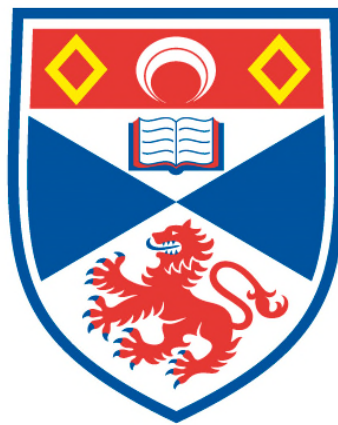# A THEORY OF WAR AS CONFLICT WITHOUT RULES

Christopher Flaherty

**A Thesis Submitted for the Degree of PhD
at the
University of St Andrews**

2016

A Theory of War as Conflict Without Rules

Christopher Flaherty
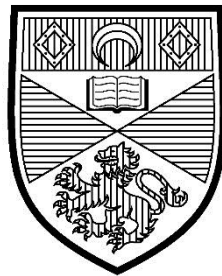
University of
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at the
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ABSTRACT

Theoretical understandings of war have been dominated by the thought of Clausewitz for a number of decades. His thought is valid in many respects, but for various reasons it is open to misinterpretation and misunderstanding; furthermore, a number of his observations (particularly on the prevalence of chance and uncertainty in war) are not fully explored and substantiated theoretically. This thesis is an attempt to present and elucidate a new theoretical understanding of war's nature which complements Clausewitz's theories and addresses these concerns: this is the understanding of *war as a form of violent conflict which is not bound by rules*.

The thesis consists of five main chapters. The first is an in-depth study of Clausewitz, which will provide an exegesis of his theories and highlight the deficiencies in his thought, before positing how understanding war as 'violent conflict without rules' could be used to address and explain them. The second chapter is a study of the theory of rules, examining in particular the role they play in moderating conflict: we can find that amongst other things, rules lend predictability and psychological security to a contest, restrict the scope of physical harm and tend to preserve the political and social status quo. As war lacks rules (in the sense that there are no 'rules of war' as there are 'rules of chess'), it therefore lacks these benefits. A following chapter on the laws and customs of war will address cases where war appears to be bound by rules, and clarify my position.

The final two chapters explore the implications of war's lack of rules with reference to two areas which are most commonly associated with war. The fourth chapter on strategy will explore how this military concept is necessitated by war's ruleless nature; the final chapter will examine the uniquely violent, physical nature of war through the same theoretical prism, and will show how the technological innovation associated with war is a consequence of its lack of regulation, and a potent contributor to the chance and uncertainty which plagues warfare.

Acknowledgements

CONTENTS

INTRODUCTION

> **War.** *sb.* XII (*werre*, *wyrre*)... Old High German, *werra* confusion, discord, strife…. *werran* bring into confusion (Germanic *wirren* confuse, perplex).[1]

The idea that war is one of the most uncertain and unpredictable forms of human activity seems to be as old as the word we use for it; this is the case not only in the sense that an individual battle can turn on the effects of some unforeseen circumstance, but also in that the course of war can and generally does proceed in ways which defy efforts at prediction. In many other ways, war is undeniably one of the most extreme forms of human interaction. No other form of conflict is so violent, no other as dangerous; its political consequences are momentous whether the toppling of a government, a redrawing of national borders, or the fall of an empire; even 'inconclusive' wars can leave a trail of destruction which itself alters the balance of power in no small way. For these reasons, war has long exerted a powerful hold on our imaginations, and has been the object of intense study over the centuries. Indeed, history was written on the theme of 'kings and battles' to the extent that the tendency became a criticism of the study of history itself, and other academic disciplines are no less afflicted by war-centrism – the study of International Relations was founded in large part to facilitate a better understanding of the causes of war and the possibilities of preventing it, and this preoccupation with warfare and material power has persisted to this day in mainstream IR theory. This is only to speak of academic treatments of the subject; the experience of war has always played a central role in the cultural life of human societies, forming the setting for rites of passage and an enactment of citizenship and identity; furthermore, it has a long pedigree as the theme of works of art and literature, from the *Iliad* to the blockbuster films of the present day.

Such a subject, enmeshed with human life for so long and in so many ways, has naturally acquired a thick patina of meaning and connotations over the centuries; attempts to define war as a concept necessarily have had to deal with these many different aspects of its nature. This difficulty is compounded by the immense variety of wars which have been

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[1] Terry F. Hoad, *The Concise Oxford Dictionary of English Etymology*, (Oxford University Press, 1993), abbreviations expanded.

fought throughout the ages, from ancient tribal clashes fought with stone weapons to (thankfully unrealised) nuclear wars between global superpowers; in many ways it appears almost impossible to hope to extricate a 'pure' concept of war from these entanglements. In modern times, there have been occasional efforts made to analyse the concept of war in depth; one of the most ambitious was made by Quincy Wright, in his magisterial work *A Study of War.* Wright makes distinction between various types of warfare, from "primitive" warfare fought between non-civilised groups, to later manifestations of warfare – 'historic' and 'modern' – each of which he characterises as being motivated by their own 'drives' (food, sex, territory and so on in earlier forms of war, with modern warfare marked by the filtering of these impulses through the experience of modern life and the modern state)[2], each possessing their own character and manifestations (indeed, Wright even goes so far as to talk of "animal warfare" as a category of war, fought between predators and prey and between rival colonies of insects)[3]. Wright's general definition of war is suitably wide-ranging:

> In the broadest sense war is a *violent conflict* of *distinct* but *similar* entities. In this sense a collision of stars, a fight between a lion and a tiger, a battle between two primitive tribes, and hostilities between two modern nations would all be war.[4]

More specifically, concerning wars between human societies:

> War is seen to be a state of law and a form of conflict involving a high degree of legal equality, of hostility, and of violence in the relation of organised human groups; or, more specifically, the legal condition which equally permits two or more hostile groups to carry on a conflict by armed force.[5]

Such a definition is naturally open to question, particularly in days when wars are not often formally declared; nevertheless, Wright's wider attempt to address war in its various forms and manifestations was a commendable effort (though there are probably not many other scholars who classify the collision of stars as an instance of warfare). Another attempt

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[2] Quincy Wright, *A Study of War, Vol. 1* (University of Chicago Press, 1942), p.53-288
[3] Ibid., p.42-52
[4] Ibid., p.8
[5] Ibid., p.13

to survey the general subject of war is Julian Lider's *On the Nature of War,* which similarly enumerates the various ways in which war can be viewed: as a biological process, a competition for survival fed by "aggressive drives" found in our biological nature; as a psychological phenomenon; or, from an anthropological perspective, as a product of our culture. It can also be seen as a product of pressures imposed on us by our ecological environment, as a legal condition (much as Wright defined it), or in a more esoteric sense, war can be seen as an almost religious space in which man can strive for "moral perfection", cultural renewal and social status.[6] War can of course be analysed as a political or sociological phenomenon, with different schools of thought coming to markedly different conclusions on the matter (some Marxist-Leninist thinkers maintaining that war is a temporary, class-based phenomenon which will necessarily cease upon the realisation of communism).[7] This definition of war as a political phenomenon is the most popular; as Lider notes, "the commonly accepted concept of war… usually comprises two basic statements: that war is an organised armed struggle (i.e. waged by armed units) and that it is waged for political aims."[8] This definition of war is essentially that given by Clausewitz, the Napoleonic-era soldier who remains probably the most famous theorist of warfare: *"War is merely the continuation of policy by other means."*[9]

Given our knowledge of war's protean character, however, we might expect there to be problems with this definition – indeed, Lider notes a few himself: depending on one's definition of politics (whether exclusively interstate or including domestic politics), certain types of conflict, like civil wars, fall outside the definition of war; "organised armed struggle" can similarly confuse the issue, as this definition can cover any range of physical conflict – Lider notes partisan warfare as a potentially problematic case, but arguably any violent conflict between groups of people could fall under this definition.[10] This is indeed what happened in the "new wars" debates in the 2000's, which exposed some of the apparently deep problems in our understandings of war. Following the end of the Cold War, a number of

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[6] Julian Lider, *On The Nature of War,* (Farnborough: Saxon House, for the Swedish Institute of International Affairs, 1977), p.17-18
[7] Ibid., p.181-185
[8] Julian Lider, *Military Theory,* (Gower Publishing 1983), p.158
[9] Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton University Press, 1976), p.87
[10] Lider (1983), p.159

sub-state conflicts erupted which to some appeared qualitatively different to earlier wars; defining features of these 'new wars' are the fact that they are not carried out by states, (Mary Kaldor, one of the central new wars thinkers, in fact speaks of "old-fashioned war between states"[11]), instead being fought by a range of actors *within* the boundaries of states – these can be warlords, criminal groups, and so on, with particular ethnic affiliations. Edward Newman has summarised the key points of the new wars thesis as follows:

- *most wars today are intrastate rather than interstate, and interstate wars have declined in number while intrastate wars have increased in number;*
- *new wars are characterized by state failure and a social transformation driven by globalization and liberal economic forces; this gives rise to competition over natural resources and illegal commercial entrepreneurship, private armies, and criminal warlords, often organized according to some form of identity;*
- *ethnic and religious conflict are more characteristic of new wars than political ideology;*
- *civilian casualties and forced human displacement are dramatically increasing as a proportion of all casualties in conflict, especially since 1990;*
- *civilians are increasingly deliberately targeted as an object of new wars; atrocities and ethnic homogenization are key hallmarks of contemporary conflict; and*
- *a breakdown of public authority blurs the distinction between public and private combatants, and between combatants and civilians.*[12]

