong?" *Foreign Policy*, no. 5 (Winter 1971-1972): 151-61, <https://doi.org/10.2307/1147725>.

⁴⁴ Robert Jervis, "Perception and Deterrence," *International Security* 7, no. 3 (1982/83): 3-20; and Jervis, "Rational Deterrence: Theory and Evidence," *World Politics* 41, no. 2 (January 1989): 189-207, <https://doi.org/10.2307/2010407>.

⁴⁵ For thought provoking discussions of the issues, see Karl R. Popper, "Of Clouds and Clocks: An Approach to the Problem of Rationality and the Freedom of Man," in Popper, *Objective Knowledge: An Evolutionary Approach* (Oxford: Clarendon Press, 1972), 231-32. The classic extension of Popper's analysis to the field of politics is Gabriel A. Almond and Stephen J. Genco, "Clouds, Clocks, and the Study of Politics," *World Politics* 29, no. 4 (July 1977): 489-522, <https://doi.org/10.2307/2010037>.

⁴⁶ Jervis, *Systems Effects*, 295.

to act in novel ways that both exploit and negate those theories.⁴⁷ The role of theory in such situations is complex, as it not only seems to explain behavior but also to cause it.

One of Jervis' favorite examples of this was what he termed the "domino theory" paradox. Influential during the Cold War and used by some in Washington to justify fighting in Vietnam, the domino theory maintains that a state's defeat in one area will embolden its adversaries to challenge it in others. "But statesmen who believe the theory and who suffer limited defeats may act especially boldly to try to show that the theory is incorrect, or at least does not apply to them. In seeking to prevent the operation of the anticipated dynamics, statesmen then disconfirm the theory."⁴⁸ In such cases, theory loses both its claim to general empirical validity as well as its utility as a source of unambiguous prescriptive guidance.

Ethics and the Uncertainties of Anarchy⁴⁹

Despite the emphasis that Jervis placed on the implications of anarchy and the security dilemma for our understanding of international politics, he did not believe the international system's constraints are always strong enough to eliminate room for deliberation and choice. Like Morgenthau and Wolfers before him, Jervis recognized that

⁴⁷ Jervis, *How Statesmen Think*, 130–32.

⁴⁸ Jervis, *Systems Effects*, 267. For a related discussion, see Robert Jervis, *The Logic of Images in International Relations* (New York: Columbia University Press, 1979), 256–76.

⁴⁹ The discussion here draws on themes more fully developed in James W. Davis, "The (Good) Person and the (Bad) Situation: Recovering Innocence at the Expense of Responsibility?" in *Psychology, Strategy and Conflict: Perceptions of Insecurity in International Relations*, ed. James W. Davis (New York: Routledge, 2013).

“statesmen rarely are entirely the prisoner of forces beyond their own control.”⁵⁰ In particular, he believed that contemporary American decision-makers enjoy a far wider range of choices than their predecessors, even if the blessings of favorable geography spared many of the latter from the hard choices that are faced today.⁵¹ But can leaders of powerful states exert control over their environment and over outcomes with any degree of confidence?

Given the discussion thus far, skepticism seems warranted. By extension, the implications for the prospect of praiseworthy foreign policy appear sobering. Morgenthau’s assessment of the leader’s predicament was perhaps an exaggeration, but only slightly so:

The statesman ... must commit himself to a particular course of action in ignorance of its consequences, and he must be capable of acting decisively in spite of that ignorance. He must be capable of staking the fate of the nation upon a hunch. He must face the impenetrable darkness of the future and still not flinch from walking into it, drawing the nation behind him. Rather than seeking unattainable knowledge, he must reconcile himself to ineluctable ignorance. He is the leading part in a tragedy, and he must act the part.⁵²

⁵⁰ Robert Jervis, “Hans Morgenthau, Realism, and the Scientific Study of International Politics,” *Social Research* 61, no. 4 (1994), 869, <https://www.jstor.org/stable/40971063>.

⁵¹ See the discussions in Robert Jervis, “The Remaking of a Unipolar World,” *Washington Quarterly* 29, no. 3 (2006), 315–37, <https://doi.org/10.1162/wash.2006.29.3.5>; C. Vann Woodward, “The Age of Reinterpretation,” *American Historical Review* 66, no. 1 (1969): 1–19, <https://doi.org/10.1086/ahr/66.1.1>; and Arnold Wolfers, *Discord and Collaboration* (Baltimore, MD: Johns Hopkins University Press, 1960), 293–41.

⁵² Hans J. Morgenthau, “The Trouble with Kennedy,” *Commentary*, no. 33 (1962): 51–55, <https://www.commentary.org/articles/hans-morgenthau/the-trouble-with-kennedy/>.

Jervis' sympathy for this assessment led to a certain empathy for the decision-maker. For if decision-makers recognized the potential obstacles in their path, they might avoid failure but also shy away from many difficult but ultimately successful endeavors.⁵³ If confidence and perseverance depended on knowledge, political action would be debilitated altogether.

Because our theories are weak and indeterminate, even well-meaning and tutored decision-makers inevitably will adopt policies that prove ineffective and compromise other important interests and values. For many students of international relations, such uncertainties relegate any discussion of ethics to the realm of pedantry. But the fact that political action inevitably leads to the compromise of some values in pursuit of others does not preclude a consideration of ethics. It is the precondition for it.

The inescapability of politics and the inevitability of value trade-offs led classical realists to propose an ethical standard that demands a conscious and conscientious effort to try and minimize the negative effects of our actions. Thus, Arnold Wolfers argued that

[m]oral condemnation ... rests not on the fact that values have been destroyed, however deplorable or downright evil such destruction may be judged. Instead it is based on the conviction either that the action in

⁵³ Jervis, *Why Intelligence Fails*, 165.

question rested on false ethical standards or that in terms of agreed ethical standards, a less destructive choice could and should have been made.⁵⁴

Jervis agreed:

The temptation to believe that the environment is so extreme as to compel the most awful actions and the statesmen's hubris of thinking that their acts are beyond judging are terribly strong and must be constantly resisted Perhaps as shocking as the calculated violations of moral standards are the many cases in which statesmen do not even think of what their acts will cost in terms of innocent lives, deplorable precedents, and values sullied.⁵⁵

Conclusion

With the death of Robert Jervis, we have lost a freethinking and original theorist of the first order. Rooted in realist thinking, he understood the imperatives of power in international relations and the sacrifices necessary to maintain the state's security. Recognizing leaders' freedom of action and the limitations of our theories, he nonetheless consistently argued that leaders should search for policies that might limit damage to their values and help them to avoid disaster, if the assumptions on which policies are formulated turn out to have been mistaken. Ethics from this perspective is prudential and can help decision-makers avoid the "comforting sense of confidence" inspired by actions taken in pursuit of a narrow conception of immediate self-interest. That is a form of

⁵⁴ Arnold Wolfers, "Statesmanship and Moral Choice," *World Politics* 1, no. 2 (1949), 180, <https://doi.org/10.2307/2008842>.

⁵⁵ Jervis, *The Meaning of the Nuclear Revolution*, 133-34.

politics Jervis derisively termed “pseudo-Realism”: a “preoccupation with power and interest narrowly conceived that so often is not only evil but self-defeating.”⁵⁶

James W. Davis is Professor of International Politics and Director of the Institute of Political Science at the University of St. Gallen, Switzerland. He is the author or editor of four books, including Clausewitz on Small War (Oxford University Press) and Threats and Promises: The Pursuit of International Influence (Johns Hopkins University Press).



⁵⁶ Jervis, *The Meaning of the Nuclear Revolution*, 134.

4. The Importance of *System Effects* to Grand Strategy

Stacie Goddard

Robert Jervis, who died in December 2021, will be remembered as one of the most influential theorists of international politics. During a career that spanned five decades, he authored some of the most significant books in the field, including *The Logic of Images in International Relations*, *Perception and Misperception in International Politics*, *The Meaning of the Nuclear Revolution* and *System Effects: Complexity in Political and Social Life*.⁵⁷ Jervis' work stretched across interdisciplinary boundaries, shaping not only political science, but also international relations theory and the fields of history, psychology, and sociology. It is hardly surprising, then, that Jervis' work also influenced how we think about grand strategy, defined as how it is that leaders devise plans designed to bring a "nation's military, economic, and social resources into alignment with its ends abroad."⁵⁸ Jervis' theories touched on every element of grand strategy: how we think about the "national interest" and how we select the instruments best able to achieve our ambitions.

But perhaps Jervis's most important contribution to the study of grand strategy was to keep all of us humble. "Grand strategy" seems to suggest that leaders have an ability to control their environment, if only they can identify the right ambitions, or choose the

⁵⁷ Robert Jervis, *The Logic of Images in International Relations* (New York: Columbia University Press, 1989); Jervis, *Perception and Misperception in International Politics* (Princeton University Press, 2017); Jervis, *The Meaning of the Nuclear Revolution* (Ithaca, NY: Cornell University Press, 1990); and Jervis, *System Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton University Press, 1999).

⁵⁸ Paul Kennedy, "Grand Strategy in War and Peace: Toward a Broader Definition," in *Grand Strategies in War and Peace*, ed. Paul Kennedy (New Haven, CT: Yale University Press, 1991), 1–2.

perfect instrument. Instead, Jervis reminds us that in a complex international system, the ability to control the actions of others, let alone outcomes, is difficult if not impossible.

A Guiding Light on Grand Strategy

To formulate a grand strategy, leaders must identify a “national interest,” as well as threats to their nation’s ambitions. Jervis’ books on images, as well as his work on misperceptions, illuminate how leaders perceive their own interests and the intentions of others and, especially, under what conditions they are likely to misperceive their own environment. We might also investigate questions of interest and threats by turning to Jervis’s work on intelligence — the ways in which nations collect and analyze information about their opponent’s capabilities and intentions, and how they might get intelligence wrong. In his last book, for example, he examined why policymakers often look at misleading indicators of military strength, and how psychological pressures can lead them to run particularly high risks.⁵⁹

A grand strategy must also identify means — the instruments leaders will use to expand their influence and limit the influence of others. Jervis spent decades thinking about the ways in which one particular instrument, nuclear weapons, had changed grand strategy. As he argued in this publication, revisiting the argument from *The Meaning of the Nuclear Revolution*, “[O]nce the United States and Soviet Union had established secure second-strike forces and entered a world of Mutual Assured Destruction (MAD), military victory was impossible. This constituted a revolution in the relationship between military force

⁵⁹ Robert Jervis, *How Statesmen Think: the Psychology of International Politics* (Princeton, NJ: Princeton University Press, 2017). Others who draw on psychology to discuss grand strategy include Keren Yahri-Milo, *Knowing the Adversary* (Princeton, NJ: Princeton University Press, 2014).

and political outcomes.”⁶⁰ On the face of it, nuclear weapons seemed to have simplified grand strategy by taking military victory off the table. In reality, nuclear weapons often made grand strategy all the more complex.

