Has "Strategic" Airpower Failed to Live up to its Promise?

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Has "Strategic" Airpower Failed to Live up to the Promise of its Theory? If so, Why?

Following the first manned flight in 1903, the potential for the role of aircraft in warfare has steadily increased in significance. Alongside the growth of technology, or what may be called the revolution in military affairs, airpower has become one of the leading components of war, with the notion of air also incorporating space in recent years. As such, this new dimension to war has sometimes been labelled as the leading edge in strategy, offering a more effective route to achieving political aims. However, the past century has provided case studies which do not necessarily conform to this particular view, such as the wars in Vietnam, Afghanistan, and Kosovo.

Before making conclusions about the effectiveness of airpower in regards to fulfilling the promise of its theory, it might first be wise to define what the theory is. Hugh Trenchard, a British officer who had a large part to play in establishing the Royal Air Force, suggested that aircraft are offensive weapons, and are not fully utilised when employed for defence.[1] Two strands of thought resulted: the first was that it became possible to attack deep targets i.e. those not on the frontline, but also constant bombardment would drastically affect enemy morale, inducing surrender from both military and civilian citizens, accumulating to a national surrender from the government. Furthermore, Giulio Douhet advocated that it offers a strategy by which wars can be ended quickly, without the catastrophic death levels following World War One.[2] From a strategic standpoint, Douhet also suggested disabling command centres through bombing as a means to prevent a counter attack, thus securing a swift victory. From this stems the theory that it is extremely effective as a tool to compel governments to act in a certain way, or as a form of deterrence if they are not directly used as actors are fearful of their capabilities. Douhet epitomised his faith in airpower by claiming that "to have command of the air is to have victory"[3], as this provides an actor with strategic freedom and the ability to attack from another dimension.

One of the most useful case studies into the utilisation of airpower stems from the U.S involvement in Vietnam, in a bid to force the Hanoi government of the North to stop supporting the Viet Cong insurgency in the South. In the more general strategy, involvement was a means by which the US aimed to prevent the spread of communism and Soviet control, as they feared the 'domino effect'; once one country fell to communism, this would have a ripple effect and spread to other nations. Operation 'Rolling Thunder' was America's opening military strategy which placed an emphasis on airpower, but was largely unsuccessful. The Viet Cong employed guerrilla tactics and made effective use of the terrain; thick jungles impaired vision from the sky and so both direct (attack) and indirect (intelligence gathering) use of the air became problematic, limiting the effectiveness of aircraft. One of the most significant problems was the gap between tactical employment and military strategy. Some actions demonstrated the usefulness of aircraft in warfare even against unconventional adversaries, such as the use of C-123s in Operation Ranch Hand to swath the ground 200 metres either side of roads to improve visibility, and later removing cultivation too in order to limit Viet Cong supplies.[4] While this was certainly effective at improving vision, it was hugely controversial. The Viet Cong claimed, somewhat validly at times, that the chemicals used inflicted illness and property damage.[5] Similarly, in 1962 aircraft attacked the village of Da Ket, which resulted in huge civilian casualties, and President Diem's submission that the US should assume control of air missions. Once again, this was a tactical success as many Viet Cong were killed, but a huge strategic failure, and we cannot evaluate tactical

actions independently from their strategic consequences. While these helped to achieve 'positive aims' of weakening the Viet Cong, they failed to achieve 'negative objectives' of limiting civilian casualties as this would lead to greater opposition, from both citizens of Vietnam as well as those domestically in the U.S, which meant a domestic war was fought in the political arena.[6] A country cannot operate effectively in warfare when it loses the emotional arm – the support of the people, as a result of strategic failure.

While airpower was devastating, it was perhaps too blunt an instrument for guerrilla warfare, and the U.S was accused of implementing heavy handed tactics with little regard for collateral damage, and had ground forces been given greater focus in terms of attack, many of these civilians would perhaps not have died; aircraft could still have been useful in indirect, auxiliary missions, providing air lifts for surface troops. A report in 1963 went as far as to claim that "political considerations regularly outweigh the military, air attacks…are all too likely to be self-defeating"[7], which suggests airpower has not completely lived up to its theory, as it cannot always provide swift victory even with command of the air; something the U.S certainly possessed. Airpower is not an end in itself, as other issues such as social, political, and economic issues, cannot be dismissed in war. Guerrilla warfare simply cannot be approached in the same manner as conventional war, as there is little in the way of assets or infrastructure that can be destroyed to impair enemy war-making capabilities. Indeed, disabling Hanoi's resupply to the Viet Cong was one objective of Rolling Thunder that failed: they required just 32,000 tons of fuel a year to maintain Southern combat, and possessed 179,000 tons, which was sufficient for at least five years.[8] A conventional force would have required a far larger amount, and so to ignore the need for a change in doctrine was somewhat careless. If airpower effectiveness can be measured as "how well it supports the positive goals without jeopardizing the negative objectives"[9], then in Vietnam, airpower was not as effective as the theory suggests. Defence Secretary Robert McNamara saw bombing as futile, and the objectives here could not be achieved through airpower.

