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Lord Trenchard, right, after the foundation stone of a new RAF College was laid at Cranwell in July 1935.

“Parallel Warfare” in Conflicts with Limited Political Aims

by Andrew McNaughton

Introduction

From the dawn of heavier-than-air flight, many individuals, strategic planners, and armed forces visualized a future where the devastations of terrestrial war could be solved from above. However, the airplane and air power theory did not entirely live up to expectations. Only in 1991 did technology catch up to theory. The precision dreamt of from Douhet to Trenchard was finally put on display in the First Gulf War. Air power theory was refined as well, including parallel warfare, where military forces could win the war before the enemy knew what hit them. Despite the coalescence of theory and technology, several problems exist with the nature of this concept, particularly recently, as limited political aims become the accepted norm for intervention.

After defining the theoretical concepts, this article will analyze the promise of parallel warfare and strategic paralysis

against three limited operations that saw the decisive application of air power: *Desert Storm* in Iraq, *Allied Force* in Kosovo, and *Unified Protector* over Libya. As Western states shy away from ground-force commitments, air power continues to be the weapon of choice in foreign intervention. These operations are almost always limited in scope, and therefore, political considerations make the concept of parallel warfare less desirable when compared to a graduated campaign of coercion.

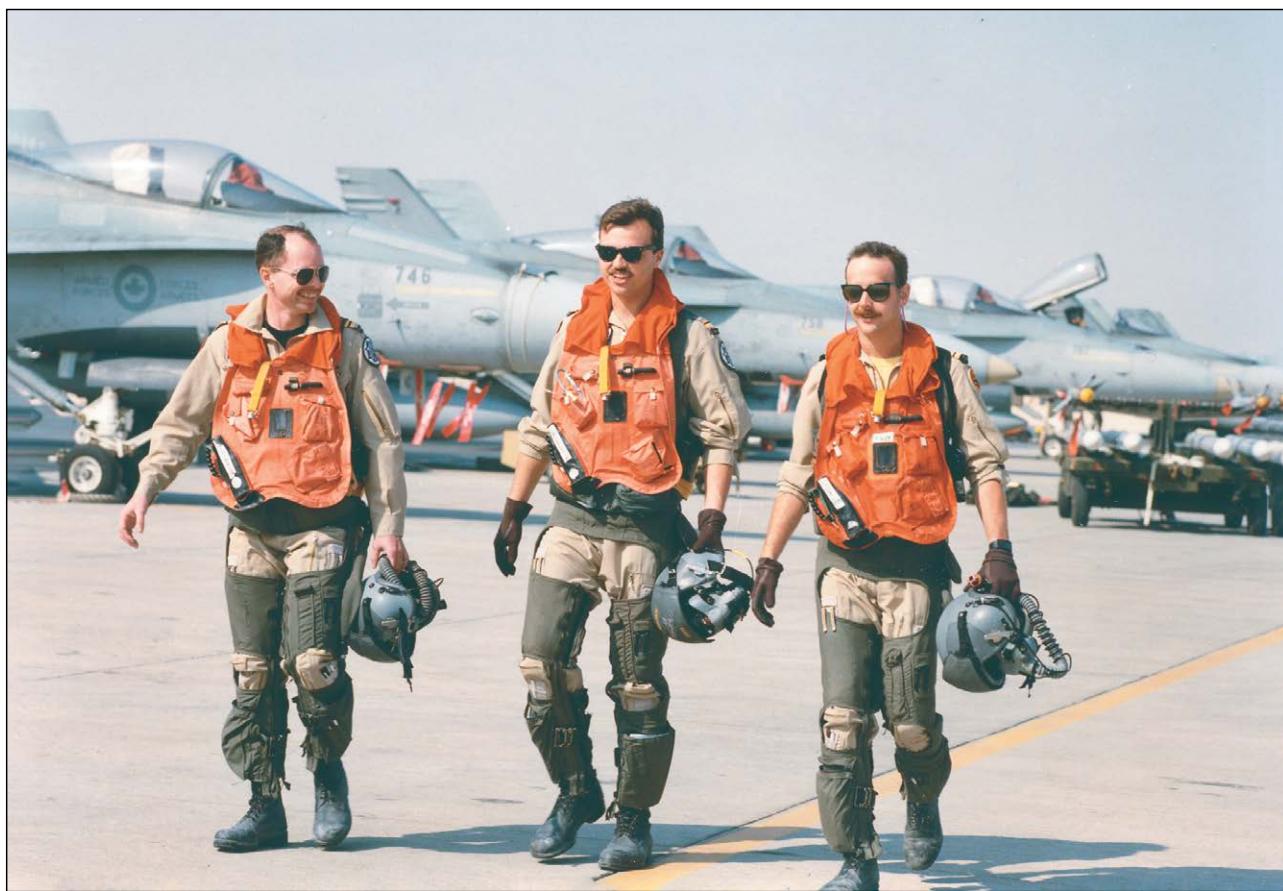
Theoretical Concepts

Like his air-minded predecessors, the American Colonel John Warden was inspired by the possibility of bypassing the front line altogether and striking the heart of the enemy. Warden envisaged independent air power achieving more than it had during the strategic bombing campaigns of the 20th Century.¹ This ‘new’ way of war would be executed first by thinking of the enemy as a system, and then through a targeting framework consisting of five rings.² At the centre of this *system*



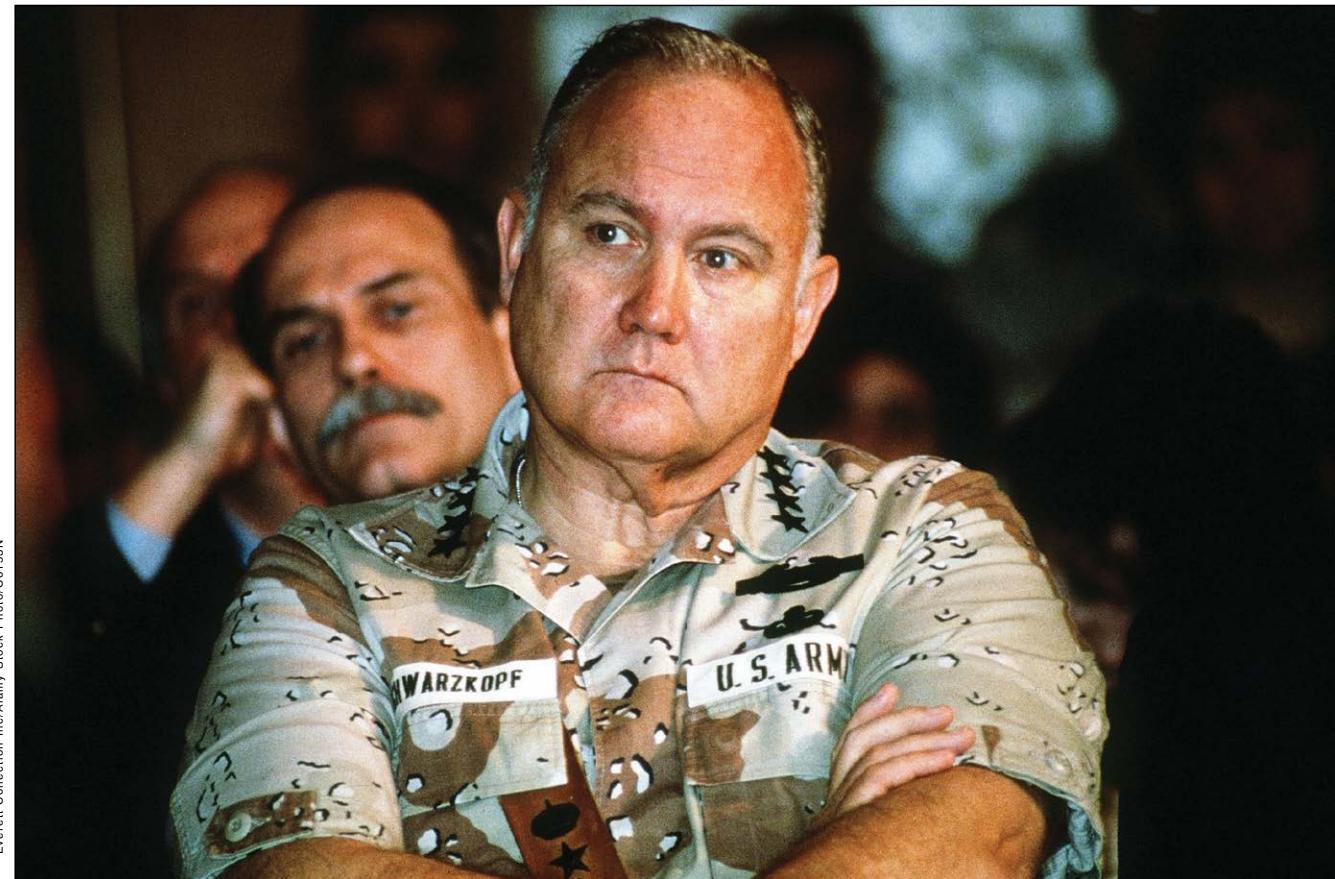
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John A. Warden III.



