MITSEMINAR XXI
EDUCATING U.S. NATIONAL SECURITY LEADERS

INFERENCE AND PARADIGMS
Reading Notes

Seminar XXI is an educational program for current and future leaders across the interagency. Over the course of the year, we will assign readings to complement lectures and discussions. This document summarizes reading materials we have assigned to frame the entire Seminar XXI curriculum. The readings summarized here are divided into two categories: "The Challenge of Knowing," and "The Paradigms." The first section explores the challenge of inference in a complex world and summarizes the tools social scientists use to identify causal relationships and explains why these approaches could be useful for practitioners. The second section outlines several different ways of thinking about, understanding, and analyzing international relations. These "paradigms" are analytical approaches that help to categorize the kinds of factors that might explain events in the world. Although we assign these readings in advance of the first session of the year, we hope these reading materials and notes will serve as a resource for you for the duration of the course, and perhaps for the duration of your careers.

THE CHALLENGE OF KNOWING

Foreign policy professionals must manage uncertainty in a complex world and answer questions about a world that does not offer easy answers. Through Seminar XXI lectures and reading assignments, we hope to arm you with some of the tools social scientists use to manage the challenge of knowing.

In "To Regain Policy Competence: The Software of American Public Problem-Solving," **Philip Zelikow** emphasizes the crucial importance of the "software" of American policymaking: "the way people size up problems, design actions, and implement policy." Policymaking, Zelikow explains, should be thought of as a discipline, like engineering or legal reasoning. Engineers and lawyers undergo specialized training, absorb a cannon, develop standardized methods, and conduct their work and are evaluated according to professional norms of the discipline. "In American public policy design, however, there are no comparable norms that distinguish professional craft. There is no commonly understood set of habits that routinely force out necessary questions and naturally highlight gaps in information or analysis." Instead, the software of policymaking in the U.S. government has devolved into "improvised guesswork," bureaucratized habits," and "opinionated dross."

The software of policymaking could be—and indeed one was—much better. Zelikow describes the deterioration of policy software from its "Golden Age" in the 1940s to the present day. During and after WWII, policymakers held themselves to a rigorous standard of analysis, supported by strong organizational norms such as detailed notes at every high-level meeting, and policy papers with real analytical depth. Unfortunately, however, "The organizational culture that accomplished so much during the war was passed along mainly through imitation and apprenticeship. [The] best practices did not

migrate into standardized training or academic degree programs. This failure permitted the "University culture with its versions of books and articles [to give] way to the culture of the newsroom."

There is currently no serious training designed specifically for policymakers. Although most high-power policymakers in the U.S. government are lawyers, lawyers are not actually trained to be policymakers. Lawyers are trained to determine what *can* be done—not what *should* be done. Policy schools, for their part, tend to encourage would-be experts to become proficient in writing brief "options" papers consisting of the concise summaries, talking points, and op-ed style analysis that their consumers—senior policymakers—will spare the time to read. "The would-be experts thus learn to be experts by dumbing themselves down." Academics, he argues, pursue questions that are of interest in their scholarly fields and are not necessarily of great interest to policymakers, and "sharply steer away from training in practical problem-solving.

Zelikow offers a template for a more rigorous approach to policymaking comprised of three steps: assessment, design, and implementation. (1) Assessments are judgments about circumstances. They answer the questions: what is going on? What, if anything, might be done? Assessments require detailed knowledge of the issue, careful disaggregation of the subject matter into its constituent pieces and presumptions, the use of heuristic tools such as scenario analyses, and "the right team" to bring expertise and analytical rigor to bear. (2) The design step requires policymakers to clearly define the objectives and to clarify the definition of success; to specify precisely and thoroughly the presumed link between proposed means and specified ends, and to choreograph the tools for enacting the policy. (3) Implementation must include systematic recording of what is being done, evaluation, and adjustment.

Noting that current educational programs do not effectively prepare students to become policymakers, Zelikow suggests an alternative curriculum that emphasizes (1) practice in analysis of complicated information rather than the immediate leap down to talking points; (2) instruction in a conscious policy design process; and (3) extensive use of detailed case studies.