On the other hand, it would not be valid to completely dismiss airpower on these grounds as, in some aspects, it was successful. Operation Linebacker replaced Rolling Thunder, and aimed at bombing key targets without political constraints or gradual escalation, which was seen as one of the major pitfalls of the initial campaign as it gave the North a chance to recoup, which could be seen as a tactical failure, not an inherent failure of airpower.[10] McNamara believed the U.S should make the NVN believe "that if they do not get out, their country will be destroyed".[11]This certainly conforms to Trenchard's original theory, as targets beyond the frontline can be targeted in order to achieve strategic success, which in this case was to first impair the North's conventional war-making ability, and to undermine their will to fight.[12] This was successful as it brought the North back to peace talks. The revolution in military affairs and development of technology led to the introduction of precision guided munitions, which meant political constraints could be relaxed due to a far lower chance of collateral damage, thus ensuring negative objectives were met (particularly in comparison to Rolling Thunder), and ensuring not just tactical but strategic success, all of a result of air power. Both Linebacker I and II were highly successful, and have been propagated as proof of bombing success, although as discussed this is not an entirely valid claim.

Despite this apparent evidence to support the theory, it has been suggested that this is only because the nature of war in Vietnam changed.[13] Following the Tet Offensive in 1968, the Viet Cong suffered huge losses, and so the NV Army was required, as well as for the unification of the whole country. An army is a far more conventional adversary, and so bombing command and control centres in order to limit communications yields a strategic advantage. Although air power was extremely useful at this stage in the war, it cannot truthfully be claimed it had the same level of effectiveness against guerrilla tactics. Furthermore, whereas it has been claimed only political restraints prevented air power from achieving its true potential, and tactical employment cannot be divorced from its consequences, which is particularly true in reference to air power. One cannot claim that air should have had tactical liberty to bomb at will, as this would have seen a huge backlash not just on a citizen-level, but also in the international arena; it is part and parcel of airpower.

Another example of guerrilla warfare undermining the theory of air power, to an even greater extent, was the Soviet intervention in Afghanistan in 1979 in a bid to insert a pro-Soviet regime whilst defeating the Mujahedeen.[14] The Soviet's military capabilities far exceeded that of their adversary, although they could not manipulate airpower in a particularly useful way. Rebels used RPGs on Soviet vehicles before discarding them and quickly blending in with the population, making them extremely difficult to identify. Helicopters became the vehicle of choice given the

mountainous terrain, although performance often fell due to high altitudes they were required to work at; pilot fatigue also set in, resulting in the loss of some aircraft.[15] American Stinger missiles were introduced which had an enormous impact on helicopters, as the Mujahedeen had sought to fight an attrition war.[16] Rebels often united in small groups, with rarely more than fifty at any given time, and so widespread bombing would have been futile, and each life lost would have cost a disproportionate economic sum to the Soviet army. Due to the tribal nature of the Afghani people, there was not a command centre or infrastructure to target to halt their war-making capacity; if one tribe were completely destroyed, there would be many others to take their place that had little sympathy for the fate of other tribes. Airpower in this war certainly failed to live up to its theory, and Douhet's claim that "to have command of the air is to have victory" certainly did not hold true, as the Soviets entered the war with total air control, and yet still lost the war despite their adversary never operating a single aircraft.[17] Clausewitz's concept 'fog of war', which implies uncertainty during war, is even more applicable to guerrilla warfare, as it is nearly impossible to gauge how well your forces are doing, or if victory is even possible.[18] In this respect, airpower can often provide little help in achieving strategic goals.

