Maneuver as a Recourse in War

This paper reviews the proposition that "maneuver is often the recourse of the weaker side in war, because it is the weaker side that must make up for its deficiencies by using some highly leveraged method of fighting." It does so by asking framing questions on the options an actor may have and the choices it may make to achieve its war goals. Using Lanchester's laws (Lanchester, 1960) in a thought experiment, it concludes that the weaker actor will be disadvantaged by always seeking an attrition strategy. As such, it reviews Arreguin-Toft's thesis of strategic interaction (Arreguin-Toft, 2001) to determine if it can be useful as a decision-making framework for actors. While finding methodological flaws in the thesis of strategic interaction's empirical analysis, it considers that with suitable modifications, it is a useful decision-making framework for actors, where weaker actors should seek to choose opposite-approach conflicts and stronger actors choose same-approach. However, in some circumstances weaker actors may not be able to act on the framework as they cannot credibly choose attrition and may have no choice but to choose maneuver. Indeed, to maximise their chances of victory, stronger actors should lean towards maneuver as unlike weaker actors, they have the option of switching to attrition if maneuver does not work. As such, maneuver is often the recourse of the weaker side in war; but should also be the first recourse of the stronger side.

What options does an actor have in waging war?

2 Each actor in a war must choose its approach to waging war along a spectrum of approaches ranging from attrition at one extreme to maneuver at the other. These approaches differ fundamentally in both aim and expression. While attrition's aim is to destroy the enemy's capability to wage war, maneuver's aim is to disrupt the enemy's political, industrial or military systems (Luttwak E. N., 1983, p. 177). Similarly, while attrition is expressed through the pitting of actors' strength against strength, maneuver seeks to avoid the enemy's strength, instead applying a selective strength against the enemy's known weakness (Luttwak E. N., 1980-1981, p. 64).

3 Distinguishing between attrition and maneuver can be confusing. Both approaches "manifest in varying degrees at all levels of conflict – tactical, operational, theatre-strategic and national-strategic" (Luttwak E. N., 1983, p. 177) and indeed, different approaches may be used at different levels. For example, Soviet deep battle doctrine was tactically attritional, with Tukhachevsky noting that if "it is not possible to envelop them, the enemy battle formation must be crushed by a deep strike from the front" (Milne, 1998, p. 77). However, deep battle doctrine was operationally maneuverist, as the objective of such a strike was not to destroy the enemy's forces but rather to "wage a decisive war of manoeuvre in rear areas" (Milne, 1998, p. 76). Similarly, actors may choose to engage in attrition behavior, where "each party tests the other's resilience by inflicting costs without offering a way out through compromise" (Langlois & Langlois, 2009, p. 1053). Despite the name, an actor employing attrition behavior targets the enemy's will by demonstrating its willingness to suffer losses, rather than necessarily targeting the enemy's forces (Langlois & Langlois, 2009, pp. 1052-1053).

4 Actors may employ attrition and maneuver at different times, depending on circumstances. For example, the initial phases of the First World War on the Western Front were characterized by maneuver, with German forces pushing through Belgium and reaching within 43 kilometers of Paris (Mombauer & Spall, 2006, p. 748) [1]. Yet the loss of the Battle of the Marne "brought an end to the war of movement on the Western Front and began four years of stalemate" (Mombauer & Spall, 2006, p. 748), in a clear transition to attrition.

5 For simplicity, this paper will use strategy to describe actors' plans to achieve their political objectives during war. This approach reduces potential confusion by limiting the discussion to the highest level of action that can be taken by an actor. It is also in line with Clausewitz' statement that war is "a continuation of political intercourse, carried on with other means" (von Clausewitz, 1976, p. 87), allowing the actor to use non-military means if necessary to achieve their political objective. Further, this paper classifies all strategies as either attritional or maneuverist. In reality, each individual strategy will employ aspects of both attrition or maneuver. However, where a strategy employs more attritional aspects than

[1] While initially this segment had referred to the "Schlieffen plan", the debate on the appropriateness of the term (see (Holmes, 2014) or (Zuber, 2010) for a taste) led to a more factual recasting of the discussion.

maneuverist, it will be classified as attritional and vice versa, considering the "proportion of each mode in the overall spectrum" (Luttwak E. N., 1980-1981, p. 65). Finally, the paper considers for simplicity that all wars are fought between two actors, each of which are the other's enemy.

