Tinted Blue

Air Force Culture and American Civil-Military Relations

Jeff Donnithorne, Major, USAF

If war is an extension of politics by other means,[1] then civil-military dialogue is the birthplace of that extension. The *logical* continuity of politics and war requires a *functional* continuity of effective civil-military exchange. This effectiveness hinges both on normative democratic ideals as well as a deep appreciation of the other's material interests. To improve the clarity of civil-military dialogue, this article explores the cultural roots of military self-interest.

While civil-military relations in the United States are generally healthy, military and civilian policymakers do not always agree on the proper means to secure their common ends. Even the best of civil-military relationships must endure a messy hybrid of cooperation and resistance between principal stakeholders. A military that believes in and submits to civilian control is still a military that harbors its own interests.

But what are the origins of military self-interest? Is it useful to assume that these massive organizations simply crave more money, autonomy, and prestige?[2] The "empirically based abstraction" of organizational culture suggests otherwise, exposing deeper currents that shape military self-interest.[3] Culture predisposes the attractiveness of certain conclusions while creating cognitive barriers to aberrant ones; it impacts what its members see, ignore, amplify, and discard.[4] In civil-military relations, interests matter—and for a military service, culture uniquely informs the content of that interest.[5]

In light of these material interests, Peter Feaver invokes a principal-agent framework to assess how civil-military relations in the United States

---

The author wishes to thank Maj Tony Carr, Dr. Stephen Chiabotti, Dr. Damon Coletta, Dr. James Forsyth, and Dr. Elizabeth Stanley for their substantive comments and suggestions for improving this article.

Maj Jeff Donnithorne holds a BSE degree in civil engineering from Duke University, a master's degree in organizational science from George Washington University, and is a graduate of the Air Force School of Advanced Air and Space Studies. He served operationally as a weapons system officer in the F-15E Strike Eagle and is currently pursuing a PhD in international relations at Georgetown University.

unfold on a daily basis.[6] As one of its independent variables, agency theory uses preference gaps between the military and civilians to help explain varying levels of civil-military friction. This article bores deeper into the causal implications of preference gaps by examining how service preferences are formed. Consequently, it is not a test *of* agency theory but rather a test *within* the theory. The hypothesis is that organizational culture informs service preferences and can create preference gaps with civilian principals. In turn, agency theory holds that these preference gaps contribute to the military's calculation of cooperation or resistance. Agency theory thus provides the framework to argue that service culture informs interests and preferences which concatenate into varying degrees of civil-military friction.

When a military service evaluates national security policy, weighing its options for cooperation or resistance, its organizational culture acts as a heuristic for informing judgment. Therefore, national security policies consonant with a service's long-standing organizational culture will likely generate cooperation, while a policy inconsistent with the culture's basic assumptions will set the conditions for resistance. Organizational culture constitutes an explanatory variable in shaping service preferences, which then inform the service's decision to cooperate or resist national policy.

To test these claims, this article disaggregates the unitary military actor and assesses cultural factors for an individual service—in this case, the US Air Force.[7] It begins with a short survey of the relevant civil-military literature and then highlights the nature of organizational culture. A brief survey of Air Force history follows, yielding five basic assumptions that form a qualitative baseline for assessing a particular policy's alignment with Air Force culture. Subsequently, the bulk of this article profiles three case studies from the past 20 years, testing the explanatory power of Air Force culture in shaping the service's varied responses to civilian policies. The cases unfold chronologically—from Operation Desert Storm in 1990, through the protracted no-fly-zone operations of the 1990s, to the force structure debates of 2007–08—providing spectral variation on the dependent variable of cooperation or resistance. This variation creates a useful array for assessing the extent to which cultural factors informed the larger civil-military exchange.

Theoretical Background

The classic literature on civil-military relations focuses largely on the essential democratic question of how civilians should control their "armed servants."[8] Samuel Huntington, in his seminal work *The Soldier and the State,* advises civilian leaders to practice "objective control" by granting wide autonomy to the military.[9] Such autonomy bolsters the ethic of professionalism within military organizations, which reinforces their willing subordination to civilian control. Similarly, sociologist Morris Janowitz idealizes a military that subordinates itself based on "self-imposed professional standards and meaningful integration with civilian values."[10] On this central issue of civilian control, both theorists offer normative visions rooted in professionalism, largely ignoring the inevitable grappling of self-interested civil-military actors.

While Feaver's work has a strong normative component, agency theory "brings material incentives back into the story."[11] Agency theory posits the civil-military relationship as a principal-agent problem, with a civilian principal employing a military agent to provide security for the nation.[12] Like any principal-agent dynamic, information asymmetries allow the military agent to pursue its own interests over those of its civilian principal. Consistent with the larger principal-agent literature, Feaver places the terms "working" and "shirking" on opposite ends of a behavioral spectrum, reflecting the extent to which the military exploits its agency status: "Working is doing things the way civilians want, and shirking is doing things the way those in the military want."[13]

The civil-military relationship therefore becomes a strategic interaction between civilian principals and military agents, with incentives, interests, and punishments informing each decision. Civilians decide first whether to monitor the military intrusively or not.[14] The military then decides whether to work or shirk the civilian policy, taking into account the magnitude of the preference gap, how strongly it feels about the issue, and how likely it is to be meaningfully punished for any misdeeds.[15] Finally, the civilian principal decides whether or not to punish any shirking that is detected.

This article gives causal privilege to one of these independent variables—the preference gap—and hypothesizes that a wide divergence of national policy from Air Force culture will set the conditions for shirking, while its convergence will engender working. Although other variables clearly contribute to the working/shirking calculation, they assume sufficiently moderate values in the following cases to sanction a limited focus

on the preference gap and its cultural antecedents. What then is organizational culture, and how could its influence be so pervasive?

The literature teems with competing definitions of organizational culture, each a nuanced variation to a common theme.[16] For simplicity, this article stands on the work of Edgar Schein, a social psychologist whose insights anchor the field. Schein defines organizational culture as "a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems."[17] Culture pervades an organization, Schein explains, by informing all levels of sociology within it. The first level of culture consists of *artifacts*—the visible, sensory phenomena such as architecture, jargon, iconography, and ceremonies.[18] Artifacts communicate the priorities and ethos of an organization, creating a first impression for an outside observer. The second level of culture includes the *espoused beliefs and values* of the organization.[19] These espoused beliefs constitute what an organization says it believes, "[its] sense of what ought to be, as distinct from what is."[20] Espoused beliefs that consistently prove effective in solving problems for the organization ossify into the third level of culture: *basic assumptions.* These basic assumptions form the cultural cortex of the organization, establishing the "theories-in-use" that actually guide behavior.[21]

Once a culture has taken root within an organization, what difference does that culture make on its members' worldviews? Schein suggests, "Culture as a set of basic assumptions defines for us what to pay attention to, what things mean, how to react emotionally to what is going on, and what actions to take in various kinds of situations."[22] An organization's culture both "guides and constrains" its members and biases the suitability of certain options while blockading the viability of others.[23] What might this look like in praxis? What are the basic assumptions of Air Force culture, and to what extent do they guide and constrain the thinking of thousands of Airmen?

The Organizational Culture of the Air Force

To answer these questions, this section canvasses Air Force history in search of its artifacts, espoused beliefs, and basic assumptions forged in the fires of external adaptation and internal integration. It surveys historical

and cultural observations from outside works and categorizes the recurring themes into five general assumptions of Air Force culture. This array of assumptions is neither definitive nor universal—clearly, these assumptions do not saturate the thinking of every Airman. They do, however, serve as a useful starting point for a qualitative comparison between a particular policy and Air Force culture.

Technology-Centered

The most salient dimension of Air Force culture is the service's core connection to technology. As defense analyst Carl Builder frankly suggests, "The Air Force could be said to worship at the altar of technology."[24] This love of technology, furthermore, finds its purest expression where man and machine meet in the piloted airplane. An observer's first visual impression of the Air Force reveals an organizational passion for aircraft. While the parade ground at West Point is flanked by statues of the Army's great generals, the Terrazzo at the Air Force Academy is cornered by the Air Force's sleekest airplanes: the F-15, F-16, F-4, and F-105. The halls of the Pentagon testify similarly, with paintings and pictures of aircraft dominating Air Force corporate territory. This fascination with flying machines stems from the earliest days of the Army Air Corps, as the nation's first Airmen felt viscerally connected with their wood-and-canvas steeds that carried them safely to and from the battle.[25]

While the Air Force's passion for technology is almost universally acknowledged, disagreements persist as to whether this technophilia is absolute or contingent on manned participation. Do the artifacts, beliefs, and assumptions of the culture value the potential effectiveness of any type of aircraft, or does the culture privilege the manned variety?[26] As exemplars of this tension, the development histories of both the intercontinental ballistic missile (ICBM) and the remotely piloted aircraft (RPA) present complex mosaics of enthusiasm and resistance.[27] Historian David MacIsaac posits the conventional wisdom, "However much the official spokesmen of the air services may deny it, [RPAs] are not considered an appropriate topic for discussion by most pilots, among whom it is an article of faith that a manned aircraft can perform any mission better than an unmanned aircraft."[28] In his in-depth analysis of RPA development, however, Thomas Ehrhard concludes differently and discounts the mythic influence of pilot bias.[29] Instead, Ehrhard argues that despite technological enthusiasm for RPA development, the Air Force's feudal structure and the absence of an

operational constituency stunted their adoption into the service.[30] Together, these findings suggest that the Air Force's passion for technology spurs enthusiasm for a wide array of potentially effective war machines, but the artifacts of its bureaucracy reveal a relative preference for the manned variety.

