

RETHINKING “AIRPOWER VERSUS ASYMMETRIC ENEMIES”

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Airpower’s effectiveness against any type of enemy depends on how well it supports the positive political goals without risking the achievement of the negative ones. The framework presented, which includes a distinctive terminology categorizing various airpower applications with those categories helping to ascertain how effectively an application supports a political goal, offers no guarantee of success or failure, nor is it a predictor of the future. But it does charge those leaders who might apply airpower to think carefully before making that decision.

When I wrote this article in 2002, the war in Afghanistan had turned from a fast-paced, conventional war of movement into an intermittent, irregular conflict reminiscent of Vietnam. A year later, the invasion of Iraq similarly dissolved into an infrequent guerrilla war in which airpower’s ability to “turn the tide” became problematic. Using so-called asymmetric warfare, America’s enemies negated the vast aerial superiority of the United States because US political objectives could not be achieved through America’s desired application of aerial firepower.

The framework I presented in 2002, an outgrowth of almost 20 years of teaching airpower history, theory, and doctrine to students and practitioners—and trying to absorb their astute comments—sadly predicted America’s application of airpower in Iraq and Afghanistan would not yield success. Accordingly, I contend the framework has stood the test of time.

Gauging airpower’s effectiveness is not easy. One reason is that no universal agreement exists on the meaning of effectiveness. Clausewitz offers perhaps the best means of measurement: How much does the military instrument help toward achieving the ultimate aim of winning the war? He equates winning to achieving the nation’s political objectives, and that criterion guides my framework for evaluating airpower’s effectiveness.¹

Like all true frameworks, though, mine does not provide a set of standard answers, nor does it predict the future or offer a universal guide for success or failure. Instead, it offers a consistent approach for determining the value of airpower in any circumstance. This approach includes a distinctive terminology categorizing various

1. Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton, NJ: Princeton University Press, 1976), 87.

airpower applications, and those categories help ascertain how effectively an application supports a political goal.

Yet, determining airpower’s political effectiveness is not a straightforward proposition because political goals are not always straightforward. As the discussion of the framework makes clear, those goals can be either positive or negative, which in turn can affect how well a particular airpower application can achieve them.

While the categories of airpower applications can be thought of as constants (the essence of how airpower is applied in each of the categories does not change), five key variables affect the ability of each application to achieve success: (1) the nature of the enemy, (2) the type of war waged by the enemy, (3) the nature of the combat environment, (4) the magnitude of military controls, and (5) the nature of the political objectives. The importance of each variable may change in different situations yielding different results. Thus, political and military leaders who employ airpower must understand exactly what the variables are and how they might blend to produce a particular outcome.

The framework provides a method for analyzing airpower applications—one that dissects the variables and examines how their integration may affect airpower’s ability to achieve political success. Hopefully, it also offers practical considerations and cautions for the statesman contemplating airpower’s use as well as for the commander charged with transforming political goals into military objectives.

Airpower and Its Applications

Before examining the framework’s particulars, a satisfactory definition of airpower is necessary. One offered by two Britons—Air Marshal R. J. Armitage and Air Vice Marshal R. A. Mason—works well: “the ability to project military force through a platform in the third dimension above the surface of the earth.”² Although Armitage and Mason admit their definition contains gray areas (e.g., whether airpower includes ballistic missiles or surface-to-air weapons), it suffices to guide the proffered framework. Indeed, their definition recognizes qualities of airpower “that are sometimes overlooked,” specifically its latent impact and its ability to apply force directly or to distribute it.³ These characteristics form the basic distinctions used in the framework to categorize airpower missions.

Airpower’s modes of application are key components of the framework. For instance, airpower poised for use but not actually engaged in an operation is a latent application—a potential impact—that corresponds to its deterrent value. In this case, airpower is not directly used in a contingency; rather, it is used as a threat. Examples of latent application abound: Adolf Hitler’s references to the Luftwaffe during the re-occupation of the Rhineland in 1936, President Harry Truman’s deployment of B-29s to England during the 1948 Berlin airlift, and President John F. Kennedy’s reliance on

2. M. J. Armitage and R. A. Mason, *Air Power in the Nuclear Age* (Urbana: University of Illinois Press, 1983), 2.

3. Armitage and Mason, *Nuclear Age*, 3.

Strategic Air Command B-52s and missile forces during the Cuban missile crisis of 1962, among others.

Although the framework acknowledges such latent applications, it primarily concerns itself with the actual use of airpower during a contingency. In war the application of airpower is twofold, based upon the purpose of the mission: it is either direct or indirect, and it is either auxiliary or independent. The direct application of airpower is the intended lethal application—designed to expend ordnance. Conversely, the indirect application of airpower is the intended nonlethal use, such as airlift, reconnaissance, electronic jamming, and aerial refueling.