What would happen if all actors chose attrition as their strategy?

6 Actors do not choose their strategies in a vacuum. Each actor will have a different objective in fighting a war and must choose its strategy with the intent of maximizing the likelihood of achieving its objective. Therefore, each actor must consider its enemy, whose choice of strategy will interact with the actor's strategy to determine the outcome. Indeed, "the enemy too has a vote" (Gray, 2007, p. 66) and the point of war for an actor is, *pace* Gray, not only to secure control over the enemy's vote (Gray, 2007, p. 68) but also to ensure that the enemy does not secure control over its vote.

7 As a demonstration of why an actor must consider its enemy and may vary its strategy, it is useful to consider a stylised case where all actors always choose attrition as a strategy. This case draws on Luttwak's description of the case of pure attrition, where enemy forces are progressively destroyed by the cumulative effect of firepower, until the proportion destroyed is sufficient to induce retreat or surrender (Luttwak E. N., 1980-1981, p. 63). In such an extreme scenario, the strategic approach is no different from the tactical approach and hence we would expect the outcomes of wars to broadly conform to Lanchester's laws of combat.

8 Lanchester's laws posit that in effect, a larger force is, *ceteris paribus*, more likely to achieve victory (Lanchester, 1960). Force size can be adjusted by weapon efficiency, such that a force with fewer men but more efficient weapons can have a greater fighting strength than one with more men but less efficient weapons[2]. The more well-known square law, applicable where forces can concentrate fire on opponents, in essence states that the larger a force is relative to its opponent, the more rapidly it will defeat its opponent and with fewer

[2] See (Lanchester, 1960, pp. 2144-2147) for an example where a force of 250 machine gunners is equivalent to that of 1000 riflemen, assuming that the machinegun is 16 times more effective than a rifle. Lanchester explicitly recognises that efficiency can in turn be adjusted by other circumstantial factors such as terrain.

casualties (Lepingwell, 1987, pp. 93-100). In an extreme case, a smaller force can be "wiped out of existence without being able to exact a toll even comparable to its own numerical value" (Lanchester, 1960, p. 2150). The lesser-known linear law, applicable where forces cannot concentrate fire, in essence states that a larger force will defeat its opponent but will suffer an equal rate of casualties (Lepingwell, 1987, pp. 100-103). The Lanchester laws' simplicity[3] makes them "useful as a heuristic for thinking about combat interactions, albeit a heuristic with distinct limitations" (Lepingwell, 1987, p. 127).

9 If Lanchester's laws are broadly accurate and applicable, then weaker actors will be more likely to lose wars than to win. It may not always be clear which actor is weaker. An actor may be globally weak but locally strong and hence able to triumph[4], although if both actors know that they are seeking attrition, it is likely that they will seek to concentrate their forces. Similarly, the weaker actor is not bound to lose. The rate of attrition can vary depending on the nature of weapons and warfare[5] and need not be deterministic[6]. In some cases, therefore, even if a weaker actor is severely outmatched by its enemy, it could still win a war through fortune.

10 However, Lanchester's laws do not appear to be accurate and applicable. Empirical assessments have yielded mixed results (Lepingwell, 1987, pp. 113-121) and the laws do not appear to apply in some cases[7]. Indeed, there is some evidence that in asymmetric conflicts, weaker actors are increasingly more likely to win over stronger actors (Arreguin-Toft, 2001,

[3] Although other reformulations of the Lanchester law, e.g. that "a force's casualties are simply a function of the size of one's own force and the enemy's lethality" (Fricker, 1998, p. 18) are arguably even more simplistic.
[4] (Lanchester, 1960, p. 2150) gives an example of a force which is large in aggregate, but is only able to mass a small amount at any time. Faced against a sufficiently large opponent, the fighting value of each contingent is zero, no matter how large the initial force is.
[5] Per para 8, if the square law were to apply, the weaker side may be expected to lose more rapidly than if the linear law were to apply. (Fricker, 1998) suggests that the attrition rate need not be exactly either square or linear
[6] (Bonder, 1967) indicates that it is unclear whether one can assume a constant attrition-rate coefficient. In short, if a weapon's probability of hitting changes based on the results of previous rounds fired, the attrition-rate coefficient may similarly change over time, depending on initial conditions, making the rate of attrition non-deterministic.
[7] See (Fricker, 1998). Interestingly, at least one study has found an empirical relationship where the greater losses one side demonstrates it is willing to suffer, the more likely the other side is to capitulate (Langlois & Langlois, 2009). This indicates that Lanchester's laws, while useful as a framing mechanism, is likely insufficient to explain how actors win wars.

pp. 97,99). This suggests that empirically, actors do choose to use other strategies than attrition.