The following basic assumption therefore informs Air Force organizational culture: *The Air Force exists because of technology, and its ongoing superiority is sustained by the ascendance of its technology. While all aircraft have their place in the Air Force mission, the manned airplane is the first among equals.*

Autonomously Decisive

The technological DNA of the Air Force informs another dimension of its culture: an abiding desire for politically unconstrained, uniquely decisive operations. Forged in the crucible of World War II and amplified by a desire for service autonomy, an unflinching commitment to strategic bombing dominated the early decades of the Air Force.[31] Even before World War II concluded, the Army Air Corps commissioned a strategic bombing survey to generate empirical evidence for its decisive impact.[32]

The Airman's love of technology and aircraft, coupled with an organizational commitment to strategic bombing, forged a natural focus on means over ends. The quest to drop increasingly accurate and lethal bombs on war-winning targets became a technological passion for the service—a discrete physics puzzle within the impossible confusion of total war.[33] Muting the Clausewitzian ideal of subordinating the violence of war to its political purpose, Air Force leaders focused instead on the lethality of their means. Historian Michael Sherry suggests that among the Air Force leaders of World War II and the Cold War, "The task, not the purpose, of winning governed."[34] Mark Clodfelter extends this trajectory, noting that modern precision weapons create a "vision of air power that focuses on the lethality of its weaponry rather than on the weaponry's effectiveness as a political instrument."[35]

One manifestation of this focus on means over ends is the Airman's discomfort with political constraints. The nearly unconstrained political environment of total war in Germany and Japan molded an expectation for the right way to use airpower. In future conflicts, the precedent of a free political hand continued to inform Air Force expectations in the straitjacket of limited war.[36] During the Korean War, "Senior Air Force leaders 'chafed under

the prospect of political constraints' that reduced the decisiveness of air power and surrendered initiative to the enemy."[37] Similarly, after the frustrations of Vietnam, Air Force leaders insisted they could have been more effective if they had been "free from political restraints."[38]

In sum, the Air Force's mastery of technology motivates a desire to unleash the full potential of that technology. A basic assumption informing Air Force organizational culture is this: *The Air Force has the power to change the face of the Earth. It can do what no other service can. To realize its true potential, the Air Force should be employed kinetically, offensively, overwhelmingly, and with minimal political interference.*

Future-Oriented

The Air Force's technological core predisposes a forward-looking orientation. As the youngest of the services, born from technological breakthrough, the Air Force "identifies the past with obsolescence, and for the air weapon, obsolescence equates to defeat."[39] Historian Tami Davis Biddle detects this tendency in Air Force thinking, noting, "too great a readiness to focus on the future without rigorously considering the past. This is an endemic problem in air forces, which develop their institutional identity around claims to see and understand the future more clearly than other services do."[40] An organizational commitment to looking ahead pervades the Air Force culture. Consequently, its third basic assumption is this: *Technology and potential adversaries change quickly, and the Air Force must orient forward to the unknown future instead of the forgotten past. The Air Force must pursue next-generation systems today to be ready for tomorrow.*

Occupationally Loyal

The machine-centric nature of the service, coupled with its disparate mission portfolio, tends to create pockets of sub-loyalties within the Air Force. Builder asserts the history of the Air Force is steeped in an individual passion for flying more than an abiding loyalty to the institution. He contends, "The Air Force identifies itself with flying and things that fly; the institution is secondary, it is a means to those things."[41]

Within the service, this phenomenon gives rise to a "fractionated confederation of subcultures rather than a cohesive military service."[42] In his study of Air Force cultural cohesion, James Smith reports a high level of occupational over institutional loyalties, particularly among pilots.[43] As a service built around a visceral connection to unique machines, loyalties

can easily migrate to those machines rather than to the larger institution. Throughout the Air Force's history, "People found themselves in an institution because that was the place to do what they wanted to do—to fly airplanes, to work on rockets, to develop missiles, to learn an interesting or promising trade, etc."[44] A recent advertising campaign by the Air Force reinforced this idea by showing young people pursuing their passions—snowboarding, bicycle racing, flying remote-controlled airplanes—and then announcing, "We've been waiting for you."[45] In contrast to the recruiting messages of the other services, the Air Force markets itself as an honorable venue for doing what you already love.

The Air Force's diverse mission portfolio contributes to divided loyalties within the service. Former chief of staff of the Air Force Merrill McPeak lamented, "People built loyalties around their commands—intense loyalties in fact—rather than loyalties to air and space power as a whole, to a broader, more comprehensive mission."[46] Air Force officer and historian Edward Mann concurs: "We were a conglomerate of specialists with greater loyalty to machines and sleeve patches than to any single unifying theme or to the Air Force itself."[47] These dynamics suggest a hierarchy of overlapping motivations within the Air Force culture; desires to serve the country, lead Airmen, fly an airplane, and control satellites all collide in a mosaic of motivations. Consequently, a basic assumption persists: *The Air Force is an honorable and patriotic means to practice a desirable high-tech trade. Loyalties to the trade, machine, and subculture can easily overtake loyalty to the institution and its mission.*

Self-Aware

As the youngest of the military services, and one that fought hard for its organizational autonomy, the Air Force is uniquely self-aware of its institutional legitimacy. During its infancy as an organization, the Air Force's adaptation to its external environment required fierce defense of its turf. Assigning roles and missions among the services spawned fractious debate and bureaucratic wrangling.[48] These dynamics imbued the Air Force with a sensitivity to its rightful place in the pantheon of established military services. Builder claims, "The Air Force . . . has always been most sensitive to defending or guarding its legitimacy as an independent institution."[49] In fact, as recently as December 2009, the office of the chief of staff of the Air Force was seeking fresh articulations of "why we need an independent Air Force."[50]

This self-aware posture subjects the service to chronic bouts of identity crisis. In 1989, an unpublished white paper entitled "A View of the Air Force Today" circulated throughout the Air Force. Its authors articulated an array of concerns about the state of their service and ultimately concluded, "The Air Force seems to have lost its sense of identity and unique contribution."[51] Two years later, the stunning success of Operation Desert Storm (ODS) seemed to resolve the crisis for the Air Force as it proved its decisive worth in dramatic fashion.[52] The institutional self-confidence, however, was short-lived. In a study published by the Center for Strategic Budgetary Assessments in September 2009, Thomas Ehrhard concludes, "Today's Air Force is experiencing an institutional identity crisis that places it at an historical nadir of confidence, reputation, and influence."[53]

These phenomena underscore a final basic assumption of Air Force culture: *Major combat operations are the best setting to showcase the unique potential of the independent Air Force. Otherwise, the Air Force serves an enabling and supporting role in which it is easily taken for granted. In times of transparent contribution, the Air Force must actively articulate its relevance to the nation.*

A suitable framework for analyzing case studies is thus in place. Agency theory provides the rational framework for considering interests and incentives, and posits a useful spectrum of working and shirking. Organizational theory reveals the power of culture to shape a military service's interests and preferences within that rational framework. Lastly, this section stipulates five basic assumptions of Air Force culture, suggested by its artifacts and espoused beliefs, and forged in its adaptation to the external environment. The following sections present three case studies of the Air Force between 1990 and 2008, testing the impact of its storied culture on its preferences for national security policy.

Desert Storm: A Case of Curious Working

> *The way the war was planned, fought, and brought to a close often had more to do with the culture of the military services, their entrenched concept of warfare, and Powell's abiding philosophy of decisive force than it did with the Iraqis or the tangled politics of the Middle East.*
>
> —Michael R. Gordon and Bernard E. Trainor
> *The Generals' War* (1995)

Politically and militarily, Operation Desert Storm appears to be a triumphant declaration of the right way to fight a war. From Iraq's invasion of Kuwait on 2 August 1990 through the cease-fire on 28 February 1991, the US military marshaled overwhelming force, leveraged superior technology, and achieved the limited political objective of ejecting Iraqi forces from Kuwait. Furthermore, the cooperation between civilian principals and military leaders during the Gulf War has been hailed as an exemplar of sound civil-military relations. A deeper look, however, reveals a far more textured array of civil-military confrontation and policy grappling.[54]

A major source of civil-military tension in the Gulf War emerged at the outset—whether to pursue an offensive or defensive strategy against Iraqi forces in Kuwait. While most accounts portray the military resisting the offensive strategy preferred by the Bush team, such resistance was hardly uniform among the services. In fact, the Air Force was eager to cooperate. As the following analysis highlights, the Air Force formed a unique enclave of working amidst an otherwise-shirking military.