Take, for example, the question of extended deterrence. During the Cold War, a key part of the containment grand strategy was that the United States should use its military and economic capabilities in order to ensure that major industrial and economic centers — Japan and Western Europe, most notably — remained free from Soviet domination. But how could the United States come to the aid of its allies in NATO and Asia, if the threat to escalate to nuclear war simply was not credible? How could the United States make a credible commitment, in Thomas Schelling’s language, to defend these areas against attack if victory were impossible?⁶¹ Attempting to answer these questions did not simplify grand strategy. Far from it. Instead, it led to demands for ever more sophisticated and precise American strategic forces designed to dominate the Soviet Union at every rung of the escalation ladder.

All of Jervis’ work holds key lessons for both scholars and practitioners of grand strategy. But I would suggest — and I think he would have agreed — that his most theoretical work holds some of the most crucial insights for the creation and implementation of grand strategy. In *System Effects*, Jervis argued that system dynamics were likely to undercut both the ability of policymakers to control the outcomes of their actions, as well

⁶⁰ Robert Jervis, “Author Response: Reflection on ‘The Meaning of the Nuclear Revolution,’ 30 Years Later,” in “Book Review Roundtable: The Meaning of the Nuclear Revolution 30 Years Later,” *Texas National Security Review*, April 30, 2020, <https://tnsr.org/roundtable/book-review-roundtable-the-meaning-of-the-nuclear-revolution-30-years-later/>.

⁶¹ Thomas Schelling, *Arms and Influence* (New Haven, CT: Yale University Press, 1966).

as the scholar's capacity to develop determinative causal theories to explain these outcomes. This book, while not a straightforward guide to the practice or study of grand strategy, offers essential lessons in the importance of prudence and humility in the face of a complex world.

System Effects

According to Jervis, we are dealing with a “system” whenever “(a) a set of units or elements is interconnected so that changes in some elements or their relations produce changes in other parts of the system, and (b) the entire system exhibits properties and behaviors that are different from those of the parts.”⁶² While Jervis draws from examples of systems in the physical, biological, and social worlds, he is primarily interested in the dynamics of international politics. With interconnections both across and within state boundaries, international politics may be among the most complex of social systems.

Of course, Jervis was not first to treat international politics as a system. Much of the work in international relations in the 1970s, most notably Kenneth Waltz's *Theory of International Politics*, was interested in theorizing international relations at the systemic level, in order to explore regularities that appear across time and space.⁶³ Jervis' goal was somewhat different. He was less interested in explaining continuities than he was in showing how interconnections among a system's units complicate both actions and outcomes.

⁶² Jervis, *System Effects* (Princeton, NJ: Princeton University Press, 1997), 6.

⁶³ See, e.g., Kenneth N. Waltz, *Theory of International Politics* (New York: McGraw-Hill, 1979).

And this is precisely why *Systems Effects*, despite its theoretical and interdisciplinary orientation, is of critical importance to the practice and study of grand strategy. Grand strategy, at least in its ideal form, suggests a level of control and the sense that leaders can develop a course of action that shapes outcomes in international politics. The idea behind America's Cold War strategy of containment, famously, was that by mobilizing military, economic, and diplomatic might, the United States could deter Soviet revolutionary aggression and eventually pave the way for more normal politics. The United States could use its own resources to influence Soviet behavior and shape outcomes. After the Cold War, a grand strategy of "liberal primacy" was designed to harness U.S. military and economic dominance to expand and sustain institutions that underpinned a liberal institutional order.

System Effects, in contrast, argues that the level of control this ideal form of grand strategy suggests is impossible. Within a system, policymakers will find their efforts to control the actions of others and steer outcomes in their favor thwarted at every turn. Complex connections mean that systems are rife with fundamental uncertainty. It is not simply that policymakers and scholars do not have enough information to foresee the effects of their actions. It is that, when acting in a system, interactions often change actors and their environment in ways that are contingent and unpredictable. For example, grand strategies in a system produce feedback effects where "the effect of actions is to amplify the problem the actions are intended to solve."⁶⁴ Arguably, Russia's grand strategy over the last decade has been to increase its control over what it sees as its sphere of influence. It has done so using economic and information instruments to disrupt NATO allies. Yet, its most recent attempt to exert influence through an invasion

⁶⁴ Robert Jervis, "Systems Effects Revisited," *Critical Review* 24:3, no. 3 (2012): 393,

<https://doi.org/10.1080/08913811.2012.767048>.

of Ukraine created negative feedback, drawing together the alliance that the country had been working so hard to undermine.

Grand strategies can also change the environment in which actors are operating, altering connections and actors' preferences in the process. When Dean Acheson suggested that Korea was outside of America's "defensive perimeter," he was likely sincere, but the invasion of Korea shifted U.S. preferences. In a system, moreover, relationships are never unilateral or even bilateral — actions taken against one actor will reverberate throughout the entirety of the system. In the late 19th century, for example, Germany's turn to an imperial grand strategy unintentionally drew France and Britain closer together. To be fair, Bismarck saw the possibility of that system effect decades earlier.

And that brings us to another level of system complexity. The international system is not populated by automatons, reacting predictably to shifts in their environment. The international system is inhabited by human beings, who are reflective, social creatures. What this means is that we can't understand the effects of grand strategy by looking only at the system's connections (although that is complex enough on its own!). We have to understand how actors perceive their environment. It is not only the connections but the *beliefs* about those connections that can shape actions and outcomes. As Jervis argued, this means that system effects change as actors learn about them and shift their own behavior as a result.

System effects thus make the practice of grand strategy difficult. And they hinder the efforts of scholars who want to study it. As Jervis argued, in recent years we've seen an increase in "the discipline's desire to pin down causation by eliminating selection effects,

reciprocal causation, and endogeneity.”⁶⁵ This methodological rigor is admirable but selection effects, reciprocal causation, and endogeneity are features, not bugs, of complex systems. They are not, according to Jervis, “threats to causal inference but ... fundamental forces operating in the world.” Consider the ongoing debate about whether America’s strategy of engagement is responsible for China’s rise, or whether NATO expansion led to the Russian invasion of Ukraine. Anyone mindful of system effects understands that these arguments are hopeless simplifications that tell us little about an interconnected world. We can never just change “one thing” in grand strategy and predict how the world might be different. In a world without engagement, for example, China might have escalated in the Straits. Or, in the absence of economic might, the Chinese Communist Party might have lost legitimacy. Both counterfactuals are plausible, and had they taken place, they would have changed the entire system of international politics.

Grand Strategy and Humility in a Complex World

All of this might suggest a certain level of futility for those creating, implementing, or studying grand strategy. Jervis was not so pessimistic. For him, approaching grand strategy from a systems perspective opened up space for better policy and social science. The last chapter of *System Effects* is full of guidance to policymakers on how to act more effectively within a system. He encouraged strategists that “when we are dealing with a system ‘we can never do merely one thing.’ This means not only that behavior rarely has only one effect, but, more importantly here, that in order to produce a desired change, the

⁶⁵ Jervis, “*Systems Effects Revisited*,” 395.

actor must do several things.”⁶⁶ He noted that “[u]nderstanding feedbacks similarly may allow actors to follow indirect routes to their goals.”⁶⁷

For scholars, he argued that studying the causal effects of grand strategies was possible, but not straightforward. He noted that “the standard comparative method often misses the dynamics at work and ignores the ways in which earlier events and their interpretations undermine the assumption that the cases being compared are independent of each other.” Likewise, we may have cases where similar causal mechanisms end up producing entirely different outcomes. A strategy of conventional deterrence may succeed at one time but not another, not because of something inherent to the strategy, but because of how that strategy is interacting with myriad other processes that exist in the international system at that time. Social science is still possible, because “scholars have the luxury of trying to sort out causation after actions have already been taken and their effects have occurred.”⁶⁸ Predicting the effects of grand strategy, on the other hand, is likely impossible.

For all of its complexity, the take-home lesson of *System Effects* for grand strategists is relatively straightforward (and in line with Jervis’ own personality): Be humble. Understanding system effects is critical for taking more effective action and producing better scholarship. But, as Jervis cautioned, “[F]ew miracles will follow from thinking systemically because the interactive, strategic, and contingent nature of systems limits the extent to which complete and deterministic theories are possible.”⁶⁹ By looking at the

⁶⁶ Jervis, *System Effects*, 291.

⁶⁷ Jervis, *System Effects*, 287.

⁶⁸ Jervis, “*Systems Effects Revisited*,” 412.

⁶⁹ Jervis, *System Effects*, 295.

world through the lens of system effects, we can be better grand strategists, either as scholars or as practitioners. But part of doing so is letting go of the illusion of control that the study of grand strategy so often implies.

Professor Stacie Goddard is the Betty Freyhof Johnson '44 Professor of Political Science and faculty director of the Madeleine Korbelt Albright Institute for Global Affairs at Wellesley College. Her latest book, When Right Makes Might: Rising Powers and World Order, was published by Cornell University Press in 2018. Her other writings have appeared in International Organization, International Security, and Security Studies, as well as the New York Times and the Washington Post. She currently is a series editor for Columbia University Press, and an editor for The Monkey Cage at the Washington Post.



5. Bob Jervis' Impact on Understanding Cyber Conflict

Jason Healey

Bob Jervis made important contributions to research on cyber conflict because he knew that, although it was fought using new kinds of tools, it was still conflict. Bob's instincts — formed by decades of research and interaction with policymakers — told him that cyber conflict was dynamic and incredibly complex, with humans on either side, including military, intelligence, and political leaders. Such a conflict would be driven by many of the same dynamics, emotions, miscalculations, misperceptions, and cognitive errors as conflicts that are fought on more traditional battlefields.

These conclusions led him to be cautious, if not downright doubtful, about theories and strategies like U.S. Cyber Command's "defending forward," which argue that the only path to security and stability in cyberspace is to reduce operational constraints.⁷⁰ U.S. cyber forces must be able to "maneuver seamlessly across the interconnected battlespace, globally, as close as possible to adversaries and their operations."⁷¹

These types of strategies seemed perhaps a bit too self serving and simple to Bob. Sure, such operations might intercept and slow down adversaries. But would our shots truly

⁷⁰ "Achieve and Maintain Cyberspace Superiority: Command Vision for US Cyber Command," United States Cyber Command, April 2018,

<https://www.cybercom.mil/Portals/56/Documents/USCYBERCOM%20Vision%20April%202018.pdf>.

⁷¹ Paul M. Nakasone, "A Cyber Force for Persistent Operations," *Joint Forces Quarterly* 92, January 2019, <https://ndupress.ndu.edu/Media/News/News-Article-View/Article/1736950/a-cyber-force-for-persistent-operations/>.

get an adversary to step back and not just temporarily keep its head down? As Jack Levy put it, more generally, in his tribute to Bob,

Building on theories of complexity, Jervis emphasized that everything is connected to everything else; that ‘we can never do merely one thing’; that causal relationships are often interactive; that non-linear relationships, third-party behavior, and negative and positive feedback generate unintended consequences; and that actors co-evolve with their environments.

In Bob’s view, pushing back against cyber adversaries, as U.S. Cyber Command asserts is an imperative, seemed accordingly unlikely to lead to long-term stability, regardless of the amount of agility, skill, or persistence applied.

Too many cyber theories and strategies appeared to be rooted in narratives of the intransigence and brazenness of cyber adversaries, requiring the American military accordingly to adopt yet looser rules of engagement (and not coincidentally larger budgets). This struck Bob as all a bit contrived, a re-telling of history with the United States recast as the plucky underdog instead of the entitled rich kid (and occasional bully) enjoying the perks of playground hegemony.