Keren Yarhi-Milo illustrates how cognitive bias can shape policymaking at the highest levels. Although Yarhi-Milo's work focuses on two related biases—confirmation bias and vividness bias—she draws on a robust field of cognitive psychology and behavioral economics devoted to examining how brains process (and misprocess) information. [See, for example, Kahneman and Tversky, *Thinking Fast and Slow*]. Yarhi-Milo asks a question of critical importance for policymakers: how do leaders assess the intentions of their adversaries? Assessments adversary intentions are critical inputs into the development of foreign policy and military strategy. It is notoriously tricky to evaluate the intentions of an adversary, however, because they have incentives to conceal their intentions for strategic gain. In the absence of truth serum, leaders are forced to rely on a number of imperfect indicators to inform their assessments.

Yarhi-Milo outlines three approaches leaders may take to assess adversary intentions. First, leaders might look at the *behaviors* of their adversaries, such as decisions to withdraw from a foreign military intervention or to join binding international organizations. While talk is cheap, these actions are costly, and can thus be considered more credible signals of adversary intentions. Second, leaders might look at the *capabilities* of their adversaries, using capability for action as a proxy for intention to act. Yarhi-Milo categorizes both of these sets of indicators, although imperfect, as clues rational leaders would look for to inform their assessments.

In contrast, Yarhi-Milo argues that leaders often come to their positions of power with assessments of their adversaries' intentions *already in mind*. Once in power, leaders do not rationally interpret new information, but instead tend to cherry-pick indications of adversary intentions that align with their preconceptions, while ignoring indications that conflict with their cognitive priors. She also argues that leaders tend to pay more attention to "evidence" of adversary intentions that is more vivid (i.e. personalized and emotionally involving, such as an in-person meeting with the adversary leader) and to discount information conveyed through less vivid means. Finally, Yarhi-Milo emphasizes how different bureaucracies within the U.S. government have different organizational focuses and standard operating procedures, which lead them to pay particular attention to information they are most accustomed to gathering, rather than the information that provides the strongest evidence for adversary intentions. Distinct bureaucracies within the state will thus come to assess adversary intentions differently.

Yarhi-Milo examines three cases: U.S. assessments of Soviet intentions under Jimmy Carter; U.S. assessments of Soviet intentions in years leading to the end of the Cold War during second admin of Reagan; and British assessments of intentions of Nazi Germany in period leading up to WWII. She finds that cognitive biases—particularly confirmation bias—and bureaucratic specialization, more than rational analysis of costly signals and capabilities, tend to shape assessments of adversary intentions.

In "Applying Method to Madness: A User's Guide for Causal Inference in Policy Analysis," **Jessica Blankshain and Andrew Stigler** make the case that social science methods of causal inference are directly relevant to policymakers and could help to improve the software of policymaking. Every policy choice boils down to an assessment of how that policy—compared to alternative policy options—will affect an outcome or set of outcomes. By altering an aspect of the environment — the *cause* — one seeks to influence another aspect of the environment — the *effect*. A proposed alliance, for example, may be meant to prevent aggressive behavior on the part of potential adversaries. This was the original intent of NATO. The alliance was an effort to communicate to the Soviet Union that an attack on a single Western European member of the alliance would automatically result in a war with the other members of the alliance, including the United States. In other words, Western policymakers believed that the creation of a mutual defense treaty would cause Soviet leaders to doubt their ability to conduct a successful offensive in Western Europe, having the effect of improving deterrence vis-à-vis the Soviet Union. In sum, causal inference is what foreign policy is all about.

Causal inference is also the "holy grail of social science." Social science begins from a crucial starting premise: establishing causal relationships in a complex world is immensely difficult. A geneticist working in a laboratory might alter a single gene in a breed of mouse in order to determine how the change in that independent variable (the gene) affected a specified outcome (such as obesity). The social scientist, however, does not enjoy the luxury of carefully controlled experiments under laboratory conditions (nor does the policymaker), and so it is much trickier to identify causal relationships in the world of international relations. Consider "democratic peace theory." Many practitioners embrace the notion that democracies do not go to war against each other. The social scientist asks—How can I determine whether the relationship between democracies and peace is mere correlation? How can I rule out the possibility that some other variable, such as economic development, caused both democratization and peace between democracies? Causal questions are not merely academic. On the contrary, many causal questions asked by social scientists are fundamental to policymakers. Policymakers don't have a choice about whether they are engaging in causal inference—causal inference is a central dimension of their job. Their choice is how rigorously they approach the challenge.

Zelikow's principal concern is that policymakers just tend to wing it. Yarhi-Milo demonstrates how, when policymakers just wing it, their cognitive biases may dictate their assessments and choices. Blankshain and Stigler walk through the tools social scientists use to conduct causal inference. Familiarity with social science approaches to causality can help policymakers facing the same challenge.