Context

When President Bush convened his National Security Council (NSC) on 2 August 1990, the principals confronted an essential question: whether to draw a defensive line in the sand at the Saudi Arabian border or pursue an offensive strategy to evict Iraqi forces from Kuwait.[55] When the president polled his advisors, the perspectives emerged clearly: Secretary of Defense Dick Cheney was looking for options that could "hurt Iraq,"[56] while National Security Advisor Brent Scowcroft and Deputy Secretary of State Lawrence Eagleburger counseled, "It is absolutely essential that the US . . . not only put a stop to this aggression but roll it back."[57] The dissenting view came from the chairman of the Joint Chiefs (CJCS), GEN Colin Powell, who resisted such enthusiasm for military action and questioned whether "it was worth going to war to liberate Kuwait."[58] As historians Michael Gordon and Bernard Trainor observe, "The lineup ran counter to what most of the public would have expected. The civilians were looking for a way to roll back the Iraqi gains while the military was urging caution."[59]

After meeting with his NSC staff and top generals at Camp David on 4 August 1990, President Bush announced that the Iraqi aggression "would not stand."[60] Several days later, Bush outlined four key objectives to guide US policy: secure the immediate, unconditional, and complete withdrawal of Iraqi forces from Kuwait; restore the legitimate government of Kuwait; assure

the security and stability of the Persian Gulf region; and protect American lives.[61] After securing permission to base troops in Saudi Arabia, the massive logistical train of men and equipment steamed east, and ODS began. President Bush was clearly on the offensive—but was the military with him?

Cutting short a family vacation, Col John Warden, USAF, hastily returned to the Pentagon on 5 August 1990 and began transforming his own theory of war into actual plans. Warden was convinced that the existing planning architecture would not generate a truly strategic and offensive air campaign; he knew the existing US Air Forces Central Command (CENTAF) plan was inherently defensive and its staff would be preoccupied deploying forces to theater.[62] Warden intended to fill the breach. At a staff meeting that day, he told his boss, "I do not have any idea how it is going to come out, but we are going to put something together anyway and see what happens."[63]

"What happened" was a fortuitous phone call. CJCS Powell and the head of US Central Command (CENTCOM), GEN Norman Schwarzkopf, felt pressure to provide the president with retaliatory options in the event of Iraqi misdeeds in Kuwait. With his own planning staff consumed by the defense of Saudi Arabia, Schwarzkopf called the Air Staff on 8 August 1990 for planning assistance.[64] Vice chief of staff Gen Mike Loh fielded the call, quickly agreed to help, and passed the momentous task down to his planning staff led by Warden.

Warden and his staff furiously churned out a conceptual plan—dubbed "Instant Thunder"—that bypassed the Iraqi forces massed in Kuwait and targeted centers of gravity in downtown Baghdad instead. Warden believed that after six to nine days of the blistering air campaign, Iraqi leaders would capitulate, thereby obviating the need for an American ground invasion.[65] Despite objections from Tactical Air Command (TAC) planners who dismissed the nascent plan as "an academic bunch of crap,"[66] Warden enjoyed the enthusiastic support of top Air Force leaders.[67]

On 11 August 1990, Warden briefed Powell on his Instant Thunder plan. Although generally pleased with Warden's effort, Powell refused to believe that the strategic air campaign could single-handedly accomplish the president's objectives: "OK, it is day six and the strategic campaign is finished. Now what?" With characteristic confidence, Warden replied, "This plan may win the war. You may not need a ground attack . . . I think the Iraqis will withdraw from Kuwait as a result of the strategic air campaign."[68] Exhorting them to make the plan more joint, Powell thanked the Air Staff team for its helpful contribution. Warden and his team briefed

Schwarzkopf on 17 August 1990 and then flew to Riyadh, Saudi Arabia, to hand off the plan to CENTAF in-theater.[69]

In Riyadh, CENTAF commander Gen Chuck Horner hired Brig Gen Buster Glosson to merge CENTAF plans and Instant Thunder into an executable scheme. With Glosson in charge and Lt Col Dave Deptula in the trenches, the newly formed Special Planning Group slaved to produce a viable offensive air campaign. With the civilian principals looking for an offensive strategy to hurt Iraq, the Air Force alone appeared eager to cooperate.

In early October 1990, a CENTCOM briefing team deployed to Washington to update the principals on their current plans for war. The team presented first to Cheney, Powell, and the JCS on 10 October 1990, and Glosson's robust air campaign clearly impressed the assembled leaders. In fact, Powell had grave concerns that the air plan looked *too* good—so good, in fact, that the president and his advisors might attempt to follow it.[70] Glosson recalls being counseled three separate times after his briefing. Powell pulled Glosson aside first and exhorted, "You've got to make sure when we go to the White House tomorrow that we don't oversell the air campaign because some of those idiots over there may convince the President to execute this before we're ready."[71] After Powell, Lt Gen Mike Carns took a turn: "Your air campaign is too good. The Chairman is afraid the President will tell us to execute. He wants you to go through the plan much faster and not be so convincing."[72]

Powell's resistance to the offensive air-only strategy persisted throughout the planning effort. On 11 October 1990, the briefing team went to the White House and briefed the president and the NSC. Glosson's brief was well received and prompted Bush to ask whether they could simply execute the first three phases of the air campaign and stop short of a ground invasion. Powell—prepared for that very reaction—responded quickly, "You've got to be ready to do Phase IV because your objective won't be accomplished."[73] Three weeks later, President Bush met with Powell and asked once again, "You and Norm are really sure that air power alone can't do it?"[74] Powell assured him that ground troops were essential to secure Iraqi withdrawal. While the president's policy of offensively ejecting Iraqi forces from Kuwait prevailed, Powell seized command of the ways and means—effectively blocking the Air Force's stand-alone offensive option.

Cultural Alignment

What role did the Air Force's unique culture play in forging its isolated cooperation with Bush's preferred policy? This section evaluates the extent

to which the Air Force's cultural assumptions aligned with the civilian policy, thereby forming the basis for its unique position.[75]

Technology-Centered. The Desert Storm air campaign—as planned and later flown—showcased the superiority of American technology as no other war had done before. In the skies above Iraq, technology finally caught up with Air Force doctrine; at last, Airmen could deliver the precise effects that early airpower advocates had long espoused.[76] Warden, Deptula, and Glosson anchored their bold plan in two enabling technologies: radar-evading stealth and precision-guided weapons.[77] Their merger furnished the enduring visual images from the war: laser-guided bombs penetrating ventilator shafts in downtown Baghdad. Such missions were a glorious consummation of the Air Force's techno-warrior culture: brave pilots, sheltered in a technological cocoon of invisibility, penetrated hostile skies to drop strategic bombs with pinpoint precision.

Autonomously Decisive. The air campaign was largely a politics-free, kinetic operation that most Airmen viewed as the decisive lead instrument in a war-winning concerto. During the critical planning process, Airmen chose nearly all of the targets and enjoyed wide political latitude. During execution of the plan, the specter of Vietnam-style target selection loomed near, making President Bush and his security team careful to avoid excessive meddling. On the occasions when Air Force leaders did experience political constraints, they chafed under the fetters.[78]

Future-Oriented. ODS was at the leading edge of geopolitical currents and technological possibilities. As the Soviet Union crumbled, the United States emerged as the lone superpower and turned its attention to shoring up regional stability. The Gulf War inaugurated a new era, demonstrably proving the United States' capability and intention to police the globe for good. Furthermore, the campaign debuted cutting-edge technology and provided an opportunity to bury the hobgoblins of Vietnam. In nearly every meaningful dimension, the war and the air campaign accorded with the Air Force's cultural inclination toward the future.

Occupationally Loyal. The evolution of the air campaign followed the tribal affiliations of the Air Force's subcultures. The final product was a hybrid of strategic targeting in Baghdad and robust support to ground operations in the Kuwaiti Theater of Operations—a strategy that allowed Airmen from both the strategic and tactical domains to ply their chosen trade. While this aspect of Air Force organizational culture does not resound as clearly as the others, it nevertheless bears subtle reflection in the final Desert Storm policy.

Self-Aware. The robust air campaign provided the ideal venue to exorcise the demons of the Air Force identity crisis articulated the year prior. The offensive strategy of Air Force preeminence proved exceptionally attractive to Airmen wanting to assert their place in the military pantheon. By the time the cease-fire was signed, the visible carnage on the "highway of death" cured the plaguing notion that the Air Force had "lost its sense of identity and unique contribution."[79]

Implications

The preeminent features of Air Force organizational culture clearly saturate the offensive air campaign of the Gulf War. Through a fortuitous sequence of events, the Air Force as an institution had an opportunity to sculpt a campaign plan in its own image, soaked in its own cultural assumptions. The Air Force's resulting policy preference accorded closely with the civilians' desired offensive policy. This convergence of preferences minimized the preference gap and helped to explain the Air Force's unique posture of working amidst an otherwise resistant military structure.

This case reveals the value of disaggregating the military actor in studying American civil-military relations. Whereas existing treatments of the Gulf War highlight the positions taken by "the military," this analysis confirms that the military services are unique actors who may work at cross-purposes with each other in creating policy. Rooted in their unique histories, the military services have distinct and powerful organizational cultures that inform their appraisal of the national interest. By comparing a proposed national policy with the cultural assumptions of an individual service, policymakers can anticipate unique cooperation or resistance from the military services. In the case of the Gulf War, the civilians' preferred policy correlated squarely with the cultural assumptions of the Air Force, creating an island of cooperation in a sea of resistance.