These points certainly reflect the thinking of Kaldor, who claims that the 'new wars' have a logic which is distinct from the 'old wars' of the past, in terms of the actors which fight them, the goals for which they are fought, and the methods used to those ends. According to Kaldor, new wars are fought by "combinations of state and non-state actors", where old wars were prosecuted by regular armies under the control of states; old wars were fought for reasons of policy – geopolitics and ideology – whereas new wars are motivated by identity politics; old wars were marked by the use of battle and the seizure of territory as the principal mechanisms by which war was decided – new wars are marked by the practice of

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[11] Mary Kaldor, "Wanted: Global Politics", *The Nation*, 5 November 2001
[12] Newman, Edward. "The 'New Wars' Debate: A Historical Perspective Is Needed." *Security Dialogue* 35.2 (2004): 174-175

population displacement and the use of violence against civilians.[13] The 'criminal' element of the New Wars is stressed by John Mueller: "most of what passes for warfare to-day is centrally characterised by the opportunistic and improvisatory clash of thugs, not by the programmed and/or primordial clash of civilisations – although many of the perpetrators do cagily apply ethnic, national or ideological rhetoric to justify their activities because to stress the thrill and profit of predation would be politically incorrect."[14] A key target of the new wars movement was the "Clausewitzian" understanding of war as violence carried out by states for political ends, an understanding which was held to be stuck in the past, and relevant only to the 'old wars' fought between modern European states.[15] This definitional struggle was fought on particularly unfavourable ground from the new wars theorists' point of view; as we shall see, Clausewitz's understanding of war was misrepresented and misunderstood, and was in fact perfectly capable of incorporating the new forms of conflict which were held to be incompatible with his supposedly 'state-based' conception. What was 'new' about the new wars was primarily their lack of resemblance to a particular type of warfare which had developed in the western world in the modern era; this was hardly the way war had always been fought (indeed there are many aspects of the 'new wars' which could be identified in conflicts like the Thirty Years' War), and the new wars scholars could have learned as much from a more thorough reading of Clausewitz. In a heated but generally one-sided exchange the primacy of the Clausewitzian conception of war as a political instrument was restored.[16]

Indeed, Clausewitz's understanding of war was not merely restored, but confirmed in its position as *the* definitive theory of war; the new wars debate was in fact just one episode in the emergence of a Clausewitzian ascendancy in academic and military circles which had begun with the publication of the 1976 Paret-Howard translation of *On War*. Nowadays Clausewitz is enjoying a long-awaited recognition and appreciation from military thinkers,

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[13] Mary Kaldor, "In Defence of New Wars", *Stability*, 2(1):4, 2 (2013), pp.1-16

[14] John Mueller, *The Remnants of War*, (Cornell University Press, 2004), 115

[15] Mary Kaldor, "Elaborating the 'new war' Thesis" in Isabelle Duyvesteyn and Jan Angstrom, eds., *Rethinking the Nature of War* (New York: Frank Cass, 2005), p.220; Martin van Creveld, *On Future War* (London: Brassey's, 1991), p.155

[16] For an overview of the debate from both sides, see Bart Schuurman, 'Clausewitz and the "New Wars" Scholars', *Parameters* 40:1 (Spring 2010), p.89-100 and Kaldor (2003). One of the strongest and most comprehensive refutations of the anti-Clausewitzian trend was the collection of articles edited by Hew Strachan and Andreas Herberg-Rothe, *Clausewitz in the Twenty-first Century* (Oxford University Press, 2007).

one that has taken the form of a deep and thorough attempt to understand the lessons contained within his unfinished, but as-yet unrivalled book on the theory of war. Attempts to dethrone him have, if anything, reinforced his position as the central figure in military thought, and not only has he held a hegemonic position in academic discussion, but his writings are assigned to officers in training in practically every western military establishment – in 1997, The United States Marine Corps went so far as to publish a field manual, *Warfighting*, written to summarise and explain the lessons of *On War* (in theory) to all ranks, both commissioned and enlisted.[17] "We are all Clausewitzians now", as the saying might as well be: not only has the understanding of war as "the continuation of politics by other means" become orthodoxy, but so have the Clausewitzian concepts of 'absolute' and 'limited' war, the notion that every war is the product of unique historical circumstances, and the idea that particular societies fight wars in their own unique ways; practically all of Clausewitz's ideas are accepted – indeed, they are commonplace, and his definition of war has become the standard.

This is true of one aspect of Clausewitz's work in particular – the appreciation of the pervasive and unparalleled role played by chance and uncertainty in war. In his own words, "*War is the realm of chance. No other human activity gives it greater scope: no other has such incessant and varied dealings with this intruder.*"[18] This focus is particularly prominent in Clausewitz's work, and accordingly has attracted a great deal of academic attention.[19] However, I have come to believe that this is one aspect of Clausewitz's thinking which leaves several questions unanswered; the substantiation he provides for his assertion that war's exposure to chance and uncertainty is unsurpassed by any other form of human endeavour, is not in itself sufficient to show why this is the case: Clausewitz's sources of chance and uncertainty – the unpredictable actions of an independent opponent, physical stresses, incomplete information and unquantifiable moral factors – are hardly unique to war. Whilst

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[17] MCDP 1 "Warfighting", United States Marine Corps (1997), http://www.marines.mil/Portals/59/Publications/MCDP%201%20Warfighting.pdf <accessed 4/9/15>
[18] Clausewitz (1976), p.101-102
[19] A number of articles have been written on this subject: see Alan Beyerchen, "Clausewitz, Nonlinearity, and the Unpredictability of War", *International Security*, Vol. 17, No. 3 (Winter, 1992-1993), p.59-90; Katherine Herbig, "Chance and Uncertainty in *On War*", *The Journal of Strategic Studies* 9.2-3 (1986), p.95-116; Thomas Waldman, "'Shadows of Uncertainty': Clausewitz's Timeless Analysis of Chance in War", *Defence Studies*, 10:3, (2010), p.336-368

other inconsistencies and omissions of *On War* can be explained with reference to the fact the book is unfinished, it does not seem the case that Clausewitz was unsatisfied with the reasons he gave for this aspect of his theory; contemporary scholarship on the theory of chance in Clausewitz's works has similarly been blind to the issue, despite the occasional explicit doubt being raised concerning the premise that war is a uniquely uncertain activity.[20] Even the most technically sophisticated efforts to explain the prevalence of chance in war (most notably from the perspective of 'nonlinear' phenomena) fail to distinguish what makes war differ from other forms of human interaction.

Research Question

In short, the research question which I have set myself is, is it possible to develop a new theoretical understanding of war which goes 'deeper' than the existing Clausewitzian definition, and which can explain *why* war is so uncertain and unpredictable – along with explaining why other idiosyncratic aspects of war (such as the central role played by strategy, the escalation of war to the 'absolute', the shape-shifting quality of war through the ages, and the use and development of military technologies) are so intimately connected to it. The definition of war in this way is an important task, though it has not been considered much in recent years – probably part of the reason for this is that the meaning of war is almost taken for granted: it is so characterised by the use of violence and destruction, that what it 'is' is apparently obvious. Another reason is that much writing on military theory is focused on specific, 'actionable' problems in strategy, with the general tendency of academic and policy work being to focus on the military problems of the day, whether the formulation of nuclear strategy in the Cold War, or the study of terrorism and counterinsurgency in the current period. What theoretical work on war has been done more recently has, as I have mentioned, largely consisted of the treatment of Clausewitz and his ideas; his work has in fact dominated theoretical thought on war for at least the last thirty years, and the general satisfaction with

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[20] *"Yet although he studies chance and uncertainty from many angles in On War, Clausewitz does not spell out the basis for his claim that war is the human activity most susceptible to the 'intruder' chance. Why is 'no other human activity' so uncertain, or so contingent (pp. 85,101)? Why is war 'chancier' than business or commerce, competitive endeavors to which Clausewitz often refers for illustrations and analogies of war? Why is it 'chancier' than the legal competition of the courtroom, or the political competition of government which, Clausewitz insists, is the very context and grounding for war?"* Herbig, p.96

his understanding of war has contributed to the lack of 'new' theory on war's essential nature. This is of course due to the fact that Clausewitz's theories are broadly correct: he was an extremely perceptive observer of his subject, one which (as we shall see) defies attempts to be represented by elaborate conceptualisations; in a sense, this restriction means that most of what can usefully be said about war as a theoretical concept is contained in the pages of *On War*. As a consequence, his theories have stood up to the criticism inflicted on them by the new wars scholars, with a little help from his latter-day interpreters.

This point is crucial, however: the reasons why Clausewitz was criticised, and his model of war questioned, were not a reflection of the shortcomings of his ideas, but were a consequence of their misinterpretation by readers who did not approach his work with adequate precautions. Clausewitz's combination of dense, early-nineteenth century German prose and his use of aphorisms makes him one of those authors who are "more quoted than read"; due to the fact that *On War* is an incomplete and partly-edited work, with much of its most important ideas presented in an unfolding dialectic, selective quotation and unsystematic reading will almost invariably rip a phrase out of its context and lead to the misunderstandings which have periodically flared up around his works. In short, despite the role of theory being to simplify reality, Clausewitzian theory is in need of a deal of clarification itself. Not only does his style of writing present challenges; his reference to potentially ambiguous concepts like 'absolute war' are open to misinterpretation, and this is even more the case with his more complex theoretical models, for instance, that of the 'trinity' of passion, chance and reason – a concept too abstract for many readers, who instead seize on his subjective 'people, army and government', to their eventual embarrassment. Dealing with these difficulties is apparently hard enough for academics who should already be cognisant of the need to accommodate such problems; policymakers and practitioners, who have rather less time to come to grips with the subtleties of the dialectical method (or to allow for the difficulties presented by an unfinished work, written in a foreign language before the advent of industrial warfare), are even less likely to be able to take benefit from his theoretical understandings of war. These problems are not disastrous – the core of Clausewitz's work remains intact, and as I have said, it is insightful and broadly correct – and the large secondary literature on Clausewitz's work can guide those new to his thought past the pitfalls which trapped earlier readers. A study of Clausewitz will naturally take some time

and effort to undertake, and I firmly believe he will always merit this; however, there would be an obvious benefit to devising a simpler theoretical definition of war which allowed even those not of a particularly scholarly mindset to grasp its fundamental nature.

