

LAND, AIR AND MARITIME STRATEGY – WHICH IS MORE DECISIVE IN WARFARE?

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ABSTRACT

Land power has been regarded as the dominant form of military power since the main objective of territorial states is to conquer and control land. And, land power has been the main military instrument for achieving this aim. In this essay, the author explores the importance of not just land strategies but air and maritime strategies in a battlefield, concluding that the latter 2 can be impactful as well. The author feels that both air and maritime strategies have proven decisive giving examples like the 1999 North Atlantic Treaty Organisation (NATO) campaign in the Yugoslavia. War. In this essay, the author presents his views in three parts. In the first part he explains the concept of strategy and the importance of understanding the types of political objectives which military force can fulfil. In the second part, he examines how force utility and a nation's strategic culture shapes its military strategy and predisposes a nation into favouring particular domains of military strategy. The third part discusses the case study of the Pacific War during World War II (WWII) and the 1999 NATO campaign in Yugoslavia, *Operation Allied Force* (OAF), to demonstrate how force utility and strategic culture resulted in their respective strategies being assessed either independently from land strategy or, in the case of Yugoslavia, without any land strategy at all. Furthermore, the Pacific War has been regarded as the only great-power war in modern history in which the outcome was not determined by land power alone, and one in which air and maritime power played more than an auxiliary role. On the contrary, OAF is often held up as the example of the effectiveness of independent airpower.

Keywords: *Strategy, Objective, Interest, Power, Environment*

INTRODUCTION

Land power is regarded as the dominant form of military power in the modern age.¹ This is because the supreme political objective in a world of territorial states is to conquer and control land.² Land power has been the main military instrument for achieving this aim, a fact borne out by both geography and history. Geographically, although most of the world comprises of water, almost all of the world's population lives on land. Agriculture and the majority of commodities (minerals, metals, wood, etc.) are harvested on land. Historically, almost all of the great power wars fought over the past two centuries were decided by a clash of armies.³ But does that mean that air and maritime strategies must always be assessed and formulated in terms of their impact on the land strategy? Or, can air and maritime strategies be formulated without such an assessment?

This essay will argue that air and maritime strategies do not always need to be assessed and formulated in terms of their impact on land strategy. Both air and maritime strategies have proven decisive with minimal assessment on their impact on land strategy, notably in the 1999 NATO campaign in Yugoslavia and the Pacific War during WWII. An understanding of the key factors that influence and constitute strategy, regardless of the domain, will allow planners to formulate a strategy which can best attain the political objectives of a war. Therefore, despite the undoubted primacy of the land domain, there have been instances where air and maritime strategies were either assessed and formulated independently from land strategy or with the absence of a land strategy altogether.

This essay will analyse this assertion in three parts. The first part explains the concept of strategy and

the importance of understanding the types of political objectives which military forces can fulfil. The second will examine how force utility and a nation's strategic culture shapes its military strategy and predisposes a nation into favouring particular domains of military strategy. The third will use the case study of the 1999 NATO campaign in Yugoslavia (OAF) and the Pacific War during WWII to demonstrate how force utility and strategic culture resulted in their respective strategies being assessed either independently from the land strategy, or in the case of Yugoslavia, without any land strategy at all. The Pacific War is regarded as the only great-power war in modern history in which the outcome was not determined by land power alone, and one in which air and maritime power played more than an auxiliary role.⁴ On the contrary, OAF is often held up as the example of the effectiveness of independent airpower.⁵