DND photo ISC91-5112 by Sergeant C. Colombe

Canadian CF-18 pilots on the flight line in Qatar during Operation Friction (Desert Storm), January 1991.



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General Norman Schwarzkopf

lies enemy leadership. They not only direct the conflict, but are also the only entity that can make concessions, and thus, they are the primary target.³ When that is not possible, the focus then moves out one ring at a time, from leadership, to organic essentials, critical infrastructure, population, and lastly, to fielded forces. The enemy's centre of gravity in each ring should be determined, and then attacked simultaneously - in parallel - from the inside out. Warden strongly advocated that if military planners and their air forces followed his model, it would lead to the enemy forces freezing in a state of paralysis.⁴

The concept of parallel warfare has been defined as a simultaneous application of force at all three levels of war against key systems to effect strategic paralysis on the enemy.⁵ This contrasts with the more traditional form of serial warfare in three ways. First, military forces can now attack a larger number of targets in a shorter time frame. Second, distance is no longer an effective defence as technology enables targets to be attacked anywhere. Finally, it is argued that in serial warfare, *tactical effects* take time to amount to *strategic results*, whereas parallel warfare can generate effects across all three levels of conflict simultaneously.⁶ Warden's model provides a method through which to rank the enemy's centres of gravity. Once determined, they are targeted and defeated all at once. This eliminates time for the enemy to recover or re-assign assets, and ultimately, it paralyses the enemy command apparatus.⁷ Warden theorized that once the enemy leadership was cut off from the remainder of its network,

the entire system would be ineffective. If this could be achieved quickly by air power, it was argued, then a bloody ground conflict could be avoided altogether.

Opposite to strategic paralysis is the concept of coercion. Rather than freezing the enemy's decision-making process, coercion works by "influencing the adversary's calculus" to "force the opponent to alter its behaviour."⁸ The distinguished American political scientist Dr. Robert Pape, a professor at the University of Chicago, breaks down coercion further into two strategies, *punishment* and *denial*. Coercion by punishment is designed to 'raise the price' to civilians, whereas coercion by denial is directed at thwarting the enemy's objectives.⁹ The stronger of the two, coercion by denial, requires a functioning enemy leadership to make concessions. Both seek to raise the price of a continued policy over time by using a graduated escalation of force.

The criticisms of these approaches are worth mentioning, as each has its own deficiencies. Of the three concepts, parallel warfare has the fewest criticisms. When detached from other ideas, the idea of transcending the levels of war in an efficient and devastating attack is enticing to the commander. However, where problems arise are in limited conflicts. The basis of this method is the destruction of targets across the system. In some conflicts, however, there may be entire industries or target bases missing, severely limiting the desired effect.



Saddam Hussein, fifth President of Iraq.