Besides being direct or indirect, the application of airpower is also either auxiliary or independent. Auxiliary airpower supports ground or sea forces on a specific battlefield, whereas independent airpower aims to achieve objectives apart from those sought by armies or navies at a specific location. The auxiliary form includes both close air support and air attack against enemy forces on the battlefield who are not in contact with friendly troops. So-called strategic bombing—aimed at enemies' war-making potential before they can bring it to bear on the battlefield—exemplifies the independent application.

Yet the terms strategic and tactical often overlap and frequently blur. Many air attacks during the last half century's limited wars not only have affected the ebb and flow of a particular engagement but also have had significant strategic consequences. For instance, the purpose of US air strikes on mobile Scud launchers during the Persian Gulf War was to eliminate Iraq's tactical capability to launch ballistic missiles, as well as to placate the Israelis, which, in turn, kept them out of the conflict.

Because of such blurred distinctions, the terms auxiliary and independent seem better suited than tactical and strategic to delineate various airpower applications. The former pair, though, is not completely pristine, because the distinction between the two depends upon how the user defines the word battlefield.

In modern war, a specific battlefield may extend for many hundreds of miles; in an insurgent conflict such as Vietnam, the battlefield may be even larger. General William Westmoreland, US commander in Vietnam from 1964 to 1968, described his battlefield as "the whole country of South Vietnam."⁴ Such a parameter may seem extreme, but it illustrates the fact that the definition of the battlefield depends to a large extent on the type of war being fought. In a conventional conflict waged to seize or preserve territory, a battlefield's boundaries are likely to be much more distinct than those in a guerrilla war—especially one like Vietnam, Afghanistan, or Iraq.

According to the framework's terminology, each application of airpower has two designations: direct or indirect *and* auxiliary or independent. For example, the American bombing of the ball bearing factories in Schweinfurt, Germany during World War II was a direct/independent application; the Berlin airlift of 1948–49 was an indirect/independent application; the B-52 strikes around Khe Sanh, South Vietnam during

4. Quoted in John Schlight, *The War in South Vietnam: The Years of the Offensive, 1965–1968*, *United States Air Force in Southeast Asia Series* (Washington, DC: Office of Air Force History, 1988), 216.

the siege of 1968 were a direct/auxiliary application; and the C-130 airlift of supplies into the beleaguered Marine base at Khe Sanh was an indirect/auxiliary application.

The dual designators describe the purpose of individual airpower missions more clearly than the amorphous terms tactical and strategic. In addition, the framework’s focus on the intent of the mission highlights airpower’s inherent flexibility by showing that one type of aircraft—whether designated bomber, fighter, airlift, and so forth—can participate in different applications.

Air Superiority

What about the air superiority mission? Where does control of the air fit in the framework? The air control mission is either auxiliary or independent, depending on how the airspace is used. For instance, obtaining air superiority over Kuwait in 1991 to enable coalition ground forces to attack Iraqi troops represents a direct/auxiliary application. Achieving air superiority over Baghdad to enable aircraft to strike the city’s key communication and electric power facilities constitutes a direct/independent application.

On occasion, gaining air superiority can have both auxiliary and independent applications. The achievement of daylight air superiority over the European continent resulting from the “Big Week” operations in February 1944 is one such example. The subsequent air control guaranteed American bomber operations would continue against German industry and provided the prerequisite protection for the Normandy invasion.

While some might contend air superiority should be a separate category in the framework, it is not because air superiority is not an end in itself. Air control—which employs both direct and indirect methods—allows direct, indirect, auxiliary, and independent applications to occur. Similarly, the categorization of such indirect applications as aerial refueling, airlift, and reconnaissance depends upon the type of mission that they facilitate. For example, refueling fighters that provide close air support for ground forces would constitute an indirect/auxiliary application. Airlifting smart bombs for F-117 operations against targets in Belgrade during Operation Allied Force would be an indirect/independent application. And obtaining reconnaissance photographs of Iraqi frontline positions in Kuwait would be an indirect/auxiliary application.

War Aims and Application of Airpower

Yet achieving air superiority that facilitates a cross-channel invasion or securing reconnaissance photographs that lead to a breakthrough of Iraqi defenses does not necessarily imply a successful application of airpower. Only one true criterion exists for evaluating the success of airpower, regardless of whether it was direct, indirect, auxiliary, or independent. That criterion is the ultimate bottom line: How well did the application contribute to achieving the desired political objective? Did it, in fact, help win the war? Answering that question first requires a determination of what is meant

by winning. The war aims must be defined, and the application of airpower must be linked to accomplishing those objectives (fig. 1).