Cyber conflict was his beloved *Rashomon* being played out yet again, with each participant having a widely differing view of even the most basic facts in an unfathomably complex system, leading to misperception, miscalculation, and yet more complexity.⁷²

⁷² Robert Jervis, *How Statesmen Think: The Psychology of International Politics* (Princeton, NJ: Princeton University Press, 2017).

“What each player does influences not only specific responses by others,” he wrote in 2016, “but many of the contours that will guide future play.”⁷³

More importantly, he wondered under what set of circumstances U.S. cyber operations would get adversaries to reverse course to accept American norms and stability? The “uncertainties and ambiguities ... and lack of shared understandings about what would constitute escalation,” he wrote, should give policymakers substantial doubts about any particular path to deterrence or stability. They should be especially leery about a strategy that depends almost entirely on yet more U.S. cyber operations that America’s adversaries — whose blood is up just as much — are supposed to recognize as defensive and stabilizing.

I didn’t know of Bob’s concerns when I became his colleague at Columbia University’s School of International and Public Affairs in 2015. Few people of his generation could get their heads around cyber issues (Joe Nye of Harvard is one of the other most-prolific outliers). I knew Bob would be different when, in my first months at the storied Saltzman Center for War and Peace Studies, I knocked on his office door to talk about spiral escalation in cyber conflict, a topic we would write about years later. I was surprised to hear him say, “Ah yes, like Olympic Games,” using the formal name for the joint U.S.-Israeli operation that resulted in the Stuxnet attack on Iran’s nuclear enrichment program. I’d not expected him to be so well read in cyber conflict and to be familiar with such details. It was the first time he showed that his understanding went below the headlines.

⁷³ Robert Jervis, “Some Thoughts on Deterrence in the Cyber Era,” *Journal of Information Warfare* 15, no. 2 (2016): 66–73, <https://www.jstor.org/stable/26487532>.

Collaboration

Bob was famous for his wit, patience, and willingness to mentor the upcoming generation of scholars. I was not the only one who would knock on that door looking for advice, guidance, or his opinion on some thorny topic. He always attended the School of International and Public Affairs' cyber workshops and was especially keen to join the ones that featured younger scholars, where he could see the latest methodologies. Still, the cyber academics who he kept closest — such as J.D. Work, with his encyclopedic memory of who hacked whom — were those with long careers as practitioners, rich with knowledge beyond what was printed in journals.

One of my greatest personal joys was when he and I agreed on just how dangerous cyber conflict could be. Building on his 1978 classic “Cooperation Under the Security Dilemma,” Bob noted that it wasn't just “doubly” dangerous, but “quintuply” dangerous, or worse. This early connection of his previous work with cyber issues led us to surmise that there were all sorts of hidden and misunderstood dynamics of cyber conflict.

The Minerva Initiative of the U.S. Department of Defense agreed, and funded Bob and me for a three-year exploration of these dynamics. Out of this time of exploration grew all of our subsequent thinking and publications on cyber conflict, even those that took place outside of the original period of this generous funding. As discussed more below, there are many more insights from our collaboration during this time that are yet to be published.

The highlight of our work together was a paper titled “The Escalation Inversion and Other Oddities of Situational Cyber Stability,” published in 2020 in the *Texas National*

ROUNDTABLE: Remembering Robert Jervis

<https://tnsr.org/roundtable/remembering-robert-jervis/>

Security Review. The goal of the paper was to move away from asking “whether” cyber operations are escalatory or de-escalatory (a false binary of much past research on this and other dynamics), and instead to ask “under what conditions” it might be one or the other.⁷⁴ Bob brought a deep appreciation of history to his work, so we were a natural fit, as I’d published the first history book of cyber conflict.⁷⁵ We both suspected that the escalatory nature of cyber operations would depend at least as much on the geopolitical tensions between adversaries as on the technical characteristics of cyber capabilities.

The result of this first collaboration was a recognition that there were at least four different escalatory mechanisms. The one with the most academic currency was how cyber capabilities can act as a “Pressure Release.” Because their effects can be both reversible and non-lethal, their use will often defuse geopolitical crises, findings that are associated with the work of other academics like Josh Rovner, Ben Jensen, and Brandon Valeriano.⁷⁶ However, we were perhaps the first to highlight that this is only true in times of relative peace and when *both* rivals strongly want to limit conflict. We were in even newer territory with the three other escalatory mechanisms that we proposed: what we called “Spark,” “Pull Out the Big Guns,” and the “Escalation Inversion.”

⁷⁴ Jason Healey and Robert Jervis, “The Escalation Inversion and Other Oddities of Situational Cyber Stability,” *Texas National Security Review* 3, no. 4 (Fall 2020): 30-53, <http://dx.doi.org/10.26153/tsw/10962>.

⁷⁵ Jason Healey, ed., *A Fierce Domain: Conflict in Cyberspace 1986 to 2012* (Arlington, VA: Cyber Conflict Studies Association, 2013).

⁷⁶ Joshua Rovner, “Cyber War as an Intelligence Contest,” *War on the Rocks*, Sept. 16, 2019, <https://warontherocks.com/2019/09/cyber-war-as-an-intelligence-contest/>; and Benjamin Jensen and Brandon Valeriano, “What Do We Know About Cyber Escalation? Observations from Simulations and Surveys,” Atlantic Council, November 2019, https://www.atlanticcouncil.org/wp-content/uploads/2019/11/What_do_we_know_about_cyber_escalation_.pdf.

For more than three decades, cyber conflict has been intensifying over increasingly existential issues and so might trigger an acute geopolitical crisis, a scenario we called “Spark.” Perhaps the best example so far is the pressure on U.S. policymakers to stop Russian ransomware gangs, especially after the attack on Colonial Pipeline.⁷⁷

Pull Out the Big Guns (a name that neither of us was ever happy with) described our concern that the increasing rate of acute geopolitical crises — encapsulated in phrases like “great-power competition” — would tempt rivals to engage in increasingly risky cyber operations. Restraint, which might seem necessary in an initial crisis between rivals, could seem naïve in a second crisis and could be a dangerous sign of weakness in a third. Dangerous times call for dangerous measures and, in such times when both rivals’ blood is up, decision-makers on either side cannot easily shrug off offensive cyber operations as a mere pressure release.

The final mechanism, Escalation Inversion, recognized our concern that if decision-makers think that war is likely, they may be tempted to use cyber capabilities early on to threaten, blind, or confuse their rival, especially if that rival is stronger. Since cyber capabilities could be used in a surprise attack to give an asymmetric advantage, a state might feel the need to attack first before its rival has a chance to do the same. As we wrote in these pages, “Cyber capabilities may be to World War III as mobilization

⁷⁷ David E. Sanger, Clifford Krauss, and Nicole Perlroth, “Cyberattack Forces a Shutdown of a Top U.S. Pipeline,” *New York Times*, May 8, 2021, <https://www.nytimes.com/2021/05/08/us/politics/cyberattack-colonial-pipeline.html>; and Ellen Nakashima, “Pressure Grows on Biden to Curb Ransomware Attacks,” *Washington Post*, July 7, 2021, https://www.washingtonpost.com/national-security/ransomware-biden-russia/2021/07/06/ff52a9de-de72-11eb-b507-697762d09odd_story.html.

timelines were to World War I,” helping initiate a war that otherwise might have been avoided.

This rather long article (about 15,000 words) has already been split into two shorter pieces for easier digestion. These articles focus on three decades of intensifying cyber conflict,⁷⁸ a deeply disturbing trend that is often ignored in the cyber literature, and on the underestimated role of surprise in cyber attacks.⁷⁹ A third article, summarizing the four escalation mechanisms, is next up. Sadly, Bob will not be around to see it published. At one of Bob’s famous lunches with Columbia’s political scientists — he would order, depending on whether we would walk north or south along Amsterdam Avenue, a gyro, steak sandwich, or thick Sicilian slice, always followed by him peeling a tiny Mandarin orange for his insatiable sweet tooth — we had the idea for our second paper.⁸⁰ The topic was how overclassification impacts cyber conflict and clouds the perceptions of both the attacker and defender. Bob was a longtime member (and former chair) of the CIA’s Historical Review Panel, whose primary purpose is “to provide full and frank advice to the Director on declassification priorities,” so classification issues were always on his mind.⁸¹

⁷⁸ Jason Healey and Robert Jervis, “How to Reverse Three Decades of Escalating Cyber Conflict,” Atlantic Council, March 24, 2021, <https://www.atlanticcouncil.org/blogs/new-atlanticist/how-to-reverse-three-decades-of-escalating-cyber-conflict/>.

⁷⁹ Jason Healey, “Preparing for Inevitable Cyber Surprise,” *War on the Rocks*, Jan. 12, 2022, <https://warontherocks.com/2022/01/preparing-for-inevitable-cyber-surprise/>.

⁸⁰ Jason Healey and Robert Jervis, “Overclassification and Its Impact on Cyber Conflict and Democracy,” Modern War Institute, March 22, 2021, <https://mwi.usma.edu/overclassification-and-its-impact-on-cyber-conflict-and-democracy/>.

⁸¹ “Minutes 06/23/06,” Public Interest Declassification Board, National Archives, accessed May 19, 2022, <https://www.archives.gov/declassification/pidb/meetings/minutes06-23-06.html>.

This issue was closely tied to another of his most lasting contributions, which was on the perception and misperceptions of policymakers.

Our Columbia colleagues Tom Christensen and Keren Yarhi-Milo later paid tribute to Bob, who, they wrote, “focused on how leaders interpret the noisy world of international politics, showing persuasively that their cognitive biases, preexisting beliefs, and personal experiences often prove as consequential, or even more consequential, than objective conditions.”⁸² These factors could be substantially shaped by classification decisions. We concluded in our second collaboration that “[n]either the highest level of decision makers, nor their security apparatuses, have better than a murky and incomplete picture of cause and effect, which they spin for security, political, or bureaucratic advantage.” The United States, in particular, classifies the punches it throws but shouts loudly about those it takes, clouding the relationship of cause and effect.

For Bob, who always had a special, abiding sympathy for decision-makers, this was less an accusation than a warning against self-deception and an admonition to keep a look out for one-sided perspectives and motivated reasoning.

Influence and Inspiration

Many of Bob’s cyber-related contributions were not in his actual written output, but in his influence in Washington, D.C. and among academics. He was often called down to the capital to share his perspective in the Pentagon, at the CIA, or at Fort Meade, the home of

⁸² Thomas J. Christensen and Keren Yarhi-Milo, “The Human Factor: How Robert Jervis Reshaped Our Understanding of International Politics,” *Foreign Affairs*, Jan. 7, 2022, <https://www.foreignaffairs.com/articles/world/2022-01-07/human-factor>.

U.S. Cyber Command and the National Security Agency. His stature as a preeminent scholar of international relations meant that most of those in the room had read his work on “doubly dangerous” security dilemmas and misperceptions in graduate school or even as undergrads. When I raised the security dilemma in a meeting of the Defense Science Board Task Force on Cyber Deterrence, another member acknowledged automatically that we were “in Jervis territory.”⁸³

Bob’s classic book *System Effects* profoundly influenced my 2019 article on persistent engagement,⁸⁴ one of the first articles to propose a causal argument and describe just what such engagement might mean in real terms. It also explored the academic and military histories of the concepts of active defense and cyber deterrence. Earlier work of mine had covered similar ground looking at systemic cyber risk, though with less rigor than I could with Bob’s input.