FACTORS SHAPING MILITARY STRATEGY

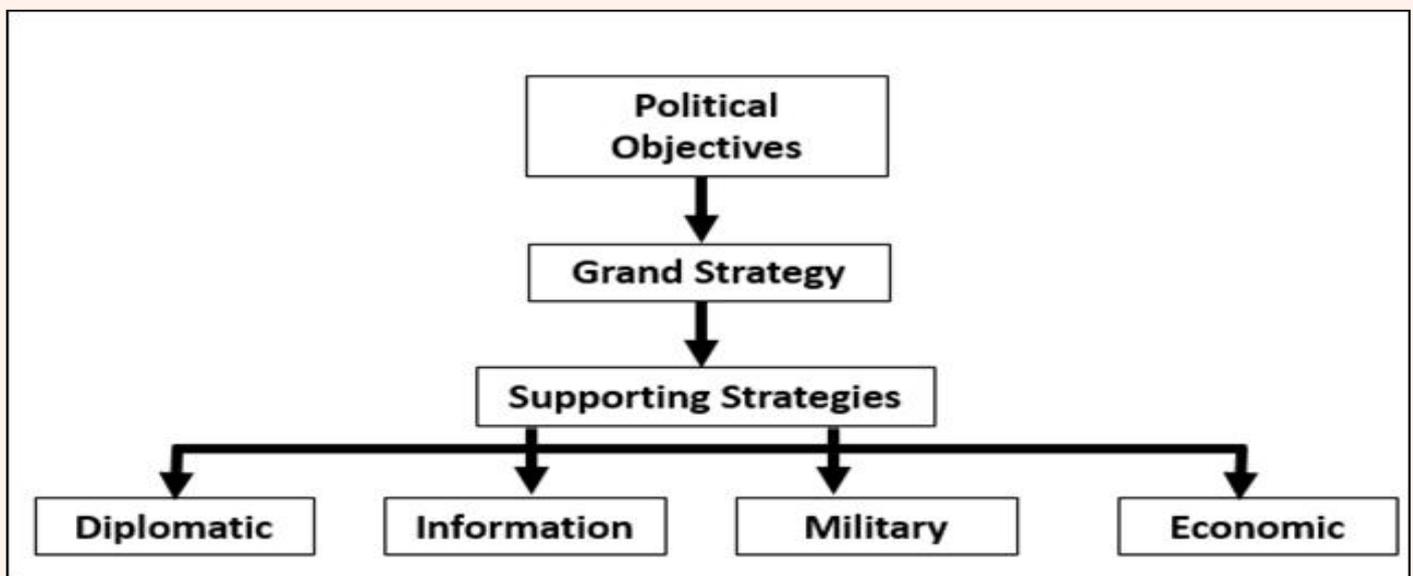
Before analysing the campaigns mentioned above, it is first necessary to understand military strategy and the factors that constitute it. Strategy has been defined as 'the overall plan for utilising the capacity for armed coercion—in conjunction with economic, diplomatic and psychological instruments of power—to support foreign policy most effectively by overt, covert and tacit means.'⁶ This definition is sufficient for explaining strategy at the national level. However, a military-specific definition is also required. Basil Lidell Hart provides this by defining strategy as 'the

art of distributing and applying military means to fulfil the ends of policy.'⁷ Both of these definitions are relevant to this essay.

Central to both definitions is the notion of strategy having to fulfil the needs of policy. Therefore, the 'ingredients' of strategy must also consider policy needs. These ingredients are expressed as a combination of ends, ways and means.⁸ At the highest level, ends are national interests, which are a nation's wants, needs or concerns.⁹ National interests are then translated into political objectives which are the basis for the national or 'grand strategy.' Grand strategy is the development, integration and allocation of all national resources towards the attainment of political objectives.¹⁰

Grand strategy encompasses supporting strategies in the realms of Diplomacy, Information, Military and Economy (DIME). This understanding is important because military strategy is never conceptualised in isolation. It influences and is influenced by all the other supporting strategies. *Figure 1* depicts the relationship between the political objectives and its supporting strategies.

This framework provides the context for the formulation of military strategy. Military strategy is also a combination of ends, ways and means. In this context, ends are the military objectives, the ways are military strategic concepts and the means are expressed as military resources.¹¹ Military strategy is also subjected to two separate sets of factors. On one hand there is