Keeping Watch: A Decade of Quasi-War

> *As 1998 winds to a close, few can claim to have predicted in 1991 that overwhelming victory would lead to such tattered laurels.*
>
> —Rick Atkinson, *Washington Post*

For the Air Force, the satisfying triumph of Operation Desert Storm slowly deteriorated into an interminable decade of frustration. The heady days of stealthy precision bombing against leadership targets in Baghdad

devolved into a protracted cat-and-mouse skirmish with Saddam Hussein. Having proved its ability to purchase political results at low cost, the Air Force became the policy instrument of choice in the years that followed. The employment of airpower, however, often ran counter to the cultural assumptions of the service, creating more frustration than satisfaction among Airmen.

Over the life span of Operations Northern and Southern Watch (ONW and OSW, respectively), the United States flew over 265,000 sorties in the south and more than 122,500 sorties in the northern tier of Iraq.[80] This containment of Saddam cost the DoD nearly $12 billion dollars and untold degradations in readiness and morale.[81] The Air Force was particularly hard hit, as its constant shuttling of Airmen and aircraft to the Gulf spurred widespread discontent and a hemorrhage of personnel leaving the service. Despite these trends, the appraisal of this national policy remained mixed throughout the Air Force. While many lamented the apparent uselessness of "boring holes in the sky,"[82] others touted the rare feat of securing national policy objectives through the air.[83] Some commanders bewailed their plummeting pilot proficiency,[84] while others appreciated the opportunity to drop bombs on enemy targets in a combat-like environment.[85] Overall, the Air Force exhibited as much confusion as frustration, unsure whether to savor its leading role or decry the dulling of its blade.

While the Desert Storm case study shows the value of analyzing an individual service, this case demonstrates that working and shirking are not binary absolutes but rather opposite ends of a behavioral spectrum. Unlike Desert Storm, in which clear cultural alignment spawned unique working, the decade of armed overwatch reveals mixed cultural alignment and a blend of both working *and* shirking. Furthermore, this case highlights a grassroots civil-military phenomenon made possible by the protracted season of the containment policy. While several administrations of Air Force leaders did their best to make containment work, symptoms of shirking bubbled up from lower echelons of the force. Over time, resistance at the individual level swelled into service-wide resistance to a culturally distasteful policy.

Containment and Culture

The national policy of containing the Iraqi regime through airpower spanned more than 10 years and three presidential administrations.[86] The critics of Iraqi containment were legion, but on balance, most critics ceded

the ongoing value of the inescapable policy. "Our policy of containment," noted former congressman Lee Hamilton, "with all its limitations and frustrations, has achieved the vital interests of the United States."[87] Former secretaries of defense William Perry and Harold Brown exhausted their strategic imagination to divine a better option, but neither could do so; Brown lamented, "This is not a good strategy, but I haven't thought of a better one."[88]

While sporadic military flare-ups in the Gulf occasionally grabbed headlines, the Air Force endured the muted monotony of sustained enforcement operations for the whole decade. As a service, the Air Force paid a high price in morale, readiness, and retention to execute the national policy; but in exchange for that price, the Air Force provided security and stability for the nation, the Persian Gulf region, and the international community.[89] To what extent did this long twilight policy agree with the Air Force's tacit cultural assumptions?

Technology-Centered. The long decade of flying constabulary missions over Iraq was not the technological showcase that ODS had been. Nevertheless, the perpetual operations afforded ample opportunities to introduce new technologies like remotely piloted Predator drones.[90] These Predator drones represented a leading edge of aerospace technology, but given the privileged status of manned platforms in Air Force culture, the Predator was slowly and tentatively accepted. Similarly, pinprick retaliations with advanced cruise missiles—so-called Tomahawk Diplomacy—proved equally unsatisfying for intrepid Air Force aviators. For Airmen whose culture prizes onsite aircrew taking measured risks to guide weapons precisely to target, outsourcing this honor to an unmanned cruise missile provided little gratification.

Autonomously Decisive. Airpower in ONW and OSW was clearly *not* used offensively, overwhelmingly, and with minimal political interference. Instead, by the very nature of protracted enforcement, the mission required inherently defensive operations with sporadic kinetic engagements designed not to overwhelm but to punish, hemmed in by extensive political sensitivities. The Air Force wants to be autonomously decisive, but the political environment hampered its autonomy, and enforcing the status quo meant there was nothing to decide. This defensive policy involved targets picked by Washington principals, punitive responses chaperoned by complex rules of engagement, and strike missions hamstrung by the political sensitivities of host nations like Turkey, Kuwait, and Saudi Arabia.

In stark contrast to the autonomously decisive ethos of the Air Force, the policy grated at the service's core.

Future-Oriented. In his written testimony to the Senate Armed Services Committee in March 1999, Air Force chief of staff (CSAF) Gen Michael Ryan quoted Air Force legend Billy Mitchell: "In the development of air power, one has to look ahead and not backward and figure out what is going to happen, not too much what has happened."[91] The constabulary enforcement of Iraqi no-fly zones, however, mired the Air Force in a perpetual recycling of past grievances. The Air Force could hardly look ahead to what was going to happen, as it labored mightily to adapt to current demands. While the containment policy gave the Air Force the opportunity to provide security for the nation and the world, it kept the service from its preferred posture of looking ahead to the unknown future.

Occupationally Loyal. The frustrations of constant deployments to an unsatisfying mission spurred Airmen—namely pilots—to leave the service and ply their trade elsewhere. While many pilots chose to leave the service for perfectly honorable reasons, the overall exodus of skilled aviators suggests that loyalty to the Air Force institution and its mission was a contingent one.

In fact, leaving the service to fly for an airline was a culturally accepted choice. General Ryan reflected, "It's not their fault they are leaving. Maybe it's our fault"—suggesting the Air Force bore some responsibility for not providing a suitably satisfying means for national defense.[92] As one article reported in September 1998, "[Pilots] are leaving because they can't justify to their families the need for being away from home half the year when US interests really aren't at stake. And, just as importantly, they can't justify to themselves not being the best."[93] Is "being the best" a higher priority than fulfilling national policy? Furthermore, do line officers enjoy the privilege of determining when US interests are really at stake? Democratic theory gives *civilians* the authority to determine what is in the national interest, while the military has responsibility for executing that policy faithfully.[94] Dismissing a tasked policy as a peripheral US interest unworthy of one's professional skill belies a loyalty to a craft over the institution and its mission.

Self-Aware. The decade of containment over the Iraqi desert did little to sustain the buoyed self-image restored by ODS. In October 2000, Thomas Ricks reported as follows: "Northern Watch is characteristic of U.S. military missions in the post–Cold War era: it is small-scale, open-

ended and largely ignored by the American people. Even though U.S. warplanes are routinely dropping bombs on a foreign country, it has not been an issue in the presidential election and has hardly been mentioned by the candidates."[95] The Air Force's sacrifice of morale and readiness went largely unappreciated by civilian principals and the nation. The relentless demands of containment imperiled the future health of the service in support of a cause that no one could embrace *or* abandon.

Overall, this assessment suggests the national policy of containment was largely—but not purely—at odds with the Air Force's cultural assumptions. While new technologies were introduced into the fight, they were not the shimmering high-tech prizes most central to the Air Force's identity. The no-fly-zone missions gave the Air Force the leading role in providing security for the nation, the region, and the world; but the missions were largely defensive, politically constrained, and reliant on nonheroic cruise missiles. The Air Force had primacy in the current fight, but the exhaustive commitment kept it from posturing for the next fight. Pilots were given ample opportunity to fly, but dissatisfaction with the benign and peripheral mission compelled them to fly elsewhere. Finally, despite the operational rigor of constant deployments and engagements with Iraqi air defenses, Airmen received little credit from the press and the nation at large. Given such varied consistency between the national policy and the Air Force's cultural assumptions, is the service more likely to work or shirk—or something in between?

Implications

Throughout the long decade, pockets of cooperation and resistance dappled the Air Force. Senior leaders worked hard to accommodate the demands of a constabulary mission, but individual Airmen deploying for the fifth or sixth time could no longer tolerate the policy's affront to their service culture. Individual resistance metastasized into a collective one, as the all-volunteer force volunteered to leave, altering the mission capability of the service. In this case, the protracted time period altered the conventional civil-military dynamic; instead of military leaders working or shirking a policy on behalf of their service, the reverse was true. The disparity between the policy and Air Force culture required an incubation period for individual symptoms of resistance to develop. When these symptoms reached critical mass across the force, the leaders had no choice but to follow and ask their civilian superiors for relief from the exhausting de-

mands.[96] The Air Force's aggregate response to containing Iraq fell somewhere between working and shirking, as the service hedged its cooperation in response to individual resistance.

381 or Bust: Buying Tomorrow's Fleet with Today's Budget

> *We are often asked: How many F-22s does the Air Force need? The answer, of course, depends on what we are being asked to do.*
>
> —Michael Donley and Norton Schwartz
> *Washington Post*, 13 April 2009

What a service buys—or wants to buy—clearly reflects its perceived role in the nation's present and future defense. Cultural assumptions dominate the acquisition process, exerting a gravitational pull toward core programs and repelling peripheral ones. Morton Halperin, an experienced scholar of bureaucracy, observes: "An organization struggles hardest for the capabilities which it views as necessary to the essence of the organization."[97] The first decade of the twenty-first century places Halperin's insight into sharp relief.

