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Feature

A Primer on US Civil–Military Relations for National Security Practitioners Dr. Jessica D. Blankshain, US Naval War College

Commentary

Understanding and Challenging "The Digital Air Force" USAF White Paper Maj John P. Biszko, USAF

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Dr. Jessica D. Blankshain

Abstract

Whether or not they realize it, military officers, federal civil servants, and political appointees take part every day in interactions that shape American civilmilitary relations. These national security professionals can benefit from familiarity with academic studies of civil-military relations, which offer key insights on debates over the proper relationship between the military and the government, the military and society, and society's role in overseeing government foreign and military policy, as well as important information on the current reality of these relationships. In an effort to make the academic field of civil-military relations more accessible to national security professionals, this primer will discuss prominent analyses of each of the three key relationships—between civilian government and military, between military and civilian public, and between civilian public and civilian government. The objective of the primer is to enable national security professionals—military and civilian—to critically evaluate arguments relating to civil-military relations and to be aware of the implications of their own actions.

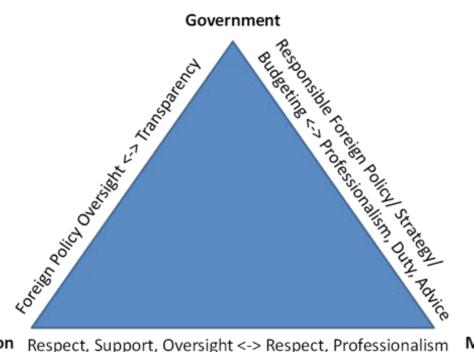
Introduction

When we hear or think about American civil–military relations, it is often in the context of major stories at the highest levels of government. Pres. Harry Truman firing Gen Douglas MacArthur.¹ Friction between Pres. Bill Clinton and Chairman of the Joint Chiefs Colin Powell over allowing gay service members to serve openly.² The "Revolt of the Generals," a period of sharp public criticism from retired generals, faced by Pres. George W. Bush and Secretary of Defense Donald Rumsfeld in the midst of the Iraq War.³ Pres. Barack Obama requesting the resignation of Gen Stanley McChrystal after a *Rolling Stone* article revealed a command climate that openly disparaged civilian leaders.⁴ Chairman of the Joint Chiefs Mark Milley publicly apologizing for "creat[ing] a perception of the military involved in domestic politics" by appearing at a photo-op with Pres. Donald Trump

during protests against police violence in Washington DC, as the president threatened to use federal troops to quell civil unrest.⁵

Despite our tendency to focus on these attention-grabbing incidents, the truth is that military officers, federal civil servants, and political appointees at all levels take part every day in interactions that shape American civil–military relations. It is therefore crucial that these individuals understand the dynamics and stakes that shape these civil-military relationships. While there are certainly efforts to educate military officers, in particular, about the norms of civil-military relations and the profession of arms, such efforts are not uniform and are not matched on the civilian side of the relationship. Moreover, they often do little to connect national security practitioners to the booming academic literature on American civil-military relations. Academic studies of civil-military relations offer key insights on debates over the proper relationship between the military and the government, the military and society, and society's role in overseeing government foreign and military policy. Academic studies also offer important information on the current reality of these relationships. It would be a mistake to assume that this literature is purely Ivory tower theorizing that has little to offer practitioners living these roles and relationships on a day-to-day basis.

In an effort to make the academic field of civil–military relations more accessible to national security practitioners, this primer will discuss prominent analyses of each of the three key relationships—between civilian government and military, between military and civilian public, and between civilian public and civilian government. While important work on American civil-military relations is being done across academic fields, including history, sociology, and economics, this primer focuses primarily on contributions from political science, which tend to emphasize the implications of civil-military relations for policy processes and political outcomes. The objective of the primer is to enable national security practitioners—military and civilian—to critically evaluate arguments relating to civilmilitary relations and to be aware of the implications of their own actions. After laying out the basics of a social science approach to civil-military relations, the primer will discuss the relationship between the military and the civilian government—how to balance civilian control and military effectiveness—before bringing in society at large, with a focus on how the military and society view each other, as well as how the public evaluates government conduct of military and foreign policy.





A Social Science Approach to Civil–Military Relations

The academic field of civil-military relations involves the study of interactions among a state's *civilian public*, its *civilian government*, and its *military* (see fig. 1).⁶ This framing does, of course, presume some degree of separation between these three components, as is the case for most large, industrial societies. The nature of these relationships will vary by regime type. In a democratic republic, such as the United States, the public delegates governing authority to the government, which in turn delegates authority for providing security through the use of force to the military (see fig. 2). Peter Feaver notes "most of democratic theory is concerned with devising ways to ensure that the people remain in control even as profession-als conduct the business of government."⁷ Put another way, "the claim of democratic theory is that even when civilians are less expert, they are still rightfully in charge."⁸ This nested delegation framing suggests the fundamental challenge of civil–military relations. Feaver summarizes this challenge as "the civil–military problematique": how "to reconcile a military strong enough to do anything the

civilians ask them to with a military subordinate enough to do only what civilians authorize them to do."⁹

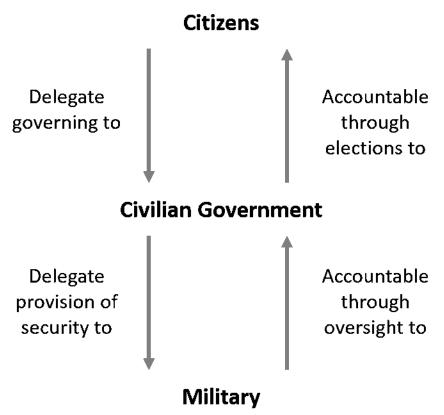


Figure 2: Democratic civil-military relations as a nested delegation model

In studying civil-military relations it is important to understand the difference between *normative* arguments—discussions of what *ought* to be—and *descriptive* arguments—discussions of what *is*. Reasonable people can disagree on particular aspects of the ideal civil-military relationship in the United States, depending on their ideology and values. Empirical evidence helps us sort through the reality of the existing relationship. Another important distinction is between empirical data that simply represent facts—for example, an estimate of the percentage of military officers who identify as Republican—and empirical studies that attempt to investigate a causal relationship—for example, that military training and experience socializing military officers to identify as Republicans. The former is simply a matter of data availability and accuracy, while the latter requires not only data but also appropriate methods for analyzing the relationship between different variables. You may be familiar with the phrase "correlation is not causation." When social scientists say this, they are generally referring to concerns such as selection effects, endogeneity, and omitted variable bias, all of which complicate the identification of the causal relationship between two variables that appear to covary in some way. For example, if we find military officers are more likely to identify as Republicans than are members of the general population, we cannot immediately assume that military service causes individuals to become Republicans. This observed relationship could be a result of a) military training and experience causing individuals to identify Republican, b) individuals who already identify Republican being more likely to join the military, or c) some other factor (such as geography, race, or gender) that is correlated with both military status and partisanship.

