PRINCIPLES OF WAR REVISITED

Viscount Horatio Nelson before the Battle of Trafalgar.

by Robert S. Bolia

That which changes urges itself on our attention incomparably more than that which stays as it was. That is a general law of our intellectual life. The perspectives, which result from the experience of historical change, are hence always in danger of being distorted, because they forget the hiddenness of that which persists.

– Hans-Georg Gadamer

Introduction

The word at the Pentagon is that warfare is changing. The self-proclaimed visionaries of this ‘transformation’ in warfare – many of them, not ironically, working at the Office of Force Transformation – speak of a ‘Revolution in Military Affairs’ (RMA), guided by concepts like Network-Centric Warfare (NCW) and Effects-Based Operations (EBO), which, they assert, will alter the fundamental character of war. Despite these claims, the theorists of NCW and EBO have failed to articulate a new set of ‘Principles of War’ to accompany the transformation. This suggests either a lack of understanding of the end state of the new way of war, or that the RMA is, in fact, a non-event.

It would be tempting to make the case that the forecasters of the RMA had simply not done a thorough analysis of the consequences of their propositions, but this is clearly not true. Indeed, their writings on the subject are voluminous. Nevertheless, they have derived from their analyses neither a requirement for nor an elucidation of a new set of principles of war.

The alternative hypothesis, that we are not in the midst of an RMA, may be interpreted in a number of ways. First, history has left us the writings of numerous prophets proclaiming a ‘new form of war.’ The Italian general and airpower prophet Giulio Douhet used these very words – la nuova forma della guerra – in a book in which he asserted not only the absolute supremacy of air forces over ground and surface forces, but also that the very threat of aerial bombardment would put an end to warfare. Similar arguments had been made previously for the machine gun, and they would be made later for nuclear weapons. Both were based upon the notion that societies would not willingly sustain the type of mass casualties evidenced at the Somme, or later at Hiroshima and Nagasaki. Needless to say, none of these theories has proven correct.

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If the latter perspective appears extreme, it should not. History is replete with examples of technological failures exacerbated by overconfidence in the capacity of the technology to change the nature of war. Researchers studying the impact of increased automation on human performance and situation awareness are very familiar with this phenomenon, which they have termed ‘automation complacency.’ Moreover, that its existence is neither a historical curiosity nor a laboratory artifact is indicated by its occurrence in recent military operations in Iraq, within the context of purportedly network-centric operations.

Another explanation for the lack of new principles of war may be the lack of novelty of the concepts underlying the Revolution in Military Affairs. While the technology required to implement the vision of NCW espoused by its most vocal proponents may be new, many of the ideas behind the vision are not new. Indeed, the idea of self-synchronization of forces can be found in Moltke’s realization of Auftragstaktik during the wars Prussia conducted against Austria and France in the 1860s and 1870s, as well as in Nelson’s victories at the Nile and Trafalgar more than half a century earlier. Neither Moltke nor Nelson had ‘real-time’ communications at his disposal. These examples also point out that speed of command is not a requirement for self-synchronizing behavior. In both cases, command intent was maintained not by communications channels, but by shared mental models developed prior to engagement.

The idea of networked forces is not new either, particularly with respect to navies. This is evident in Admiral Sandy Woodward’s description of the Royal Navy’s networked air defence system used – not always successfully – in the Falklands War. While this event precedes the proclamation of NCW by field experts Cebrowski and Garstka by more than 15 years, the concept is older still, and dates at least to the Pacific theatre during the Second World War.

The case might also be made that Effects Based Operations is not an entirely new concept, although the point need not be belaboured. The proponents of EBO have done their due diligence, and do not hesitate to provide historical examples of EBO. Indeed, they suggest that it is the manner in which good commanders have always fought wars. The novelty is not the concept itself, but rather in its having been made explicit, as well as its subsequent incorporation into joint doctrine.

One final reason why NCW has not led to an enumeration of new principles of war is that it is largely irrelevant for the enemies that the United States and its allies fight today. It is one thing to speak of fighting against oppression in order to make the world safe for democracy, but the US has selected as its targets one nation still waiting to emerge from the 19th Century, and another that is only now beginning to

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**Discussion**

One problem with the anticipators of RMAs is that they seldom predict the development of appropriate countermeasures. Certainly Douhet was not imagining surface-to-air missiles when he wrote “nothing that man can do from the surface can interfere with the capacity of an airplane to move along in the third dimension,” any more than the creators of the Maginot Line were imagining the tactics of Blitzkrieg. There have been few developments in the history of military technology that have not spawned countermeasures. And there is no reason to believe that the technology of NCW will be somehow immune.

The ‘other side of the coin’ is that, even in the absence of effective countermeasures, there exists the possibility that NCW may not work as advertised. Its devotees enjoy calling attention to Metcalf’s Law, which states that the power of a network is proportional to the square of the number of nodes in the network. What their analyses fail to uncover is that such an increase in ‘power’ is accompanied by a concomitant increase in complexity, which will likely lead to unpredictable behaviors, and even instability. Apparently random bouts of sluggish performance and network dropouts are far from uncommon, even in relatively small computer networks. If a maximally connected network is envisioned as a force *multiplier*, should not a disconnected network be regarded as a potential force *divider*?
recover from the pummeling given it by a US-led coalition more than 15 years ago. NCW might be a ‘game-changer’ in a war against Russia or China, but against Afghanistan and Iraq it is, at best, overkill.