After the procurement holiday of the 1990s, the Air Force sought to recapitalize its aging fleet, pursuing new tankers, helicopters, RPAs, and fighters. While every program endured scrutiny, no aircraft provoked more fractious debate than the F-22 Raptor, the Air Force's premier fighter. By 2008, these debates escalated to a fever pitch as the pursuit of more Raptors clashed violently with Secretary of Defense Robert Gates' stated priorities. Crusading to put the Pentagon on a wartime footing, Gates pushed the services to buy systems relevant to irregular war, which he viewed as the "most likely and lethal scenarios" for both the present and future US military.[98] Toward that end, Gates publicly prodded Airmen to provide more unmanned intelligence, surveillance, and reconnaissance (ISR) coverage in-theater.[99] The F-22 and the Predator RPA thus became symbols of a deeper divide over how to prepare for the future: for Gates, the RPA embodied the Air Force's contribution to the new normal of irregular warfare, while the Air Force pitched its F-22 as an indispensible strategic hedge against a future near-peer competitor.

The F-22 and the Predator both provide an iconic comparison—and one that reveals the cultural roots of civil-military conflict.[100] Although

Air Force secretary Michael Wynne and chief of staff Gen T. Michael Moseley were ostensibly fired in June 2008 for their "lack of effective oversight" in the nuclear enterprise,[101] nearly all commentators agreed that the irreconcilable debate over the F-22 contributed in part to Gates' decision.[102] Consequently, this case broaches the unexplored pole of the working-shirking continuum established in the earlier cases. While the Air Force curiously worked in planning Desert Storm and gradually balked at the no-fly zones, this case offers a striking example of organizational culture leading a service to shirk the policy of its civilian leaders.[103]

Cultural Alignment

If organizational culture is the essential variable in forming a service's preference, the five primary assumptions of Air Force culture should echo very differently between the F-22 and the Predator. This section explores the relative consonance between Air Force culture and the core ethos of these two major weapon systems.

Technology-Centered. Both the F-22 and the RPA manifest leading-edge technologies that are vital to the Air Force mission. Air Force culture, however, exhibits a preference for embodied platforms that permit warrior-flyers to ride technology into battle. Consequently, the F-22 is the apotheosis of Air Force technological achievement: a single fighter pilot employing radar-evading stealth to gather intelligence, shoot down enemy fighters, and drop precision-guided bombs. An RPA, conversely, boasts an advanced array of technology, but its remotely piloted nature consigns it to second-tier status within the bureaucracy and culture.

Autonomously Decisive. Throughout its history, the Air Force has prized its independent contribution to the joint fight. Although many RPAs are now equipped with a kinetic strike capability, their core mission is to support the joint fight by providing real-time ISR. The F-22, however, sets the gold standard for autonomy and decisiveness. Beyond the obvious capabilities of air superiority and precision bombing, even the Raptor's capacity for ISR is autonomously decisive—as one Air Force colonel described: "There are environments [with] advanced defensive systems . . . where [only] the F-22 can go in and operate. And, by virtue of being there, it can collect information that's of great value to a lot of other users."[104]

Future-Oriented. In many respects, the debate between the F-22 and the RPA was a proxy war in the meta-clash over the future of

American defense. Were the irregular wars in Iraq and Afghanistan harbingers or aberrations? Secretary Gates clearly believed that irregular conflict merited the nation's focus and funding, while Air Force leaders surveyed a different horizon. In testimony to Congress, General Moseley warned, "As a service chief, I'm worried about tomorrow. Beyond Iraq and Afghanistan, there are storm clouds on the horizon, troubling global trends that will bring friction, competition and conflict, and will no doubt involve potential adversaries who have gone to school on American airpower these last 17 years."[105] Within the larger debate about America's future, the F-22 embodied the Air Force's commitment to future preparedness.

Occupationally Loyal. From 1982 until 2008, fighter pilots led the Air Force as its chief of staff—Moseley was the ninth in a string of fighter generals. Strikingly, the F-22 is the culmination of plans originally drafted in 1981.[106] The F-22 was therefore conceived, purchased, and defended by a 26-year administration of fighter pilots. In an Air Force that often engenders loyalties to a particular job or an individual aircraft, the F-22 air-superiority fighter always had a powerful patron at the highest level. RPAs lacked an equivalent voice. As stated earlier, Ehrhard attributes much of the service's slowness in fielding RPAs to the feudal dynamics of its subcultures and the absence of an internal constituency.[107] In short, RPAs did not enjoy the bureaucratic top cover or internal advocacy given to the F-22.

Self-Aware. The Air Force's desire for preeminence, particularly in major combat, generally supersedes any satisfaction derived from supporting ground operations in land-centric irregular war. The F-22 and the RPA, therefore, represent contrasting poles of autonomy and support—the F-22 is inherently independent and decisive, while an RPA most often supports a ground commander. Furthermore, all four services are flooding the skies with a teeming armada of unmanned aircraft, but the F-22 comprises a unique capability for the Air Force. The Raptor thus enhances the Air Force's self-styled raison d'être, while RPAs confer no such distinction.

As an embodied technology, boasting a unique capacity for autonomously decisive operations and nurtured by 26 years of fighter-pilot patronage, the F-22 is a central icon of Air Force culture. The Air Force's impassioned pursuit of more Raptors, despite clear civilian guidance to the contrary, comes then as little surprise.

Public Debate

The total number of F-22s the Air Force planned to buy was a moving target, tumbling down with the Berlin Wall from 750 to 648, then 442, 333, and 271.[108] In December 2004, with the Army and Marine Corps deeply entrenched in Iraq and Afghanistan, Secretary of Defense Donald Rumsfeld released Program Budget Decision (PBD) 753, cutting over $10 billion from the F-22 program and trimming its purchase to 179 aircraft. The Air Combat Command, however, had fixed on an operational requirement for 381 F-22s—enough to equip a full 24-plane squadron for each of the service's 10 Air Expeditionary Forces.[109] The Air Force remained doggedly committed to this requirement and even slashed its personnel budget to pay for more aircraft. In December 2005, Moseley and Wynne endorsed PBD 720, a draconian plan to chop 40,000 Airmen from the active force to finance more airplanes.[110] By 2007, the planned purchase of F-22s had increased slightly to 183 aircraft, while the Air Force "requirement" of 381 stood unchanged.

In October 2007, General Moseley and Secretary Wynne testified before the House Armed Services Committee, restating their firm requirement for 381 Raptors.[111] Gates, however, quickly assured the Congress that the Defense Department was content with the planned purchase of 183. "I'm persuaded that 183 is probably the right number, or something in that ballpark," Gates testified on 6 February 2008. "I know that the Air Force is up here and around talking about 350 or something on that order . . . The reality is we are fighting two wars, in Iraq and Afghanistan, and the F-22 has not performed a single mission in either theater."[112]

Undeterred by the secretary's pointed testimony, Air Force leaders quickly took up their familiar refrain. One week after Gates' testimony, Gen Bruce Carlson, commander of Air Force Materiel Command, assured reporters, "We think that [183] is the wrong number . . . We're committed to funding 380. We're building a program right now to do that. It's going to be incredibly difficult on the Air Force, but we've done this before."[113] General Carlson's remarks incensed the office of the secretary of defense (OSD), prompting one official to categorize them as "borderline insubordination."[114] Gates tracked down Secretary Wynne on vacation, rebuking Carlson and forcing Wynne and Moseley to disown the errant remarks.[115] Nevertheless, Air Force leaders did not easily back down—in the same news reports that covered Carlson's remarks, General Moseley stated, "We can defend our requirement of 381. You can defend

that on any number of operational analyses but I'm trying not to go down that road."[116] Two weeks later, Moseley and Wynne defended the requirement once again, justifying their budget requests to Congress. Testifying before the Senate Armed Services Committee on 5 March 2008, Moseley trumpeted the long view, looking past the irregular landscape of Iraq to a full-spectrum future—a future underwritten by a deep bench of F-22s.[117] When asked if 183 Raptors were enough, Moseley responded, "No, sir."

Later, in March 2008, Secretary Gates started beating his own familiar drum—support for the current conflicts. Frustrated with the Pentagon's sluggish support for the present instead of the future, Gates lamented: "In ISR, it was business as usual. I really pushed the Army and the Air Force—particularly the Air Force—and I intend to keep pushing because the unmet need is huge."[118] Despite the Air Force's efforts to meet the secretary's intent, Gates remained unimpressed: "I'm not satisfied that anybody in the Pentagon is doing enough to put us on a path where we have adequate resources for this."[119] In his most publicized rebuke of the Air Force ISR effort, Gates addressed future Air Force leaders at Maxwell AFB the following month. On 21 April 2008, he exhorted, "My concern is that our services are still not moving aggressively in wartime to provide resources needed now on the battlefield. I've been wrestling for months to get more ISR assets into the theater. Because people were stuck in old ways of doing business, it's been like pulling teeth. While we've doubled this capability in recent months, it is still not good enough."[120]

In a memo to all Airmen released later that week, Moseley and Wynne were quick to note Gates' comments were directed at "the services" and not the Air Force specifically.[121] Additionally, the Air Force secretary and chief thoroughly detailed the service's massive contribution to the ISR enterprise in-theater, proving that it was truly "all in."[122] Gates, however, wanted Airmen to work smarter, not harder; specifically, he sought to challenge "long-standing service assumptions and priorities about which missions require certified pilots and which do not."[123] While Moseley had repeatedly insisted that bomb-dropping, missile-firing Predator operators be fully qualified pilots, Gates viewed the policy as an "element of the culture that [is a] barrier to progress and achieving the mission."[124] In Gates' estimation, the service willing to mortgage 40,000 Airmen to finance its future F-22 fleet was not making an equally sacrificial commitment to the current fight.