*Figure 1: Relationship of Political Objectives to Supporting Strategies.*¹²

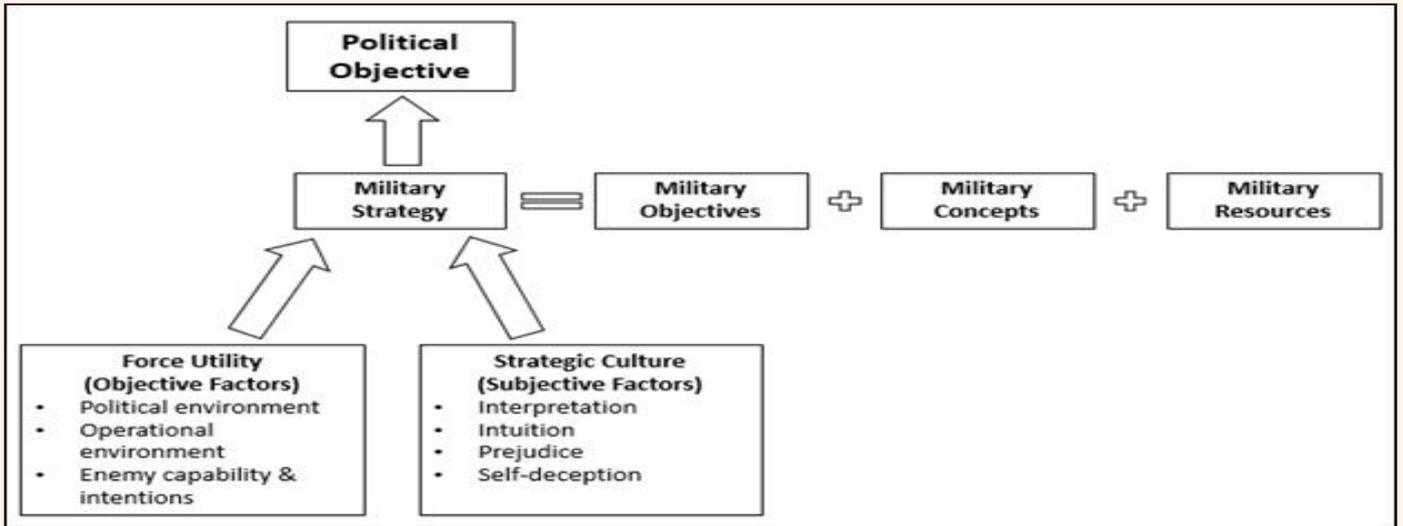


Figure 2: Factors Influencing Military Strategy.

force utility which is defined as ‘the usefulness of force as a tool of policy in compelling the enemy to do our will.’¹³ Force utility comprises objective factors such as the political and operational environment, enemy capabilities and intentions. On the other hand is strategic culture, which is defined as ‘the set of attitudes and beliefs held within a military establishment concerning the political objective of war and the most effective strategy or operational method to achieve it.’¹⁴ Strategic culture provides a subjective guide to the planner’s decision-making as it is shaped by the attitudes and beliefs of the military leadership. The relationship between these factors is shown in *Figure 2*.

POLITICAL OBJECTIVES

All strategies serve a political end. Therefore, a clear understanding of the political objectives to be attained is essential to strategic formulation. As highlighted earlier, the military is but one of the levers

of power available to a state and in the modern day is usually only used when all other options have been exhausted. Political objectives which require a military solution can be broadly classified into limited and unlimited objectives. (See *Figure 3*)

As shown, both types of objectives have very different desired end-states. An unlimited political objective entails the elimination of the opponent as a political entity while a limited political objective allows for the enemy leadership to survive and retain power.

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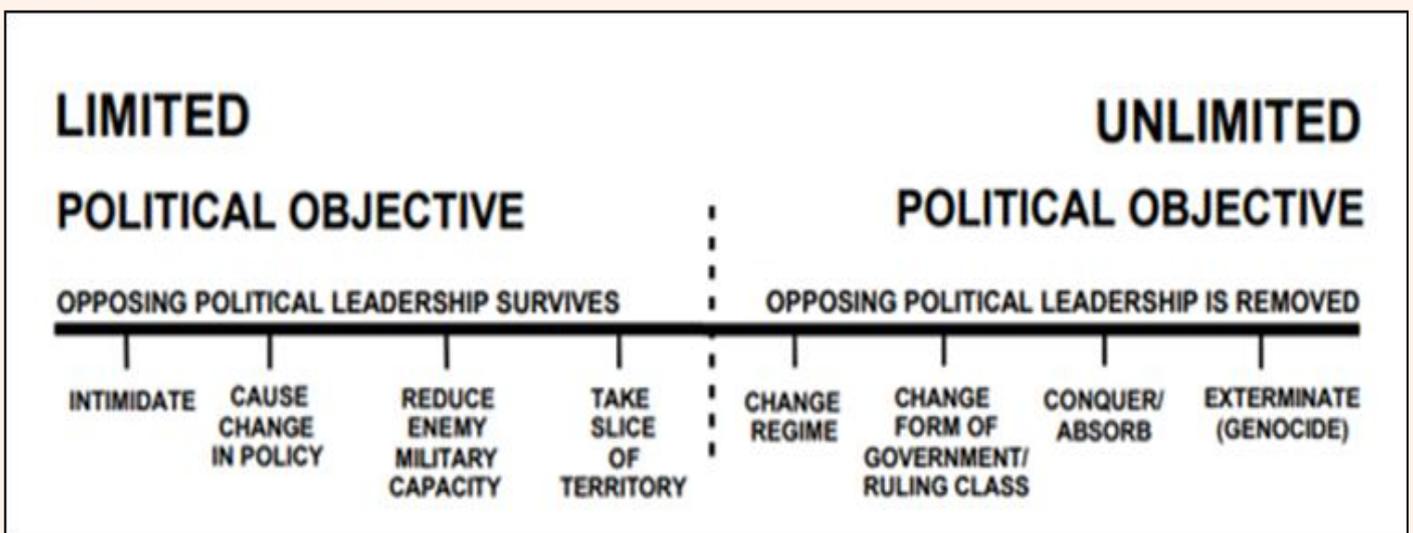