Some aspects of American civil-military relations are relatively settled from a normative perspective. For example, most agree the relationship between the military and the civilian government is properly one of military subordination. Other aspects of civil-military relations are more controversial. When does military dissent cross a line and threaten civilian control? Is there an operational sphere over which the military should have relative autonomy? Should a democratic society rely on citizen-soldiers, or create a professional "warrior caste"? To what degree should military culture represent society's values, particularly in terms of diversity and inclusiveness? What role should veterans play in partisan politics? Aside from such philosophical disagreements over these normative issues, disputes over the validity of various types of data and methods of analysis mean observers may not agree on how closely the civil- military reality resembles any of these normative visions. These are some of the many debates the academic literature on civil-military relations seeks to shed light on.

The Relationship between the Military and the Civilian Government

The relationship between the military and the civilian government has been the leg of the civil-military triangle that has received the most attention from political scientists. Scholars focus on questions such as: How do elected officials, civil servants, and military leaders interact at the highest levels? How do these interactions affect the balance between civilian control and military effectiveness? One can think of civil-military outcomes, in the most general sense, as falling along a continuum between two extremes. At one end, the military is so weak it collapses

on the battlefield and is unable to assure the security of society. On the other end, the military is so powerful it overthrows the civilian government. Of course, there are many possibilities between these extremes. Feaver elaborates, "Because the military must face enemies, it must have coercive power, the ability to force its will on others. But coercive power often gives the holder the capability to enforce its will on the community that created it."¹⁰ Feaver notes that while the traditional fear is this coercive power will be used in a coup, coercive power also creates other risks: "the possibility that a parasitic military could destroy society by draining it of resources," or "a rogue military could involve the polity in wars and conflicts contrary to society's interests and expressed will," or the military could "resist civilian direction and pursue its own interests."¹¹

Civilian Control of the Military

In particular, analysts have focused on "civilian control"—the civilian government's ability to ensure it gets the military policy it wants, despite the fact the military is physically more powerful than the civilian government in that it directly controls the instruments of violence. There is a temptation to believe "civilian control" as such is not an issue in the United States because no one is seriously worried about a military coup. But, as Owens notes, "this is a straw man."¹² Lindsay Cohn writes that a true understanding of "control" extends beyond which party—civilian or military—has formal authority to include "the concepts of governance, influence, and obedience."¹³ In particular, "The literature on political control of the military agent is largely in agreement on three points: civilians must have the institutions and authority to issue orders, they must not be subject to undue influence in the formulation of the orders, and they must be obeyed when they issue orders."¹⁴

In his classic work, *The Soldier and the State*, Samuel Huntington identifies three responsibilities of military leaders in relation to the civilian government. The first is the "representative function," the professional requirement "to represent the claims of military security within the state machinery."¹⁵ The second responsibility is to exercise the "advisory function." This is the professional imperative "to analyze and to report on the implications of alternative courses of action from the military point of view."¹⁶ The third responsibility is to exercise the "executive function." Huntington writes this responsibility requires the professional military "to implement state decisions with respect to state security even if it is a decision

which runs violently counter to his military judgment."¹⁷ Richard Kohn picks up this thread of the executive function, arguing that:

[I]n practice, the relationship is far more complex. Both sides frequently disagree among themselves. Further, the military can evade or circumscribe civilian authority by framing the alternatives or tailoring their advice or predicting nasty consequences; by leaking information or appealing to public opinion (through various indirect channels, like lobbying groups or retired generals and admirals); or by approaching friends in the Congress for support. They can even fail to implement decisions, or carry them out in such a way as to stymie their intent. . . . We are not talking about a coup here, or anything else demonstrably illegal; we are talking about who calls the tune in military affairs in the United States today.¹⁸

This suggests a disconnect between *normative* ideals of civilian control of the military and the civil–military bargaining that occurs *in practice*.¹⁹ We now turn to an overview of the academic theories that examine the ways in which civilian control is likely to vary in practice, and the ways the civilian government can attempt to maximize control.

The "classical" literature on civil–military relations, epitomized by the works of Huntington (a political scientist) and Morris Janowitz (a sociologist), focuses on ideological and ethical factors.²⁰ Both authors suggest military professionalism is the key to ensuring civilian control. Huntington defines a profession as having specialized expertise, corporateness, and social responsibility. He argues that military officers fit this description, having specialized expertise in the management of violence, the ability to set their own entrance standards and enforce their own professional ethic, and a responsibility to provide security for the society that depends on them.²¹ The aspect of this literature most likely to be familiar to national security professionals, and particularly military officers, is Huntington's theory of "objective control," a system in which civilian and military spheres are distinct, and civilians grant military officers significant autonomy over operational and tactical decisions in exchange for the military's willingness to stay out of politics and policy decisions. Huntington argues objective control maximizes military professionalism.²² Huntington further predicted that for the military to succeed in providing security in the face of a significant threat like Soviet Communism America's individualistic, liberal society would need to become more like the military. This is one area in which he differs significantly from Morris Janowitz,

who instead argues that the military should evolve with societal values and norms. $^{\rm 23}$

More recent work by Feaver has shifted the focus from internal controls on military behavior (in the form of indoctrinating a professional ethic of subordination) to external controls in the form of monitoring and punishment. Feaver suggests the civil-military relationship can be modeled with the "principal-agent" framework familiar to economists who study contract theory and organizational economics.²⁴ The civilian principal and military agent may have divergent preferences (generally not over the fundamental aim of national security, but over the means by which national security is to be achieved). At the same time, the military has more information about its activities, and expertise on military issues, than does the civilian principal. The challenge is for the civilian principal to ensure the military "does what it has contracted with the principal to do, how the principal has asked it to, with due diligence and skill, and in such a way as to reinforce the principal's superior role in making the decisions and drawing the lines of any delegation."25 Feaver suggests the civilian cannot achieve this by relying on military professionalism alone—instead the civilian principal must create a system in which it is able to monitor the military's behavior and punish misbehavior accordingly.²⁶

In terms of achieving control, Cohn summarizes the relationship between different methods of control by turning to sociologist Max Weber, who argues that in terms of motives for obedience, "selfish gain is the weakest, but it can be strengthened by ideals or affinities, and one or both of these in conjunction with a belief in the legitimacy of the control relationship will yield the most stable situation."²⁷ Cohn puts these factors together in more concrete terms as follows:

The strength of government control over its agents should increase when there are institutions supporting civilian authority, civilian leaders competent and confident in defense policy making, an agent culture of subordination to legitimate authority, an effective system of principal monitoring and punishment, and low average preference discrepancies between the government and the agent organization.²⁸

Civilian authority is complicated in the American case by the separation of power between the executive and legislative branches. What does it mean for the military to be subordinate to the civilian government when the civilian government is divided on military policy? As Owens notes, "while the president and secretary of defense control the military when it comes to the use of force, including strategy and rules of engagement, Congress controls the military directly with regard to force size, equipment, and organization, and indirectly regarding doctrine and personnel."²⁹ Jim Golby finds that the Senate does use its power to confirm presidential appointments to shape senior military leadership, with presidents of both parties more likely to appoint officers with ideologies more similar to their own when the president's co-partisans control the Senate.³⁰ Owens further argues: "When the two branches are in disagreement, the military tends to side with the branch that most favors its own views, but never to the point of direct disobedience to orders of the commander in chief."³¹ In a comparison of the American and British systems, Deborah Avant finds that divisions within the civilian government can make the military less responsive to civilian efforts to spur military adaptation.³² In a separate study, Avant argues that disagreement between civilian officials over policy goals also leads to more pushback from military leaders about their desired missions.³³

While none of the authors above suggest that a military coup is a serious threat in the US today, they point to a number of areas on the margins where the military could challenge the civilian government's ability to conduct policy as it chooses.

Patterns of Civilian Control and Military Effectiveness: The Role of Military Expertise

It is important to remember there are two sides to the civil–military problematique; in addition to a military subordinate to civilian control, society also desires a military strong enough to protect it from threats. Thus, an important test of a pattern of civilian control is how well it contributes to the effectiveness of a state's military. How might civil–military relations affect military effectiveness? At the extreme, civilians might intentionally keep the military weak, starving it of funds and personnel, in order to prevent the military from amassing too much power. Even in today's constrained fiscal environment, few would argue this is the case in the United States. But more subtly, the pattern of civilian control chosen by the government may affect a state's ability to effectively build military capacity and connect political goals with military means. For example, Amy Zegart, argues that political leaders designed a number of important national security institutions including the National Security Council and Joint Chiefs of Staff—to maximize their own ability to exert political control rather than to maximize their effectiveness in implementing national policy.³⁴

Eliot Cohen points out that—in contrast to the recommendations of Huntington's objective control theory—there have been occasions when wartime civilian leaders such as Winston Churchill and Abraham Lincoln were involved in strategic, operational, and tactical decisions.³⁵ Cohen selects for analysis a handful of cases in which he argues civilian trespassing in the military sphere led to good outcomes, and thus does not prove objective control always harms military effectiveness, but he does illustrate that neither does civilian intervention necessarily reduce military effectiveness, and that indeed it may be beneficial in some instances. Civilian "meddling" may help to minimize "the disjunction between operational excellence in combat and policy, which determines the reasons for which a particular war is to be fought."³⁶

Risa Brooks also analyzes how a state's civil–military relations affect its ability to formulate successful strategy.³⁷ Brooks argues good strategic assessment requires information sharing and strategic coordination between civilian and military, as well as a military competent to assess its own (and others') capabilities and a clear decision-making and authorization process.³⁸ Brooks hypothesizes the quality of strategic assessment will vary with civil–military preference divergence and with the civil–military balance of power. In particular, she suggests strategic assessment will be of the highest quality when preference divergence is low and the civilians are dominant. It will be worst when preference divergence is high and civilian and military share power, with no party clearly dominant. The quality of strategic assessment will be "fair" when the military dominates.³⁹ As one of her case studies, Brooks analyzes the quality of strategic assessment with respect to post-conflict planning for the 2003 Iraq War. She argues this was a case of "mixed" results as the civilian side was clearly dominant, but preference divergence was high as a result of military resistance to Rumsfeld's transformation efforts:

Underlying disputes over policy and strategic issues induce political leaders to employ oversight mechanisms to ensure military compliance with their initiatives ... while these tactics mitigate problems in information sharing ... and provide for a clear authorization process ... the safeguards are also often counterproductive to strategic coordination. They truncate political-military dialogue and limit the range of perspectives represented in the advisory processes.⁴⁰

In other words, Brooks suggests that when civilians are too heavy-handed in their monitoring and punishment of military behavior, they may stifle civil–military dialogue, resulting in faulty strategic assessment.

As the above discussions have hinted, at the crux of the civil-military problematique is the role military expertise plays in policymaking and policy implementation. What does it mean for military officers to advise without advocating for particular policies? In what realms should the military have more or less autonomy in choosing and carrying out its actions? What should military officers do if they don't feel their advice is being adequately heard and considered? What should civilians do if they believe military officers are using advice strategically to control policy?

The Huntingtonian model of military advice has increasingly been questioned, both in terms of its practicality—can such a model of advising be achieved in practice?—and in terms of whether doing so would be desirable in a normative sense. Risa Brooks notes that in Huntington's conceptualization, "relations between civilians and the military in advisory processes are therefore essentially transactional, rather than collaborative."⁴¹ In this model, senior military leaders " should readily offer politics-free assessments of military options after civilians provide them with definitive guidance about their goals in international conflicts."⁴² Janine Davidson argues that in reality, both sides—civilian and military—end up frustrated by the civil—military dialogue around use of force decisions. They become trapped in a perpetual chicken and egg problem in which military leaders are frustrated that civilians will not give them specific guidance on policy objectives from which to begin their planning process, while civilians are frustrated that military leaders will not provide them with a full range of options from which they can determine achievable goals.⁴³

This Huntingtonian view of the military's role in policymaking is often referred to as "best military advice." Jim Golby and Mara Karlin argue that this term is problematic, and risks "creat[ing] the impression that military advice is better than civilian advice."⁴⁴ They further argue that this framing reinforces the tendency to view the advising relationship as transactional, with the military providing a take it or leave it option that civilians disregard at their peril.⁴⁵ In addition, "best military advice" reinforces the unrealistic framing of a clear separation between military and policy spheres, making it more difficult to connect military policy to overall strategic and political goals.⁴⁶

Elsewhere, Golby argues that Huntington's formulation of military professionalism and objective control "has created the lasting impression that civilian leaders must implicitly trust, and grant autonomy to, military leaders" when instead "autonomy must be earned and re-earned continuously through the daily

demonstration of character and competence, and the commitment by members of the profession to police themselves and hold one another accountable."⁴⁷ He further argues that to earn autonomy and trust:

US military leaders must recognize their advice must evolve as political conditions change; must focus more on cooperation with civilians than on civilian control; empower mid-level leaders and staff officers to participate fully in the interagency process; anticipate problems rather than waiting for a political end state; and focus on how military tools can accomplish civilian goals.⁴⁸

Similarly, Risa Brooks contends that a "new approach [to the advisory process] should promote greater engagement by military leaders with civilian policymakers in considering political objectives and policy-related issues."⁴⁹

The reader may, by now, have noticed that much of the literature on the militarygovernment relationship focuses on the military's responsibilities and obligations. This literature on the civilian side of the equation remains underdeveloped, but civilian responsibilities have not been entirely ignored. Golby and Karlin note that an important part of the responsibility for a healthy advising relationship falls on civilian policymakers, who must be knowledgeable about national security affairs and prepared to engage in this iterative process.⁵⁰ Alice Hunt Friend argues that the government "civilians" in the civil–military relationship are not simply "not military." Rather, "the experience, skills, knowledge, and vision that civilians bring to their politically enabled roles in the civil-military relationship provide the military profession the context in which it is called to serve."⁵¹ This also evokes Cohn's discussion of civilian control, referenced earlier, in which she writes that civilian control will be stronger when there are "civilian leaders competent and confident in defense policy making."52 Strengthening civilian competence thus holds promise for increasing both civilian control and military effectiveness at the same time.

Dissent and Disobedience

As noted earlier, Huntington asserts that military officers have a responsibility to represent and advise, but also to execute orders they disagree with. This is a nice theoretical distinction, but the line between advice, dissent, and disobedience can be blurrier in practice. Among scholars and practitioners of US civil–military relations, Feaver describes a divide between "professional [military] supremacists," who "argue that the primary problem for civil–military relations during wartime is ensuring the military an adequate voice and keeping civilians from micromanaging and mismanaging matters," and "civilian supremacists" who "argue that the primary problem is ensuring that well-informed civilian strategic guidance is authoritatively directing key decisions, even when the military disagrees with that direction."⁵³ Cohen describes military input in policy making as an "unequal dialogue." It is "a dialogue, in that both [the civilian and military] sides expressed their views bluntly, indeed, sometimes offensively, and not once but repeatedly—and unequal, in that the final authority of the civilian leader was unambiguous and unquestioned."⁵⁴ Feaver, more bluntly, calls this civilians' "right to be wrong."⁵⁵

This theoretical division has been observed in the real world. Owens notes: "During the 1990s some military officers explicitly adopted the professional supremacist] view that soldiers have the right to a voice in making *policy* regarding the use of the military instrument, that indeed they have the right to *insist* their views be adopted."56 In Feaver's principal-agent formulation, military efforts to insist on a particular policy might include various forms of "shirking": "foot dragging," "slow rolling" and leaks to the press designed to undercut policy or individual policy makers.⁵⁷ The professional supremacist view is complicated by the military's expanding role in foreign policymaking, as Derek Reveron explores in an examination of the growing role of regional combatant commanders.⁵⁸ What is and is not within the realm of professional military expertise when military leaders also function as diplomats and aid workers? A relatively extreme example of professional supremacist thinking is Marine lieutenant colonel Andrew Milburn's Joint Forces Quarterly article "Breaking Ranks," which argues "there are circumstances under which a military officer is not only justified but also obligated to disobey a legal order."⁵⁹ In particular, Milburn writes an officer "[is obligated] to disobey an order he deems immoral; that is, an order that is likely to harm the institution writ large-the Nation, military and subordinates-in a manner not clearly outweighed by its likely benefits."60

In a response, Kohn, a leading figure in the civilian supremacist camp, writes that Milburn's piece is "an attack on military professionalism that would unhinge the armed forces of the United States" and that "in the US, the military possesses no autonomy of any kind not derived from civilian political institutions, and certainly no moral autonomy."⁶¹ Similarly Feaver, firmly within the civilian supremacist camp, writes that even resignation in protest is out of bounds, and "would do much to undermine healthy civil–military relations if it ever became accepted practice among senior officers." He suggests a "dissenting senior officer" can pursue three options, "all well-grounded in democratic civil–military norms." These

options include "the right and the duty to speak up in private policymaking deliberations"; the "obligation to offer their private military advice" "when asked to do so in sworn testimony in congressional hearings"; and "the right ... to clarify the public record when senior civilians misrepresent the content of their advice in public ... provided it does so through one of the two courses of action described above."⁶²

Others have attempted to chart a more moderate course that allows for military dissent and moral autonomy, but acknowledges important limits. For instance, Leonard Wong and Douglas Lovelace propose a range of available options for dissent from working to achieve consensus to resignation, and argue that military officers should choose one based on the degree of civilian resistance to military advice and the seriousness of the threat to national security the policy embodies.⁶³ Don Snider also accepts the idea of broadening the choices available to uniformed officers when faced with what they believe to be flawed policy decisions by civilians, but argues that officers should above all consider the imperatives of military professionalism and how the "trust" relationship between the military profession and other entities within American society and government will be affected by their actions. Such a moral analysis, he argues must address at least five considerations: the "gravity of the issue to the nation (and thus to the profession's clients)," the "relevance of the strategic leader's professional expertise to the issue," the "degree of sacrifice involved for the dissenter," the "timing of the act of dissent," and finally whether act of dissent congruent "with the prior, long-term personality, character and belief patterns of the dissenter?"⁶⁴ One way to view some of these methods of dissent—leaks to the media, statements to the public—is as an attempt by the military to disrupt the nested delegation problem (see Figure 2) by circumventing the civilian government, aiming to be held accountable directly by the civilian public, instead. There is some evidence that the public can be influenced by signals that senior military leaders support or oppose a particular use of force, 65 although this may or may not translate into changes in government policy. This is in keeping with broader findings that members of the American public often follow elite, and sometimes social group, cues when forming opinions on foreign policy issues.⁶⁶ Such a direct appeal may be attractive to many as a more direct form of democratic accountability, but also raises questions of attentiveness and expertise. Is the civilian public able to judge the military's actions and take actions to ensure accountability, separate from the intervention of the civilian government?