In short, I am seeking to develop a concise theory of war which allows us to understand exactly why it is so unique: my thesis is that much of what is idiosyncratic to war follows from a fundamental aspect of its nature which has not yet been fully articulated by Clausewitz or by his successors. War is a form of violent, organised conflict – o*ne which is not bound by rules*.[21] To explain by means of an analogy: the standard definition of war is as a violent contest, fought between states, for a political end. Though broadly correct, this definition could conceivably be used to describe the settling of a political dispute by means of a boxing match or some form of single combat – a state of affairs which no one would instinctively recognise as war. War can be defined against other forms of violent contestation by the fact that it lacks an ordered, regulated structure: in other cases of conflict, a framework of rules orders the conduct of the contest, and in so doing, reduces uncertainty and danger; limits the scope of conflict; controls for chance events; and facilitates the development of predictive theories – that war lacks rules, means that it lacks these benefits. The same lack of restriction also accounts for war's variability, its escalatory dynamics, the panoply of weapons and tools with which it is fought, and the extremes of experience to which its human participants are exposed; the use of violence outside of a regulated framework of rules is the common denominator which all instances of war share.

Methodology

I will argue my thesis over a number of chapters; firstly I will establish the theoretical base of my argument with a detailed analysis of Clausewitz's theories of war, and a study of the theory of rules and rule-bound behaviour in general. In this theoretical section I will first seek to draw out Clausewitz's ideas from their presentation in *On War*, addressing the various factors which have obscured his meaning over the years. I will do this through a reading of his text with an eye to his intellectual context in the period where the

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[21] A similar concept of war, as a "condition of open-ended organised violence", has been advanced in Darran Alexander Moseley, "A Philosophy of War", (PhD thesis, University of Edinburgh, 1997).

Enlightenment and Romantic eras overlap, and with attention to his formative intellectual influences; most of my study of Clausewitz will take the form of a close reading of *On War,* with particular attention being paid to his reasoning as to the core aspects of what defines war as a concept and especially what he has to say about the role of chance and uncertainty in warfare. The second half of the theoretical section will consist of an analysis of rules and their properties in social life; here I will cast my net particularly widely over sociological and more narrowly legalistic literature. As with my treatment of Clausewitz and the thesis as a whole, I am seeking to identify the very basic theoretical elements of rules in order that I might apply them to; I am especially concerned with identifying analogies between different forms and systems of rules, along with similar 'mechanisms of action'. Once I have concluded with the explicitly theoretical sections of my thesis, I will go on to examine the practical side of war, addressing the existence of laws of war and examining the realms of strategy and technology through the prism of my theory of war along with the other theoretical observations I have made. By applying these to various aspects of war, I will explain the usefulness of my theory of war both with reference to the existing literature, and by examining aspects of warfare which it can reveal in a new light.

Clausewitz's Theory of War

My first chapter, as I have said, will take the form of a summary of Clausewitz's thoughts on war, with particular attention paid to his writings on chance and uncertainty. Clausewitz wrote in an age of particular importance regarding understandings of uncertainty, being subject to the influence of both the systematising, rationalising Enlightenment and the Romantic counter-reaction which rebelled against the assumptions of that age. He was also profoundly influenced by Machiavelli, whose conceptions of *virtù* (an amalgam of boldness, resourcefulness, and strength, commonly found in the great men of history) and its counterpoint, the force of the goddess *fortuna* – are mirrored in his own discussion of genius and chance. I will elaborate on these influences before describing the central aspects of Clausewitz's understanding of war: the conception of war as a form of politics; his conception of 'absolute' and 'limited war', and the use of violence more generally; the concept of the 'trinity'; and the possibilities for theoretical understanding of warfare. Following this survey, I will critique Clausewitz's assumptions regarding the sources of

chance, and examine more recent explanations of why war is such an uncertain form of activity – in particular, Alan Beyerchen's application of nonlinearity to Clausewitz's theories. Finally, I will reiterate my thesis, and make clear the compatibility of my theory of "war as violent conflict without rules" with Clausewitz's own theories.

A Theory of Rules and the Characteristics of Rule-bound Conflict

If I am to define war by its lack of rules, then what rules 'are' and what they 'do' must be properly elaborated. In my second chapter I will survey the literature on rules and norms, and advance a precise definition of the kind of rules which I argue war lacks. Rules can come in two main forms: explicit, codified laws, and implicit, internalised norms – collections of these rules serve to regulate various forms of social interaction, and are said to 'constitute' these activities; one subset of this kind of rule-system concerns the governance of what I call "abstract contests" – activities such as sports, games, and more serious contests like litigation and democratic elections: these 'constitutive' rules are the type of rule which I argue war lacks. In these forms of contests, rules serve a number of purposes, allowing a controlled process of conflict resolution with protections against escalation and physical harm, a clear set of criteria which delineate conditions for victory, and a reduced cost overall, by means of symbolic interaction. Lacking such rules, war lacks these benefits. All rules operate by restricting possible actions, and I note a number of dimensions of restriction which have particular importance with regards to war. In other forms of conflict, our actions are limited in terms of space and time, and with regard to the tools which we can use; typically, a place and time is allotted for the contest which favours neither side, and the means by which the contest is carried on are similarly regulated, with equality again a defining factor.

Rules serve a number of functions and provide a number of benefits to those who operate within their bounds. Significantly for the explanation of the uncertainty of war, by structuring various forms of activity in a regular, consistent manner, rules allow actors to plan their future actions with a greater sense of security regarding the shape of their future environment. Rules also serve the purpose of maintaining a given social order, typically serving the interests of powerful groups in society who hold a 'hegemonic' position with regards to the formulation of the rules. Furthermore, the fact that rules limit the scope of

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conflict and require its contestation through symbolic interaction – rather than through a direct test of material strength – has the effect of limiting drastic change, reinforcing their generally conservative effects. After discussing the various types of rules and their effects, I will present a set of criteria which enables us to identify which rules have a particularly strong – or weak – effect on binding human behaviour, enabling the analysis of the conventions and regulations which have been built up around the conduct of war.

The Rules of Ruleless Conflict - The Laws and Customs of War

The conduct of war has been hedged around with customs and restrictions for as long as it has been fought, and the undeniable existence of 'laws of war' is the biggest threat to my thesis. To address this, I will undertake a survey of several manifestations of rules which have regulated the conduct of war, and analyse them in the light of my previous chapter on the nature of rules. In particular I will look at the laws of war of ancient Greece and the Middle Ages, which in a number of ways appear to structure war as an abstract contest. The hoplite-based laws of war in the ancient Greek world tended to produce battles which followed a broadly consistent pattern, and which were marked by various symbolic actions; the chivalric codes of the Middle Ages similarly structured battle as a formal contest between members of the knightly class, and drew distinction between different types of war which permitted greater or lesser amounts of savagery. I aim to show that these rules did not constitute rules for the conduct of war as a kind of 'symbolic' contest, where certain actions had significance beyond their physical effects; furthermore, I will show how the rules of these societies were founded on their unique socioeconomic and cultural characters, and explain the implications this has for my thesis. I will also look at a number of customs which are connected with war, and argue that these (and other self-imposed restrictions on conduct in warfare) are attempts to cope with a form of activity which is uniquely stressful, dehumanising and dangerous precisely because of a lack of rules inherent in itself. I will also give a brief summary of the laws of war which developed out of the Hague and Geneva conventions in the early twentieth century, which illustrate the weaknesses in laws which govern such an activity as war, which exerts extremely strong pressures to break rules – due to a lack of higher authority, a relative weakness (or absence) of shared cultural and material

interests between warring actors which otherwise provide the basis for rules, and the difficulty of regulating military technologies which are in constant state of evolution.

Having established and defended the theoretical basis of my thesis, the final two chapters will apply the theory of war as violent conflict without rules to two areas of war which are particularly connected to war; firstly, the concept of strategy, which has been closely associated with warfare, but has come to be applied to other forms of human endeavour, and secondly, the phenomenon of technology and technological innovation in war and the wider implications of war as a physical process. Through a study of these two areas I will demonstrate the utility of conceiving of war as violent conflict without rules, and explore in depth the mechanisms through which war manifests its unique nature.