Figure 3: Limited vs Unlimited Political Objectives.¹⁵

UNDERSTANDING FORCE UTILITY

Armed with this understanding of the political objectives, a strategic planner can then decide which domains of military strategy, and in what combination, can best fulfil these objectives. This is the essential foundation of Clausewitz's notion that 'War is a continuation of policy by other means.'¹⁶ Military force has often been applied without achieving the desired political end-state despite attaining battlefield success.¹⁷ This is most evident in the recent campaigns in Iraq and Afghanistan where the conflicts have dragged on for more than a decade despite the success of individual military engagements.¹⁸ In these examples, the forces employed lacked utility.

To ensure this match between politico-military objectives, a clear comprehension of the objective circumstances affecting military strategy is first required. Whether military force serves to achieve the political objectives, which are the true measure of its utility, depends on the choice of military strategy. Military strategy is affected by the broader political and operational environment, as well as enemy capability and intentions. Therefore, in order for force to be employed with any utility, a clear understanding of the context in which it is being employed is required, a clear definition of the result to be achieved, an identification of the target to which the force is being applied, and an understanding of the nature of the force being applied.¹⁹

To achieve maximum utility, the first objective factor that must be considered is the political environment. This environment is distinct from the political objectives. It encompasses the political support for the employment of force, both domestic support from a state's population as well as support from the international community. As the war between the United States (US) and Vietnam in 1965 clearly showed, a failure to consider the domestic aspect of the political environment can easily erode the utility of the employed force.²⁰

The second factor is the operational environment which comprises a combination of conditions, circumstances and influences which determine the use of military force.²¹ Terrain and weather are the key

aspects of the operational environment. They affect the type of military forces to be employed, the equipment to be used and the tempo of operations. Understanding the effects of these operational variables acting upon both the enemy as well as our own forces are fundamental to the development of military strategies.

No effective military strategy can be conceived without understanding the influence, capabilities and intentions of the enemy.

The last factor is the enemy. No effective military strategy can be conceived without understanding the influence, capabilities and intentions of the enemy. The reason is aptly explained by Clausewitz who asserted that 'in war, will is directed at an animate object who reacts.'²² This 'animate object' is the enemy, who's planning, preparations, operational and strategic choices during the conduct of war affect our own strategic requirements. The oppositional nature of the enemy thus cause the strategic planner to be confronted by two simultaneous, potentially competing goals: policy, which is derived from the national interest, and battlefield demands.²³ To effectively bridge the gap between the political and strategic aspects of war, planners require a coherent intellectual framework to define their objective and identify the means to use to achieve it. Yitzhak Klein asserts that this framework is strategic culture.²⁴

THE INFLUENCE OF STRATEGIC CULTURE

Strategic culture is shaped by numerous factors including history, geography, politics, national culture, economics and technology. It draws upon these factors to provide a subjective guide that shapes a planner's interpretations and intuitions. It may also be a source of prejudice and self-deception that may blindside the planner when he least expects it. While strategic culture can be viewed at three distinct levels, this essay will focus on strategic culture at the military level or the

‘national ways of making war’.²⁵

This relationship between force utility and strategic culture will be used in the following sections to analyse the Pacific War and OAF, and explain how they led to air and maritime strategies being conceived without assessment on their impact on the land strategy. In the Pacific War, the land strategy was formulated based on the requirements of the air and maritime domains while in OAF, land forces were not deployed as part of the campaign.