In early May 2008, Secretary Gates addressed the Heritage Foundation, and diagnosed the services with "'Next-War-Itis'—the propensity of much of the defense establishment to be in favor of what might be needed in a future conflict."[125] Gates redoubled his commitment to the current wars, repeating his conviction that America's "most likely and lethal scenarios" for the future included more of the same. "I believe that any major weapons program, in order to remain viable, will have to show some utility and relevance to the kind of irregular campaigns that . . . are most likely to engage America's military in the coming decades."[126] Since the secretary had already opined on the F-22's marginal commitment to such conflicts, the implications of his comments resounded clearly.

The ongoing conflict between Gates, Moseley, and Wynne climaxed the following month in a surprising subplot. After two high-profile mistakes in the Air Force's handling of nuclear weapons, Gates commissioned ADM Kirkland Donald to investigate the service and its nuclear protocols.[127] Upon receiving Admiral Donald's report on 5 June 2008, Gates concluded, "The focus of the Air Force leadership has drifted with respect to perhaps its most sensitive mission."[128] He noted "the gradual erosion of nuclear standards and a lack of effective oversight by Air Force leadership," commenting further that the "overall mission focus of the Air Force has shifted away from this nuclear mission." In an unprecedented decapitation of service leadership, Gates accepted the immediate resignations of both Moseley and Wynne.

Despite Gates' public assurances to the contrary,[129] Pentagon insiders and defense analysts easily recognized the role of the F-22/RPA skirmish in the secretary's decision. Gates spoke repeatedly of the drift in Air Force priorities away from the nuclear mission—the service's dogged commitment to the F-22 likely served as the unspoken distraction. John Tirpak observed, "The shake-up was a clear message to the Air Force to quit making a direct case for preferred systems and get more 'joint'."[130] Other editorials sounded a harsher tone: "Under Wynne and Moseley, Air Force leaders refused to listen to calls for change, even as the military landscape changed around them. Their disregard of increasingly pointed messages has, at times, bordered on insubordination; for example, their insistence on acquiring twice as many F-22 Raptors as called for in Gates' budget."[131] Even Wynne acknowledged the likely influence of their budget sparring on his ouster, "I believe that I had a very big difference of philosophy with my boss, and that he chose this moment to relieve me."[132]

Gates' nomination to replace Moseley confirmed the cultural undercurrents of the civil-military conflict. Gen Norton Schwartz, a mobility and special operations pilot, replaced Moseley as chief of staff, ending the 26-year reign of the fighter generals. The dour implications for the F-22 were inescapable; a chief of staff with a background in special operations, leading a chastened service, was unlikely to charge the same bull that had gored his predecessor.[133] In the months that followed, Schwartz unsurprisingly announced that the Air Force would seek less than 381 F-22s, hailing as "a sign of a healthy institution that we're willing to revisit long-held beliefs, no matter how central to our ethos they may be."[134] The following spring, Schwartz and Secretary Michael Donley published an op-ed in the *Washington Post*, revising the service's warfighting assumptions and pledging their support for Gates' plan to cap F-22 production at 187 aircraft. "The F-22 is a vital tool in the military's arsenal and will remain in our inventory for decades to come. But the time has come to move on."[135] The hard-fought battle had finally ended—and democratic theory insists that the proper side prevailed.

Implications

Agency theory posits the civil-military relationship as a strategic interaction of civilian principals and military agents responding to material incentives. In this case, the Air Force's deeply rooted culture privileged the F-22 Raptor, prompting tireless advocacy despite resistance from its civilian principals. The preference gap became sufficiently wide that the Air Force shirked the civilian policy and steadfastly trumpeted its ongoing requirement for 381 F-22s.[136] With such shirking clearly detected, the next decision belonged to the civilian principal: whether and how to punish the service for its shirking. Under the proximate cause of nuclear mishandling, Gates found his opportunity to remove the Air Force leaders with whom he could no longer work effectively. Ultimately, the punishment yielded its intended effect: the replacement crop of Air Force leaders assented to Gates' position on the F-22 and rightfully exhorted the service to move on. Having clearly and exhaustively identified the risks incurred by fewer F-22s, the Air Force was not in a position to protest further. For the health of the country's civil-military relationship, "The military can describe in some detail the nature of the threat posed by a particular enemy, but only the civilian can decide whether to feel threatened and, if so, how or even whether to respond. The military assesses the risk; the civilian

judges it."[137] Perhaps one day the country will wish it had 380 F-22s—but such speculation is largely irrelevant. In a democracy, the "civilians have a right to be wrong."[138]

Conclusion

Civilian principals and military agents share a common interest in pursuing healthy civil-military relations. Grounded in democratic theory, each party benefits from knowing both what its role *should* be as well as the meaningful incentives that motivate the other. For civilian principals, this study exposes the illusion of the military as a unitary actor by highlighting the causal impact of organizational culture. In the aggregate, military service members certainly share common characteristics that differentiate them from the civilian public. In the gritty sphere of policy, however, military leaders from different services are not fungible assets. Admirals have reached their positions by thriving within the naval culture, while Air Force generals have grown up thinking like Airmen. The services have markedly distinct cultures that shape their perception of the national security environment.

Consequently, understanding the unique service cultures can improve the creation of viable policy, clarify communication, and help civilians anticipate where pockets of resistance or cooperation are likely to arise. Civilians face no danger of an imminent coup but should recognize that policies inconsistent with the cultural assumptions of a particular service will likely engender hedging or foot-dragging from that service. As this study has shown, the organizational culture of a military service plays a dominant role in shaping its interests and preferences, which in turn inform its calculation of working or shirking the civilian policy.

For military members, this study suggests the value of understanding the origin of one's preferences. Airmen advocating an air-centric position should understand their conclusions may be staked down in cultural assumptions, not anchored in absolute truth. By exposing the tacit assumptions of service culture, military members can recognize the service-colored glasses that naturally color their world. Airmen, Soldiers, Sailors, and Marines could then articulate a service position with rigor and humility, aware of the unproven assumptions animating their ideas.

Humility of perspective is all the more essential in a civil-military exchange. While the military has a duty to provide expert counsel, a civil-military debate of principals and agents is inherently an "unequal dialogue."[139] The military agent is accountable to its civilian principal, who is in turn accountable to the electorate. By right of place, therefore, civilians command the decision-making high ground—the military's position is honorably and necessarily subordinate. By appreciating the boundaries of their prescribed role and the cultural origins of their self-interest, military leaders can best uphold and advance a healthy civil-military relationship. Together, civilian and military leaders can thus sharpen their unequal dialogue, improving the armed extension of diplomatic policy to advance the nation's interests. SSQ

Notes

1. Carl von Clausewitz, *On War*, trans. and ed. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984), 87.

2. This is the classic portrait of military organizations painted by Barry Posen, *The Sources of Military Doctrine: France, Britain, and Germany between the World Wars* (Ithaca: Cornell University Press, 1984); and Jack Snyder, *The Ideology of the Offensive: Military Decision Making and the Disasters of 1914* (Ithaca: Cornell University Press, 1984).

3. Edgar H. Schein, *Organizational Culture and Leadership*, 3rd ed. (San Francisco: Jossey-Bass, 2004), 7.

4. Jeffrey W. Legro, "Military Culture and Inadvertent Escalation in World War II," *International Security* 18, no. 4 (1994): 108–42.

5. See Elizabeth Kier, *Imagining War: French and British Military Doctrine Between the Wars* (Princeton: Princeton University Press, 1997), 38.

6. Peter Feaver, *Armed Servants: Agency, Oversight, and Civil-Military Relations* (Cambridge: Harvard University Press, 2003), 3.

7. For commentary on the value of disaggregating military culture into its distinct service components, see Williamson Murray, "Does Military Culture Matter?" *Orbis* 43, no. 1 (1999): 34; Theo Farrell, "Figuring Out Fighting Organisations: The New Organisational Analysis in Strategic Studies," *Journal of Strategic Studies* 19, no. 1 (1996): 122–35; Deborah D. Avant, *Political Institutions and Military Change: Lessons From Peripheral Wars* (Ithaca: Cornell University Press, 1994), 14; Adam N. Stulberg and Michael D. Salomone, *Managing Defense Transformation: Agency, Culture and Service Change* (Burlington, VT: Ashgate, 2007), 20; and Jeffrey Legro, *Cooperation Under Fire: Anglo-German Restraint During World War II* (Ithaca: Cornell University Press, 1995).