Figure 1. War aims and the application of airpower

War aims—the political goals of a nation or organization at war—can range from limited to total. Grand strategy blends diplomatic, economic, military, and informational instruments in a concerted effort to achieve those aims. Meanwhile, military strategy combines various components of military force to gain military objectives that, in turn, should help achieve the political goals. Attaining the military objectives may require a mixture of ground, sea, or air operations, and the forces performing those operations may act in either independent or auxiliary fashion. These definitions and connections are relatively straightforward.

Such linkages, however, are not the only ones that determine whether military force—airpower in particular—will prove effective in achieving the desired war aims. Besides being either limited or total, war aims are also positive or negative.

Positive goals are achieved only by applying military force, while negative goals, in contrast, are achieved only by limiting military force. For example, for the United States, the unconditional surrender of Germany in World War II was a positive political goal requiring the destruction of Germany's armed forces, government, and the National Socialist way of life; few negative objectives limited America's use of the military instrument. By comparison, in the Kosovo conflict, the United States had both the positive objective of removing Serb forces and the negative objective of preserving the North Atlantic Treaty Organization, the latter goal restraining the amount of force America could apply.

A similar example comes from the Persian Gulf War, although in that conflict the American aim of preserving the alliance was both a positive and a negative goal. That is, President George H. W. Bush had to commit American military force against Iraqi scuds to keep the Israelis out of the war, but if he applied too much force in the air campaign, he risked dissolving the coalition.

While some critics might equate the notion of negative objectives to constraints, doing so is a mistake because such objectives have equal importance to positive goals. Failure to secure either the positive or the negative goals results in defeat; victory requires that both must be obtained. The United States would not have succeeded during either

the Persian Gulf War or the Kosovo conflict had the coalitions that backed those enterprises collapsed.

Of course, the contradictory nature of positive and negative goals creates a dilemma: what helps achieve a positive objective works against a negative one. In a limited war, negative objectives always exist; the more limited the war, the greater the number of negative objectives. As President Lyndon Johnson tragically learned in Vietnam, once his negative objectives eclipsed his positive goals, he lost the ability to achieve success with any military force, especially airpower.

How do positive and negative objectives affect the application of airpower? On the one hand, the absence of negative goals encourages the design of an air campaign with few restrictions, such as World War II’s Combined Bomber Offensive against Germany or Twentieth Air Force’s assault on Japan. A preponderance of negative goals, on the other hand, limits the application of airpower.

Negative objectives have restrained American air campaigns in every major conflict since World War II—most recently in Afghanistan and Iraq. The restrictions typically appear in the form of rules of engagement, which are “directives issued by competent military authority that delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered.”⁵ The impetus for these directives comes from political leaders and their negative goals (fig. 2).



Figure 2. Effect of negative objectives on the application of airpower

The greater the number of negative objectives—and the greater the significance attached to them by political leaders—the more difficult it becomes for airpower to attain success in achieving the positive goals. This assessment is especially true of the direct/independent application of airpower. If negative objectives outweigh positive goals, they will likely curtail, and perhaps even prohibit, airpower’s ability to strike at the heart of an enemy state or organization. Yet before a user of the framework points

5. Chairman of the Joint Chiefs of Staff (CJCS), *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02 (Washington, DC: CJCS, November 8, 2021), 188, <https://www.jcs.mil/>.

to this statement as a basic truth, he or she should realize that measuring positive versus negative objectives remains an inherently subjective activity.

Typically, positive and negative goals are not quantifiable; even when they are, comparing numerical results will likely equate to comparing apples and orange juice. Moreover, positive and negative objectives may be stated explicitly or only implied, which further muddies the water in terms of evaluating results.

Spelling out the objectives does not guarantee clarity, however, and the lack of clearly defined goals makes gauging their achievement particularly difficult. For instance, in Afghanistan, America aimed to achieve the positive goal of preventing a safe haven for future terrorist attacks against the United States, along with the objective of winning the hearts and minds of the Afghan people, a goal both positive and negative. Force was necessary to free Afghans of Taliban or Al Qaeda control, but too much force—especially applied indiscriminately or by mistake—undermined the effort to create an Afghan democracy. Reconciling those objectives, especially with quantifiable outcomes, proved impossible. Ultimately, though, that is how airpower's effectiveness must be measured: How well does it support the positive goals without jeopardizing the negative objectives?

Key Variables

In determining when airpower is most likely to help achieve the positive goals, the five main variables mentioned earlier come into play. These variables are complex factors that cannot be easily dissected, nor can one variable be considered in isolation from the others because the variables' effects are often complementary. Each has questions associated with it, and the questions provided are not all inclusive—others will certainly come to mind. Answering the questions differently for one variable may cause the other variables to assume greater or lesser importance.