Generations of fellow academics will understand the deep satisfaction of being able to go to Bob’s office (in the afternoon, of course, when he’d be reading a journal with his feet propped up) to talk through some new development. In this case, it was to explore how persistent engagement could be seen as a feedback loop, as he’d described in *System Effects*. The cyber optimists who saw persistent engagement as stabilizing were essentially arguing that defending forward with cyber operations would cause beneficial, negative feedback while we pessimists feared it would cause harmful, positive feedback

⁸³ *Final Report of the Defense Science Board Task Force of Cyber Deterrence*, Defense Science Board, Feb. 28, 2017, https://dsb.cto.mil/reports/2010s/DSB-CyberDeterrenceReport_02-28-17_Final.pdf.

⁸⁴ Robert Jervis, *System Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton University Press, 1997); and Jason Healey, “The Implications of Persistent (and Permanent) Engagement in Cyberspace,” *Journal of Cybersecurity* 5, no. 1 (2019), <https://doi.org/10.1093/cybsec/tyz008>.

and would spin out of control. Weeks later, I returned to excitedly reveal that — after I’d heard about an environmental scientist who had realized that climate change was driven by multiple, interacting feedback loops (winning a Nobel Prize in the process) — I’d realized that cyber conflict was not driven by *one* feedback loop but at least *eight*.

Bob’s influence also helped Rose McDermott, his former student and long-time mentee,⁸⁵ to publish the first paper on the role of emotion in cyber conflict, in which she examined the “recent literature in psychology and neuroscience on the effects of emotion on both choice and action” in order to take a close look at “the influence of specific emotions on decision-making in cyber conflict.”⁸⁶

At Bob’s intellectual home at the Saltzman Institute of War and Peace Studies, we are keeping his legacy alive. We are working to expand my paper with Bob on overclassification into a book chapter for the Modern War Institute. And, with my Saltzman colleagues Yarhi-Milo and Erica Borghard, we are exploring how cyberspace as a semi- or differently governed realm makes the role of political psychology particularly relevant, not least to understanding escalation and stability within cyber conflicts. Because cyber conflict is semi- or differently governed (not ungoverned), decision-makers are more likely to be impacted by uncertainty, leading them to rely more on traditional cognitive frameworks, heuristics, and emotions, which may be mismatched to the strategic environment or the expectations of rival states. Organizational cultures built to manage traditional conflicts (or fight traditional wars) may find themselves unsuited to

⁸⁵ Rose McDermott, “Robert Jervis: Scholarly Silverback,” accessed at Saltzman Institute of War and Peace Studies, May 26, 2022, http://www.siwps.org/wp-content/uploads/diplo_McDermott_Jervis.pdf.

⁸⁶ Rose McDermott, “Some Emotional Considerations in Cyber Conflict,” *Journal of Cyber Policy* 4, no. 3 (2019): 309–25, <https://doi.org/10.1080/23738871.2019.1701692>.

cyber conflict while cognitive biases raise the risks of misperception and miscalculation. Bob was to share the role of principal investigator with others at Saltzman, but now we shall have to carry on without him.

My great sadness in working with Bob was a delay to the crowning paper of our Minerva-funded efforts: a 15,000-word, encyclopedic categorization of every dynamic of cyber conflict. It was essentially done in the autumn of 2020, when we first learned of Bob's diagnosis. But I just wanted to clear up one last detail before publication, clarifying under what conditions the offense or defense had the advantage in cyberspace. This was not just a simple blog post over the holiday break, as I'd hoped, but a year-long effort. The resulting paper is one I'm tremendously proud of, but the delay meant that we were unable to publish the work in his lifetime.

During the first half of summer break, I was blessed to have lunch almost every day with Bob and another legend, Dick Betts (gyro, Godfather hero,⁸⁷ or pepperoni roll). Because of the pandemic, that dropped to just the infrequent Zoom lunch with a group of colleagues from Saltzman and elsewhere. The gradually decreasing contact with Bob over the last two years means that I haven't quite accepted that he has passed. In a way, this thrills me and I'm unwilling to let it go, as it drives me to new ideas. But, even though he is gone, I know I will *always* be able to knock on his door again for more guidance, even if it is in my own imagination.

⁸⁷ "Godfather Combination Hero," Hamilton Deli, accessed May 19, 2022, <https://menupages.com/hamilton-deli/1129-amsterdam-ave-new-york/menu-item?id=6142724>.

Jason Healey is a senior research scholar at Columbia University's School for International and Public Affairs, specializing in cyber conflict and risk. He started his career as a U.S. Air Force intelligence officer, helping create the world's first joint cyber command before moving to cyber response and policy jobs at the White House and Goldman Sachs. He was the editor of the first history of conflict in cyberspace, A Fierce Domain: Cyber Conflict, 1986 to 2012. He is on the DEF CON and Black Hat review boards and served on the Defense Science Board task force on cyber deterrence.



6. Robert Jervis on Political Psychology

Rose McDermott

Robert Jervis' impact on political psychology within the field of international relations is both inspiring and intimidating. He pioneered the incorporation of theories, methods, and ideas from social psychology in particular into the analysis of foreign policy decision-making and international relations theory more generally. Jervis infused much of his work with these ideas, but perhaps no work is better known or more foundational to this effort than *Perception and Misperception in International Relations*.⁸⁸ But his influence in political psychology neither starts nor ends with this iconic work. Rather, because he helped define the field, his work also directed it in some important, if largely unseen and unchallenged, ways.

Because I have discussed the more specific aspects of Jervis' substantive contribution to political psychology elsewhere,⁸⁹ I take this opportunity to reflect on the larger ways in which Jervis' work set the agenda and defined the standard for work in international relations that includes some psychological elements. He did so in at least three fundamental ways: by highlighting the influence of the individual on state level outcomes; emphasizing largely unmotivated cognitive biases in analyzing the problems that can plague individual decision-makers; and focusing on larger theoretical issues.

⁸⁸ Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 2017).

⁸⁹ Rose McDermott, "Contributions to Political Psychology," in *Perceptions of Insecurity*, ed. J. Davis (New York: Taylor & Francis, 2012).

The Role of the Individual

Jervis was not the first one to examine the importance of the individual in explaining larger political outcomes. Others came before him, most notably Harold Lasswell,⁹⁰ whose many influential students, including Fred Greenstein and Herb Simon,⁹¹ continued the tradition of incorporating psychological concepts into their work. Notably, and not insignificantly, Lasswell took a psychodynamic approach to his work. This model came out of Freudian psychoanalysis that largely located the motive for human behavior in drives toward sex and aggression. This was the dominant psychological theory at the time he was writing in the 1930s and so, although Lasswell's psychodynamic emphasis was not surprising, it limited the usefulness of this form of analysis for many kinds of investigation. The inherent nature of the theory restricted the range of questions, the search for evidence, and the domains of inquiry that could be generated. Sometimes this approach can prove quite insightful in the study of individual leadership, especially when extensive historical information is available, as was the case with Alexander and Juliette George's psychobiography of Woodrow Wilson.⁹² However, psychoanalytic notions also

⁹⁰ H.D. Lasswell, *Psychopathology and Politics* (Chicago: University of Chicago Press, 1986); and H.D. Lasswell, *Power and Personality* (New York: Routledge, 2017).

⁹¹ Fred I. Greenstein, "Can Personality and Politics Be Studied Systematically?" *Political Psychology* 13, no. 1 (March 1992): 105–28, <https://doi.org/10.2307/3791427>; Fred I. Greenstein, "The Impact of Personality on Politics: An Attempt to Clear Away Underbrush," *American Political Science Review* 61, no. 3 (September 1967): 629–41, <https://doi.org/10.2307/1976084>; Fred I. Greenstein, *Personality and Politics* (Princeton, NJ: Princeton University Press, 2014); and Herbert A. Simon, "Human Nature in Politics: The Dialogue of Psychology with Political Science," *American Political Science Review* 79, no. 2 (1985): 293–304, <https://doi.org/10.2307/1956650>.

⁹² Alexander L. George and Juliette L. George, *Woodrow Wilson and Colonel House: A Personality Study* (Lexington, MA: Plunkett Lake Press, 2019).

lean toward illuminating the internal psychological patterns of specific individuals, making it much more difficult, theoretically, to examine mass public opinion or enlighten positive aspects of leadership. Certainly, Lasswell's work had a huge influence on many of his students, but many of those students, including Greenstein and Simon, went on to devote the vast majority of their research to substantive areas outside of international relations.

Within international relations, most of the leading theoretical work, going back to Hans Morgenthau,⁹³ but consolidated by the work of Jervis' friend Ken Waltz,⁹⁴ focused on the role of the state. The constraints imposed by the international system were understood to negate the ability of any given individual to exert a meaningful influence on the outcome. Jervis' work upended this traditional understanding by bringing in the role of the individual to help explain state level outcomes in a systematic way. Prior to Jervis, most international relations theory would have argued that it would not have mattered if Adolf Hitler or Bill Clinton had been the leader of Germany in the 1930s. The assumption was that the outcomes would have been the same because the incentives and constraints of the international environment were seen as dispositive. Most regular people would find this contention ridiculous. Indeed the enormous systematic effect of an individual leader might seem obvious now in the wake of Donald Trump's presidency and his effect on international politics. But Jervis' serious acknowledgement of the powerful role that individuals could exert on state-level outcomes was quite radical for international relations theory at the time he introduced it.

⁹³ Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, 7th ed., rev. Kenneth W. Thompson and W. David Clinton (New York: McGraw-Hill Education, 1985 [1948]).

⁹⁴ Kenneth N. Waltz, *Theory of International Politics* (Long Grove, IL: Waveland Press, 2010 [1979]).

Jervis' genius was to recognize, as Lasswell had, the power of the individual over large political outcomes, but to do so in a way that did not depend on a large amount of idiosyncratic information about the specific person in the way that legitimate psychodynamic analysis demanded. He accomplished this goal by drawing on systematic experimental evidence conducted by social psychologists who worked on issues surrounding judgment and decision-making, among other topics. This approach allowed him to apply general principles about how most people behave in certain situations to specific leaders or events from history. These experimental results, and the theoretical ideas they generated or illustrated, allowed for a kind of generalization that was impossible with more individually focused psychoanalytic work.

Unmotivated Biases

Just as Lasswell's emphasis on psychodynamic theories reflected his time, Jervis' emphasis on so-called unmotivated biases in *Perception and Misperception* (as well as other subsequent work) also reflected the time in which that work was written. Coming just prior to the apex of the cognitive revolution in psychology, the focus of discovery at the time was on the role of unconscious biases — those biases that operate rather like optical illusions. People are largely unaware of the effect of these biases on their preferences, choices, and behaviors, but once they are made aware, they readily recognize the error and are motivated to correct it. Notice how this emphasis emerges in direct reaction to the earlier Freudian notions that posited deep seated feelings that drive human behavior and which people are typically unwilling or unable to acknowledge. Such feelings were also assumed to be unconscious, but were understood to emerge from strongly motivated drives toward sex and aggression, and not from simple quirks of

perception. Later work adopted the Freudian notion of unconscious bias, but dropped the motivated feelings from the model. This later work, which Jervis drew on heavily in *Perception and Misperception*, focused on biases that were “cold” as opposed to the “hot” Freudian notions.