Blankshain and Stigler review four main approaches to causal inference in social science: formal models, controlled experiments, statistical analyses, and historical cases and analogies. Their discussion is succinct, so I will not summarize it here. Read it! They make several points in their discussion of statistical analyses and of historical cases and analogies that warrant some extra attention. With respect to statistical analyses, they offer a caution: be on guard, they warn, against the correlation/causation illusion. Selection effects, reverse causality, and omitted variables could create the appearance of causality where none exists. Selection effects refer to the concern that observations chosen for inclusion in the dataset were biased in a way that creates an illusion of a causal relationship. Consider their example: "'Study finds that 80 percent of successful senate campaigns raised over $X million.' It is tempting to infer that high spending leads to campaign success, but without knowing how much losing campaigns spent, we cannot make this inference." Omitted variable bias is the possibility that some other, unidentified variable is causing variation in both the independent and the dependent variables at once. Reverse causality refers to the possibility that the analyst has misidentified the causal relationship between the independent and dependent variables — that is, changes in the dependent variable cause changes in the independent variable, rather than vice versa.

Social scientists also use historical cases and analogical reasoning to establish causal relationships between variables. Within a single case, a social scientist might trace the mechanisms linking the presumed cause to the outcome in order to determine whether there really was a causal relationship, or whether other forces played a larger role. Analogical reasoning refers to linking causal relationships across cases. If X caused Y in case A, then perhaps X will cause Y in case B as well. Analogies are ubiquitous in foreign policymaking. The best book on the subject is Yuen Foong Khong's *Analogies at War*, which recounts how Walt Rostow argued that the U.S. should bomb North Vietnam's oil logistics, on the grounds that a similar strategy had proven effective against Nazi Germany. Rostow had made a common mistake of analogical reasoning—he had failed to understand the precise conditions that had made Germany so susceptible to bombing, and was therefore unable to recognize how the absence of those same conditions in Vietnam would render the bombing ineffective.

Blankshain and Stigler warn practitioners to be on guard against the temptation to use analogies less as logical evidence for a past causal relationship than as emotional appeals designed to win support for an argument by conjuring terror of past catastrophes such as Munich, Pearl Harbor, September 11th, and Vietnam. Like all tools of inference in social science, analogies are neither inherently good nor inherently bad. Done well, they can be extremely useful. Done poorly, they are dangerous.

Returning to the fundamentals, policymaking must start with a clear conceptualization of the goal (the outcome that the proposed cause/policy is intended to bring about). Causal reasoning should be as explicit as possible. How, precisely, will the proposed policy bring about the desired effect? What kind of evidence would you need to have, in an ideal world, to be fully confident that policy X will bring about outcome Y? Of course, you're not in an ideal world, but responsible leaders must still ask themselves: What evidence do I have? Is it good evidence? Does the evidence I draw seem, suspiciously,

to confirm my cognitive priors? Am I undervaluing evidence that is dissonant with my priors or my world view? Am I doing my best to approach the thorny problem of inference with the rigor it demands? Social science offers policymakers a toolkit that can help.

PARADIGMS

Paradigms are ways of thinking about, understanding, and analyzing international relations. They are analytical lenses that help the wearer to focus on the particular phenomena that are most salient for understanding a given set of events. Different paradigms stress different factors that are likely to be important in explaining international politics. At the same time, a paradigm may blind users to the influence of factors that it tends to discount. Achieving a good understanding of complex outcomes in international politics often requires using paradigms in serial to see what each lens reveals. The readings in this section and the next provide a practical introduction to these abstract paradigms.

REALISM

John Mearsheimer presents a structural realist approach to understanding international politics. In the Realist paradigm, the primary unit of analysis is the state—a unitary rational actor that seeks to achieve security for itself. Mearsheimer contends that the only way for states to achieve this elusive security is to accumulate as much power as possible, with hegemony as their ultimate goal.

For Mearsheimer, five assumptions about the international system drive this pursuit of power. First, the international system is anarchic: no central authority can impose order among states. Second, great powers inherently possess some offensive military capability that they can use to harm or even destroy one another. Third, states can never be certain of one another's intentions. Every state must fear that its neighbors' offensive military capabilities will eventually be used against them. Fourth, great powers aim primarily to survive: to maintain their territory and autonomy. Survival is the basic goal that must be satisfied before states can do anything else. Fifth, great powers are rational actors who think strategically about how to survive in anarchy.