The Problem of Strategy – Planning in Uncertainty

As I have mentioned, one of the most idiosyncratic qualities of war is the central role played by strategy. That this is an intrinsically military pursuit is often taken for granted, but I believe that an understanding of war as a form of conflict which is unstructured by rules can explain why strategy is such a central part of war – and furthermore, which can account for why some strategies are more effective than others. The lack of a clear system of arbitration and substantive criteria for settling the contest means that each actor has to identify the way in which a war can be won – a task which is in some ways simple (destroy the enemy, or punish him until he gives in), but in fact requires that a huge amount of information be assimilated and processed; in certain cases (for instance, in the field of counterinsurgency) the strategist may be compelled to draw upon the disciplines of sociology, economics and anthropology as well as purely military learning. Strategy, along with the related concepts of tactics and operations, has developed over time as a concept; originally referring to purely military plans, its remit expanded with the increasing size and complexity of socio-political organisations and their similarly transformed armed forces: 'grand strategies', responses to the needs of industrial societies with worldwide reach, are in many ways far removed from the more limited concerns of the ancient Greek *strategos*. Nevertheless, all forms of strategy can ultimately be understood as plans for military action, drawn up without benefit of the guidelines which would otherwise be provided by constitutive rules.

In particular, I wish to draw attention to a number of approaches to the challenge of strategy which differ in their appreciation of war's ruleless nature, and the difficulties that it poses. The first such approach is the application of 'deductive', prefabricated doctrine to strategy: these can be developed in two broad ways. Firstly, strategists, commanders, and societies are often inclined to cling to a conceptual model of what war 'is' based on subjective assumptions derived from historical experience and what is called 'strategic culture' (we can see such a dynamic manifested in the Greek and medieval constructions of war). Secondly, attempts have been made to consciously discern 'objective' principles which can be used to furnish predictive models for strategy; this has been exemplified by the disciplines of geopolitics and geostrategy, which seek to establish firm principles of strategy based on objective geographical facts (a similar use having been made of geometry during the Enlightenment). In either case, an inaccurate reading of war as a 'fixed' form of activity which can be prepared for and conducted with a reasonable level of certainty is a common – though mistaken – response to the unique problems it presents as an unstructured form of activity. Alternatively, there are a number of what I call 'inductive' strategic and tactical approaches, which are founded on an explicit understanding of war as a form of conflict without rules. 'Maneuver warfare' and irregular war are two of these, being particularly notable in drawing on the thought of both Clausewitz and Sun Tzu – each of whom have markedly different approaches to war, but whose theories are compatible with our own understanding of war. Each derives their strength from their conscious exploitation of the possibilities afforded by freedom of action (exploitation of movement in space and time, for instance, plays a key role in both doctrines) and crucially, each acknowledges the need to form a coherent theoretical understanding of the war in question in a way which addresses its lack of structure, which would otherwise be provided by a framework of rules.

The aspect of war which necessitates strategy – the fact that it lacks a clear set of criteria as to how a victory can be achieved – is shared by a number of other forms of human interaction, such as commerce and politics (as it is conducted outside of institutional processes like elections). The emergence of strategic planning as a concept in these areas can be explained by this shared lack of structure; nevertheless, with a fuller understanding of how

war is distinguished from these areas, we can show that it is the home of strategy; war's uniquely disordered nature leaves very little that can be taken for granted.

The Physicality of War and the Means of Destruction

As Clausewitz himself noted, a great deal of the chance and uncertainty which afflicts war stems from this particular aspect of its nature; that war is not conducted through symbolic channels but takes place in 'the real world' exposes it to the vagaries of chance events, irregularities in terrain and weather, and a host of other inputs, each of which can have outsize consequences which cannot be reliably predicted. This is not all, however. The physicality of war is one of its most important aspects, being one which is not shared to anywhere near the same extent by other forms of conflict – not excepting sports. This is because the extent to which war is prosecuted in the physical world is a necessary consequence of its rulelessness – and this has particularly profound implications when we consider the role of rules in conserving social and political order. By allowing conflict to be carried out through symbolic interactions and by otherwise restricting the scope of physical damage, rules limit the extent to which a given conflict can alter the distribution of material power in a society. Having no rules, war has to be waged in the physical world, which accordingly exposes its participants to much greater levels of harm – a fact which has important consequences with regards to war's relationship with political order. The fact that war is fought through the medium of physical combat and is not subject to the restriction of rules has a number of other implications which help to further explain its character: in an immediate sense, the freedom to use new tools to prosecute wars results in technological innovation, which forms part of the escalatory dynamic which was noted by Clausewitz in regard to his conception of war approaching the 'absolute'. This dynamic has its own effects, which exacerbate the chance and uncertainty in warfare; most obviously, new technology is by definition something of an unknown quantity, and its effects will not be fully understood. Less intuitively grasped, but more significant, is that war's physicality and its tendency to make use of ever-more sophisticated and complex technologies has transformative effects on the societies which engage in it.

As I have mentioned, in rule-bound conflicts material damage is limited, and the means of conflict are generally bound in such a way as to restrict the scope of the contest; this serves to maintain a socio-political status quo which is in large part based on the distribution of material wealth and power within the society in question. Material damage is therefore more consequential, and has effects potentially more far-reaching, than that of symbolic damage as it is done within a rule-bound contest. The converse of material damage in war is the growth in size and complexity of the technologies and *techne* (the skills, or craft) which are used to prosecute it. The tendency toward the development, supply and use of increasingly complex weaponry and increasingly large armies has historically been a huge driver of social organisation; I will provide an overview of the "Military Revolution" debate and the literature on state formation to highlight the mechanisms by which these transformations of human social organisation are effected. That the actors themselves, and not merely their tools, are changed by war is another important contribution to its inherent uncertainty and unpredictability; an important point I will emphasise is that states are not only altered in their external characteristics by their adaptations to war, but that their internal dynamics are profoundly altered as sub-actors within them are alternately empowered and disenfranchised by the adoption of new military technologies. The distribution of these, what I call 'the means of destruction', within a society is a profound influence on its political order, and has important implications for the formulation of strategy (for instance, I believe that the Clausewitzian concept of the strategic 'centre of gravity' can be effectively explained with reference to this concept). The distribution of the means of destruction also has important implications for the conduct of war between groups which either share or lack a similar internal structure, which as mentioned is a key foundation of workable restrictions on warfare.

I will conclude my thesis with some speculation as to the potential uses of this conception of war in other academic disciplines and in the formulation of policy. War has been an immensely important part of human life and will continue to be so for the foreseeable future; the areas covered in this work are but a small part of what can be explained by the understanding of 'war as violent conflict without rules'. This new understanding of the most basic theoretical aspects of war's nature will, I hope, prove convincing and useful – both in

explaining its many peculiarities, and in enabling policymakers and theorists to better understand the nature of their most dangerous instrument.

CLAUSEWITZ'S THEORY OF WAR

Introduction

As I have mentioned, the thought of Carl von Clausewitz is perhaps the closest thing to orthodoxy in the theoretical study of war, and indeed *On War* is one of only a few key texts which are considered classics on the subject. In his book, Clausewitz advances a theory of warfare which attempts to identify timeless truths about a form of conflict which he sees as uniquely resistant to elaborate, prescriptive theorising, and one which is highly sensitive to the influence of chance and uncertainty. Clausewitz's thoughts are profound, and I do not take issue with them on their own merits, but I believe that there is more to add to his conceptualisation of war which would serve to provide an even firmer theoretical basis to his teachings. To make this point, I shall first examine Clausewitz's thoughts on the nature of war, particularly his thoughts on war's tendency to the 'absolute' (an extreme conceptualisation of the inherent tendencies in war which push it to higher and higher levels of violence and destruction); his characterisation of war as a political instrument; the conceptual tool of the 'trinity'; and his analysis of the changing character of war through the ages. I will undertake a particularly detailed study of Clausewitz's writings on chance and uncertainty, putting his thought on this subject into historical context, and paying attention to his intellectual influence in this regard. We will find that Clausewitz identified the sources of chance in war as the presence of high levels of mental and physical stresses, unquantifiable factors which make certainty impossible, and the reciprocal nature of warfare; later writers have also identified in *On War* an appreciation of what is now called a 'nonlinear' understanding of physical phenomena, which further explains the uncertainty of warfare. However, none of these factors or dynamics are exclusive to war. Clausewitz's opinions on chance in war, though not necessarily unjustified, appear to rest on unquestioned assumptions which he may have inherited from intellectual influences such as Machiavelli, as well as from his own battlefield experiences: conceptualising war as a violent contest which is unbounded by constitutional rules, however, *does* provide a compelling rationale for Clausewitz's claim that war is uniquely exposed to chance. I will explain how this is so with reference to the functions and properties of constitutive rules in other forms of conflict, before taking each of

the sources of chance Clausewitz identifies and explaining how they ultimately derive from the absence of a constitutive rule-based structure.

Reading Clausewitz

Clausewitz was born in 1780 into a family which like many others in Prussia had strong connections to the army. Clausewitz's father was a lieutenant under Frederick the Great, and of three sons who went into the military, all achieved general rank. Clausewitz's career began early when, as a 12 year old lance corporal, he fought in the Rhineland in the French Revolutionary wars. Upon graduation from the Berlin Military Academy in 1804 he was top of his class; one year later he wrote his refutation of Bülow, an influential enlightenment-era military theorist who attempted to apply geometric principles to the conduct of strategy. Fighting in the disastrous battle of Jena-Auerstadt, Clausewitz was captured and held prisoner in France; on his return to Prussia, he became part of a group of reform-minded officers, who advocated the restructuring of the Prussian military and social order along the lines of France. In the 1810s Clausewitz wrote a number of unpublished (or rather, unpublishable) memoranda, advocating the raising of a militia (*Landwehr*);[22] this and his other writings which called for a 'nation in arms' and castigated the weak resistance to Napoleon put up by Prussia, along with his unorthodox conduct – attempting to join not only the Russian but also the Austrian armies when they seemed to offer more resistance to the French[23] – were evidence both of his idealism and of a lack of political nous, a combination not to the benefit of his career. Introverted and aloof in manner, he does not appear to have the stomach for political intrigue; his career, though varied, lacked the high-level battle commands he craved. Sidelined into staff work and given the unglamorous post of director of the *Kriegsacademie* in Berlin, Clausewitz was instead forced to sublimate his intellectual energies into his writings on the theory of war.