Jervis later came to understand that this emphasis on cold, hard cognition, to the relative neglect of emotion, left out an important part of human motivation. Unlike earlier psychoanalytic models, later studies of emotion in psychology broadened the repertoire of motivating emotions quite substantially, to include feelings of anger, fear, shame, pride, humiliation, and even sadness and happiness. Jervis recognized that the relative neglect of emotion may have biased his earlier work, and as a result he tackled this neglect head on in his new preface to *Perception and Misperception* that came out in 2017. Importantly, he noted that, while it might prove useful to undertake subsequent analysis of emotional motivation in the behavior of leaders, he did not think this renewed attention would invalidate or fundamentally change the nature of his earlier analysis. I think this is right. Emotional work might expand the kind of questions asked or the application of these ideas to broader populations, or it might provide new findings, but it would not necessarily vitiate the insights provided by the work that focused on more unmotivated biases.

One of the reasons this is true is that many emotional issues are often idiosyncratic. The same event, even a large universal experience such as the attack on the United States on 9/11, might generate fear in some people and anger in many others. As a result, in large bureaucracies, people may work at cross purposes since some are afraid and others are angry. This is different from what can happen when everyone shares an unconscious or unrecognized bias that becomes more and more exaggerated as it increases up the chain

of command. This is not to say that emotions do not matter. They can matter a great deal. However, more influential emotions are often also more recognizable by others than, say, a heuristic bias like an anchoring effect⁹⁵ — wherein individuals tend to give more weight to the first piece of information they receive — and thus perhaps offer more opportunities for recognizing what is going on and implementing strategies or procedures to reduce any negative impact that might result (leaving aside the issue of whether those who are less powerful can persuade the more powerful). Anchoring effects might skew everyone’s perception of how much something might cost or how long it would take in the same direction, and thus bias can become exacerbated. Certainly emotions can become contagious as well, but this is less likely given that different people may have dramatically different emotional responses to the same event.

Regardless of Jervis’ later attempt to grapple with the influence of emotion on decision-making, his emphasis on so-called unmotivated biases shaped the form of inquiry of the vast majority of the subsequent work in this area of international relations. While recent scholarship has begun to investigate topics that include or focus on the influence of emotion,⁹⁶ such as work on intention, the direction of the field had tended to follow Jervis’ earlier lead, concentrating on the role of unconscious unmotivated biases on judgment and decision-making. Ironically, this tendency constitutes its own form of an

⁹⁵ Amos Tversky and Daniel Kahneman, “Judgment Under Uncertainty: Heuristics and Biases,” *Science* 185, no. 4157 (1974): 1124–31, <https://doi.org/10.1126/science.185.4157.1124>.

⁹⁶ Robin Markwica, *Emotional Choices: How the Logic of Affect Shapes Coercive Diplomacy*. (Oxford: Oxford University Press, 2018); Todd H. Hall, *Emotional Diplomacy: Official Emotion on the International Stage* (Ithaca, NY: Cornell University Press, 2015); Marcus Holmes, *Face-to-Face Diplomacy: Social Neuroscience and International Relations* (Cambridge, UK: Cambridge University Press, 2018); and Joshua D. Kertzer and Dustin Tingley, “Political Psychology in International Relations: Beyond the Paradigms,” *Annual Review of Political Science* 21, no. 1 (May 2018): 319–339, <https://doi.org/10.1146/annurev-polisci-041916-020042>.

anchoring effect. Jervis' work was so foundational that subsequent work is evaluated relative to it. In this way, researchers start from a position that assumes the validity and importance of unmotivated biases, while remaining skeptical of more emotionally based explanations.

Substantively, the dichotomy between cognition and emotion is a false one, and the last two decades of work in psychology has demonstrated the ways in which thoughts and feelings are inextricably intertwined. Indeed, recent work in psychology, particularly work that uses magnetic resonance imaging (MRI) to study the brain, has placed great emphasis on the role of emotion in decision-making and has shown how emotion directs attention, perception, and many other psychological processes.⁹⁷

These recent insights do not, as Jervis noted, necessarily invalidate earlier work. It is often useful to separate concepts out analytically to discern their specific effect, even if such processes do not necessarily separate in practice. International relations typically picks up ideas from other fields at a bit of a lag, so it is likely that some of these concepts and ideas will filter their way into the discipline in the future, at least at the margins.

Emphasis on Larger Theoretical Ideas

One of the most generative aspects of Jervis' broader work applying psychological concepts to political topics lies in his emphasis on big theoretical ideas. An enormous and

⁹⁷ Elizabeth A. Phelps, Karolina M. Lempert, and Peter Sokol-Hessner, "Emotion and Decision Making: Multiple Modulatory Neural Circuits," *Annual Review of Neuroscience*, no. 37 (2014): 263–87, <https://doi.org/10.1146/annurev-neuro-071013-014119>.

increasing amount of work in political science and international relations in general focuses on methodological advances. While this pursuit clearly has value, the larger questions that such methodological sophistication is designed to enlighten often remain hidden or opaque and would certainly be lost on non-academics. Moreover, many specific empirical findings also have clear limits to their applicability without a fuller recognition of other factors that interact within larger dynamic and interacting environments. Experimental work might reveal an important underlying psychological tendency, but those patterns would still need to meet the reality of larger political forces, constraints, and incentives in the real world. For example, a president might present a policy like President Joe Biden's Build Back Better plan based on his central values,⁹⁸ but his ability to get that legislation passed depends on a large number of other people making independent calculations regarding their own best interests in Congress. Through an exploration of underlying psychological patterns and dynamics in the realm of foreign policy, Jervis illustrated the many ways in which specific psychological biases can interact with, and influence, other important political realities.

Increasing attention to delineating specific microfoundations of decision-making makes it extremely difficult to synthesize diverse findings that often occur at different levels of analysis into a larger comprehensive theoretical framework. Joshua Kertzer and Dustin Tingley argued in a 2018 article that the age of big theory is over.⁹⁹ Perhaps. If so, this may be a consequence of dividing research into smaller and smaller pieces. In other words, the lack of big theory may be a result of disproportionate attention being paid to methods over substance. Such a focus of attention and energy may distract from the

⁹⁸ "The Build Back Better Framework," The White House, accessed Aug. 3, 2022, <https://www.whitehouse.gov/build-back-better/>.

⁹⁹ Kertzer and Tingley, "Political Psychology in International Relations."

recognition of overlapping concepts or dynamics. However, big theory need not die a quiet or unsung death. For example, powerful parsimonious theories such as evolution can prove decidedly productive in generating many novel hypotheses that can then be empirically tested.

Jervis proved so influential in part because he was unique in his ability to synthesize theories from various disciplines to provide novel insights into international relations. He was able to identify the underlying assumptions that unified seemingly disparate findings and derive new hypotheses from them. These models could then be tested empirically in deductive fashion through a variety of methods, including case studies, quantitative analysis, or experimental work.¹⁰⁰ In this way, Jervis' theoretical ideas could combine disparate findings in ways that highlighted their significance for real world political outcomes.

J

ervis asked big, hard questions that even people outside academia can easily recognize as important and meaningful in their own lives, as well as in international relations: How do others perceive us? How do others try to manipulate our perception of them? How do we strive to manipulate others' perception of us? How do we know whether or not our perceptions are accurate?

All of Jervis' work in political psychology focused on developing and illuminating innovative theoretical ideas. He did so both by relying on experimental work done by others but also by drawing on his vast knowledge of diplomatic history as well as his unique insights and observations.

¹⁰⁰ I thank James Davis for reminding me of this important point.

Jervis' focus on making theoretical insights as opposed to marginal additions to existing knowledge constitutes a big part of what makes his work so influential and timeless. While it is certainly true that the field of psychology, for example, moved quickly beyond the classic experimental studies that Jervis relied on in writing *Perception and Misperception*, most of his applications to notions in international relations have held up, precisely because he kept his eyes on the prize and concentrated his efforts on these larger theoretical debates and arguments. Thus, although the field of psychology has become increasingly preoccupied with brain imaging studies, which Jervis did not do, he could, and did, keep up with that field and its central debates. This was possible because the main questions in psychology still reflected the foundational theoretical questions and issues he had first examined years prior.

Indeed, Jervis' ideas and applications proved so influential because they extended far beyond the restricted limits of the experimental demonstrations that often inspired them. He drew on these experiments' insights into human behavior but extended the reach of these often-narrow studies by examining how some of these features might play out in real life. He often did this by using the treasure trove of material on diplomatic history he kept close at hand for inspiration and evidence. His clever ability to see beyond the narrow scope of a particular study to the wider implications of a particular dynamic provided the foundation for his larger theoretical arguments. His continued attention to these theoretical notions consolidated his influence. And, despite his encyclopedic knowledge of history, he never got lost in the weeds. Rather, he always used the fodder of his examples in service of generating broader theoretical insights to illuminate how individual psychology could, and did, influence state behavior, even within systemic constraints.

Final Thoughts

It is no exaggeration to say that Jervis' influence on political psychology in international relations was both foundational and definitive. In many ways, because of the time in which he first wrote *Perception and Misperception*, no one can update it in a single volume. It stands *sui generis*, as does much of his other work, including *The Logic of Images*,¹⁰¹ which focused on signaling, and *System Effects*,¹⁰² which examined the effect of unintended consequences on both theory and practice. The primary field from which *Perception and Misperception* drew — social psychology — has both expanded in scope, narrowed in focus, but also declined in both influence and status within psychology, relative to the work being conducted in neuroscience. This would make it extraordinarily difficult for scholars to draw on new findings in these fields that would have obvious broader implications for international relations.¹⁰³

The transition in emphasis in psychology over Jervis' lifetime does not render any of his work less influential. Rather, because his influence on the application of psychology to politics was so original, he directed the subsequent development of the field of political

¹⁰¹ Robert Jervis, *The Logic of Images in International Relations* (New York: Columbia University Press, 1989).

¹⁰² Robert Jervis, *System Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton University Press, 1998).

¹⁰³ But some of us try. See James Davis, "I Think, Therefore IR? Psychology, Biology and the Notion of Praxis," in *Praxis as a Perspective on International Relations*, ed. Gunther Hellmann and Jens Steffek (Bristol, UK: Bristol University Press, 2022); and Rose McDermott and Peter K. Hatemi, "Political Ecology: On the Mutual Formation of Biology and Culture," *Political Psychology* 35, no. 1 (2014): 111–27, <https://www.jstor.org/stable/43783791>.

science in general and political psychology in particular. He introduced the systematic application of widespread experimental studies into our understanding of many aspects of international relations, from leadership and intelligence, to nuclear stability and cooperative behavior.

Hopefully, this kind of work will not stop with Jervis' passing. The advances that have been made in psychology, biology, behavior genetics, and other fields should inform our understanding of international relations and be used to further develop the field in novel ways. Truly generative work, like Jervis', can serve as a starting point for future theoretical development and application.