Moreover, no formula determines what variable may be the most important in any specific situation or how their combined effect may contribute to—or hinder—the achievement of the positive goals. If all five variables argue against a particular application of airpower, however, that application is unlikely to be beneficial. The *assumptions* made in answering the questions for each variable are also of critical importance. If those assumptions are flawed, the assessment of the variables is likely to be flawed as well.

Nature of the Enemy

Determining the make-up of an opposing state or nonstate actor is essential to applying aerial force to defeat it. What military capabilities does the enemy possess? What is the nature of the enemy's military establishment? Is it a conscript force, volunteer military, or blend? Is the enemy population socially, ethnically, and ideologically unified? Where is the bulk of the populace located? Is the populace primarily urban or agrarian?

What type of government or central leadership apparatus does the enemy have? Are the individuals who lead strong or weak, supported by the populace or despised?

Or is the populace ambivalent? What is the leadership’s relationship with the military and its commanders? How resolute are the political leadership, the military, and the populace? What are the fiscal underpinnings of the enemy state or organization and is it self-sufficient in any area? How important is trade? What allies does the enemy have, and how much support do they provide?

If more than one enemy is involved, these questions must be asked about each enemy and a determination made about which one poses the greatest threat.

The Enemy’s Way of War

Airpower strategists must determine how the enemy fights to defeat it. Is the conflict a conventional war to seize or hold territory? Is it an unconventional guerrilla struggle? Is it an insurgency supported by a third party? Is the conflict a war of movement or a stagnant fight from fixed positions? How often does the fighting occur? Incidentally, this variable also affects airpower’s ability to achieve a positive political objective. In general, the direct application of airpower, whether applied independently or as an auxiliary function, works best against an enemy waging a fast-paced, conventional war of movement and has minimal impact against an enemy waging stagnant or infrequent combat.

The Combat Environment

Despite great technological advances, the basic structure of a combat environment can still thwart aerial operations. What is the climate, weather, terrain, and vegetation in the hostile area? How might they affect applications of airpower? As we learned in Vietnam, dense air can affect helicopter operations, while Afghanistan taught us thin air can do so as well. Are adequate bases available? Could real or potential allies provide them, and how could an enemy’s real or potential allies disrupt the desired use of airspace in the combat arena? What are the distances involved in applying airpower, and can those distances be overcome? What type of support—and protection—are required, key considerations for drone operations?

Magnitude of Military Controls

This variable involves constraints placed on airpower applications by military rather than political leaders. Ideally, no military controls exist, but that may or may not be the case—such controls can stem from many sources. Is there unity of command? What are the administrative arrangements for controlling airpower, and do those arrangements conflict with operational control? The “route package” system that segregated Air Force from Navy airspace over North Vietnam and helped trigger competition between the two services for sorties stands as perhaps the most egregious example of how command disunity can disrupt an air campaign.

Doctrine can also lead to military controls. Is airpower doctrine adaptable to different circumstances? What are the personal beliefs of commanders regarding how best to apply airpower? Personal convictions can play a significant role in limiting airpower

applications—witness the Korean War. Despite encouragement from the Joint Chiefs of Staff to bomb North Korean hydroelectric plants, Army General Matthew Ridgway, United Nations commander, refused to do so because he thought it would enlarge the scope of the war. His successor, General Mark Clark, had no such misgivings. One month after Clark took command, Air Force, Navy, and Marine aircraft attacked the facilities.

Political Objectives

Often, this variable is the most important. Are the positive goals truly achievable through the application of military force? Is the application of airpower necessary to obtain the positive objectives? How committed is the leadership that is applying airpower to achieving the positive goals? How committed is its populace? Can leadership attain the positive goals without denying the negative objectives? How do the negative objectives limit airpower's ability to help achieve the positive goals?

The direct/independent application of airpower seems to work best for a belligerent with no negative objectives—provided a suitable type of enemy wages a suitable type of war in a suitable type of environment free of significant military restrictions. For the United States in World War II, suitable conditions existed, and few negative objectives or military controls limited the application of military force. Since that conflict, however, negative objectives have played prominent roles in guiding American war efforts. For the United States in future wars, the prospect of fighting without them is remote indeed.

Conclusion

In the final analysis, airpower's effectiveness against any type of enemy depends on how well it supports the positive political goals without risking the achievement of the negative ones. The framework presented here offers no guarantee of success or failure, nor is it a predictor of the future. But it does charge those leaders who might apply airpower to think carefully before making that decision.

Clausewitz warned that “no one starts a war—or rather, no one in his senses ought to do so—without first being clear in his mind what he intends to achieve by that war and how he intends to conduct it.”⁶ That admonishment, delivered almost two centuries ago to readers who had fought against Napoléon with muskets and sabers, remains apt in the age of air warfare. Æ

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6. Clausewitz, *On War*, 579.