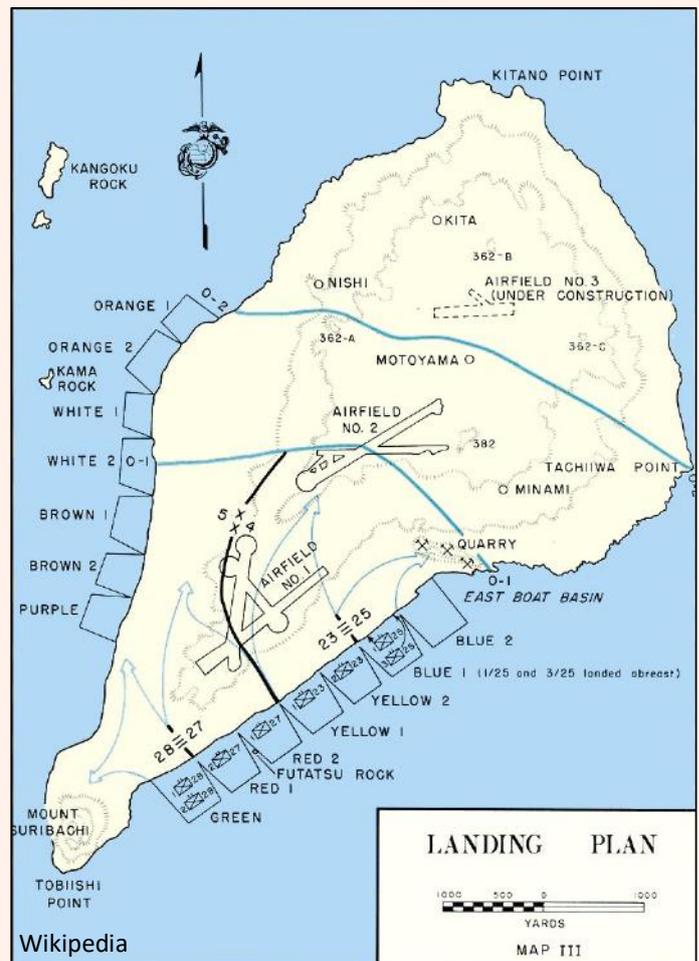
THE PACIFIC WAR: FORCE UTILITY AND STRATEGIC CULTURE FAVOUR AIR AND MARITIME STRATEGIES

This analysis will illustrate how the factors affecting strategy led to the conception of an air and maritime-dominant strategy to fulfil the political objectives of the Pacific War. The case study will focus on the central Pacific theatre from Midway onwards as it was from then that the US started to recover from Pearl Harbour and began formulating an offensive strategy.

The political objective of the US in the Pacific War was an unlimited one—the unconditional surrender of Imperial Japan.²⁶ In line with this objective, the ends, ways and means of the Pacific campaign were shaped accordingly. The ‘ends’ were twofold: attain the physical defeat of the Japanese military and destroy their will to resist. The ‘ways’ encompassed several options. While US planners were prepared to eventually launch a land invasion of Japan, they believed that a maritime blockade combined with a devastating air offensive would be the best way to achieve the political end-state at the lowest possible cost.²⁷ To achieve this, an island-hopping strategy was developed. This involved identifying suitable islands for capture as staging areas. These were then used to extend the reach of US air and naval power until the Japanese home islands were within range.²⁸ The means to achieve this were the US carrier, strategic bomber fleet and the army divisions assigned to this theatre. These ends, ways and means formed a strategy that was shaped by the objective factors of geography.

Geographically, the Pacific Theatre comprised

numerous islands and atolls separated by vast bodies of water. This necessitated the dominance of a maritime strategy to establish sea control. This was especially vital in this theatre as both Japan and the US strongholds in the Pacific were reliant on Sea Lines of Communications (SLOCs) for resupply. The US exploited this by ordering unrestricted submarine warfare against Japan. This proved critical in starving Japan of badly needed resources in the later stages of the war by destroying an average of 100,000 tons of Japanese shipping every month.²⁹ By mid-1943, this totalled 1,745,000 tons of Japanese merchant shipping.³⁰



Map of Iwo Jima detailing the invasion. Iwo Jima was used as a US staging base for resupply and refuelling during the Pacific War once it was captured.