A Primer on US Civil-Military Relations for National Security Practitioners

Lindsay Cohn, Max Margulies, and Michael Robinson argue that we cannot really consider disobedience and moral autonomy without considering the context, in particular distinguishing between the questions of "whether to obey orders that would be counterproductive to the mission, whether to obey orders that would be immoral (but not necessarily illegal), and whether to obey orders that appear to the officer to undermine the political order or the national interest."⁶⁷ In particular, while "most people probably agree that military officers ought to exercise both tactical judgment and some personal moral agency," whether military officers should disobey or resign when they think their mission is "contrary to the national interest, or insufficiently justified or clarified by the political leadership" is a far more controversial question.⁶⁸ While it may be tempting for individual officers to frame these decisions to disobey as ones of professional expertise or personal morals, this risks ignoring the broader consequences of military disobedience, especially at scale. Risa Brooks argues that American military officers' selfconception as apolitical military professionals in the Huntington sense may blind them to the political consequences of their actions: "a military leader may speak out, believing herself to be motivated by personal conscience or an altruistic concern for the country's security, but then fail to recognize the action's political effects."69

This brief overview demonstrates that while most analysts and practitioners believe that the military should both be subordinate to civilian political authority and provide expert advice as part of the policymaking process, questions and issues remain. Empirically, we do often see friction in the advice and policymaking process. Normatively, there is disagreement about what form military advice should take and to what extend military pushback on policy decisions is appropriate.

Bringing in the Civilian Public

We next turn to the civilian public's relationships with the military and with the civilian government. While these are two distinct relationships, we consider them together as they overlap in important areas. Members of the military are drawn from, and have personal connections to, the general public. This same public is responsible for holding the government accountable for military policy, primarily through elections. Some scholars and journalists argue the degree to which they do so is directly related to the degree to which they feel connected to the military. The early post-Cold War period led to a whole subgenre of civil-military

relations literature sometimes called "gap studies," focusing on the possible existence, and consequences, of a widening "gap" between the military and American society.⁷⁰ The military may also play role in mediating the relationship between civilian public and civilian government through public relations efforts and the involvement of individuals connected to the military in domestic politics.

In particular, we consider the following questions. Who serves in the military? How do civilians view the military? Does the civilian population pay adequate attention to military policy? What role do, and should, veterans play in domestic politics?

Who Serves?

Who serves in the United States military? Should military service be compulsory, or voluntary? To what extent should the military establishment represent the diversity and ideology of the broader society? As with other questions discussed above, scholars and analysts have worked both to describe the ways the United States has actually managed its military manpower, and to discuss how it should do so to accord with democratic ideals while maintaining both civilian control and military effectiveness.

Owens describes the history of US military manpower:

Through most of its early history, the United States maintained a small regular peacetime establishment that mostly conducted limited constabulary operations. During wartime, the several states were responsible for raising soldiers for federal service, either as militia or volunteers.

While the United States resorted to a draft during the Civil War and again during World War I, conscription became the norm in the United States only from the eve of World War II until the 1970s.⁷¹

Despite the end of conscription in 1973, the bones of this system are still in place today, as evidenced by the continued requirement that military-aged male citizens register with selective service.

The US military has now been an all-volunteer professional force for over four decades, and has maintained a sizable peacetime active duty capacity since the end of the Cold War 25 years ago. As one might expect, studies indicate the current all-volunteer force (AVF) is more representative of society in some respects than in others. For example, the force is younger and more male than the population at large, but the racial breakdown of the force is similar to that of society as a whole.

Compared to the draft-era force, the AVF is "more educated, more married, more female, and less white."⁷² The military is, though, "disproportionately Republican and rural."⁷³ A study of military recruits before and after 9/11 indicates the majority of enlisted recruits come from the middle class. The only income quintile noticeably underrepresented is the bottom quintile.⁷⁴ More recently, Hugh Liebert and Jim Golby argue "Today's military is as representative of the nation socioeconomically as racially, though soldiers are somewhat more likely to come from middle-class suburbs than from the poorest or richest neighborhoods."⁷⁵ There are significant differences between the demographic composition of the officer vs. enlisted corps, so it is important to pay attention to which group(s) are being referenced when reviewing data on the composition of the force.

The primary mechanism by which the government, on behalf of society, controls the composition of the force is through the method by which individuals are selected for service. It is important to note this question is not as simple as "draft or no draft." In an all-volunteer system, society, through the government, must make decisions about the size of the military, the qualifications for service, the length of enlistments, and the penalty for leaving service early. Similarly, a conscript system could involve universal service, mandatory service for some segment of the population, or a draft lottery in which members of the eligible segment of the population are selected for service at random. These different systems have very different implications for how the burden of service is spread.⁷⁶ One could have a standing conscript military, or one in which conscripts are only called up in the event that additional manpower is needed in a conflict. To attract certain types of individuals to the military (for example, computer scientists, or women, or Democrats) the government could use voluntary mechanisms—altering its marketing message, or targeting recruitment and retention incentives—or use compulsion, forcing certain groups into service (though in the US, the latter method would raise questions of constitutionality).

Debates around who serves generally concern three factors: civilian control of the military, military effectiveness, and ideology:

Civilian Control of the Military: Going back to the terms discussed in the previous section, some argue a military that is more representative of society will have interests more aligned with civilians' thus decreasing the civil–military preference gap and facilitating civilian control. Eric Nordlinger writes, "in the absence of significant differences between civilians and soldiers, the civilians may quite easily retain control because the military has no reason

(i.e., opposing beliefs or conflicting interests) to challenge them."⁷⁷ This assumes, however, that joining the military institution does not somehow alter these individuals' interests. It also highlights the American tradition of glorifying the "citizen-soldier," an average citizen who takes up arms in times of need in the tradition of the Revolutionary War's Minutemen.⁷⁸ There is an inherent tension between having members of the military view themselves as "just like everyone else," and thus likely to share the interests of the civilians they serve, and creating force that sees itself as a profession distinct from society, but subordinate to society's wishes.

Military Effectiveness: The choices between voluntary and compulsory service, length of service, and diversity of servicemembers also have implications for military effectiveness. There is evidence to suggest that volunteer professional militaries are more effective.⁷⁹ Particularly in a high-technology force, rapid turnover among a short-term conscript force could degrade readiness and increase reliance on contractors, for example. Huntington worried American liberalism, with its emphasis on the importance of the individual, is inherently antimilitary and that attempts to make the military "conform or die" would result in military failure during the high-threat, long-duration Cold War.⁸⁰ More recent challenges to efforts to diversify the force have argued certain types of diversity harm military effectiveness by disrupting small group cohesion.⁸¹ In contrast, others argue that diversity actually discourages groupthink and encourages innovation, and that traditional models of who belongs in the military severely hamper efforts to recruit the best talent.⁸²

Ideology: Some argue regardless of the effects on civilian control and military effectiveness, it is right for the military to reflect certain aspects of society's composition and values, or that exclusion from the military constitutes a civil-rights violation.⁸³ These arguments have been made with respect to racial integration, open service by gay servicemembers, and opening more military roles to women.⁸⁴ A Congressional Research Service report notes "Women's rights supporters contend that the exclusionary policy prevents women from gaining leadership positions and view expanding the roles of women as a matter of civil rights."⁸⁵ "Some carry the argument further to say that women cannot be equal in society as long as they are barred from full participation in all levels of the national security system."⁸⁶ Another component of the ideological argument is that having a more diverse military, with personal connections to a broader segment of

society, will improve democratic feedback mechanisms by creating stronger incentives for the civilian public to hold the government accountable for foreign policy. We examine this issue in more detail in a later next section.