8. Taken from the title of Feaver's work.

9. Samuel Huntington, *The Soldier and the State: The Theory and Politics of Civil-Military Relations* (Cambridge: Harvard University Press, 1957), 83.

10. Morris Janowitz, *The Professional Soldier: A Social and Political Portrait* (Glencoe, IL.: Free Press, 1960), 420.

11. Feaver, *Armed Servants*, 285.

12. Feaver, *Armed Servants*.

13. Ibid., 60. As Feaver explains, the terms *working* and *shirking* carry loaded connotations in a military context but should be understood more antiseptically, as in the economics literature. Shirking, for example, is not meant to imply "lazy or desultory behavior, or possibly treasonous treachery."

14. This consideration incorporates the perceived cost of that monitoring, as well as its role as an incentive to the military, which is assumed to prefer autonomy (nonintrusive monitoring).

15. If the military and the civilians want the same thing, there is no incentive to shirk. Conversely, if the military has a divergent interest and believes their shirking will not be detected, or not be punished, or that the punishment would not be costly, its incentive to shirk increases.

16. See Schein, *Organizational Culture and Leadership*; James Q. Wilson, *Bureaucracy: What Government Agencies Do and Why They Do It* (New York: Basic Books, 1989); Ann Swidler, "Culture in Action: Symbols and Strategies," *American Sociological Review* 51, no. 2 (1986); Kim S. Cameron and Robert E. Quinn, *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework* (Reading, MA: Addison-Wesley, 1999); Morton H. Halperin et al., *Bureaucratic Politics and Foreign Policy*, 2nd ed. (Washington: Brookings Institution Press, 2006).

17. Schein, *Organizational Culture and Leadership*, 17.

18. Ibid., 25.

19. Ibid., 28.

20. Ibid.

21. Ibid., 31. Schein attributes the expression "theories-in-use" to the work of Chris Argyris.

22. Ibid., 32.

23. Ibid., 8.

24. Carl H. Builder, *The Masks of War: American Military Styles in Strategy and Analysis* (Baltimore: Johns Hopkins University Press, 1989), 19.

25. Perry M. Smith, *The Air Force Plans for Peace, 1943–1945* (Baltimore: Johns Hopkins Press, 1970), 18. Smith writes, "To him the airplane was not just a new and exciting weapon; it was what carried him miles behind enemy lines and brought him back; it was a personal possession which was given a personal, usually feminine, name, kissed upon return from a mission, and painted with a symbol for each enemy plane shot down or bombing mission completed."

26. While Airmen rightly aver that remotely piloted aircraft constitute *manned* systems given their extensive personnel footprint, the use of "manned" in this article refers to pilots inhabiting airborne cockpits.

27. The story of Air Force development of the ICBM is detailed in Neil Sheehan, *A Fiery Peace in a Cold War: Bernard Schriever and the Ultimate Weapon* (New York: Random House, 2009). For a discussion of resistance to both systems based on organizational identity, see Robert Jervis, *Perception and Misperception in International Politics* (Princeton: Princeton University Press, 1976), 422.

28. Quoted in Carl H. Builder, *The Icarus Syndrome: The Role of Air Power Theory in the Evolution and Fate of the U.S. Air Force* (London: Transaction Publishers, 1994), 163.

29. Thomas Ehrhard, "Air Force UAVs: The Secret History," *Mitchell Institute*, July 2010, http://www.afa.org/Mitchell/Reports/MS_UAV_0710.pdf. This article comprises a shortened version of Ehrhard's much longer doctoral dissertation on the adoption of RPAs into each of the services.

30. Ehrhard, "Air Force UAVs", 44–46.

31. Smith, *Air Force Plans for Peace*, 17.

32. David MacIsaac, *Strategic Bombing in World War Two: The Story of the United States Strategic Bombing Survey* (New York: Garland, 1976).

33. These ideas are reflected in Michael S. Sherry, *The Rise of American Air Power: The Creation of Armageddon* (New Haven: Yale University Press, 1987), 251–52.

34. Ibid., 180.

35. Mark Clodfelter, *The Limits of Air Power: The American Bombing of North Vietnam* (New York: Free Press, 1989), 203.

36. The metaphor of the "straitjacket" in fighting limited wars comes from Dr. Tom Hughes, School of Advanced Air and Space Studies, Maxwell AFB, AL.

37. Michael Worden, *Rise of the Fighter Generals: The Problem of Air Force Leadership, 1945–1982* (Maxwell AFB, AL: Air University Press, 1998), 43.

38. Tami Davis Biddle, *Rhetoric and Reality in Air Warfare: The Evolution of British and American Ideas About Strategic Bombing, 1914–1945* (Princeton: Princeton University Press, 2002), 299. Echoed in Worden, *Rise of the Fighter Generals,* 169.

39. Charles Dunlap, "Understanding Airmen: A Primer for Soldiers," *Military Review* (2007), 127.

40. Biddle, *Rhetoric and Reality*, 291.

41. Builder, *Masks of War*, 37.

42. James Smith, "Air Force Culture and Cohesion: Building an Air and Space Force for the Twenty-First Century," *Airpower Journal* (Fall 1998), 46.

43. "Occupational" orientation refers to a primary loyalty to the task or occupation, whereas an "institutional" orientation gives chief loyalty to the institution itself over the task performed within that institution.

44. Builder, *Icarus Syndrome,* 35.

45. Melanie Streeter, " 'We've Been Waiting' Campaign Returns to Television," *Airman,* November 2004, 9.

46. Quoted in Worden, *Rise of the Fighter Generals*, 235.

47. Edward C. Mann, *Thunder and Lightning: Desert Storm and the Airpower Debates* (Maxwell AFB, AL: Air University Press, 1995), 163.

48. For a full discussion of this time period, see Jeffrey G. Barlow, *Revolt of the Admirals: The Fight for Naval Aviation, 1945–1950* (Washington: Brassey's, 1998).

49. Builder, *Masks of War,* 27.

50. Greg Jaffe, "Combat Generation: Drone Operators Climb on Winds of Change in the Air Force," Washington Post, 28 February 2010, http://www.washingtonpost.com/wp-dyn/content/article/2010/02/27/AR2010022703754.html (accessed 1 Mar 10).

51. Quoted in Builder, *Icarus Syndrome,* 5.

52. Builder, *Icarus Syndrome,* 10.

53. Thomas Ehrhard, *An Air Force Strategy for the Long Haul* (Washington: Center for Strategic and Budgetary Assessments, 2009), 28, http://www.csbaonline.org/4Publications/PubLibrary/R.20090917.An_Air_Force_Strat/R.20090917.An_Air_Force_Strat.pdf.

54. For a summary of the conventional civil-military accounts, see Feaver, *Armed Servants*, 235. Feaver himself, however, is quick to note that Desert Storm had more civil-military conflict that conventional wisdom admits.

55. Gordon and Trainor, *Generals' War*, 18.

56. Diane T. Putney, *Airpower Advantage: Planning the Gulf War Air Campaign, 1989–1991* (Washington: Air Force History and Museums Program, 2004), 24.

57. Gordon and Trainor, *Generals' War*, 37.

58. Colin Powell and Joseph Persico, *My American Journey* (New York: Random House, 1995), 450.

59. Gordon and Trainor, *Generals' War*, 31.

60. Ibid., 49.

61. Thomas Keaney and Eliot Cohen, *Revolution in Warfare?: Air Power in the Persian Gulf* (Annapolis, MD: Naval Institute Press, 1995), 22.

62. Mann, *Thunder and Lightning*, 27.

63. John Andreas Olsen, *John Warden and the Renaissance of American Air Power* (Washington: Potomac Books, 2007), 145.

64. H. Norman Schwarzkopf and Peter Petre, *It Doesn't Take a Hero* (New York: Bantam Books, 1992), 313.

65. Putney, *Airpower Advantage,* 45.

66. Ibid., 52.

67. Olsen, *John Warden and the Renaissance of American Air Power*, 151; General Loh exhorted Warden, "This is the No. 1 project in the Air Force. You can call on anybody anyplace that you need for anything."

68. Ibid.

69. Putney, *Airpower Advantage,* 81.

70. Ibid., 221.

71. Buster Glosson, *War with Iraq: Critical Lessons* (Charlotte, NC: Glosson Family Foundation, 2003), 58.

72. Ibid.

73. Ibid., 63; and Putney, *Airpower Advantage,* 223.

74. Putney, *Airpower Advantage,* 263.

75. Although the Air Force's cooperative posture has been described first, the causal implication cuts in the other direction. The hypothesis argues that a tight correlation between the national policy and the Air Force's organizational culture will engender working. Having witnessed a unique degree of working in this case (the dependent variable), this section works backward to operationalize the degree of correlation between the civilian's desired policy and the culture of the Air Force.

76. Dennis M. Drew, "Desert Storm as a Symbol," *Airpower Journal* 6, no. 3 (Fall 1992): 4–13.

77. Keaney and Cohen, *Revolution in Warfare?* 191.

78. Gordon and Trainor, *Generals' War*, 474. After civilians were killed in the bombing of the Al Firdos bunker on 13 February 1991, Powell insisted on vetting all targets in Baghdad. Glosson and his team complained to CSAF Gen Merrill McPeak who took it up with Powell, ultimately to be convinced of the chairman's logic. Likewise, when Cheney directed a large apportionment of air assets to the SCUD-hunting mission to keep Israel out of the war, air planners resisted such interference with their plan.