Complementing this maritime strangulation was carrier and land-based airpower. US airpower destroyed Japanese naval forces and established air superiority over contested islands prior to amphibious landings. Strategic airpower was also the only way US forces could effectively strike the Japanese home islands early in the war due to the vast distances involved. The strategy in the central Pacific thus necessitated a heavy

emphasis on the maritime and air domains. Tactically, land forces were crucial in capturing key islands for subsequent force projection. Air and naval power did support the land force for these tactical actions. However, the selection of those islands was determined by the needs of the air and maritime strategies—those islands deemed suitable as staging areas for ships and aircraft. Moreover, the determined martial spirit of the Japanese soldiers, compelled the Japanese to fight to the death even if hopelessly outnumbered. This further deterred the US from engaging in costly ground assaults if there were alternatives. These objective factors of geography and enemy capability were complemented by the subjective factors of US strategic culture.

The Pacific War exhibited six out of the seven characteristics of US strategic culture proposed by Russel Weigley and Thomas Mahnken.³¹ These characteristics, when considered along with geographical and enemy factors, shaped a strategy dominated by air and naval domains. These characteristics of US strategic culture are: (1) Aggressiveness at all levels of warfare. Even while on the defensive after Pearl Harbour, the US employed counter-offensives as seen in the Coral Sea and Midway.³² (2) And (3) Desire for decisive battles and employing maximum effort. Evident in the battles for Midway, the Marianas and the Leyte Gulf which saw heavy concentrations of combat power aimed at seeking decisive battles with the Japanese fleet, despite significant risks to US forces.³³ (4) An industrial approach to war. During the course of WWII, the US produced 297,000 aircraft, 8,800 naval vessels, 193,000 artillery pieces and 86,000 tanks, out-producing the entire Axis in aircraft, tanks and heavy guns within the first year of its' involvement.³⁴ (5) Firepower-intensive approach to war. Seen in the strategic bombing of Japanese cities and the amphibious assaults which employed co-ordinated naval gunfire and close-air support.³⁵ (6) Technological approach to warfare. Demonstrated in multiple innovations, the most notable of which were code-breaking, the invention of the B-29 strategic bomber—a qualitative leap from other contemporary designs and, the atomic bomb.³⁶ The only

characteristic not evident was the preference for direct over indirect strategies. Throughout the Pacific War, the US sought to bypass and isolate Japanese strongpoints where possible instead of attacking them head-on, a clear indirect strategy.³⁷

Ultimately, the war was won by crippling of the Japanese military by combined air and maritime offensives, the erosion of Japanese will and economic strangulation wrought by the strategic bombing, submarine campaigns, use of the atomic bombs, and the invasion of Manchuria by Russia.³⁸ All these factors emphasised the dominant role that air and maritime strategies played in obtaining the unconditional Japanese surrender, thus sparing the Allies a costly ground invasion of Japan.

OPERATION ALLIED FORCE: LIMITED POLITICAL OBJECTIVES RESTRICT THE USE OF LAND POWER

This case study will illustrate how an air strategy was formulated in isolation from a land or maritime strategy. The main reason for this was that NATO's political objective was essentially limited—stopping the oppression of Kosovar Albanians.³⁹ Many of the NATO states were reluctant to sustain casualties during the intervention and this effectively ruled out the employment of land forces. The 'ends' thus involved a strategy of coercion that materialised in the form of a phased air operation aimed at stopping attacks on civilians, rather than one aimed at destroying Milosevic's forces and government, at least initially.⁴⁰ The objective factor of geography also played a part in shaping the choice of 'ways' used in the conflict.

Geographically, land locked Kosovo limited the employment of maritime power to force projection and ship-to-shore strike. Land routes through Macedonia and Albania were either constricted by narrow valleys or difficult for armoured vehicles due to their poor state of repair. The high mountain ranges further limited the range and endurance of heliborne forces. The terrain thus favoured the defending forces and would require a massive investment of manpower by NATO if they wished to successfully prosecute a land campaign—something deemed undesirable as the conflict was a

humanitarian intervention rather than an all-out war. The political environment behind the conflict also made the deployment of land forces a politically risky decision that would face considerable domestic opposition.⁴¹ These factors, when considered with the limited political objectives, left air power as the sole military instrument that NATO could rely on. On top of these factors shaping force utility, strategic culture also played a role in favouring the choice of air power as the sole strategic arm.