Civilian Attitudes toward the Military

As the reader is likely already aware, the military is one of the most respected and trusted institutions in American society. Americans have more confidence in the military than in the Supreme Court or Congress, and trust members of the military more than they trust civil servants. The 2018 General Social Survey (GSS) finds that 60 percent of Americans had "a great deal" of confidence in the military, compared to 31 percent in the Supreme Court, 12 percent in the Executive Branch, and 6 percent in Congress. According to the GSS, confidence in the military has outpaced confidence in these other intuitions since 1991, when a gap opened up between the military and the Supreme Court.87 Similarly, Pew Research Center found that 83 percent of the public had a "great deal" or "fair amount" of confidence in the military, compared to 61 percent in career government employees, 42 percent in presidential appointees, and 37 percent in elected officials.⁸⁸ Recent studies investigate the role "social desirability bias"—perceived social pressure to support the troops-might play in boosting these numbers for the military, as people may be reluctant to suggest that they do not support the troops.89

One area that has received growing attention is the potential partisan polarization of the public's view of the military and its performance. The Pew study cited above found significant partisan differences in confidence in these components of government. 91 percent of respondents who self-identified as Republican or leaning Republican expressed confidence in the military, compared to 76 percent of those who self-identified as Democrats or leaning Democrat. Conversely, 71 percent of Democrats/lean Democrats expressed support in career government employees compared to 48 percent of Republicans/lean Republicans. Expressed another way, self-identified Republicans expressed confidence in the military significantly more than in civilian government employees (91 percent vs. 48 percent) while self-identified Democrats expressed less disparate levels of confidence in both groups (76 percent vs. 71 percent). Interestingly, there was no gap between Republicans and Democrats on confidence in elected officials.⁹⁰

This suggestion of a potential partisan split accords with recent work by political scientists. David Burbach, for example, finds that while the American public's

confidence in the military has increased over the past 20 years, it has increased fastest among Republicans, and part identification is in fact the best predictor of confidence in the military. He further finds that members of both parties have more confidence in the military when their party controls the White House.⁹¹ Michael Robinson similarly finds that the public's views of the military are divided along partisan lines in part due to selective exposure to, and biased processing of, news media. He finds that "Media outlets such as FOX News, more heavily trafficked by conservative Republicans, were less likely to report on military scandals or poor wartime outcomes."⁹² Further, in survey experiment, exposure to negative news about the military did not depress Republican respondents' confidence in the military, while it did decrease confidence among Democrats and Independents.⁹³

Why might national security practitioners care about the civilian public's view of the military? For one, the large gap between public confidence in the military vs. in the civilian government may exacerbate some of the tensions in the militarygovernment relationship analyzed above. It may be harder for elected officials (and civil servants) to question or push back on military advice when they know the military is far more popular with the public than they are. Similarly, partisan divides in confidence in the military may create the appearance that the military itself is a partisan actor, making it complicating the working relationship between the military and Democratic administrations, in particular.

Civilian Attention to Government Policy Making

It is up to the citizenry, as represented by the civilian government, to determine the appropriate role of the military in society and in foreign policy. Of course, the military's purpose is to maintain the nation's security, but what does this mean in practice? How, when, and when should the military be used? Is the public aware of how the military is used, and willing and able to hold the government accountable for military policy?

In his 2015 *Atlantic* article "The Tragedy of the American Military," James Fallows argues Americans have a "reverent but disengaged attitude toward the military—we love the troops, but we'd rather not think about them."⁹⁴ This means that:

Outsiders treat [the military] both too reverently and too cavalierly, as if regarding its members as heroes makes up for committing them to unending, unwinnable missions and denying them anything like the political mindshare we give to other major public undertakings . . . A chickenhawk nation is more likely to keep going to war, and to keep losing, than one that wrestles with long-term questions of effectiveness.⁹⁵

Fallows suggests the driver behind the American public's neglect is that "the distance between today's stateside American and its always-at-war expeditionary troops is extraordinary."96 With no risk to themselves or their loved ones, "the public, at its safe remove, doesn't insist on accountability."97 Fallows quotes retired Admiral Mike Mullen, former chairman of the Joint Chiefs of Staff, as saying of the AVF, "I would sacrifice some of that excellence and readiness to make sure that we stay close to the American people. Fewer and fewer people know anyone in the military. It's become just too easy to go to war."98 Fallows concludes, "because so small a sliver of the population has a direct stake in the consequences of military action, the normal democratic feedbacks do not work."99 Others have raised a concern that military service seems to run in families, creating a potential "warrior caste."100 It is common for occupations and professions to run in families,¹⁰¹ but society may find this tendency more concerning in some occupations than others. The argument that the professional AVF is too removed from society, or becoming a warrior caste, is sometimes used to support a return to conscription.¹⁰² Others instead argue that the US military should change the way it targets its recruiting and retention efforts.¹⁰³

Academic studies have found mixed support for the hypothesis that conscription increases the degree to which the public will restrain military policy. Michael Horowitz and Matthew Levendusky, using a survey experiment, find that Americans are less willing to commit troops to defend a third-party country from aggression when they believe those troops will include draftees. The effect is larger on those of draft age.¹⁰⁴ Other cross-national studies of the relationship between conscription and likelihood of conflict have reached conflicting conclusions, with some finding that conscription makes conflict more likely, and others that it makes conflict less likely.¹⁰⁵ Recent work does suggest that those who do not have social contact with the military are more reluctant to offer opinions on the military and military policy.¹⁰⁶

An alternative explanation for the American public's perceived lack of interest in military policy is that this is actually a return to normal after the spike in military participation and foreign policy interest produced by WWII and the early years of the Cold War. For example, the Pew Research Center analyzed Gallup Poll data on what the American public viewed as the "most important

problem in presidential years" and found that while foreign policy and security issues outweighed economic issues from 1948–1972, the reverse was true from 1976–2000, with both types of issues cited equally in 2004.¹⁰⁷ Of course, this switch also accords with the switch to the AVF, so further studies would be needed to attempt to determine what drives the American public's lack of attention to foreign and military policy.