The war in Kosovo provided a unique case study in that it was the first war in which the air force was the sole military arm used, with the absence of any surface forces. NATO believed intervention through the use of coercion was necessary to force Serbian leader Slobodan Milosevic to act differently, and decided airpower would offer the most in terms of strategic success, with President Clinton enforcing the belief that ground troops would not be employed.[19] Military barracks were attacked in a bid to lessen Milosevic's capabilities, but NATO imposed restrictive rules of engagement in order to meet its negative objectives. Furthermore, it is believed that Milosevic faced a political backlash from citizens and fellow politicians alike, as survival became the number one objective for many of the people on a daily basis (or they at least believed this to be the case, in which evidence for the psychological impact of airpower arises).[20]There was also huge technological advancement with regards to precision guided munitions, and the introduction of unmanned aerial vehicles (UAVs), and both served to meet negative goals: the former reduced collateral damage, and the latter ensured NATO's troops were not made vulnerable to dangerous missions which maintained support for intervention.[21] This certainly suggested that airpower was finally realising its potential and transforming into the leading edge of military power, precisely as early theories predicted.

Unfortunately, the employment of airpower was not quite as straightforward as this might suggest. It has been claimed that there were a number of other factors that had a significant impact, with British Army Lieutenant General Sir Michael Jackson claiming that Russia urging Milosevic to surrender was extremely important, particularly as Russia could not be associated with an individual being tried for war crimes.[22] Also, it may not be entirely valid to claim that airpower was the only form of military strength. While NATO was not formally affiliated with the Kosovo Liberation Army, they still had a role to play, and it could be argued that their attack forced the Yugoslav Army to counter, and thus made them susceptible to air attack.[23] Thus, there was still a ground force in play, regardless of if it belonged to NATO. In relation to ground forces, there were many points within the conflict where it was believed they should be employed, with plan B-Minus suggesting the use of up to 300,000 NATO troops; a plan that the then British Prime minister Tony Blair favoured.[24] Furthermore, there were also a number of technical issues that cannot be overlooked. Despite the use of precision guided munitions, aircraft were sometimes forced to fly at altitudes of 15,000 feet to avoid antiaircraft attacks. This impaired vision, and on one occasion civilian vehicles were mistaken for a convoy and destroyed by USAF F-16s, again demonstrating that airpower can be lethal if wrongfully applied.[25] The introduction of UAVs, while seen to be somewhat useful, often does not provide as in-depth intelligence and reconnaissance as surface troops can as there is a decisive lack of intuition. Nevertheless, despite all these shortcomings, NATO only incorporated the air force into its strategy, and so it would be wrong to deny that this was a military success, and goes some way to providing evidence that airpower can indeed live up to its theories of decisive war.

Overall, there are a number of conclusions that can be drawn about the effectiveness of air power, which rely on much support from the aforementioned case studies. One is that airpower should never be seen as end within itself, and is instead an enabler in that it provides strategic opportunities and, while it was credited with victory in the Kosovan war, this would not always be the case. Furthermore, it is often most useful in auxiliary, or combined arms, operations, working with effective synergy with ground forces. Again, the Kosovo war provides a reliable example, as a ground invasion may have produced faster results and be seen as more of a threat to sovereignty than air attacks

due to the physical nature of crossing a nation's borders.

When facing insurgents the indirect role of aircraft is often underestimated, as it is particularly useful for inserting troops in hard-to-reach areas as well as providing useful intelligence – vital in small wars given that intense forms of warfare are often not permitted. It is in this guerrilla warfare that the high-tech aspects of air are pivotal. Precision guided munitions help to achieve negative objectives by reducing collateral damage and, in recent years, the role of satellites has proven to be extremely beneficial, such as providing information on weather which may indicate the prime location and time for attacks, as nations continue to invest in the potential role of space as an extension of airpower.[26] As such, it can be claimed that airpower has a significant role in warfare today, but one that should not be overestimated. Very rarely will air provide the only solution, and the political objective should always assume dominance, with air often being used in a heavy-handed fashion which often backfires. Rather, as with the war on terror, other factors cannot be ignored, such as implementing governmental, educational and economical reforms in a bid to win the hearts and the minds of the people. Being so heavy-handed may even have the reverse effect, as when the Vietnamese became even more committed, and Milosevic initially stepped up his ethnic cleansing, as gradual bombing often "inspires more anger than fear".[27].

Clodfelter provides a valid evaluation of airpower as he claims we have created a modern version of it that focuses on the destructive capabilities instead of its use as a political tool.[28] Airpower has thus not quite lived up to the promise of its theory, and so while it is both a very important and extremely powerful arm of military force, outside of conventional warfare between states, which is quite a rare occurrence in the modern international system, airpower leaves much to be desired, and cannot alone be employed in order to fulfil an actor's grand strategy.[29] Certainly, air is too often viewed as either a success or a failure, as though the two are dichotomous categories when it may be best viewed as a continuum, as air power is often very useful, but in many cases would have been far more effective if a different strategy, such as combined arms, had been adopted.[30]

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