Robert Jervis' death is tragic not only because we have lost a great and unique mind, but also because he still had a great deal to offer to the study of international relations. It will be incumbent on his students and followers to draw on his work to continue to provide insights about the wider world to both the academic and policy communities. His contributions demand no less and offer the foundational basis upon which we can strive to follow in his footsteps.

Rose McDermott is the David and Marianna Fisher University Professor of International Relations at Brown University.



7. Jervis on Intelligence

Joshua Rovner

Robert Jervis was not an intelligence scholar. He was a student of international relations and political psychology. This was precisely why his work on intelligence was so important.

Jervis did not start his career by asking how intelligence bureaucracies operate or what were the particular problems associated with intelligence analysis, though later he examined those issues with care. Instead, his first book asked how states understood one another. States spend a lot of time and effort trying to cultivate a certain image abroad. Doing so is less costly than military action or economic coercion. Yet, other states may see them very differently, much to their dismay. Efforts to craft an image do not guarantee the right kind of recognition. Indeed, states may portray themselves as peaceful and cooperative — or strong and resolute — only to find out that few others view them that way.¹⁰⁴

And when states try to send specific signals of their intentions, they are often misunderstood, sometimes with terrible consequences. Human frailty gets in the way of understanding. Statesmen are prone to the same psychological limitations as anyone else. They interpret signals through the lens of their own expectations, hopes, and beliefs. This sometimes leads them to exaggerate dangers and ignore genuine opportunities for diplomacy. In other cases, they underestimate threats, preferring wishful thinking to preparing for conflict. Jervis' work on political psychology showed that the balance of

¹⁰⁴ Robert Jervis, *The Logic of Images in International Politics* (Princeton, NJ: Princeton University Press, 1970).

power was not an automated accounting exercise, but a deeply human effort to make sense of a messy world.¹⁰⁵

That messiness occupied Jervis' work after the Cold War, when the collapse of the Soviet Union removed a stable characteristic (bipolarity) from the international system. U.S. policymakers were energized by their apparent Cold War triumph, but also concerned about a raft of transnational issues that did not fit neatly into their old world view. The roster of relevant actors — states and nonstate groups alike — increased the possibility for unexpected system effects. Efforts to influence specific actors, or to send more general signals of U.S. intent, could affect third parties in ways that were hard to predict. Complexity was frustrating to policymakers, who preferred clearer statements of cause and effect. Their frustration was also ironic, given America's overwhelming military and economic advantages. The unipolar moment made them ambitious, to be sure, but they were also strangely anxious. No state had ever had such an advantage over its rivals, but you wouldn't always know it from listening to U.S. statesmen.¹⁰⁶

These propositions were the foundation for a breathtaking contribution to international relations theory. Jervis' approach to world politics allowed him to puzzle over everything from 19th-century diplomacy to 20th-century nuclear strategy. His pathbreaking work on the security dilemma inspired generations of scholars — working in very different research traditions — who were interested in the prospects of cooperation under

¹⁰⁵ Robert Jervis, *Perception and Misperception in International Politics* (Princeton, NJ: Princeton University Press, 1976).

¹⁰⁶ Robert Jervis, *System Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton University Press, 1997).

anarchy.¹⁰⁷ His analysis of the nuclear revolution inspired a debate about proliferation, arms control, and strategy that remains ongoing today.¹⁰⁸ And his study of complexity in international politics,¹⁰⁹ and the strange ways in which events could pinball throughout the international system, foreshadowed our current efforts to make sense of global security crises like climate change and COVID-19.

Intelligence in Theory and Practice

Jervis' theoretical work also had significant implications for intelligence. This is because intelligence agencies are supposed to help leaders make sense of the world. Intelligence services collect information using secret and open methods and analyze it for decision-makers. Secret intelligence is particularly important because it holds out the possibility of revealing other states' real intentions and capabilities. In this way, intelligence agencies can reduce the effects of ambiguous information and potentially alleviate the security dilemma. It is not surprising, then, that Jervis became interested in how intelligence worked, when it succeeded, and why it failed.

The basic problem, as he liked to point out, is that facts are not self-interpreting. If conclusions were obvious, and if new information pointed to only one possible outcome,

¹⁰⁷ Robert Jervis, "Cooperation Under the Security Dilemma," *World Politics* 30, no. 2 (1978): 167-214, <https://doi.org/10.2307/2009958>.

¹⁰⁸ Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1989). For a recent discussion, see Francis J. Gavin, Nina Tannenwald, Charles L. Glaser, Austin Long, Lawrence Freedman, and Robert Jervis, "Book Roundtable: The Meaning of the Nuclear Revolution Thirty Years Later," *Texas National Security Review*, April 30, 2020, <https://tnsr.org/roundtable/book-review-roundtable-the-meaning-of-the-nuclear-revolution-30-years-later>.

¹⁰⁹ Jervis, *System Effects*.

then there would be no need for analysis. However, this is rarely the case in international politics, so states invest in intelligence analysis to try to figure out what it all means. Unfortunately, the act of analysis itself introduces a host of cognitive and motivated biases, which lead analysts down the wrong path. In this way, intelligence creates a paradox: The analytical process we need in order to understand the world often leads to misunderstanding.

Intelligence services have experimented with many procedural guards to prevent this, but the solutions (e.g., devil's advocacy, competitive analysis, etc.) can create their own set of problems. Everyone knows a devil's advocate is a contrarian. Such a person is easy to marginalize. And competitive analysis can lead to entrenched positions rather than openness to alternative conclusions. Sometimes the process of competition is little more than a vehicle for politicization. Intelligence analysis created problems, and efforts to fix those problems created new ones.

Yet, Jervis did not believe that intelligence was doomed to fail. Careful attention to rules of inference might help improve analytical performance. A deliberate effort to apply social science methods might go some distance to reduce the failure rate and the consequences of analytical mistakes. The goal was not perfection — errors were inevitable given the nature of the task. Nor was the goal to guarantee effective policy. After all, policymakers were not obligated to make decisions based on intelligence, and very often they ignored it. Jervis offered a more modest vision: “More careful, disciplined, and explicit reasoning will not automatically yield the right answers but will produce better analysis, do a better job

of revealing where the key differences of opinion lie, and increase the chances of being correct.”¹¹⁰

During the Carter administration, Jervis had an opportunity to put these ideas into practice, when he joined the CIA as a scholar in residence. Originally, he intended to provide a kind of quality control for agency analyses, but he ended up doing a lot of writing. His most famous work was a post-mortem on the fall of the Shah of Iran, which was declassified and published three decades later.¹¹¹ Jervis’ report addressed the conventional wisdom about why American intelligence was caught by surprise during the Iranian Revolution. Most observers believed that the main problem was overreliance on the Iranian security forces for information, and an unwillingness to offend the Shah by cultivating other sources. Although Jervis did not disagree with these claims, he argued that they overlooked the real problem. The intelligence community’s main error was not a failure of collection. It was a fundamental misunderstanding of the politics of Iran. Misguided assumptions about the Shah and his enemies distorted the analysis of events between 1977 and 1979. Presumably, they would have also distorted the analysis of other information, had it been available.

Jervis’ critique reflected his social science principles. He focused, for instance, on the CIA’s expectation that the Shah would crack down on the opposition if it ever seriously threatened the regime, using the disciplined and ruthless security forces at his disposal. This was a comforting idea, but it prevented early warning. It was also

¹¹⁰ Robert Jervis, *Why Intelligence Fails: Lessons from the Iranian Revolution and the Iraq War* (Ithaca, NY: Cornell University Press, 2010), 3.

¹¹¹ The postmortem was released in Jervis, *Why Intelligence Fails*, 34–108.

“disconfirmable.”¹¹² Analysts were right to believe that revolutions would likely collapse in the face of a strong and coherent security force. They were not foolish. The problem, however, was that they had no incentive to gauge the real strength of the regime until it was too late. As a teacher and researcher, Jervis always stressed the importance of falsifiable claims. What, he asked, would cause you to reconsider your previous views? When will you start to suspect you are wrong? CIA analysts were not compelled to answer that question before the revolution. Indeed, their expectations about the Shah made it irrelevant.

Intelligence agencies like to invest in technologies that facilitate analysis, including easily searchable databases and efficient data-sharing protocols. Such technologies hold out the promise of enabling analysts to quickly access the information they need in order to keep track of complex events — to connect the dots before disaster strikes. But Jervis’ post-mortem suggested that such technologies wouldn’t have mattered much, even had they been present in the Carter years. The real problem, he insisted in his report, “lay less in the incorrect interpretation of specific bits of information than in a misleading analysis of the general situation which pre-dated the crisis and strongly influenced perceptions of the events.”¹¹³ Analysts were unable to overcome their analytical priors, partly because they were not in the habit of reconsidering their assumptions. This was only natural. Individuals usually steer clear of critical self-reflection. It’s a lot easier to trust one’s own beliefs than to live in perpetual uncertainty. Nonetheless, Jervis suggested that a little doubt would be good for intelligence analysis, just as humility is necessary for open-minded scholarship.

¹¹² Jervis, *Why Intelligence Fails*, 24.

¹¹³ Jervis, *Why Intelligence Fails*, 37.

Jervis gave other advice: Encourage analysts to make explicit causal arguments and declare what sort of evidence would support them. Encourage alternative hypotheses to reveal the range of possibilities and the nature of analytic differences. Recast the culture of analysis away from current reporting, which occupied too much time and precluded the sort of careful analytical process Jervis envisioned. Above all, cultivate a spirit of intellectual community, in which analysts learn from and challenge one another and collectively improve the quality of their products.

Such aspirations may sound naïve and idealistic. An intelligence agency is not a college campus, after all, and a community of analysts is not the same as a college faculty. Intelligence analysts do not have the luxury of time, given the need to respond to policy questions about fast moving events. Nor can they retreat behind uncertainty, given that policymakers need answers. Jervis was well aware of these arguments, having spent decades around intelligence professionals both during and after his stint at the CIA, and he understood the practical realities that constrained analysts. But Bob was right: Intelligence analysts should aspire to the kind of self-conscious rigor that was at the heart of his own scholarship, and intelligence managers should do all they can to make it possible. The quality of intelligence would surely improve, even if it remained imperfect.

More rigorous analysis meant thinking logically rather than chasing data. The key insight from Jervis' post-mortem was that basic assumptions about Iran had prevented analysts from understanding the meaning of new information. The pressure to deliver daily reporting, however, made it unlikely that they would ever check those assumptions. Indeed, they colored their views of the nascent revolution. Progress was more likely in calmer times, when intelligence officials could take a step back and reconsider their approach, spared from the urgent need to produce a continuous stream of updates. The

ROUNDTABLE: Remembering Robert Jervis

<https://tnsr.org/roundtable/remembering-robert-jervis/>

CIA's Center for the Study of Intelligence, a hub for institutional learning, was only founded in 1975, and it was still getting going when Jervis arrived at Langley. Deliberate efforts to refine the craft of analysis expanded in the years that followed. The intelligence community experimented with new education programs for analysts and with new methods to mitigate the problems that he had identified. The results have been mixed, which is not surprising. All professions go through cycles of review and reform, inspired by institutional traumas and bolstered by new ideas.