Veteran Involvement in Domestic Politics

The primary way the civilian public holds the government accountable for policy—military and otherwise—is through elections. What role does the military play in mediating the relationship between the civilian public and the civilian government? Some military veterans (particularly retired flag officers), reservists, and National Guard members walk a delicate line between their legal status as citizens with the right to participate in politics, and being seen to speak for the military establishment. What level of political participation is appropriate?

Recent research by Golby et al. suggests military officers see a clear distinction between the appropriateness of participating in politics while in uniform vs. after retirement. "Although 70 percent of officers said it was inappropriate for members of the active duty military to criticize senior civilian leaders in the government, only 20 percent thought it was inappropriate for retired officers to do so."108 The authors suggest retired officers' participation in politics is problematic. "[I]t is not clear that the political support of retired officers is based purely on military expertise ... According to the FEC data on the contributions of retired four-star officers, retired officers were more likely to support candidates from the party of the president who appointed them to four-star rank."¹⁰⁹ They also worry "that these veterans use public esteem of the professional and nonpartisan military to give greater weight to their own partisan political views ... this straddling of nonpartisan professionalism and partisan political activity can, over time, erode Americans' trust in the military."¹¹⁰ Separately, Michael Robinson finds some evidence that perceptions of senior military leaders—retired and active—as partisan actors damage both their individual credibility and the institution's trustworthiness among citizens of the opposite party.¹¹¹ Despite these concerns, Golby and his colleagues note:

There aren't a lot of policy options available to influence the activity of retired military. It would be inappropriate—and beyond that, unconstitutional—to put any formal restrictions on what they can and cannot do once they have retired

from active military service. Retired military are fully citizens and should enjoy their full rights as citizens. But citizens regularly restrain themselves in the interests of serving the public good.¹¹²

Similar issues are raised by the political activities of "part-time" military officers, those in the Reserves or Guard. These officers face minimal restrictions on their political activity while off duty. But partisan activity in which these individuals strongly identify as service members raises questions about the perception of military politicization, as well as about maintaining good order and discipline when they return to their units.¹¹³ This is particularly the case when this individuals criticize other elected officials: "When an officer who is also a politician publicly criticizes orders from his commander in chief, who belongs to a different political party, it raises concerns about good order and discipline within the military and, perhaps most significantly, it makes it harder to keep clear separation in the public mind between the military and politics."¹¹⁴

Others have explored whether veterans have an advantage in elections and whether they have different policy preferences, or govern differently, than nonveterans. The answers to these questions are generally complicated. Jeremy Teigen finds that veteran advantage in congressional and presidential elections is highly context dependent.¹¹⁵ Danielle Lupton finds that veterans in Congress more likely than nonveterans to vote for measures that increase congressional oversight of military operations, such as limits on troops and increased access to information.¹¹⁶ Christopher Gelpi and Peter Feaver find that when there are more veterans in government, the US is less likely to initiate military interventions, especially humanitarian ones, but more likely to use higher levels of force once a conflict is initiated.¹¹⁷ These empirical findings can guide debates on whether Americans should want more, or fewer, veterans in government.

Conclusion

This primer on civil-military relations has presented a brief overview of some key aspects of the academic and policy debates surrounding American civil-military relations in an effort to make the academic literature on civil-military relations more accessible to national security practitioners. It examined normative theories of the "civil-military problematique" as well as a discussion of how this dilemma has been approached in practice. The primer discussed both the relationship between the military and the civilian government—how to balance civilian control and military effectiveness—and the role of society at large, with a focus on

how the military and society view each other, as well as how the public evaluates government conduct of military and foreign policy.

We conclude with several key takeaways for practitioners:

- Civilian control of the military comprises more than the absence of a coup or outright disobedience. Military officers, civil servants, and political figures must also consider the role of military advice and dissent in shaping civilian policy preferences and options.
- The relationship between the composition of the military and outcomes such as civilian control, military effectiveness, foreign policy restraint, and accordance with democratic values, is far more complicated than is frequently portrayed.
- Those with a connection to the military, even those not currently in uniform, may be perceived differently than "average civilians" when participating in domestic politics, and this may reflect on the institution, for better or worse.

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Understanding and Challenging "The Digital Air Force" USAF White Paper

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Abstract

This short article is an examination, constructive critique, and epilogue to "The Digital Air Force" USAF White Paper. The article characterizes the white paper in terms of where it falls in a traditional stratification of guidance documents, categorizes the white paper in terms of international relations theory and philosophy, identifies and challenges four key assumptions, and concludes by suggesting that the paper's most important contribution is in its implied meaning for global warning intelligence. The four key assumptions challenged are that the world can best be understood as entering into phases of technological advancement as a coherent whole; that the most effective way for a military to win over great-power adversaries is to evolve its own capabilities in lockstep with the changing character of the technological landscape; that the best way to attack or defend an increasingly digital entity is with increasingly digital weapons and defenses; and that government-sourced innovation is appropriately equivocal with military technological advances.

Introduction

On Tuesday, 9 July 2019, Acting Air Force Secretary Matthew Donovan made comments accompanying the release of "The Digital Air Force" USAF White Paper, which is now publicly available.¹ Written outside of a traditional strategy or policy vehicle, the white paper characterizes how senior leaders conceive of the Air Force's current and future relationship with technology.²

This short article characterizes the white paper in terms of where it falls in a traditional stratification of guidance documents, categorizes the white paper in terms of international relations theory and philosophy, identifies and challenges four key assumptions, and concludes by suggesting that the paper's most important contribution is in its implied meaning for global warning intelligence.³

"The Digital Air Force" USAF White Paper falls squarely into the vision and guidance category.⁴ It is in the same strategic class as purpose, intent, values, and interests; somewhere subordinate to national interests or dominant philosophical trends in the national intellectual character.⁵ The paper contains some general objectives and also hints at some ends, ways, and means; however, it is not structured

to assign objectives to particular offices of primary responsibility, nor does it capture costs or risks associated with its proposed ways and means.