Clausewitz has been interpreted over the years by a number of thinkers, in a variety of different ways. Christopher Bassford identifies four main schools of thought:

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[22] Hugh Smith, *On Clausewitz,* (Hampshire: Palgrave Macmillan, 2005), p.15
[23] Peter Paret, *Clausewitz and the State*, (Oxford University Press, 1976), p. 104

- *an "Original Intent" school, primarily historians narrowly focused on Clausewitz's own influences, drives, goals, and often the presumed limits to his thought and perceptions in the specific context of Prussia in the periods immediately surrounding the wars of the French Revolution and Napoleon.*
- *an "Inspirationist" school, primarily present-minded political scientists, strategic-affairs types, soldiers, and business theorists who are interested in freely adapting Clausewitzian concepts exclusively to current issues. It also includes some historians interested in applying Clausewitzian ideas to historical problems outside the boundaries of the modern West.*
- *a "Receptionist" school, primarily historians who are interested in the ideas and impacts of Clausewitzian inspirationists over time.*
- *an "Editorial" school—people who think they have clear ideas as to what Clausewitz "really meant" and how to edit the rough draft Clausewitz left behind in order to more faithfully convey his concepts.*[24]

My own analysis of Clausewitz's thought is closest to the 'inspirationist' and 'original intent' schools; however, as regards the latter, I am not primarily concerned with establishing the genealogy of his ideas but am instead seeking to bear in mind the ways in which his experiences of war and his intellectual context have coloured his own writings. I am not concerned with exploring how exactly Clausewitz influenced those who came after him (though I will address his influence on certain doctrines in my later chapter on strategy), nor am I convinced I have a special insight into what Clausewitz really wanted to say in *On War*. Nevertheless, I am not merely "freely adapting Clausewitzian concepts exclusively to current issues" as other interpretationists might do: my purpose in writing this chapter is to expound the key concepts and overall form of Clausewitz's theory of war in some depth, and in particular examine his reasoning for claiming that war is a unique form of human activity – especially the assertion that it is a uniquely chance-ridden and uncertain endeavour.

There are important lessons to be drawn from writers who work in the other schools of the Clausewitzian academy; the reading of any historical text must be undertaken with a

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[24] Christopher Bassford, *Tip-Toe Through the Trinity – The Strange Persistence of Trinitarian Warfare,* (2016), http://www.clausewitz.com/mobile/trinity8.htm <accessed 15/02/2016>

great deal of care, and this is especially so with regards to *On War,* a work that has been frequently misinterpreted – to occasionally disastrous effect. There are various reasons why this has been the case: firstly, Clausewitz's writing is at times confusing, with seemingly aphoristic passages set in the context of a dialectical argument, where one seemingly categorical statement is contradicted – or at least modified – by another in the following paragraph. Combined with Clausewitz's occasionally dense prose style and difficulties with translation, the temptation is to take a line out of context and thus misrepresent his thinking; a habit which is especially pronounced when readers come across his mentions of the concept of absolute war, and which resulted in later thinkers caricaturing him as the prophet of total war and an exponent of the subordination of politics to the needs of strategy. Another problem with Clausewitz's book is its unfinished nature; begun in 1815 but based on writings composed over many years, Clausewitz decided to make substantial revisions to the text of *On War* in 1827, and by the time of his death had completed only Book One (of eight) to his satisfaction – a point particularly associated with Raymond Aron.[25] There are other issues with reading Clausewitz; Peter Paret and Azar Gat emphasise the difficulties which result if Clausewitz is not understood with reference to the intellectual context of his own time – particularly his place spanning the age of the Enlightenment and its intellectual antithesis, the Romantic era, a fact crucial in interpreting his dialectical style.[26] Yet another issue is the need to understand the implications of the fact that Clausewitz wrote in a time where military technologies were far different to those of our own, and to incorporate this understanding into our interpretation of his theories.[27] I will make an effort to bear these concerns in mind; whenever biographical or chronological factors are relevant, I will incorporate them – as most of my focus is on the theoretical side, technical details will not predominate, but similarly I will be alert as to this consideration. However, my own purpose is not to place Clausewitz in his historical context or to reconcile his writings to another world: the aim of my own study of Clausewitz is to examine his thoughts on the theory of war, what war is and *why* it is so, and explain them with reference to my theory of war as conflict without rules; in short, I

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[25] Raymond Aron, *Clausewitz: Philosopher of War*, trans. Christine Booker and Norman Stone, (London: Routledge and Kegan Paul, 1983)

[26] Paret, (1974); Azar Gat, *The Origins of Military Thought: From the Enlightenment to Clausewitz*. (Oxford University Press, 1989)

[27] For instance, see Michael Handel, *War, Strategy and Intelligence*, (London: Frank Cass, 1989), p.60

write to emphasise certain critical observations he makes as to the nature of war, the reasons and logic behind his assertions, and to identify consistencies with my own ideas.

Clausewitz's theory of war

Clausewitz's intention in writing *On War* was to write a theory of war that would be timeless and applicable to all forms of warfare; his intellectual integrity and his disdain for the fixed, incorrect, yet fashionable ideas of the moment were very much in evidence in his theoretical writings, particularly when he turned to the subject of chance and uncertainty in war. Clausewitz lived in an intellectual world dominated by the Enlightenment on one hand, and the Romantic reaction to it on the other: some thinkers believed that war, like the natural sciences, might be amenable to rational, scientific analysis – and therefore believed that prescriptive 'laws of war' could be uncovered. Examples of works from this school of thought include the Marquis de Puységur's Art of War by Principles and Rules, Maurice de Saxe's Reveries on the Art of War, and, most prominent in Clausewitz's eyes, his contemporary Heinrich von Bülow's Principles of Modern War, which advocated a geometric approach to warfare, specifying lines and angles of approach which would determine success ("rococo absurdity" in Clausewitz's eyes).[28] On the other side of the equation, Counter-Enlightenment theorists such as Georg Heinrich von Behrenhorst, who had fought in the wars of Frederick the Great, emphasised the chaotic nature of war, with all its unquantifiable aspects – success was rather more dependent on "courage, energy, skill, together with chance and luck", than on the prescriptions of quasi-mathematical theories.[29]

Clausewitz's own theory of war fell somewhere between the two camps – perhaps closer to the latter. In a preface to an unpublished manuscript, he makes clear his opinions on theorists who seek to present self-contained theories: "Perhaps it would not be impossible to write a systematic theory of war… but the theories we presently possess… try so hard to make their systems coherent and complete that they are stuffed with commonplaces, truisms and nonsense of every kind."[30] With this in mind, what can we say of war – theoretically speaking? Clausewitz reaches an understanding of his concept through a dialectical argument

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[28] Smith, p.56
[29] Smith, p.57
[30] Clausewitz (1976) p.61

in the first chapter of *On War*. Firstly Clausewitz characterises war as "nothing but a duel on a larger scale" – a fight between two actors who each seek to disarm or otherwise beat the other through physical force, "*an act of force to compel our enemy to do our will.*"[31] With both fighters seeking to overcome the other, war is driven by the logic of escalation: each must place their enemy in the most intolerable position – i.e. to disarm him (somewhat oddly, Clausewitz does not talk of a war of extermination) – and as each is aware that the other is trying do the same, the pressure is to always exert the maximum effort. A crucial point is that there is nothing inherent to war which limits this tendency, something which Clausewitz mentions repeatedly:

> War is an act of force, and **there is no logical limit to the application of that force**. Each side, therefore, compels its opponent to follow suit; a reciprocal action is started which must lead, in theory, to extremes.[32]

> If wars between civilized nations are far less cruel and destructive than wars between savages, the reason lies in the social conditions of the states themselves and in their relationships to one another. These are the forces that give rise to war; the same forces circumscribe and moderate it. **They themselves however are not part of war; they already exist before fighting starts. To introduce the principle of moderation into the theory of war itself would always lead to logical absurdity.**[33]

> Attached to force are certain self-imposed, imperceptible limitations hardly worth mentioning, known as international law and custom, but they scarcely weaken it.[34]

War can be bound by rules – but it does not have to be, and these rules are likely to be weak. Clausewitz does not elaborate further on the character of these rules, or why exactly they are so weak when applied to war – probably he thought it obvious – or, equally likely, not worth mentioning. Clausewitz seems to develop his thinking on 'absolute war'; at first it is an ideal for the commander to aspire to, as evidenced by Napoleon's great successes – the

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[31] Ibid., p.75
[32] Ibid., p.77, my emphasis
[33] Ibid., p.76 – my emphasis.
[34] Ibid., p.75

time in which war came closest to the absolute, in his eyes. Later (in the revised Book One of *On War*, which was the only part of the work he considered complete) he treats it as a purely theoretical concept and one that should not be considered to exist in the physical world. Smith makes an analogy to absolute zero, a temperature never reached in reality but one which factors into our equations anyway.[35]