79. Builder, *Icarus Syndrome*, 5.

80. Michael Knights, *Cradle of Conflict: Iraq and the Birth of Modern U.S. Military Power* (Annapolis: Naval Institute Press, 2005), 243.

81. John A. Tirpak, "Legacy of the Air Blockades," *Air Force Magazine* 86, no. 2 (February 2003).

82. David Wood, "Workloads and Pay Woes Driving Veteran Pilots Out of Air Force," *Star-Ledger,* 29 May 1997, 12.

83. Paul K. White, *Crises after the Storm: An Appraisal of U.S. Air Operations in Iraq since the Persian Gulf War* (Washington: Washington Institute for Near East Policy, 1999), 84.

84. Wood, "Workloads and Pay Woes."

85. White, *Crises after the Storm*, 80.

86. The most useful and comprehensive history of the Iraqi containment can be found in Michael Knights, *Cradle of Conflict: Iraq and the Birth of Modern U.S. Military Power* (Annapolis: Naval Institute Press, 2005).

87. White, *Crises after the Storm*, 89.

88. Bryan Bender, "Poisoned Cigars, Perhaps?" *Jane's Defence Weekly* 33 (12 April 2000): 21–25.

89. This insight comes from Dr. James Forsyth, School of Advanced Air and Space Studies, who heard Gen Anthony Zinni assert similar claims.

90. White, *Crises after the Storm*, 59.

91. William Mitchell, *Winged Defense: The Development and Possibilities of Modern Air Power* (Tuscaloosa: University of Alabama Press, 2009), 20.

92. Otto Kreisher, "In the Sandbox," *Air Force Magazine* 81, no. 8 (August 1998).

93. Harley A. Hughes, "Bailing Out," *Armed Forces Journal International* (September 1998): 45.

94. Feaver, *Armed Servants*, 6.

95. Thomas Ricks, "Containing Iraq: A Forgotten War," *Washington Post,* 25 October 2000, A01.

96. See, for example, William Matthews and Bruce Rolfsen, "Ryan to JCS: Give Us a Break," *Air Force Times,* 12 July 1999, 8–10.

97. Morton H. Halperin et al., *Bureaucratic Politics and Foreign Policy*, 2nd ed. (Washington: Brookings Institution Press, 2006), 38.

98. Robert Gates, Remarks to the Heritage Foundation, Colorado Springs, 13 May 2008, http://www.defense.gov/speeches/speech.aspx?speechid=1240.

99. Robert Gates, Remarks to Air War College, 21 April 2008, http://www.defense.gov/speeches/speech.aspx?speechid=1231.

100. The debate between Gates and Air Force leaders was clearly more nuanced than a binary choice between F-22s and RPAs—it was a question of numbers, priorities, and preferences. This case deliberately posits a false choice between two competing systems to suggest their *relative* priority.

101. Robert Gates, Remarks to Pentagon Press Corps, 5 June 2008, http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4236.

102. See Michael Sirak, "The Wynne Outbrief," *Air Force Magazine* 91, no. 9 (September 2008); Loren Thompson, *How the Air Force Fell So Far* (10 June 2008), http://www.lexingtoninstitute.org/how-the-air-force-fell-so-far?a=1&c=1129; John A. Tirpak, "Get in Formation," *Air Force Magazine*, 9 June 2008; Guy Norris and Graham Warwick, "End of an Era; USAF Leadership Changes Further Imperil Threatened F-22 as Defense Dept Hails F-35 Progress," *Aviation Week & Space Technology*, 16 June 2008; Rowan Scarborough, "Air Force Firings Followed Budget Battle; Spending, Future Capabilities Split Gates, Top Brass," *Washington Times*, 15 June 2008; Karen Walker, "The Right Direction—Firing of Wynne, Moseley Allows Gates to Select Leadership to Get Air Force Back on Track," *Air Force Times*, 16 June 2008; Erik Holmes, "Ejected—How, and Why, Moseley and Wynne Were Forced Out—and the Report That Was the Final Shot," *Air Force Times*, 16 June 2008; and Gordon Lubold, "When Gates Stared Down the F-22 Lobbyists," *Christian Science Monitor*, 28 September 2009.

103. As stated before, use of term *shirk* does not carry the highly pejorative connotation that it typically does in military usage. It is used here in the principal-agent context to signify the agent pursuing its own interests over those of its principal.

104. "New Technology Proves to Be Dynamite during JEFX 08," *Air Force Print News*, 13 May 2008, http://www.af.mil/news/story_print.asp?id=123098472.

105. Hearing of the House Armed Services Committee, *Air Force Strategic Initiatives*, 24 October 2007.

106. "YF-22 Fact Sheet," National Museum of the US Air Force, http://www.nationalmuseum.af.mil/factsheets/factsheet.asp?id=2382.

107. Ehrhard, "Air Force UAVs," 44–46.

108. Ronald O'Rourke, *Air Force F-22 Fighter Program: Background and Issues for Congress*, CRS Report for Congress (Washington: Congressional Research Service, 11 September 2009), 7.

109. In addition to the 240 frontline aircraft, the 381 included the requisite number of training, test, and maintenance aircraft to sustain the fleet.

110. Rod Hafemeister, "The Cuts Are Coming," *Air Force Times,* 30 January 2006.

111. Hearing of the House Armed Services Committee, *Air Force Strategic Initiatives*, 24 October 2007.

112. Hearing of the Senate Armed Services Committee, *Fiscal Year 2009 Defense Authorization Request*, 6 February 2008.

113. Bettina Chavanne, "General: We Will Find a Way to Buy 380 F-22s," *Aviation Week,* 13 February 2008.

114. Peter Spiegel, "Fighter Dispute Hits Stratosphere," *Los Angeles Times,* 15 February 2008.

115. Holmes, "Ejected." Carlson retired 10 months later.

116. Spiegel, "Fighter Dispute Hits Stratosphere."

117. Hearing of the Senate Armed Services Committee, *Department of the Air Force in Review of the Defense Authorization Request for Fiscal Year 2009*, 5 March 2008.

118. Peter Spiegel, "Battle Breaks Out Over the Predator," *Los Angeles Times,* 21 March 2008.

119. Ibid.

120. Gates, Remarks to Air War College.

121. "The Contributions of America's Airmen," *Air Force Print News*, 24 April 2008, http://www.af.mil/news/story_print.asp?id= 123095872.

122. Ibid.

123. Gates, Remarks to Air War College.

124. Ibid.

125. Gates, Remarks to the Heritage Foundation.

126. Ibid.

127. The mishandled B-52 flight from Minot AFB to Barksdale AFB is detailed in Joby Warrick and Walter Pincus, "Missteps in the Bunker," *Washington Post,* 23 September 2007. An outline of the mistaken shipment of nuclear fuses to Taiwan is described in "The Gates Case," *Air Force Magazine* 91, no. 7 (July 2008).

128. Gates, Remarks to Pentagon Press Corps.

129. In his Pentagon press conference on 5 June 2008 and his remarks to Airmen at Langley AFB on 9 June 2008, Gates stated the firing decision arose from the nuclear issues only.

130. Tirpak, "Get in Formation."

131. Walker, "The Right Direction."

132. Michael Sirak, "The Wynne Outbrief," *Air Force Magazine* 91, no. 9 (September 2008).

133. Guy Norris and Graham Warwick, "End of an Era; USAF Leadership Changes Further Imperil Threatened F-22 as Defense Dept Hails F-35 Progress," *Aviation Week & Space Technology,* 16 June 2008.

134. August Cole, "Air Force Says Fewer F-22s Needed," *Wall Street Journal,* 17 February 2009.

135. Donley and Schwartz, "Moving Beyond the F-22."

136. For simplicity, this piece treats the secretary of defense as the lone principal. In reality, the military endures the complexity of a "divided principal," answering in different ways to both the executive and legislative branches. The F-22 enjoyed wide political support in Congress, which no doubt contributed to Air Force leaders' steadfast advocacy for more aircraft. For more

on the divided principal issue, see Deborah D. Avant, *Political Institutions and Military Change: Lessons from Peripheral Wars* (Ithaca: Cornell University Press, 1994).

137. Feaver, *Armed Servants*, 6.

138. Ibid. Feaver concludes his text with these apt reminders: "The health of the democracy depends . . . as much on respect for the process of democratic politics as on the substance of the policies that process yields . . . But even when the military is right, democratic theory intervenes and insists that it submit to the civilian leadership that the polity has chosen. Let civilian voters punish civilian leaders for wrong decisions. Let the military advise against foolish adventures, even advising strenuously when circumstances demand. But let the military execute those orders faithfully. The republic would be better served even by foolish working than by enlightened shirking." *Armed Servants,* 302.

139. Eliot Cohen, "The Unequal Dialogue: The Theory and Reality of Civil-Military Relations and the Use of Force," in *Soldiers and Civilians: The Civil-Military Gap and American National Security*, eds. Peter Feaver and Richard H. Kohn (Cambridge: MIT Press, 2001), 433.