11 As such, actors must assess themselves and their enemies to determine whether they are the weaker actor and what strategy they should employ. Stronger actors are naturally drawn to attrition[8], which allows them to use their strength directly against the enemy's relative weakness. Given this dynamic, weaker actors would be more disposed to consider varying their strategies, to avoid being caught in a "quasi-physical process" (Luttwak E. N., 1980-1981, p. 64) which would leave them worse off.

How should a weaker actor decide which strategy to use?

12 Even if always choosing attrition will likely leave a weaker actor, it is not immediately obvious that the weaker actor should always choose maneuver. For such players, attrition may lead to defeat more often than not, but the path to defeat has the virtues of being predictable and gradual (Luttwak E. N., 1980-1981, pp. 63, 65). In contrast, maneuver offers the possibility of triumph, but at the risk of catastrophic failure (Luttwak E. N., 1980-1981, p. 65). Similarly, even though stronger actors are drawn to attrition, they may not always choose it. Luttwak characterizes attrition as resource-based and maneuver as knowledge-dependent (Luttwak E. N., 1980-1981, p. 65); a stronger actor may be superior not only in resource but also in knowledge, and hence may also choose maneuver. Weaker actors therefore need a framework to determine which strategy to choose, and under which conditions.

13 Arreguin-Toft proposes that the interaction of actors' strategies ("thesis of strategic interaction") can generally explain the outcome of asymmetric conflicts (Arreguin-Toft, 2001). In his view, each actor's strategy has an ideal counterstrategy, and actors who are able to predict their enemy's strategy and implement the appropriate counterstrategy will be more likely to win (Arreguin-Toft, 2001, p. 104). As such, the thesis of strategic interaction may be a useful framework for weaker actors.

[8] For a rousing defence of why the stronger current actor should use attrition, see (Peters, 2004)

14 Similar to this paper, Arreguin-Toft reduces the universe of strategies to direct and indirect strategies[9], where direct strategies target the enemy's forces and indirect strategies target the enemy's will (Arreguin-Toft, 2001, p. 105). Arreguin-Toft considers only four forms of direct and indirect strategies. Strong actors may only choose direct attack or barbarism, defined as "the systematic violation of the laws of war in pursuit of a military or political objective" (Arreguin-Toft, 2001, p. 101). Conversely, weak actors may only choose direct defence[10] or guerilla warfare (Arreguin-Toft, 2001, p. 103). Considering the likely results of the interaction of these strategies, Arreguin-Toft hypothesizes that "strong actors are more likely to win same-approach interactions and lose opposite-approach interactions" (Arreguin-Toft, 2001, p. 110) and following empirical analysis of asymmetric conflicts, concludes that the results support this hypothesis (Arreguin-Toft, 2001, p. 111).

15 The thesis of strategic interaction seems to have been tested through empirical analysis, using data from the *Correlates of War* project. However, there are methodological challenges to the thesis of strategic interaction which reduce its ability to be used as a general theory of asymmetric conflict. Arreguin-Toft's empirical analysis is a correlation between the outcome of a conflict and whether the conflict featured an opposite-approach interaction. The interpretability of such a correlation relies heavily on whether the data is accurate; however it is hard to determine if the data is indeed accurate.

16 Arreguin-Toft has chosen to encode whether the conflict features an opposite-approach interaction by reviewing the history of the conflict (Arreguin-Toft, 2001, p. 110). From the review, the conflict will be classified as direct-direct, direct-indirect, indirect-direct or indirect-indirect, before being reduced to same-approach or opposite-approach (Arreguin-Toft, 2001, p. 110). However, this reduction to same-approach or opposite-approach means that it is not possible for other parties to determine whether or not the resulting codes are accurate. For instance, it seems unusual that the Malayan Emergency is coded as a same-approach conflict (Arreguin-Toft, 2001, p. 127). The Malayan Emergency is widely considered

[9] Mapping closely but not perfectly to attrition and maneuver strategies as described in para 5; Arreguin-Toft rules out the use of other, non-military means to achieve objectives.