That this push to extremes is not achieved in reality is due to the influence of three factors. The first is the fact that war is not an isolated phenomenon: it does not take place between two abstract entities, but between two sides each with some knowledge of the other's capabilities and will. This knowledge enables a kind of calculation of what the enemy may do and moderates the drive to all-out conflict.[36] The second factor that war is not waged in one single act; all military resources (which include the actor's armed forces; its population; the physical features of its country; and any allies it may possess) cannot be mustered and applied to the war effort immediately, and so each side has an incentive to draw back its effort (the pressure to escalate in response to the enemy's efforts being lessened).[37] The third factor is the fact that the result of war is never final (an oddly categorical statement, even if this is generally the case): states are not necessarily destroyed by losing a war, and so the lack of the threat of total annihilation – which would otherwise provoke absolute efforts – leads to a less intense prosecution of the war.[38] Clausewitz mentions other reasons as to why war fails to approach its absolute state: the fact that the defence is stronger than the attack lends itself to a certain conservative disposition amongst generals, who for this and other reasons (such as incomplete knowledge of the enemy forces) will tend to hesitate from taking bold actions.[39]

There are other, more significant reasons why war does not approach the absolute, which feed into Clausewitz's concept of the trinity. Firstly, the political aim of a given war will in part determine the amount of effort which will be exerted; a modest aim will not ordinarily excite great passions, and equally will not threaten the enemy to the extent that he

[35] Smith, p.113
[36] Clausewitz (1976), p.78
[37] Ibid., p.79-80
[38] Ibid., p.80
[39] Ibid., p.84-85

will unleash his full potential. The fact that war is fought for a political aim is of course one of the observations which is most associated with Clausewitz – war is "a continuation of political intercourse, carried on with other means."[40] Second, the fact that war is fought in the 'real world' exposes it (as we have seen) to the chance and uncertainty which is so prevalent a force in warfare; guesswork based on the calculation of probabilities replaces certainty, and luck has an important role.[41] The combination of these factors with the original drive to the absolute, results in Clausewitz's concept of the trinity

> War is more than a true chameleon that slightly adapts its characteristics to the given case. As a total phenomenon its dominant tendencies always make war a paradoxical trinity – composed of primordial violence, hatred, and enmity, which are to be regarded as a blind natural force; of the play of chance and probability within which the creative spirit is free to roam; and of its element of subordination, as an instrument of policy, which makes it subject to reason alone.

The point to be noted here is that Clausewitz claims that war can differ markedly from case to case: when he says that "war is more than a true chameleon" he is alluding to the fact that the differences in each case of war go deeper than surface appearance, with different political aims, variations in the play of chance, and the variable passions which each war stirs in the population all being capable of altering the character of the war concerned. The particularly Clausewitzian notion that every war is a unique occurrence which needs to be understood in its unique historical and social context, is encapsulated in this concept. Clausewitz explores this aspect of his thought in Chapter Three of Book Eight of *On War*, wherein he makes a historical survey of various societies and notes how in each case they made war in their own unique way. Not only will each individual society fight for different purposes, but they will differ in the proportion of their population which fights; their political and social structures will vary; and the resources upon which they can draw will be subject to their own particular limits.

To go through Clausewitz's examples: the "Tartar hordes" (the Mongols) went to war

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[40] Ibid., p.87
[41] Ibid., p.85-86

as a nation, with their entire families in tow. As such, their political aims were near-absolute – "to subdue their enemies or expel them"[42] (whether this was indeed the case historically is another matter).[43] Their uncivilised nature, says Clausewitz, was the only brake on their progress. The republics of the Classical world, on the other hand, fought wars which were limited in scale and scope due to a lack of military manpower (the common people being unable to bear arms) and the fact that they were "so many and so close together" that the balance of power would always mitigate against grand schemes of conquest by any one of them.[44] Rome was different, thanks to her own unique circumstances; Alexander the Great was likewise an exceptional case – possessing a well-trained and organised army which was under his complete personal control and facing weak opposition, he could confidently aspire to huge conquests. The same could not be said of medieval monarchs, whose control over their subordinates was not so strong; the military technologies and techniques of the time were oriented towards individual combat, and as the liege lord relied so much on the whims of a loose confederation of warriors, campaigns were necessarily brief: as Clausewitz notes, "if a thing could not be finished quickly it was impossible."[45] The *condottieri* of the Italian city states were expensive and therefore few in number, and being mercenaries were not very passionate about the outcome of the battles they fought – war becoming so removed from its true nature that "its character was wholly changed, and no deduction from its proper nature was still applicable."[46] As we will see in a later chapter, this view of the *condottieri* is rather exaggerated, and it is likely that this is a prejudice Clausewitz has acquired from an uncritical

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[42] Ibid., p.586

[43] This is possibly another area in which Clausewitz was influenced by his reading of Machiavelli, who also occasionally makes selective use of history. In Book 2 of *The Discourses,* Machiavelli discusses the wars fought between the Roman Republic and the Gauls who had migrated into Italy; he characterises the Gallic force as being composed of their entire people – including whole families – and that the campaigns fought by such a people are by necessity wars of expulsion or extermination – "war of the most cruel and terrifying kind", due to the extreme political aims at stake. Machiavelli describes the barbarian invasions which led to the collapse of the Roman Empire in the west as wars of this sort – and, interestingly, also goes on to draw comparison with the more recent cases of "very great movements among the Tartars" whom he, like Clausewitz, appears to think were driven by the same concerns. As we shall see Clausewitz also shares Machiavelli's famously contemptuous attitude towards the *condottieri,* another assessment which could be (and has been) taken issue with by more recent historical study. More broadly, examining the merits of different societies – of their forms of political organisation, their religions, the composition of their armies and so on – is an aspect common to the two thinkers. See Niccolò Machiavelli, *The Discourses*, Bernard Crick (ed.), Leslie J. Walker, S.J (trans.), and Brian Richardson, (London: Penguin, 1983), p.294-298

[44] Clausewitz (1976), p.586

[45] Ibid., p.587

[46] Ibid., p.587

reading of Machiavelli. Clausewitz's use of history, it may already be clear, is rather more useful as substantiation of his ideas than as accurate information in its own right.

States with more disordered internal politics behaved differently to more centralised states; they would not have the consistency of action that marked a more united polity, and this was indeed the form of war fought by less cohesive states such as the Holy Roman Empire.[47] Towards the end of the seventeenth century, however, most of Europe's states had become more or less centralised, and maintained standing armies which were not composed of independently powerful feudal vassals but of hired soldiers. This, coupled with the increasingly sophisticated administration of states, gave them the ability to field armies much larger than they had been able to previously. The international context, claims Clausewitz, was more amenable to war in that the smaller number of independent states ceased to threaten the kind of situation as occurred in the Classical period, where dozens of rivals would intervene in an attempt to frustrate another's attempts at total conquest (a bizarre thing to say, given the myriad number of wars aimed at maintaining the balance of power in this period). Despite these inducements to a more vigorous form of war, there existed a contrary influence, in that the government and the people of the states were drifting further apart; the ordinary people did not feel so invested in the fate of the polity as they might have done had they been citizen-soldiers in the Classical model, and the military capabilities of the states of Europe were relatively well-understood, being a function of the states' wealth and the number of "such idle vagabonds as they could lay their hands on either at home or abroad."[48]

The break came with the French Revolution, when war began to approach the absolute (at least in the eyes of the 'immature' Clausewitz): "War, untrammelled by any conventional restraints, had broken loose in all its elemental fury."[49] With the people finally returned to war as an active participant, the limits which restricted the conduct of war in the pre-revolutionary era could be transcended. The participation of the people as an active force in war enabled the French to field large armies and Napoleon to take the bold and decisive actions which won him his successes, no longer bound by the physical restrictions which

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[47] Ibid., p.588
[48] Ibid., p.589
[49] Ibid., p.592

characterised (but were not an inherent part of) war as it was fought in the past.[50] However, this success provoked a reaction, and in Spain, Austria, Russia and Prussia the masses were mobilised to meet the threat; the people were returned to war, and it was unclear whether there could be any going back to the old model of warfare.

At this point our historical survey can end. Our purpose was not to assign, in passing, a handful of principles of warfare to each period. We wanted to show how every age had its own kind of war, its own limiting conditions, and its own peculiar preconceptions. **Each period, therefore, would have held to its own theory of war, even if the urge had always and universally existed to work things out on scientific principles**. It follows that the events of every age must be judged in the light of its own peculiarities. One cannot, therefore, understand and appreciate the commanders of the past until one has placed oneself in the situation of their times, not so much by a painstaking study of all its details as by an accurate appreciation of its major determining features. **But war, though conditioned by the particular characteristics of states and their armed forces, must contain some more general – indeed, a universal – element with which every theorist ought above all to be concerned.**[51]

The principles of war and the possibilities for theory

The fact that every war is unique – to the extent that every age could conceivably have its own theory of war – has important implications for anyone who would try to devise lasting lessons about warfare. The aspiration for theory is to divine patterns and regularities in a given activity, to identify those 'universal elements' which define an activity, with the ultimate aim of being able to predict the course of events – or at least provide accurate guidance for the commander in a given set of circumstances. Clausewitz distinguishes

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[50] This is – once again – an area where Clausewitz's life has distinct parallels with Machiavelli's. Clausewitz's professional life was fought under the shadow of the French Revolutionary and Napoleonic Wars, which shattered the *ancien régime* model of warfare; Machiavelli's career was similarly set in the context of the French invasion of Italy in the Italian Wars, which swept aside the *condottieri* armies and impressed upon the Italian states – particularly Florence – their comparative weakness.