Strategic paralysis has some notable criticisms as well. First, several pundits argue that strategic paralysis is a misnomer. One author argues that the chosen method to achieve this paralysis is heavily *tactical* and *operational* in nature, making it "...not really a way of war but a way of battle."¹⁰ Another author furthers this thought that a collection of destroyed *tactical* targets does not necessarily constitute a leap to *strategic* effect.¹¹ The theory also considers the enemy as a "passive collection of targets" and discounts the enemy's language, culture, and politics.¹²

The second area of criticism for strategic paralysis is its legality. A strict adherence to strategic paralysis through Warden's model could lead to the illegal targeting of enemy leadership. Political leaders are protected through several articles of international law, and strict considerations apply for those individuals directly involved in hostilities.¹³ Another legal consequence is that a totally paralysed enemy state may not be able to legally terminate the conflict, and their military forces could end up still fighting on, negating the endeavour.¹⁴

Coercion depends greatly upon intelligence and a true understanding of the enemy's motivations.¹⁵ Another drawback is that commanders must be prepared for enemy "counter offers," and must be willing to risk the chance that a conflict could end up becoming a full-scale war.¹⁶ The largest drawback, however, is time. Pape argues that the time required to coerce an opposing

government is long, because governments hold on due to the implications of defeat, as well as due to a poor evaluation of their own military performance.¹⁷ Together, these reasons can become considerable disadvantages for Western governments looking for quick international engagements.

Decisive Air Campaigns

Parts of these concepts were applied in the following three air campaigns, in which air power played a decisive role. Each of these campaigns were subordinate to limited political aims, and therefore, they make an appropriate test for the theories.

Desert Storm

As the diplomatic tensions rose after the Iraqi invasion of Kuwait in 1990, a planning cell within the US Air Force called *Checkmate* began to develop plans for a military retaliation against Iraq.¹⁸ Lead by Warden, a plan for an air campaign entitled *Instant Thunder* was developed. This operation was based upon Warden's Five Ring Model, where in six days, aircraft would strike 84 targets to incapacitate key leadership and military capabilities.¹⁹ Although Warden promised this campaign would be sufficient, as planning progressed, it was met with high level opposition due to the fact it neglected the Iraqi forces already in Kuwait.²⁰ By August



A CF-18 awaiting takeoff at Aviano, Italy, as part of Operation Echo/Operation Allied Force.

1990, *Instant Thunder* was more-or-less incorporated into a more comprehensive plan consisting of four phases; revised *Instant Thunder* strategic targets, suppression of enemy air defences in Kuwait, preparation of the battlefield, and air support during the ground assault.²¹

Although conforming to the Clausewitzian focus of identifying the enemy centres of gravity, Warden and General Norman Schwarzkopf, the Coalition Commander, saw the situation in the Persian Gulf differently. Warden believed the solution rested in bombing targets in Iraq, whereas Schwarzkopf and his headquarters staff correctly identified Saddam Hussein's centre of gravity in the conflict, namely, his military forces in Kuwait.²² Due to the abundance of combat aircraft available when the air campaign began on 17 January 1991, the first three phases were started simultaneously. In this respect, the concept of parallel warfare was utilized. Iraqi defences were attacked simultaneously, with the neutralization of Iraqi command and control in the first eight hours and the dismantling of the air defence system within thirty-six hours.²³

Within days of the first bombs being dropped on Baghdad, Saddam's regime and its forces were effectively strategically paralysed. Nonetheless, his forces fought on. Due to advancements in bombing and new tactics, the Coalition's destruction of Iraqi

forces in Kuwait began to take a toll. Although falling short of Schwarzkopf's goal of 50% attrition, Iraq's forces were attacked day and night with ever-increasing losses. Tanks, artillery, and armoured vehicles were especially targeted, leading to the news-worthy "tank-plinking" flights, where Iraqi armoured forces were destroyed with precision bombs.²⁴ It was this battlefield focus that proved decisive in coercing Saddam to withdraw from Kuwait.²⁵ By mid-February, Saddam had accepted Soviet-brokered terms for a "full and unconditional withdrawal from Kuwait," dropping his previous list of conditions.²⁶ What this timing demonstrates is that if a centre of gravity is correctly identified and supporting targets are attacked, the concept of parallel warfare is a useful tool. Furthermore, the negotiations and the announcement of withdrawal happened long after Warden's strategic targets were destroyed, thus undermining the view of using a strategic paralysis campaign to win a conflict.²⁷