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The exact characteristics of NATO strategic culture are more difficult to define since NATO is an alliance of democratic European states. However, much can be inferred from NATO's approach to the conflict. The US, as a major NATO member, would have a great influence on overall NATO strategic formulation. The most obvious influence is the technological approach to the campaign which saw the widespread use of Unmanned Aerial Vehicles (UAV), secure, real-time Command and Control (C2) networks, and Precision-Guided Munitions (PGM) which gave NATO aircraft an all-weather strike capability. Risk-aversion and a reluctance to put boots on the ground was another manifestation of NATO strategic culture. Due to the low-stakes involved in the conflict—NATO was not fighting an existential threat, and thus was unwilling to put lives at risk when airpower offered a less risky solution. This is supported by Martinez-Marchain and Allen who asserted that 'lower stakes make an airstrike-only strategy more likely.'⁴²

The eventual resolution of the conflict has been attributed to a number of possible factors: (1) The withdrawal of Russian support, (2) International isolation and dwindling domestic support, (3) Potential deployment of NATO ground forces, and (4) Milosevic's

indictment as a war criminal. However it is undeniable that the air campaign was indispensable to this outcome as it was the sole coercive military instrument.⁴³

CONCLUSION

The case studies illustrated disproved the notion that air and maritime strategies must always be assessed and formulated in terms of their impact on land strategy. In the Pacific War, land power was employed at locations dictated by the needs of the air and naval forces. To meet the political objectives, force utility had to be considered based on the geographical characteristics of the area of operations, widely separated islands in a vast ocean board, as well as the capabilities of the Japanese military which had established a large defensive perimeter in the Pacific and were prepared to fight to the death on land. Aspects of strategic culture also influenced the formulation of strategy as seen in the industrial and technological emphasis and the desire for decisive battles seen throughout the war. These objective and subjective factors led to the conceptualisation of an air and maritime-dominant strategy.

The case study of OAF demonstrated how a combination of geographical factors, limited political objectives and strategic culture dictated an independent air strategy. The reluctance of NATO to risk a costly ground war and constraints imposed by geography combined, left air power as the sole military tool to achieve the limited political objective of stopping the oppression of Kosovar Albanians. Strategic culture played an enabling role due to the high-tech capabilities available to NATO, and an inhibiting role because of NATO's risk aversion. Both of these cases lead us to the conclusion that while operationally, air, land and maritime strategies must often be formulated with each other in mind, none should be privileged over the other in pursuit of the political objectives. The assessment and formulation of air, maritime and land strategy has to be done in the context of seeking the best way of serving the national interests and achieving national goals. The ends dictate the ways and means.

BIBLIOGRAPHY

- Arthur, F. Lykke Jr, "Defining Military Strategy," *Military Review* 69, no. 5 (May 1989).
- Bradley, J. H, Dice, J. W, *The Second World War, Asia and the Pacific*, Department of History, (United States Military Academy, West Point, New York, 2002).
- Clausewitz, Carl, *On War*, Trans. & Ed. Howard, M. & Paret, P. (Princeton University Press, New York, 1976).
- Global Security.org, "*Strategy: Ends and Means*", (2017), https://www.globalsecurity.org/military/library/policy/usmc/mcdp/1-1/mcdp1-1_chap2.pdf
- Hart, B. L, *Strategy*, (New York: Praeger Publishers, 1975).
- Klein, Yitzhak, "A Theory of Strategic Culture," *Comparative Strategy* Vol. 10, (Department of International Relations, The Hebrew University of Jerusalem, Jerusalem, 1991).
- Layton, P. "The Idea of Grand Strategy", *The RUSI Journal*, 157:4, (2012), DOI: 10.1080/03071847.2012.714193
- Mahnken, T, G, "*United States Strategic Culture*," Defence Threat Reduction Agency Advanced Systems and Concepts Office, (2006), http://www.au.af.mil/au/awc/awcgate/dtra/mahnken_strat_culture.pdf.
- Martinez-Machain & Allen, "Why Countries Choose Airstrikes as a Coercive Tool". *The Straits Times*, (Apr 16, 2018), <https://www.straitstimes.com>.
- Mearsheimer, J. J, *The Tragedy of Great Power Politics*, (University of Chicago, 2014).
- Muller, R. Richard, *The Air War in the Pacific, A History of Air Warfare*, Ed. Olsen, J. Andreas, (Potomac Books, Washington D.C. 2010).
- Nohr, A. A, "The Utility of Force is Contextual", *E-International Relations Students*, (2012), <http://www.e-ir.info/2012/04/06/the-utility-of-force-is-contextual/>.
- Osgood, R. E. *NATO: The Entangling Alliance*, (Chicago, IL: University of Chicago Press, 1962).
- Powers Rob, "What is an Operational Environment in the Military?" *The Balance*, (Mar 2018), <https://www.thebalance.com/what-is-operational-environment-3350884>.
- Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (Bloomington: Indiana University Press, 1973).
- Smith, R, Introduction: Understanding Force, *The Utility of Force*, (Vintage Books, New York, 2008).
- Stigler, L. Andrew, "A Clear Victory for Air Power", *International Security* 27, no.3, (MIT Press, Winter 2002-2003).
- Till, G, *In Search of Seapower, Seapower: A Guide for the Twenty First Century*, (Routledge, New York, 2013).