[51] Ibid., p.593 – my emphasis

between a number of different types of 'rules' in this sense in Chapter 4 of Book 2 of *On War*. The first type is *law,* defined in the sense of a law of causality: "Viewed as a matter of cognition, law is the relationship between things and their effects. Viewed as a matter of the will, law is a determinant of action." Next are *principles*, which are law-like in some respects but are not in themselves determinant of action*: "Principle… represents only the spirit and the sense of the law: in cases where the diversity of the real world cannot be contained within the rigid form of law, the application of principle allows for a greater latitude for judgement." Rules* (as in rules of thumb) are similar to principles, in that they are laws which admit exceptions: "In another sense, the term "rule" is used for "means": to recognise an underlying truth through a single obviously relevant feature enables us to derive a general law of action from this feature. Rules in games are like this, and so are the short cuts in mathematics and so on."[52] My own understanding of rules as they apply to games is somewhat different to this somewhat vague definition, as we will go on to see in the next chapter.

Clausewitz is insistent that war does not admit for deterministic laws: "in the conduct of war, perceptions cannot be governed by laws… Principles, rules, regulations and methods are, however, indispensable."[53] The application of rules and principles in war can take the form of routine action, which can be useful; such patterns of behaviour derive their validity from the fact that they are based on average probabilities, a source of information which is especially important in an otherwise chaotic and unpredictable environment: "The frequent application of routine in war will also appear essential and inevitable when we consider how action is based on pure conjecture or takes place in complete ignorance..."[54] Routines are especially useful for lower-ranking officers of uncertain quality – "Officers whom one should not expect to have any greater understanding than regulations and experience can give them have to be helped along by routine methods tantamount to rules"[55] – however, there is a tendency of those who are not gifted to rely on the strategies of their more illustrious predecessors. Clausewitz criticises the trend of commanders copying the techniques of great commanders – Frederick II's oblique order, or Napoleon's "brutal rush of concentric masses" – without understanding of whether such a technique fits the circumstances.

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[52] Ibid., p.151
[53] Ibid., p.152
[54] Ibid., p.153
[55] Ibid., p.153

So long as no acceptable theory, no intelligent analysis of the conduct of war exists, routine methods will tend to take over even at the highest levels. Some of the men in command have not had the opportunities of self-improvement afforded by education… Their only insights are those that have been gained by experience. For this reason, they prefer to use the means which their experience has equipped them, even in cases that should be handled freely and individually… The danger is that this kind of style [a 'personal' or routine way of doing things], developed out of a single case, can easily outlive the situation that gave rise to it; for conditions change imperceptibly[56]

An analogy might be made with a pianist who practices a few set tunes until he is proficient in them, but is otherwise completely unaware of musical theory – and is unable to improvise when called upon to do so. The important thing for a commander is to understand the principles of war and be able to apply them intelligently and flexibly to any set of circumstances.

What, then, are the principles of war which Clausewitz believes can be identified? In 1812 (15 years before he decided to revise his writings in *On War*) he wrote a brief work on the subject for the crown prince of Prussia, Frederick William, before Clausewitz left for Russia. The principles he identifies touch upon various areas, principally concerned with the tactics and strategy. Contained in the "General Principles for Defense" are such lessons as the need "to keep our troops covered as long as possible… not to bring our troops into combat immediately"[57] and where exactly the commander should place this reserve;[58] in his principles for the offense, Clausewitz advocates focusing the attack at only one point of the enemy's forces, rather than dispersing the effort, and exhorts the would-be commander to cut off the enemy's line of retreat.[59] He goes into more detail as to how this should be done with armed forces of the time: artillery should open the battle "*in great batteries massed against*

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[56] Ibid., p.154
[57] Carl von Clausewitz, *Principles of War,* Hans W. Gatze (trans., ed.), (Harrisburg, PA: Military Service Publishing Company, 1942), p.15
[58] Ibid., p.16
[59] Ibid., p.21-22

one point"[60], and afterwards light infantry should be employed; the cavalry should be kept out of range of the enemy, but close enough to take advantage of any tactical opportunities that arise.[61] As far as principles regarding terrain are concerned, Clausewitz characterises it as providing benefits primarily to the defence, recommending that geographic features such as mountains or rivers should be used to secure one flank while the main effort to defeat the enemy is made by the other. In strategy, there are three objects of a given war: "(a) to conquer and destroy the armed power of the enemy; (b) To take possession of his material and other sources of strength, and (c) To gain public opinion"[62] to achieve the first, offensive efforts should be concentrated at the "main body of the enemy army"; for the second, "we should direct our operations against the places where most of these resources are concentrated". Finally, "public opinion is won through great victories and the occupation of the enemy's capital."[63]

Clausewitz goes further into the subject of principles in *On War* Firstly, there is the factor of superiority of numbers. Clausewitz seems to hesitate to classify this as the most important factor when it comes to winning an engagement, but after qualifying himself in typically theoretical fashion[64] he concludes that numerical superiority is an extremely important influence, with even great commanders like Frederick the Great and Napoleon struggling to prevail over forces with a two-to-one superiority over their own. Most important is not numbers per se, but the concentration of superior numbers at the decisive point: "the forces available must be employed with such skill that even in the absence of absolute superiority, relative superiority is attained at the decisive point."[65] The obverse of this is that one should not expose one's own forces to being outnumbered: the army should not be divided. "There is no higher and simpler law of strategy than that of *keeping one's forces concentrated*. No force should be detached from the main body unless the need is definite and

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[60] Ibid., p.28
[61] Ibid., p.29-30
[62] Ibid., p.42
[63] Ibid., p.45-46
[64] "If we thus strip the engagement of all the variables arising from its purpose and circumstances, and disregard the fighting value of the troops involved (which is a given quantity), we are left with the bare concept of the engagement, a shapeless battle in which he only distinguishing factor is the number of troops on either side..." Clausewitz (1976), p.194
[65] Ibid., p. 196

urgent."[66] Combined with the factor of concentration of forces in *space* is the need to concentrate forces in *time*; in strategy in particular, it is important to deploy all forces available simultaneously; "their employment will be the more effective the more everything can be concentrated a single action at a single moment."[67]

This last point is balanced by the need to maintain a reserve in the case of unexpected developments; Clausewitz maintains that this principle is more a requirement in the tactical sphere, as the sources of uncertainty are more keenly felt in combat. In the case of a strategic reserve, it must be useful – there is no point in withholding troops from combat, as that weakens one's own effort with no strategic use – it is better to make simultaneous use of the forces available.[68] All of these points are contained under Clausewitz's heading of "Economy of Force"; this is not economy in the sense of a miserly eking out of military resources, but the most efficient use of all forces available to the commander. The principle is "always to make sure that all forces are involved – always to ensure that no part of the whole force is idle… When the time for action comes, the first requirement should be that all parts must act".[69] This is of course consistent with the concept of absolute war – overcoming the enemy by exerting a greater effort than he can provide in return.

One of the ways in which this can be achieved is by the use of surprise – rather, it is necessary; "for without it superiority at the decisive point is hardly conceivable… We suggest that surprise is at the root of all operations without exception, though in widely varying degrees".[70] In this area, Clausewitz again sees a distinction between the realms of tactics and strategy. Surprise is less likely in the strategic sphere, as effective surprise depends on the enemy being unaware, and that one's own forces are able to take advantage of the situation as fast as possible – these circumstances are more likely to be found in a tactical situation where time and space are limited, whereas a strategic surprise is easily guessed at, with the preparations for strategic movements (preparation of supply depots) being hard to disguise or hide; in any case, effective surprise depends not only on the efforts of the

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[66] Ibid., p.204
[67] Ibid., p.209
[68] Ibid., p.210-212
[69] Ibid., p.213
[70] Ibid., p.198

commander and his army, but on favourable chance circumstances which are effectively beyond their control.[71] Clever ruses and cunning in general are things which Clausewitz does not believe factor into war as much as is supposed. Here he makes an interesting observation:

> Strategy is exclusively concerned with engagements and with the directions relating to them. **Unlike other areas of life it is not concerned with actions that only consist of words, such as statements, declarations and so forth.** But words, being cheap, are the most common means of creating false impressions… To prepare a sham action with sufficient thoroughness to impress an enemy requires a considerable expenditure of time and effort, and the costs increase with the scale of the deception.[72]

War's physical nature has important implications when it comes to undertaking action – a point we will explore in a later chapter. Another important principle of Clausewitz's is the identification of the opponent's "centre of gravity". This is the most effective target for military action.

> A centre of gravity is always found where the mass is concentrated most densely… The fighting forces of each belligerent – whether a single state or an alliance of states – have a certain unity and therefore some cohesion. Where there is cohesion, the analogy of the centre of gravity can be applied. Thus, these forces will possess certain centres of gravity, which by their movement and direction, govern the rest..."[73]

Elsewhere, Clausewitz characterises this centre of gravity as "the hub of all power and movement, on which everything depends."[74] The form this takes varies from case to case: sometimes the centre of gravity is the enemy army, while at other times – for instance, when domestic politics is a decisive factor – it is the enemy capital; in cases where the war is fought by an alliance, the centre of gravity is in the "community of interest" between the allies, and in rebellions it is found in the personalities of its leaders. Antulio Echevarria defines the common characteristic of these various centres of gravity as the fact that they

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[71] Ibid., p.200
[72] Ibid., p.202-203 – my emphasis
[73] Ibid., p.485-486
[74] Ibid., p.595-596

"possess a certain centripetal force that acts to hold an entire system or structure together"[75] – they are what keeps the enemy force operating as a cohesive system.