Despite these caveats, it might be interesting to consider the effects, if any, of NCW and EBO on the currently accepted principles of war, not in light of current technology, but rather, assuming the ideal end-state posited by the twin concepts of operations. Notwithstanding the possibility that these principles are not at right angles, they will be considered separately and in the order in which they traditionally appear.14

**Objective.** “Every military operation should be directed toward a clearly defined objective.” While proponents of NCW might argue that an enhanced level of shared awareness will provide for dynamic reallocation of objectives at the tactical level, yet objectives they remain. Moreover, neither NCW nor EBO modify the requirement for the declaration of unambiguous objectives at the strategic and operational levels. Israel launched the Six-Day War against its Arab neighbours without clearly articulating its political and military objectives, instead fighting – and winning – a decisive military victory, until compelled to stop by a United Nations sponsored cease-fire. Thus, it ended the war in control of a set of territories occupied by a hostile population, leading to an unstable situation that, nearly four decades later, has still not been resolved.

**Offensive.** “Seize, retain and exploit the initiative.” The increase in speed of command purported to be offered by NCW is geared specifically toward the maintenance of the offensive, by allowing network-enabled commanders to get inside the decision loop of their adversaries and to ‘lock out’ potential enemy actions or strategies.

**Mass.** “Concentrate combat power at the decisive place and time.” While EBO theorists would argue that it is effects that should be massed rather than combat power, the result is the same. The repudiation of this principle would require advocating the division of forces, which does not follow from the premises of NCW. Indeed, the argument for self-synchronization suggests that NCW will promote a more efficient massing of forces.

**Economy of Force.** “Allocate minimum essential combat power to secondary efforts.” This is very nearly a corollary of the Mass principle. A concentration of maximum combat power at a particular place and time implies minimal residual power for allocation to diversions.

**Manoeuvre.** “Place the enemy in a position of disadvantage through the flexible application of combat power.” This is one of the avowed purposes of both NCW and EBO, presumably achieved by the former through self-synchronization of forces and speed of command, and by the latter through effects-based analysis.

**Unity of Command.** “For every objective, there should be unity of effort under one responsible commander.” Although NCW advocates argue for flatter organizations and distributed decision-making – conferring power upon those at the edge of the organization – none of them has encouraged the abandonment of the leadership concept, or the elimination of the military’s hierarchical organization. Efficient networks will allow for the distribution of command, but ultimately, there needs to be a single individual accountable for each operation.

**Security.** “Never permit the enemy to acquire an unexpected advantage.” One of the advantages of the dense sensor netting and maximal connectivity proposed by promoters of NCW is the ability not only to detect what the enemy has done as soon as he has done it, but also to know what he is going to do before he does it. In many ways, security thus becomes a spillover benefit of NCW. Moreover, many of the potential unexpected advantages the enemy might have acquired will have been ‘locked out.’

Field Marshal Graf Helmuth Karl Bernard von Moltke

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Simplicity. “Prepare clear, uncomplicated plans and clear, concise orders to ensure thorough understanding.” While it is unlikely that supporters of NCW and EBO would argue explicitly against this principle, it may be the only one on the list that does not agree with the ideas they espouse. Specifically, both concepts of operations advertise that they will enable significantly more complex operations, and that ‘understanding’ will be maintained via the network. This flies in the face of Moltke’s dictum on plans surviving contact with the enemy, but the implicit assumption of NCW is that adversarial decisions will not be a factor because they will have been predicted and taken into account. This is a very large assumption indeed.

Conclusion

Whether or not one is a devotee of NCW and EBO, an examination of the principles of war in terms of the ideals of these concepts fails to generate the requirement for a revised list. If this is indeed the case, can NCW and EBO really be called harbingers of the RMA? Or is the revolution in military affairs really no more than a revolution in military terminology?

NOTES

1. ‘Was sich verändert, drängt sich der Aufmerksamkeit unvergleichlich viel mehr auf, als was beim Alten bleibt. Das ist ein allgemeines Gesetz unseres geistigen Lebens. Die Perspektiven, die sich von der Erfahrung des gesichtlichen Wandels her ergeben, sind daher immer in der Gelahn, Verzerrungen zu sein, weil sie die Verborgenheit des Beharrenden [...]’ Hans-Georg Gadamer, Wahrheit und Methode: Grundzüge einer philosophischen Hermeneutik (Tübingen: Mohr-Siebeck, 1990), pp. 3-4. This and all subsequent translations are those of the author.


5. Strictly speaking, countermeasures to nuclear weapons have not been demonstrated in combat. Such a demonstration has thankfully been unnecessary, given the unwritten agreement between the nuclear powers that use of nuclear weapons equates to Mutually Assured Destruction.

6. See, for example, Alberts, Garstka, and Stein, Network Centric Warfare; Alberts and Hayes, Power to the Edge.

7. For a series of examples within the same conflict, see Robert S. Bolia, ‘Over-Reliance on Technology in Warfare: The Yom Kippur War as a Case Study, Parameters, Vol. 34, No. 2, pp. 46-56.


12. This case is made a number of times in Smith, Effects Based Operations.

13. On the other hand, its application as envisaged by EBO theorists has seldom been completely successful, nor is its marriage with NCW likely to make a difference. Fundamentally, EBO is not about affecting the enemy forces as much as it is about affecting the hearts and minds of enemy civilians. NCW, on the other hand, is focused specifically on the efficient application of violence.

14. The principles are itemized in Donn A. Starry, ‘The Principles of War,’ Military Review, Vol. 61, No. 9, pp. 2-12. Unless otherwise noted, all subsequent quotations are from this article.

15. This is essentially the argument of Auftragstaktik vs Befehlstaktik. Spencer Fitz-Gibbon makes a cogent argument for the former in his Not Mentioned in Despatches... The History and Mythology of the Battle of Goose Green (Cambridge, United Kingdom: The Lutterworth Press, 1995).