In terms of international relations theory, the writer(s) of the white paper take a primarily neorealist perspective, with a secondary bend toward futuristic constructivism. Thucydides' classical realism is nearly absent.⁶ There are no overt references to fear, the role of the state, the role of the Air Force as subordinate to a state actor, or how the Air Force and the state in any way capture the realist tendencies of the humans that make up the military and the state.⁷ There are, however, overt references to dominance.⁸ Classical liberalism is also auspiciously absent.⁹ There are no references to joint, interagency, coalition, allies, how technology allows one to cooperate with an adversary and thereby deter conflict, or how technology enables more efficient cooperation in achieving the stated objectives more generally. Neorealism is strong in the paper.¹⁰ Recapitalization is a strong theme, in which the need to recapitalize is based in interests, scarcity of resources, and a security dilemma.¹¹ Constructivism is a weak to moderate influence in the paper, taking a neoconstructivist or futurist-constructivist form.¹² The paper suggests that the Air Force will work with industry to create artificial intelligence, which will then assist human actors in more efficiently assigning meaning to changes in the operational environment. The human and inhuman intelligence together in some proportion will then predict and act, creating a reality more favorable to Air Force interests.¹³

In addition to a neorealist and futuristic constructivist perspective, the writer(s) of the white paper fall into a scientistic philosophical category.¹⁴ The white paper is not scientifically or dialectically expository, as it does not propose a thesis and an antithesis, finally arriving at a synthesis.¹⁵ The paper is, however, scientistic, as one of its basic philosophical premises is that one can understand the environment, the problem, the actors, and oneself using science or technology. Of course, that premise itself cannot be proven by science or technology and is, therefore, a philosophy.¹⁶ Coming astride this powerful philosophical trend in the national and military intellects are other latent ideas:

Science and technology explain themselves.¹⁷ The virtues of science and technology are self-evident and implicative. There are fewer and fewer important distinguishing characteristics between human intelligence and artificial intelligence. Despite the facts that machines cannot imagine and have no will, one is increasingly tempted to personify them with terms that have historically applied to living things, for example, "kill the network" and "the critical node is dead." This white paper blurs the lines even further, stating that the Air Force requires networks that are "self-healing"—without distinguishing between curing, healing, restoring, and repairing— essentially stripping *healing* of the social reintegration implication the term has traditionally carried in Western social anthropology.¹⁸ The paper goes further still, stating in its final line that "we will become a digital Air Force," suggesting that not only can machines take on human qualities but also that our organizations can also take on digital qualities.¹⁹ Of course, the idea behind digitizing something is about how data is expressed, and expression is a matter of how living things exchange thoughts.²⁰ An animal mind, desiring to share an idea, expresses that idea onto the mind of another living thing through some form of communication or display of information.²¹ Digital display is one of those mediums.²² For the expressing animal entity to "become digital" is an interesting reversal of traditional subordinate relationships: from "active intellect to expression to medium to pression to active intellect" now inverted to be "blended intellect to impression or expression."

In addition to taking a primarily neorealist, futurist constructivist, scientistic approach to military affairs, the writer(s) assume that the world can best be understood as entering into phases of technological advancement as a coherent whole (i.e., "Our world is entering a new age of technological discovery and advancement.")²³ This basic assumption of a coherent technological community may be a cosmopolitan overstatement of integration. A growing divide between the rich and poor, as well as burgeoning realism, makes the world less unified by technological advancement and more so broken into groups, some of which possess powerful technological tools, and some of which are increasingly disadvantaged.²⁴ The fractious community situation makes technological integration subservient to economic situations, as well as to whether or not users choose to integrate, depending on their political conceptions.²⁵ Whereas the paper assigns technological advancement as the defining characteristic of a global community's evolution, changes in economics, climate, and politics may be even more salient drivers of how military power is applied to cope with global evolution.

Second, the writer assumes that the most effective way for the military to win over great-power adversaries is to evolve its own capabilities in lockstep with the changing character of the technological landscape. In this assumption are subordinate assumptions: that modern war can be categorically divided into a previctory phase, and then a victory point in time and space—that modern wars have definitive winners and losers—and that the respective militaries are the primary agents of the winners and losers. In fact, modern warfare is a process without a clearly defined end state, made up of subordinate end states as communities continue to pursue increased influence for their espoused value systems and relative economic power.²⁶ To draw clear lines between harnessing technology and gaining in relative influence, the paper would have to connect technological advancements to either a value or economic interest(s).

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Third, the writer assumes that the best way to attack or defend an increasingly digital entity is to use increasingly digital weapons and defenses. This assumption may have to be qualified, as human beings are still the primary agents of the defended and defending entities, and the violent or nonviolent force required to coerce human beings into conforming to another's will has not changed in its essence or substance—only in its accidents.²⁷ Furthermore, the increasingly digital force would in this way present a problem to its adversary that is relatively much simpler to solve than previously. As a force emphasizes its technological edge more than its human edge—its (artificial) reasoning over its will, opportunity, or creativity—it makes the adversary's problem increasingly scientific and less human. All the adversary has to do is determine how best to undermine something digital, which is relatively easy compared to how best to undermine another's creativity.

Fourth, the paper equates government-sourced innovation with military technological advances. This is likely an outgrowth of an organizational cultural ritual that equates innovation and technology generally; however, many important technological advances in war have not first been exogenous to war. ²⁸ Many times, the historical military innovation was in how military leaders interpreted the implications of adversary technology on the environment and then responded to that change effectively—not necessarily harnessing the same technology as was already present in the environment when forming their effective responses. One such example, from Emily Goldman and Richard Andres's "Systemic Effects of Military Innovation and Diffusion," is simply the way the US military revolutionized the method commanders conceive of information operations.²⁹ This is an important evolution in thought about technology but is not in and of itself technological.

Since innovation is a rise in efficiency or effectiveness without a corresponding rise in real or opportunity costs, some of the most important military innovations have not been technological at all. In proposing that the military leader begin to pace innovation off of commercial-off-the-shelf technology, the paper perhaps unwittingly suggests that the military leader's responsibility-driven likelihood to innovate is increasingly the beneficiary of companies' profit-driven likelihood to innovate, instead of the other way around. Military innovation then becomes subordinate to the economic conditions that permit commercial innovation, which in turn creates a distorted mutually implicative dependency among a military's charge to create a permissive environment for the economy, the military's need for companies in that economy to innovate, and the economy's need to expand in areas where financial interests depart from security interests. In addition to prompting concerns in the areas of these four key assumptions, the paper understates its own importance—stopping short of explicitly noting the most immediate and important effect of "The Digital Air Force" on operational effectiveness. Up to this point, human beings have pretended to be able to adequately describe the operational environment. Teaming with machines, human beings may be able to begin to adequately describe that operational environment, for the first time.

The 2013 version of Joint Publication 2-0, *Joint Intelligence*, introduced a thennew term to replace what used to be *indications and warning* in the same document.³⁰ The publication defined *warning intelligence* as broken into emerging and enduring warning concerns. The increasing automation of data discovery and digitization of decision-making loops has its strongest impact in the former: "emerging warning concerns."The thousands of factors that lead to the use of violent coercive force in a point in time in space—the holidays, the weather, the cultural proclivities, the intensity of coalition activity in the area, the relative success or failure of previous attempts, the flavor of recent ideologue propaganda on YouTube—all of the perhaps statistically significant factors that must at once be identified by regression, modelled and fed into a predict can now be actioned. The connection between warning and the commander's acceptable level of risk is being completely reformed.

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