Suppose, for the sake of argument, that Jervis had gotten his way. Imagine an intelligence community that also operated as a fully fledged intellectual community, where norms of rigor and reevaluation were deeply embedded among analysts and managers. Imagine that intelligence estimates were scrupulously clear about their underlying assumptions and the quality of available information. In such a world, analysts would explain why the evidence supports one particular interpretation over the alternatives. More importantly, they would describe what kinds of evidence would cause them to reconsider their conclusions.

Jervis would surely welcome all of these developments. But it still wouldn't be enough. The reason is that intelligence does not serve its own purposes. It exists to help decision-makers make better decisions. Intelligence is only valuable if policymakers are willing to engage.

Pitfalls of Intelligence-Policy Relations

In some ways, improving intelligence-policy relations is more difficult than improving the quality of intelligence. Not surprisingly, Jervis spent many years pondering this

ROUNDTABLE: Remembering Robert Jervis

<https://tnsr.org/roundtable/remembering-robert-jervis/>

problem.¹¹⁴ Policymakers have different needs than intelligence professionals. They value decisive judgments that enable decisive actions when time is short, and they like to minimize value trade-offs. This creates friction with analysts who are reluctant to make exact predictions about future events. No one is a soothsayer, not even an analyst in possession of secret information. As a result, policymakers frequently ignore intelligence officials in favor of other advisers. Sometimes they make policy based on their own instincts.

A more pernicious problem is the manipulation of intelligence to reflect policy preferences. Political leaders have often used intelligence to win political debates, because they understand the persuasive power of secret intelligence. Even skeptics might give leaders the benefit of the doubt, if they claim to act on the basis of the best available information. The intelligence imprimatur means a lot. If the underlying intelligence does not actually support their public claims, however, then leaders have reason to pressure intelligence officials to change their conclusions. Such politicization has a long track record, and has been the source of intense controversy in the United States.

No episode was more controversial than the intelligence surrounding the Iraq War. The George W. Bush administration claimed to possess intelligence showing that Iraq was sitting on a stockpile of weapons of mass destruction. Saddam Hussein possessed chemical and biological weapons, the administration declared, and the means to manufacture more of them. Hussein might also build nuclear weapons, quickly, if left

¹¹⁴ Robert Jervis, "Intelligence and Foreign Policy: A Review Essay," *International Security* 11, no. 3 (Winter 1986–1987): 141–61, <https://doi.org/10.2307/2538887>; and Robert Jervis, "Why Intelligence and Policymakers Clash," *Political Science Quarterly* 125, no. 2 (Summer 2010): 185–204, <https://www.jstor.org/stable/25698994>.

unchecked. But the actual intelligence picture was murky, and U.S. forces discovered no arsenal after the invasion in 2003. The disparity between pre-war claims and post-war discoveries led critics to accuse the administration of lying about intelligence or leaning on the intelligence community to help it make the case against Iraq.

Jervis investigated these arguments in detail, and asked his contacts in the intelligence community about their experiences.¹¹⁵ They did not report coming under direct pressure to toe the administration's line, although Jervis notes that the pre-war atmosphere did not inspire careful deliberation and reassessment. More important, from his perspective, was that other countries came to the same conclusion about Iraq's capabilities, even though many of them opposed the war.¹¹⁶ Jervis was skeptical about claims of politicization for these reasons. Somewhat depressingly, he found the same roots of failure that had been present in the earlier Iran case: confirmation bias, insufficient attention to alternative hypotheses, a lack of analytical creativity, and so on. These problems persisted despite years of effort to overcome them. Why?

¹¹⁵ Robert Jervis, "Reports, Politics, and Intelligence Failures: The Case of Iraq," *Journal of Strategic Studies* 29, no. 1 (2006): 3–52, <https://doi.org/10.1080/01402390600566282>.

¹¹⁶ I suspect he was wrong. Given the lack of agreement within the United States, where prewar pressure was probably strongest, it is highly unlikely that analysts in other countries were united in their beliefs about Iraqi weapons. See Joshua Rovner, *Fixing the Facts: National Security and the Politics of Intelligence* (Ithaca, NY: Cornell University Press, 2011), 141–42. More recent reporting supports this idea. See, for instance, Alan Barnes, "Getting It Right: Canadian Intelligence Assessments on Iraq, 2002–2003," *Intelligence and National Security* 35, no. 7 (2020): 925–52, <https://doi.org/10.1080/02684527.2020.1771934>; and Alan Barker, "Chirac's Doubts About Iraqi WMD," *Financial Times*, Jan. 22, 2010, <https://www.ft.com/content/5dbb4044-07e2-396e-bb3f-30438f2ba647>.

There are at least two possible explanations, and they are not mutually exclusive. First, the problems of analysis are unsolvable. Humans experience cognitive biases, and they take intellectual shortcuts in the absence of clear and overwhelming information. No amount of training can fix this. The best that intelligence agencies can do is to be conscious of the problem and try to alert readers to the danger. Second, politics affect the tone and content of estimates, even if politicians do not engage in crude elbow twisting. Although Jervis was not convinced that politicization was at work, he did acknowledge that “[t]his does not mean that political pressure had no role at all. At the very least, it created (and probably was designed to create) an atmosphere that was not conducive to critical analysis and that encouraged judgments of excessive certainty and eroded subtleties and nuances.”¹¹⁷

Neither explanation will provide comfort to reformers who believe they can fix intelligence by replacing personnel or reorganizing the bureaucracy. Psychology and politics are permanent features of intelligence analysis. Jervis warned us that they always lurk in the background, and always threaten to undermine the quality of estimates. This does not mean that intelligence officials should give up, but it does suggest that we set our expectations accordingly.

In this sense, the problems of intelligence are no different from the problems of statecraft. Because Jervis grounded his work in international relations theory, he understood this more than anyone. Intelligence agencies, and the leaders they support, exist in a world of fuzzy facts open to multiple interpretations. They also exist in a world of politics and persuasion. States try to influence one another (and leaders try to influence their citizens) however they see fit. They conceal, deceive, and sometimes

¹¹⁷ Jervis, “Reports, Politics, and Intelligence Failure,” 36.

manipulate intelligence as a form of signaling. Leaders, moreover, are reluctant to accept interpretations that get in the way of their preferences and beliefs. Such reluctance is an important cause of misperception in international politics, and an enduring source of trouble for intelligence.

Ambiguous information, political competition, and human psychology conspire against efforts to make sense of the world. The challenge for international relations scholars is to generate and test theories that account for at least some patterns of state behavior across time and space. The challenge for intelligence agencies is to provide practical assessments for decision-makers who operate without the luxury of time and scholarly detachment. Navigating these problems is tricky for everyone involved. Robert Jervis remains their essential guide.

Joshua Rovner is an associate professor in the School of International Service at American University.



8. Robert Jervis and the Nuclear Question

Marc Trachtenberg

The nuclear question — the question of the role that nuclear weapons play, or should play, in international political life — was one of Robert Jervis’ central interests throughout his career.¹¹⁸ Two of his books and a number of his articles dealt with it directly, but the issue came up in one way or another in many of the things he wrote. And his ultimate goal in doing that work was to shed light on that “should” question — that is, on the question of policy. Should we want a world in which all-out war would inevitably mean total destruction for both sides, a world in which a politically meaningful nuclear balance could therefore scarcely be said to exist? Or would we be better off in a world in which strategic superiority was still a meaningful concept?

Jervis’ approach to that question was rooted in a certain theory of how international politics works in the shadow of nuclear weapons, what he called the theory of the nuclear revolution. For him, the nuclear revolution itself had two elements: “the overwhelming power of the weapons and the existence of mutual second-strike capability, meaning that neither side can eliminate the other’s retaliatory capacity by launching a first strike.”¹¹⁹ The *theory* of the nuclear revolution, on the other hand, was a set of arguments about what all this meant. The key claim was that we could be fairly relaxed about living in this kind of world:

¹¹⁸ This is an abridged and somewhat revised version of my article “Robert Jervis and the Nuclear Question,” published in James W. Davis, ed., *Psychology, Strategy and Conflict: Perceptions of Insecurity in International Relations* (Oxford: Routledge, 2013).

¹¹⁹ Robert Jervis, *The Illogic of American Nuclear Strategy* (Ithaca, NY: Cornell University Press, 1984), 22.

If nuclear weapons have had the influence that the nuclear-revolution theory indicates they should have, then there will be peace between the superpowers, crises will be rare, neither side will be eager to press bargaining advantages to the limit, the status quo will be relatively easy to maintain, and political outcomes will not be closely related to either the nuclear or the conventional balance.¹²⁰

The implication was that we should *not* want to live in a world where the nuclear balance is manipulable — that we should *not* want to reach for anything like a disarming first-strike capability, and we should not want both sides to pursue a strategy of that sort.

Jervis' claim, of course, was not that international politics would just stop once people understood the implications of the nuclear revolution. The assumption was *not* that in a world of secure retaliatory forces nuclear weapons would play no role whatsoever. Deliberate escalation up to the level of all-out war might make no sense, but, he argued, a conflict could escalate even if “no one wants it to.”¹²¹ There was “an irreducible minimum of unpredictability that operates,” Jervis wrote, “especially in situations which engage a state’s highest values.”¹²² This whole state of affairs, however, had a stabilizing effect. It was because things could escalate without anyone wanting them to that both sides would have to behave cautiously, no matter what the local military balance was. “Paradoxically,”

¹²⁰ Robert Jervis, *The Meaning of the Nuclear Revolution: Statecraft and the Prospect of Armageddon* (Ithaca, NY: Cornell University Press, 1989), 45.

¹²¹ Jervis, *The Meaning of the Nuclear Revolution*, 19, 21.

¹²² Robert Jervis, “Deterrence Theory Revisited,” *World Politics* 31, no. 2 (January 1979): 299–300, <https://doi.org/10.2307/2009945>.

he argued, “stability is in part the product of the belief that the world is not entirely stable, that things could somehow get out of control.”¹²³

Manipulating Risk

But that risk of inadvertent war was not just something that was built into the system and had to be accepted as a fact of life. It was also something that could be consciously exploited — and in this context, Jervis built on Thomas Schelling’s well-known arguments about the “manipulation of risk” and the “threat that leaves something to chance.”¹²⁴ Even if statesmen would never do anything that they knew would lead directly to a general nuclear war, they could still rationally take actions that involved a certain risk — say, a 10 percent chance — that things would spin out of control.¹²⁵ Indeed, they could take actions that they knew would increase the risk of escalation in the hope that their adversaries would find that level of risk unbearable. But both sides could play that game, and the outcome of the dispute would depend on which side had the greater resolve — that is, which side was the last to find the level of risk intolerable. The balance of resolve (and not, say, the conventional military balance) would therefore play the key role in international political life.

Jervis, of course, understood that there were problems with that approach to strategic issues. In a world where crises were, to use Schelling’s phrase, “competitions in risk-taking,” confrontations, Jervis wrote, would “resemble the game of Chicken,” and in that

¹²³ Robert Jervis, “Why Nuclear Superiority Doesn’t Matter,” *Political Science Quarterly* 94, no. 4 (Winter 1979–80): 620, <https://doi.org/10.2307/2149629>.