Allied Force

Air power played a role in many of the conflicts following the dissolution of Yugoslavia. However, it was during the Kosovo War that air power proved decisive. Armed clashes between the Kosovo Liberation Army, made up of oppressed Kosovar Albanians, and the military forces of the former Yugoslavia (Serbia) began in earnest in 1998, with Serbian troops arriving in Kosovo in force in 1999.²⁸



President Slobodan Milošević.



A representative CP-140 Aurora, which were very active and productive during Operation *Unified Protector* / Operation *Mobile*.



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Muammar Gaddafi in Tripoli, 2010.

Serbian forces continually committed human-rights abuses in Kosovo, leading to multiple diplomatic coercion efforts from both the US and NATO, including economic and diplomatic sanctions as well as a coercive military presence.²⁹ These efforts failed, and it became clear that unless the diplomatic efforts were paired with military force, they would be ineffective.³⁰ In February 1999, US officials presented a bombing campaign designed to coerce Slobodan Milosevic, the Serbian president, to stop the ethnic cleansing, and pave the way for the deployment of a NATO peacekeeping presence.³¹ The campaign consisted of three phases: soften the air defence system and command structure; strike military targets south of Belgrade; and finally, conduct attacks against targets within the city of Belgrade.³² Not only was it felt that a ground operation would produce greater casualties, but based upon experiences in Bosnia and the Gulf War, it was believed that air power could provide a clean victory for NATO.³³ Furthermore, in the beginning, the deployment of ground forces was completely ruled out, further constraining NATO military planners and commanders.³⁴

Serbian air defences were extensive, and their operators were well-trained, putting up a strong defence when air operations began on 24 March 1999. Despite extensive damage to phase one targets, there was no appreciable effect upon Milosevic's actions. In fact, atrocities increased, and it became clear that he was playing for time.³⁵ During the second phase, choke points, marshalling

areas, and lines of communication were attacked, as well as tank concentrations.³⁶ Interestingly, due to the lack of a ground threat, Serbian tanks were well-concealed in the mountainous terrain, and were rarely spotted out in the open, making them very difficult to locate and destroy.³⁷ Four weeks into the campaign, NATO began bombing Belgrade itself, focussing upon those elements that supported Milosevic's hold on power: the political machine, state media, security forces, and the economic system. After weeks of worries with respect to escalation, the campaign finally threatened the livelihood of Milosevic's friends in the political and media elite.³⁸ Heavy bombing operations continued, NATO announced air superiority had been attained at the end of April, and on 8 June, Milosevic finally agreed to all NATO demands for withdrawal.³⁹ Despite this progress, there had been difficulties in determining the Yugoslav centre of gravity, some authors even declaring that it was never found during the entire campaign.⁴⁰

Many pundits argue that an air campaign based upon Warden's model rather than a coercive model would have achieved more. The results of targeting Milosevic directly could have occurred at the beginning of the campaign, as opposed to a month into the campaign. One of the main detractors for using Warden's model in this conflict is the fact it relied upon unilateral action and did not take into consideration the many intricacies of alliance interventions. Furthermore, it was necessary for the Yugoslav state to remain intact during this conflict in order to prevent spillover into



A CF-18 Hornet, also very active during *Unified Protector*.

the other unstable nations.⁴¹ The benefit of the coercive campaign is that it may not always work, but the escalatory aspect is the more humane approach in circumstances less than total war.⁴² Indeed, the fact remains that there was no real threat of ground invasion in the 78-day NATO campaign, and it was successful.