According to Mearsheimer's Realism, economic interdependence, democratization, and international institutions will not foster stability among great powers. Regardless of the level of economic interdependence, states' regime type, or their institutional memberships, great powers will fear one another because the international system is anarchic. Fear prevents cooperation and promotes competition—often in the form of alliance building, arms races, resource grabbing and even preemptive war.

In the fifth chapter of his book, Mearsheimer provides more detail on states' goals and corresponding strategies. He argues that great powers generally have four main goals. First, they seek regional hegemony. Whenever possible, they also seek to prevent the rise of regional hegemons in other parts of the world by encouraging security competition among rivals abroad. Second, great powers aim to maximize their wealth, because economic strength is the foundation of military might. They also seek to prevent rivals from acquiring potential sources of wealth, such as oil-rich territory. Third, great powers aim to maintain a preponderance of land power, because land power is the most important component

of military might. Fourth, great powers seek nuclear superiority over their rivals, including first strike counterforce capabilities.

According to Mearsheimer, states rely on four main strategies to pursue these objectives. First, they can go to war. Conquest sometimes pays. Second, states also rely on what Mearsheimer calls blackmail. They can try to gain power at a rival's expense by threatening military force. Third, states can engage in the "bait and bleed" strategy, which involves causing rivals to engage in a protracted war, so that they bleed each other white while the baiter remains strong. However, because it is difficult to get other states to fall into this trap, states are more likely to engage in the fourth strategy, which he calls "bloodletting." This involves making sure that any ongoing war between one's rivals turns into a long and costly conflict that saps their strength.

Finally, Mearsheimer discusses how states check aggressors. They can use appeasement, bandwagoning, balancing, and buck-passing. He explains that the first two, appeasement and bandwagoning, are dangerous because both involve conceding power to an aggressor. As a result, Mearsheimer argues that the more common choice is between balancing and buck-passing. With balancing, a great power assumes direct responsibility for preventing an aggressor from upsetting the balance of power, either by drawing lines in the sand or forging defensive alliances ("external balancing") or mobilizing additional resources for defense ("internal balancing"). All of these actions are costly. Therefore, Mearsheimer argues that states are more likely to buck-pass. They try to get another state to bear the burden of deterring or fighting an aggressor, while remaining on the sidelines themselves. Buck-passing can be dangerous, however, if the buck-catcher fails to check the aggressor. There is also the opposite danger that the buck-catcher might be too successful and become a threat in itself. In short Realists view the world as a dangerous place where states must compete to survive.

LIBERALISM

Andrew Moravcsik provides an overview of liberalism. All variants of Liberal theory, he argues, focus not on what states *can* compete to get, as Realists do, but on what they *want*. The paradigm rests on one basic idea: variation in social demands and state preferences, influenced by globalization, drives state behavior in world politics. Moravcsik outlines three core assumptions of all Liberal theories. The first concerns the nature of societal actors: globalization generates different demands from individuals and groups because it affects different groups differently. For example, in any given state globalization may enrich some, and impoverish others. The second concerns the nature of the state: states represent the demands of a subset of domestic individuals and social groups. For example, this 'selectorate' may be the entire body politic, or a narrow elite. Their demands and interests define what states want. The third assumption concerns the nature of the international system: the pattern of alignment among state preferences shapes state behavior. Opposing state preferences make conflict more likely, while more convergent ones generate peace and cooperation.

Drawing on these three assumptions, Liberals do not claim that wars should never happen, only that they do not result from the factors—or at the times and places— Realists identify. Liberals believe war occurs not when there are imbalances of power, but when aggressor states arise with revisionist preferences so extreme that other states are unwilling to submit. Moravcsik delineates three variants of Liberal theory, each of which explains how a different source of conflicting state preferences can trigger war.

First, ideational liberal theories link state behavior to varied conceptions of desirable forms of cultural, political, and socioeconomic order, which rest in large part on domestic social identities or ideologies. In this view, armed conflict becomes more likely in situations of intense ideological conflict, for example, where nationalist conflicts split important national minorities on opposite sides of a border, or where a political system feels threatened by the very existence of an opposing ideology elsewhere.

Second, commercial liberal theories stress economic interdependence and how the pattern of economic winners and losers created by states' economic policies—their distributional consequences'—shape groups' preferences within society. In this case, armed conflict becomes more likely in circumstances where resources are scarce but readily captured, and economic control easily monopolized. Examples include the imperial and trade wars of Early Modern Europe and even oil states today.