ENDNOTES

1. Mearsheimer, J. J, *The Primacy of Land Power, The Tragedy of Great Power Politics*, (University of Chicago, 2014), 83.
2. Ibid., 85-86.
3. Ibid., 110-111.
4. Ibid., 110-113.
5. US Air Force, *The Air War over Serbia: Aerospace Power in Operation Allied Force*, Initial Report (Washington, DC: US Air Force, 2001).
6. Osgood, R. E. *NATO: The Entangling Alliance*, (Chicago, IL: University of Chicago Press, 1962).
7. Hart, B. L, *Strategy*, (New York: Praeger Publishers, 1975), 351.
8. Arthur, F. Lykke Jr, "Defining Military Strategy," *Military Review* 69, no. 5 (1989) 3.
9. Global Security.org, "*Strategy: Ends and Means*", (2017) 38, https://www.globalsecurity.org/military/library/policy/usmc/mcdp/1-1/mcdp1-1_chap2.pdf

10. Layton, P. "The Idea of Grand Strategy", *The RUSI Journal*, 157:4, (2012), 57-58, DOI: 10.1080/03071847.2012.714193
11. Arthur, F. Lykke Jr, "Defining Military Strategy," 3.
12. Global Security.org, 40.
13. Nohr, A. A, "The Utility of Force is Contextual", *E-International Relations Students*, (2012), <http://www.e-ir.info/2012/04/06/the-utility-of-force-is-contextual/>.
14. Klein, Yitzhak, "A Theory of Strategic Culture," *Comparative Strategy*, 10, Department of International Relations, (The Hebrew University of Jerusalem, Jerusalem, 1991), 5.
15. Global Security.org, 44-45.
16. Clausewitz, Carl, What is War? *On War*, Trans. & Ed. Howard, M. & Paret, P. (Princeton University Press, New York, 1976) 99.
17. Smith, R, Introduction: Understanding Force, *The Utility of Force*, (Vintage Books, New York, 2008), 6-7.
18. Ibid.
19. Smith, R, *The Utility of Force*, 8.
20. History.com Staff, "Vietnam War", *History.com*, (A+E Networks, 2009), <https://www.history.com/topics/vietnam-war/vietnam-war-history>.
21. Powers Rob, "What is an Operational Environment in the Military?" *The Balance*, (Mar 2018), <https://www.thebalance.com/what-is-operational-environment-3350884>
22. Clausewitz, Carl, *On War*, 134-136.
23. Klein, Yitzhak, *Comparative Strategy*, 6-7.
24. Ibid.
25. Klein, Yitzhak, *Comparative Strategy*, 8.
26. Bradley & Dice, *The Second World War, Asia and the Pacific*, 148.
27. Ibid., 148.
28. Ibid., 156-157.
29. Ibid., 115-117.
30. Ibid., 151.
31. Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (Bloomington: Indiana University Press, 1973), xxi.
Mahnken, T, G, "United States Strategic Culture," 12.
32. Bradley & Dice, *The Second World War, Asia and the Pacific*, 103-115.
33. Ibid., 108-115, 161-167, 192-195
34. Mahnken, T, G, "United States Strategic Culture," 11.
35. Bradley & Dice, *The Second World War, Asia and the Pacific*, 170.
36. Muller, R. Richard, *A History of Air Warfare*, 73.
37. Bradley & Dice, *The Second World War, Asia and the Pacific*, 139-140.
38. Ibid., 252-259.
39. Muller, R. Richard, *A History of Air Warfare*, 229.
40. Ibid.

41. Stigler, L. Andrew, “A Clear Victory for Air Power”, *International Security* 27, no.3, (MIT Press, Winter 2002-2003), 133-134.
42. Martinez-Machain & Allen, “Why Countries Choose Airstrikes as a Coercive Tool”. *The Straits Times*, (Apr 16, 2018), <https://www.straitstimes.com>.
43. Muller, R. Richard, *A History of Air Warfare*, 244



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