Unified Protector

The third decisive air campaign was *Unified Protector*, NATO's intervention in the 2011 Libyan Civil War against Muammar Gaddafi. The non-violent protests that had marked similar Arab Spring's uprisings throughout northern Africa turned violent in late-February 2011, when Gaddafi directed his forces to quell the rebellion, rather than to capitulate.⁴³ It became clear that civilians were quickly becoming the target of the crackdown. At the UN, the US led the charge for intervention using the 'responsibility to protect' initiative as impetus, and on 17 March 2011, the resolution was granted "mandating 'all necessary measures' to protect civilians."⁴⁴ International sanctions and an arms embargo followed, as well as the establishment of a no-fly zone. The US quickly set up a task force to implement the resolution and then commenced air strikes on 19 March. These strikes destroyed the Libyan air defence system, as well as concentrated groupings of armoured vehicles besieging Benghazi.⁴⁵ To garner broader international support for interference in what was a civil war, the US diligently worked to hand-over control to an international

organization as soon as possible. To that end, on 31 March, NATO assumed operational control.⁴⁶

The campaign's focus was upon supporting the rebels, and upon identifying the enemy centre of gravity as the Libyan fielded forces.⁴⁷ There were many critics of this approach, arguing that air power's true value was undermined by not targeting Gaddafi and his headquarters in accordance with the Warden approach. These critics failed to realize the importance of the Libyan people deciding the outcome themselves, augmented with some precision-bombing support from NATO. The air strikes also importantly gave the rebellion time to organize and train, preventing a concerted Libyan intervention that would have quickly crushed the rebellion.⁴⁸ By 24 March, Libyan air defences, including the Libyan air force, had been destroyed or rendered non-effective, and the campaign shifted to interdicting Libyan army movements.⁴⁹

As the rebels grew more competent, they began to feed tactical strike information over Twitter to NATO. An unlikely forum, Twitter proved essential to aiding NATO in distinguishing rebels from regulars using the same vehicles, as well as in coordinating strikes for the rebel advance.⁵⁰ This too was aided by the deployment of NATO surveillance and targeting aircraft, providing a key data link from headquarters monitoring Twitter, to aircraft operating over the country.⁵¹ After 223 days of strikes in support of the rebel advance to Tripoli, air attacks halted a

convoy carrying Gaddafi, which was quickly converged upon by rebel fighters, ending the civil war.⁵²

In a very different campaign from *Desert Storm* and *Allied Force*, *Unified Protector* produced a decisive air intervention in support of a rebellion. Using a graduated approach in support of an untrained force, and leveling the playing field by removing heavy firepower from the aggressor made all the difference in a successful transition of power, and not leaving a power vacuum in an already-unstable region.⁵³ An attack against traditional strategic targets may have truly paralysed the Libyan state, especially with the overwhelming advantages possessed by NATO. The appropriateness of this approach is called into question, however, when the protagonist does not want to commit ground troops to occupy and rebuild from the destruction.

Conclusion

There have been many promises associated with air power and its war-winning capabilities. The reach afforded to commanders gave rise to the ability to affect strategic paralysis on their enemies through devastating attacks on parallel targets. Coalesced into Warden's model, these theories have driven many air power practitioners to utilize these concepts as the methods for downstream conflicts. In the time since

Warden's model gained traction, three decisive air campaigns have taken place. *Desert Storm* was unique from the others in that a ground invasion was both *threatened* and *conducted*. As the West shied away from committing ground troops for combat during the 1990s, as well as giving due consideration to the costs of occupation and rebuilding, the destruction wrought by parallel warfare and strategic paralysis became inappropriate for this level of conflict. Instead, coercive campaigns, such as *Allied Force* and *Unified Protector*, became more popular, limiting initial commitments and allowing for multi-faceted operations with complex goals. The use of precision-guided munitions allows for much greater accuracy, as demonstrated through the three air campaigns. However, their effectiveness is only as good as the associated strategy. In conclusion, these decisive air campaigns tends to demonstrate that the concept of parallel warfare is not the most effective method of warfare in future limited interventions.

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