¹²⁴ See especially Jervis, *The Illogic of American Nuclear Strategy*, 137–38.

¹²⁵ Jervis, *The Illogic of American Nuclear Strategy*, 134, 168; and Jervis, “Deterrence Theory Revisited,” 300.

situation no one could be sure that the outcome would be peaceful.¹²⁶ And even if war were avoided, it was by no means certain that the *status quo* power would prevail. The poker game of risk manipulation, after all, could be played by both sides: “[T]he fear of war could be used as a lever to change the status quo as well as to preserve it.”¹²⁷ But in practice, Jervis did not think that these problems loomed very large, and one of the basic reasons was that the balance of resolve, in his view, favored the *status quo* power. And that whole way of looking at things — and this was characteristic of Jervis’ approach to these issues — was reinforced by an argument drawn from cognitive psychology to the effect that fear is a more powerful emotion than greed — that a loss hurts more than an equivalent gain gratifies.¹²⁸

All of this served to support the general conclusion that deterrence is relatively easy to achieve, and that American defense policy, in particular (in a situation like the one the United States faced during the Cold War), could be based on a relatively straightforward risk manipulation strategy. And Jervis was quite comfortable with that approach. Indeed, from his point of view, a certain degree of instability — that is, a certain risk that a limited war could develop into a nuclear holocaust, even if neither side wanted it to — was desirable:

While both sides have an interest in eliminating extreme crisis instability, they need to see that there is some chance that events could get out of control once violence is employed because this is the main generator of caution and the primary means of exerting pressure on the other side

¹²⁶ Jervis, *The Illogic of American Nuclear Strategy*, 152.

¹²⁷ Jervis, *The Meaning of the Nuclear Revolution*, 29.

¹²⁸ Jervis, *The Meaning of the Nuclear Revolution*, 31, 168–73.

If security is linked in part to the danger of inadvertent war, then too much stability could make the world safe for coercion and violence.¹²⁹

Resolve and Posturing

What, then, is to be made of this whole line of argument? The fundamental question here has to do with policy. To the extent that we have any choice in the matter — and Jervis obviously assumed we have some — would we really want to live in a world where political outcomes were determined by which side was willing to run the greater risk of general war — where victory would go to the side with the strongest nerves? Such a world, I think, could be quite dangerous. The reason is simple. In international politics, as in other areas of life, what you reward is what you get. In such a world, there would be a great premium on resolve, on risk-taking, and perhaps ultimately on recklessness, as each side is led by competitive pressure to toughen its own stance. As Jervis himself pointed out, moreover — and this was typical of his extraordinary ability to see the weaknesses in his own arguments — in this kind of world, where “each side wants to stand firm if and only if it believes that the other will back down,” the two sides have a strong incentive to adopt tactics that strengthen their bargaining positions: to overstate how strongly they feel about an issue, to pretend to be foolhardy, to act as though “they do not understand the risks they are running.” At the same time, each side has a strong incentive to adopt counter-tactics — to suggest, for example, that the impression one’s adversary is trying to give is not to be taken at face value, but rather has to be understood in bargaining terms,

¹²⁹ Robert Jervis, “Arms Control, Stability, and Causes of War,” *Daedalus* 120, no. 1 (Winter 1991): 177, <https://www.jstor.org/stable/20025362>.

or at least that one believes this to be the case.¹³⁰ This sort of thing is clearly bound to play a certain role in international political life, especially in relations between nuclear powers. But do we really want it to play a greater role than it absolutely has to? To the degree we have any choice in the matter, wouldn't we want something more tangible, less purely subjective, to play a greater role in shaping political outcomes?

Those problems with the way a system based on resolve would work strike me as very fundamental. To be sure, during the Cold War period they never really came into play in a major way. In theory, the problem could have been quite serious — a Berlin Crisis during the period of nuclear parity might have been very dangerous indeed — but in practice, political differences were never great enough to generate a true “competition in risk-taking.” Even in the Cuban missile crisis, you don't find either side playing that kind of game.

The real problem was somewhat different. It had to do not so much with actual resolve as with posturing — and especially with each actor's attempts to manipulate not just its adversary's beliefs about the controllability of an armed conflict, but even more the adversary's beliefs about whether that actor really believes what it says about the controllability, or uncontrollability, of the fighting, once it reaches a certain level. People's minds become the battlefield, and this gives international political life a rather odd character. And the question again is whether, to the extent we have any choice in the matter, this is the kind of nuclear world we want to live in, or whether some alternative would be better.

¹³⁰ Robert Jervis, “Bargaining and Bargaining Tactics,” in *Coercion*, ed. J. Roland Pennock and John Chapman (Chicago: Aldine-Atherton, 1972), 282–85.

Jervis, of course, was quite aware of this sort of problem. In fact, one of the hallmarks of his work was a real sensitivity to the importance of what each side thinks about what the other believes and to the efforts each side makes to manipulate the other's beliefs about what it itself is thinking.¹³¹ Note, for example, his discussion of the question of what the U.S. government should say about limited nuclear war:

The threat of a limited response can be more credible than that of all-out war only if the Russians believe that American leaders believe that escalation can be avoided What is crucial for the added credibility that the ability to carry out limited strikes brings is not the Russians' beliefs about whether nuclear war can be kept limited, but their beliefs about what the American decision-makers think about this question. Indeed, deterrence would be maximized if the Russians thought control was impossible, but believed that the United States thought it was relatively easy.¹³²

On the other hand, if a country wanted to deter its adversary from adopting a limited nuclear war-fighting strategy, it should pretend that it believed that matters were bound to escalate, that it would therefore not fight a limited nuclear war (no matter what its true policy was), and that, as terrible as it was, it would opt instead for an all-out nuclear attack. The goal would be to get one's opponent to conclude that it was too dangerous to use nuclear weapons in even a limited way.¹³³ So given that both sets of calculations could

¹³¹ Indeed, his very first book, and to my mind one of his best, was explicitly concerned with the role of deception in international politics: Robert Jervis, *The Logic of Images in International Relations* (Princeton, NJ: Princeton University Press, 1970), esp. 10-11.

¹³² Jervis, *The Illogic of American Nuclear Strategy*, 111.

¹³³ See Robert Jervis, "Cooperation Under the Security Dilemma," *World Politics* 30, no. 2 (January 1978): 210, <https://doi.org/10.2307/2009958>.

come into play, you might have a kind of tug-of-war, with each actor trying to convince its rivals not so much that its way of viewing the problem of escalation was correct, but rather that it really believed it was correct, and had not just adopted that way of talking about the issue for bargaining purposes.

In this sort of world, one takes a position in the hope of affecting one's adversary's beliefs, and not just beliefs about abstract and rather hypothetical issues of nuclear strategy. The premium placed on resolve and (perhaps even more) on perceptions of resolve can also have a profound impact on the actual conduct of policy. Small issues can get blown out of proportion to their intrinsic importance "because they are taken as tests of resolve," and people can behave in an at least apparently irrational way, in order to "make plausible the threat to trigger" a nuclear war.¹³⁴

But doesn't all this suggest — again, to the extent that we have any choice in the matter — that we should not want to live in such a world? Does it really make much sense for a state to rely so heavily on deception and pretense — on feigning greater resolve than it itself feels, on trying to bluff its way through every regional conflict that comes up? If policy were more open and more honest, a genuine meeting of the minds would be easier to reach. Communication between rival powers is hard enough — generally harder than policymakers realize at the time — even without the kind of posturing one sees in a world where resolve is so important. But given the seriousness of the problem, do we really want to make it even more difficult for rival powers to understand each other by choosing

¹³⁴ Jervis, *The Meaning of the Nuclear Revolution*, 39; Robert Jervis, "Was the Cold War a Security Dilemma?" *Journal of Cold War Studies* 3, no. 1 (Winter 2001): 54, <https://www.jstor.org/stable/26925099>. U.S. policy during the 1971 Indo-Pakistani War is a good case in point. See the discussion in the long version of this article in Davis, *Psychology, Strategy and Conflict*, 113-15.

to live in a world where bluff and deception are bound to lie at the heart of international political life? And if so, wouldn't it be better to live in a world in which the strategic balance has some objective content — a world in which shifts in the balance are militarily and therefore politically meaningful — and where we do not rely so heavily on purely subjective factors?

A Complex World

What then does all this imply about how Jervis' work in this area is to be assessed? It is hard to judge his work the way you would another scholar's. One doesn't associate him with a particular well-developed theory of international politics — that is, with a particular set of claims about how the world works. His whole approach was remarkably undogmatic, or really anti-dogmatic. He was in particular very open to new scholarly work that cut against the grain of some of his most basic arguments — the work, most notably, by Brendan Green and Austin Long about the “delicacy” of the nuclear balance in the later Cold War.¹³⁵

I used to think that this was to be understood in terms of Jervis' personal style. But now I think that his general approach was rooted in a certain vision of how things work and of how the world should be studied. That vision is laid out most explicitly in *System Effects*, which, to my mind, is his deepest, most interesting but also most under-appreciated book. One of his basic arguments there was that people tend to think too much in terms of direct effects. They are too quick to draw straight lines, for example, from intentions to

¹³⁵ See Brendan Rittenhouse Green, “The Philosopher King,” H-Diplo/ISSF Tribute to the Life, Scholarship, and Legacy of Robert Jervis, Part I, Feb. 4, 2022, 55, <https://issforum.org/ISSF/PDF/ISSF-Jervis-Tribute-1.pdf>.

consequences. But in systems — and the international political system is a good case in point — the indirect effects are so wide ranging and so important that one is never quite sure what impact a particular action will have or how a particular development is to be explained. Our whole way of analyzing things, in Jervis' view, was fundamentally misguided: We think, for example, that we can understand the effect of something by looking at situations that are the same except for that one variable. But “when we are dealing with systems,” he wrote, “things cannot change one at a time — everything else cannot be held constant.”¹³⁶ The world is much too complex to focus on just one set of effects, especially since people are inclined to focus on those effects that, for one reason or another, they happen to find congenial.¹³⁷ Given how easy it is to miss so much of the picture, you have to make a real effort to look at things from different angles — to do the kind of analysis that might lead to conclusions that run counter to what you would like to believe.

My own teacher, Raymond Sontag, once said to me that there are no answers in history. It took me a long time to understand what he had in mind. It is that when we study international politics, we have to deal with some very difficult issues, in intellectual terms and in moral terms, as well. But it is an illusion to think that there are solutions to those problems “out there” just waiting for us to discover them. It is the journey that matters, even if it doesn't lead to any particular destination, or even to any destination at all. We grapple with the core issues of the field as honestly and as carefully as we can, and in doing so we almost automatically develop a deeper understanding of how things work.

¹³⁶ Robert Jervis, *System Effects: Complexity in Political and Social Life* (Princeton, NJ: Princeton University Press, 1997), 73.

¹³⁷ Jervis, *System Effects*.

Just working in that way, we somehow end up seeing beyond our own preconceptions. That was Sontag's view, and I think it was Jervis' as well.

***Marc Trachtenberg**, an historian by training, is now a research professor of political science at UCLA. He is the author of a several books and a large number of articles dealing mostly with 20th-century international politics. His most recent book, *The Cold War and After: History, Theory, and the Logic of International Politics*, was published by Princeton University Press in 2012.*