Third, republican liberal theories stress the role of domestic representative institutions, elite and leadership dynamics, and executive-legislative relations, with an eye toward explaining whose preferences actually dominate policymaking. In these cases, war can still break out when states are run by dictators or military juntas in search of legitimacy; imperial cliques with a narrow economic interest in expansion; or when "failed" states force individuals to adopt risk-acceptant strategies simply to assure a modicum of basic security and prosperity.

All three versions of Liberal theory predict significant variation in the substantive content of foreign policy across issues, regions, or hegemonic orders. While Moravcsik is far from a blanket optimist, he does predict that over long periods of time there can be major changes in the nature of world politics that override the pattern of great power conflict that Realists emphasize, and which dominates the history of the nation state. In general, Liberal variables such as democracy, economic interdependence and ideological conflict have been moving in a normatively positive direction for the past 75 years. Armed conflict in the world has generally been in decline, and has essentially disappeared from Western Europe, the Americas and parts of East Asia. Conflict, such as it still is, coexists with ever more intensive international cooperation in many issue areas. Moreover, many countries pursue strategies that are manifestly not based on Realist power balancing, but on economic, social and political cooperation and engagement—even among otherwise competitive great powers, such as the US and China. The best way to explain this, Moravcsik argues, is to accept the Liberal premise that what states want can and does change substantially over time and has a critical impact on what states do.

Finally, Moravcsik asserts that a great advantage of Liberal theory is that it is not exclusive. It meshes well with other paradigms and theories. Neither academics nor practitioners ultimately find monocausal theories particularly convincing. Liberals argue that the first thing one needs to know about a situation in world politics is what the underlying stakes are—i.e. what states want, and how badly they want it. This means Liberalism comes first in any multi-causal explanation of outcomes in international politics. In a subset of cases, Liberal theory will tell us that state preferences are highly conflictual and important enough that ruling elites in society will be willing to contemplate the use of military force. In such cases, Realist theory may tell us a lot about who ultimately prevails and how.

CONSTRUCTIVISM/CULTURAL PARADIGM

Thomas U. Berger examines why Germany and Japan have failed to develop an independent defense posture in the decades since the end of the Second World War. He argues that this behavior is confusing

to the neorealist and neoliberal schools, both of which predict that states react rationally to the international environment. Neorealists would predict that both states should have rearmed as their economic power increased and the international environment grew more threatening. Neoliberals would predict that the states should have rearmed in order to meet the demands of the international organizations to which each country belongs.

Instead, Berger argues that cultural explanations must be sought. He summarizes his argument, "The central thesis is that Germany and Japan, as a result of their historical experiences and the way in which those experiences were interpreted by domestic political actors, have developed beliefs and values that make them peculiarly reluctant to resort to the use of military force." Berger delves into the unique political-military cultures that have arisen in each nation. Japan, he argues, came to see itself as a "merchant nation" which forswears military power and relies entirely on the U.S. for defense. Germany has focused on its membership in the community of other Western states and restricted its military to its role within NATO. In both cases, structural explanations prove insufficient in explaining defense postures.

HISTORICAL-INSTITUTIONAL/MATERIALIST PARADIGM

Paul Collier presents a materialist explanation of ethnic conflict. Materialist explanations of international politics focus on the distribution of material resources and the interests this distribution creates. For materialists, economic opportunity and deprivation drive international politics.

Collier's analysis of civil wars in the period 1965-1999 leads him to conclude that "where rebellions happen to be financially viable, wars will occur." Grievances may generate political conflict but in order to explain how such political conflicts escalate to violent conflicts, one must focus on a rebel group's opportunities to raise revenue. Collier's analysis highlights three "risk factors" that systematically increase a state's chance of having civil war: 1) economic dependence on primarily commodity exports; 2) low average income; and 3) slow or stagnant growth. The first factor makes an economy "vulnerable to looting and taxation," thus providing a rebel movement with a steady income to fight a war. The latter two factors provide a pool of potential rebel recruits who lack jobs and opportunities under the existing political system.

This focus on economic opportunity and profitability of predation also leads Collier to argue, counterintuitively, that societies that are diverse in terms of ethnicity and religion are significantly safer than homogenous societies. Diversity makes it more difficult to assemble a large enough rebel force. Collier's argument embodies the materialist paradigm by virtue of its focus on the economic forces underlying civil conflict.