[10] Interestingly and counterintuitively, Arreguin-Toft includes limited aims strategies as direct defence, where weaker actors may conduct a pre-emptive attack, citing the example of Egypt attacking Israel in 1973 (Arreguin-Toft, 2001, p. 103).

to be a guerilla conflict, but coding it as a same-approach system using Arreguin-Toft's typology implies that the British had resorted to barbarism, which is an odd description of the British counterinsurgency efforts[11]. This challenge is worsened because the dataset's coding on multiple occasions is not consistent with descriptions in the paper. For example, America's intervention in the Vietnam war is coded as a same-approach conflict (Arreguin-Toft, 2001, p. 128), but is described as an opposite-approach conflict (Arreguin-Toft, 2001, p. 111). Similarly, Israel is coded as the weaker actor in the 1973 Yom Kippur War[12] but Egypt is described as a weaker actor in the same war when describing direct defence strategies (Arreguin-Toft, 2001, p. 103). As such, it is hard to adequately assess the quality of the data and hence the accuracy of the empirical analysis.

17 Nonetheless, the thesis of strategic interaction is intuitively compelling. It is aligned with Mao's maxim that "defeat is the invariable outcome where native forces fight with inferior weapons against modernized forces *on the latter's terms*"[13]. In this regard, it may be similar to Lanchester's laws – even with a range of methodological flaws, it can be a useful heuristic for thinking about strategic interactions. In short, the appropriate framework for weaker actors is to identify what the stronger actor is likely to do – then do the opposite.

<u>Can the thesis of strategic interaction predict outcomes?</u>

18 One potential qualitative way to test whether the thesis of strategic interaction is a useful tool is to examine it against Mack's thesis of interest asymmetry[14]. We may have more confidence in the thesis of strategic interaction's explanatory power if it can explain outcomes that the thesis of interest asymmetry cannot. Indeed, Arreguin-Toft attempts to do so in his paper, proposing an alternative explanation for the outcome of the US intervention in Vietnam (Arreguin-Toft, 2001, pp. 113-121) as a combination of several simultaneous interactions. However, Arreguin-Toft's example is unsatisfying because the thesis of strategic interaction predicts the same outcome as the thesis of interest asymmetry and so it is hard

[11] In fact, this is easily resolved by expanding the range of strategies to include non-military means. Implicitly, Arreguin-Toft has already done so by considering the Malayan emergency as a same-approach conflict (Arreguin-Toft, 2001, p. 127).
[12] See (Arreguin-Toft, 2001, p. 128) – the result of 0 indicates that Israel is considered the weaker actor
[13] Quoted in (Mack, 1975, p. 176)
[14] This paper has used Arreguin-Toft's characterisation of Mack's paper as interest asymmetry for convenience; (Mack, 1975) does not use the term.

to tell which thesis is more likely to be explanatory. The choice of Vietnam as an example is confusing because the conclusion to Mack's paper references a testable example: Northern Ireland (Mack, 1975, p. 199).

19 It is opportune at this point to review the thesis of interest asymmetry. As Arreguin-Toft puts it, "an actor's relative resolve or interest explains success or failure in asymmetric conflicts" (Arreguin-Toft, 2001, pp. 94-95) and hence where interests are asymmetrically distributed, the least interested party will win. Put another way, in Mack's memorable phrase, "big nations lose small wars" because they are fighting a limited war and hence have limited will; in contrast, the weaker actor is fighting an existential war and hence has unlimited will[15]. In short, the weaker actor, by imposing "a steady accumulation of 'costs' on their opponent" (Mack, 1975, p. 185) steadily erodes the stronger actor's limited will, until domestic contradictions force the stronger actor to withdraw. Mack's paper concludes by describing the then ongoing asymmetric conflicts in Northern Ireland and Angola, stating that "in both countries, the key question is no longer whether to withdraw but rather when and how." (Mack, 1975, p. 200)

20 As at time of writing, the United Kingdom has not yet withdrawn from Northern Ireland[16]. The signing of the Good Friday agreement in 1998 has led to peace, where Northern Ireland remains a part of the United Kingdom, addressing several concerns including the right of all persons born in Northern Ireland to have dual citizenship of the United Kingdom and the Republic of Ireland (Wolff, 2003, p. 14). The thesis of interest asymmetry has not been able to explain this outcome.

21 With a minor expansion to include non-military means, the thesis of strategic interaction can explain the outcome in Northern Ireland. The Provisional Irish Republican Army ("PIRA") fought an ongoing insurgency against the British and Unionist militias for nearly 30 years with neither side managing to defeat each other militarily (Gregg, 2011, p. 650). By

[15] This is not dissimilar to the Fable of the Chicken and the Pig (Unknown, n.d.); in short, at breakfast, the chicken is involved, but the pig is *committed*. Big nations are the chickens; small actors are the pigs.
[16] Though it is unclear whether this will remain the case following Brexit, such a withdrawal by the United Kingdom cannot be said to have been forced by the IRA.

1990, the British had started peace talks with the militants and by 1998, the Good Friday agreement was signed (Gregg, 2011, pp. 651-652). The PIRA's approach throughout was an indirect guerilla war strategy under Arreguin-Toft's typology (Arreguin-Toft, 2001, pp. 103-104). However, the eventual British approach of negotiation does not fit in Arreguin-Toft's typology since it does not require armed forces (Arreguin-Toft, 2001, p. 100). This challenge can be resolved by allowing the typology to include non-military means (i.e. moving from direct/indirect strategies to attrition/maneuver strategies); indeed Arreguin-Toft has implicitly already done so in his coding of the Malayan Emergency[17]. As such, the Northern Ireland conflict can be considered as a same-approach conflict, which is more likely to be won by the British as the stronger actor.

Is choosing an opposite-approach strategy really feasible for weaker actors?

22 The thesis of strategic interaction provides a decision-making framework but it may not actually be possible for weaker actors to act according to the framework. In some circumstances, weaker actors may be so weak in comparison to their enemy that they have little choice but to choose maneuver strategies. Such a result is broadly aligned with Luttwak's view that maneuver strategies are "compulsory for the side weaker in resources, which simply cannot prevail by attrition" (Luttwak E. N., 1980-1981, p. 64). However, Luttwak's position is too deterministic as there are situations under which the weaker side can still win via attrition, especially where the weaker side is not severely outmatched.

23 Following the thesis of strategic interaction, weaker actors should seek to predict their opponent's strategy and choose the opposite to maximise their chance of victory. Since stronger actors are drawn towards attrition, weaker actors should generally choose maneuver. However, the thesis of strategic interaction equally applies to stronger actors, albeit in reverse. By backward induction, knowing that a weaker actor will choose maneuver, the stronger actor should also choose maneuver. However, in some circumstances the weaker actor may not be able to respond with an attrition strategy for if it does, the stronger actor may also switch to an attrition strategy, where it is dominant.

[17] See para 16

24 The Malayan Emergency may provide a useful example of how weaker actors may be caught by this trap. The Emergency can be broadly separated into two phases, from 1948 until 1951 and from 1951 until 1960, with the appointment of Oliver Lyttelton as colonial secretary as the divider. The first phase can be characterized as an interaction between attrition by the British and maneuver by the Malayan Communist Party. Using a search-and-destroy strategy, the British conducted futile sweeps through the jungle; futile, because Communist forces would avoid the British, returning to their camps once the sweep had passed (Nagl, 2002, p. 68). In this phase, the strategic interaction benefitted the Communists as the weaker actor. The second phase on the other hand, can be characterized as an interaction between maneuver by the British and maneuver by the Malayan Communist Party. By recognizing that "the Emergency is in essence a Police rather than a military task" (Nagl, 2002, p. 77), the British were able to change their strategy to maneuver. In this phase, the British decisively won the strategic interaction by "defeating the political subversion, not the guerillas" (Thompson, 1966, p. 55). Yet the Communists could not change to an attrition strategy, as that would expose them to the overwhelming strength of the British. It was better to continue with a maneuver strategy, which at least held out a chance of success.

Conclusion

25 Weaker actors are driven towards maneuver strategies because they tend to represent the best option available. But stronger actors are not barred from using maneuver strategies. Indeed, following the thesis of strategic interaction, stronger actors should prefer to use maneuver strategies over attrition strategies when fighting weaker opponents, because they are more likely to win same-approach conflicts. As such, while maneuver is often the recourse of the weaker side in war it may not be sufficient to make up for the weaker sides' deficiencies. Indeed, maneuver should also be the recourse of the stronger side in war.

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