Many of the principles which Clausewitz advances are individually debateable, and bear the imprint of the military situation of his own time – his writings on strategic surprise, along with his well-known scepticism of intelligence, are particularly questionable in the light of the famous deception operations of the Second World War, such as Operations Mincemeat, misleading German intelligence as to the Allied invasion of Sicily in 1943, and Bodyguard, the equivalent operation for the 1944 Normandy landings (though the latter particularly relied on the manipulation of electronic signals intelligence to create the impression of phantom armies, which the German intelligence networks had no other access to, as well as the use of industrial technology to create large quantities of decoy materiel). While deception operations cannot obscure military build-up entirely, they can mislead the enemy as to where exactly it will be deployed. However Clausewitz might be criticised for these and other of his observations, it is important to note that his principles of war are predominantly 'bottom-up' in nature – they are concerned with 'how to think', more than 'what to do', and are directly founded on basic assumptions about the theory of war; building abstraction on top of abstraction as the geometric thinkers of his time did is anathema.[76]

Chance in War

What were Clausewitz's thoughts on the subject of chance and war? Firstly, we must understand what Clausewitz means when he speaks of 'chance' and uncertainty. While he does not make an explicit, self-contained definition of so obvious a term, by reading through his mentions of the concept we can establish what defines the 'realm of chance'. Firstly, war is defined as uncertain due to the fact that it is inimical to precise calculation: there can be no descriptive theory of war as aspired to by the 'geometric' school of military strategy.

In short, absolute, so-called mathematical, factors never find a firm basis in military

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[75] Antulio Echevarria, "Clausewitz's Center of Gravity: Changing Our Warfighting Doctrine – Again!" Strategic Studies Institute (September 2002), http://www.strategicstudiesinstitute.army.mil/pubs/download.cfm?q=363 <accessed 15/02/2016> p.16
[76] Clausewitz (1976), p.214-215

calculations. From the very start there is an interplay of possibilities, probabilities, good luck and bad that weaves its way throughout the length and breadth of the tapestry. In the whole range of human activities war most closely resembles a game of cards.[77]

War is therefore more a matter of probabilities than of certainties, and nothing can be known for sure. This can be either a good or a bad thing: Clausewitz's characterisation of chance and uncertainty in *On War* reflects the tension between the opportunities provided by these factors, and the difficulties they pose. Book One of *On War* speaks of chance with a kind of optimism, delighting in the opportunities that uncertain war provides:

Although our intellect always longs for clarity and certainty, our nature often finds uncertainty fascinating. It prefers to day-dream in the realms of chance and luck rather than accompany the intellect on its narrow and tortuous path of philosophical enquiry and logical deduction only to arrive – hardly knowing how – in unfamiliar surroundings where all the usual landmarks seem to have disappeared. Unconfined by narrow necessity, it can revel in a wealth of possibilities; which inspire courage to take wing and dive into the element of daring and danger like a fearless swimmer into the current"[78]

And in his famous concept of the 'trinity' he repeats this sentiment:

As a total phenomenon its dominant tendencies always make war a paradoxical trinity-composed of primordial violence, hatred, and emnity, which are to be regarded as a blind natural force; **of the play of chance and probability within which the creative spirit is free to roam;** and of its element of subordination, as an instrument of policy, which makes it lubject to reason alone. The first of these three aspects mainly concerns the people; **the second the commander and his army**; the third the government. The passions that are to be kindled in war must already be inherent in the people; **the scope which the play of courage and talent will enjoy in the realm of**

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[77] Ibid., p.86
[78] Ibid., p.86

probability and chance depends on the particular character of the commander and the army...[79]

Here, chance and uncertainty is associated with new possibilities for action and freedom of movement – for those who are courageous enough to take advantage of it. A skilled commander can seize opportunities and take advantage of the freedoms afforded his "creative spirit". Such an understanding is what underlies his discussion of surprise, which Clausewitz suggests "lies at the root of all operations without exception", depending not so much on the ingenuity of the commander, but mostly on the fleeting alignment of chance circumstances.[80] A commander who 'thinks outside the box' can exploit the possibilities of war and funnel uncertainty toward the enemy, either by using new weapons, which are terrifying to those who have not experienced them,[81] or conversely by using techniques and manoeuvres which have fallen out of fashion – Clausewitz cites Napoleon's use of circumvallation at the battle of Mantua as an example.[82] In war, barriers to action "consist in a sense only in man's ignorance of what is possible". However, chance and uncertainty have their negative side – in other chapters Clausewitz characterises chance as an obstacle to be overcome rather than a source of opportunity.

These are the effects of chance and uncertainty in war – but what brings them about? There are a number of factors to consider. One of the principal sources of uncertainty and chance mentioned by Clausewitz is the reciprocal nature of war: "War, however, is not the action of a living force upon a lifeless mass... but always the collision of two living forces… So long as I have not overthrown my opponent I am bound to fear he may overthrow me. Thus I am not in control: he dictates to me as much as I dictate to him."[83] This combines with a 'feedback' effect wherein the political objectives of a war shift due to the influence of events during the course of the war, moving it in an unintended direction. Further to this, Clausewitz's most categorical statement of what makes war so uncertain comes in his discussion of the moral factor: "The influence of the great diversity of intellectual qualities…

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[79] Ibid., p.89 – my emphasis
[80] Ibid., p.198
[81] Ibid., p.170
[82] Ibid., p.162
[83] Ibid., p.77

is the primary cause for the diversity of roads to the goal… and for the disproportionate part assigned to the play of probability and chance in determining the course of events"

For Clausewitz, there are at least four factors inherent to war which contribute to making it an especially uncertain phenomenon. Firstly, there is danger, on which he speaks with some authority, describing the feelings which beset a novice soldier as he nears the battlefield in evocative manner. Cannonballs and bursting shells hit the ground all around and casualties occur with increasing regularity; as grapeshot rattles against roofs and the ground, shot falls "like hail" and musketballs "whistle around us", and while "the sight of men being killed and mutilated moves our pounding hearts to awe and pity", the novice cannot help but notice his own conduct and that of his comrades begin to change. Indeed, as Clausewitz concedes, "even the bravest can become slightly distracted."[84] In essence:

> The novice cannot pass through these layers of increasing intensity of danger without sensing that here ideas are governed by other factors, that the light of reason is refracted in a manner quite different from that which is normal in academic speculation. It is an exceptional man who keeps his powers of quick decision intact if he has never been through this experience before.[85]

The emphasis is on how exposure to danger affects the mind of the commander and to an extent everyone involved – in such a setting, "the ordinary man can never achieve a state of perfect unconcern in which his mind can work with normal flexibility",[86] and the scope of chance (that which is out of our control) – increases accordingly. The temptation to hesitate and procrastinate in this sort of situation is another source of uncertainty; decisions to 'consolidate' one's own position, rather than push on and maintain momentum and initiative, "could make offensive wars easier; but they cannot make its results more certain. They usually camouflage misgivings on the part of the general"[87] – such dithering exposes the army to counterattack and other perils. How commanders and soldiers will react to such stresses is not a known quantity either; this "great diversity in mental qualities" in an army is

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[84] Ibid., p.113
[85] Ibid., p.114
[86] Ibid., p.114
[87] Ibid., p.599

another cause of "the disproportionate part assigned to… probability and chance in determining the course of events."[88]

The influence of physical effort (or as Clausewitz puts it, 'friction') is a source of chance in its own right, due to its unquantifiable nature: "because its limits are uncertain, it resembles one of those substances whose elasticity makes the degree of its friction exceedingly hard to gauge."[89] Each army and general will be capable of different degrees of effort, and this depends on the circumstances of each particular case. The third source of uncertainty is the factor of intelligence. Of all of Clausewitz's opinions, his scathing views on the unreliability of intelligence are perhaps the most dated and one-sided, and his conclusions are debatable to say the least – though as it forms the core of his argument we shall deal with it here.

> By "intelligence" we mean every sort of information about the enemy and his country – the basis, in short, of our own plans and operations. If we consider the actual basis of this information, how unreliable and transient it is, we soon realize that war is a flimsy structure that can easily collapse and bury us in its ruins… Many intelligence reports in war are contradictory; even more are false, and most are uncertain.[90]

This is due not only to the potentially contradictory nature of intelligence reports received in the heat of battle (or afterwards, in the shape of falsified casualty reports[91]), but also to those times when false reports pile up and the commander acts upon them – "just as the reports turn out to be lies, exaggerations, errors and so on. In short," Clausewitz concludes, "most intelligence is false". The natural propensity of commanders to err on the side of caution compounds the influence of bad intelligence and again introduces more 'friction' into the conduct of the war, which "has a way of masking the stage with scenery crudely daubed with fearsome apparitions"[92]. Finally, we come to Clausewitz's much-noted concept of general friction, the aggregate effect of hundreds of actions and minor occurrences

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[88] Ibid., p.139
[89] Ibid., p.115
[90] Clausewitz (1976), p.117
[91] Ibid., p.234
[92] Ibid., p.118

which cannot be predicted.

> Everything in war is very simple, but the simplest thing is difficult. The difficulties
> accumulate and end by producing a kind of friction that is inconceivable unless one
> has experienced war… countless minor incidents – the kind you can never really
> foresee – combine to lower the general level of performance, so that one always falls
> short of the intended goal.[93]

Clausewitz uses the image of a carriage journey to illustrate his point – a simple case,
but still one in which so much in the way of "minor incidents" can contribute to a lack of
correspondence with idealised plans. In essence, the sources of chance and uncertainty which
Clausewitz identifies are as follows: firstly, the reciprocal dynamic provided by active
opposition – the uncontrollable and unpredictable plans and actions of the enemy, which
when combined with one's own generate even more unpredictable consequences; secondly,
the central role of unquantifiable factors like willpower (and the difficulty of achieving
certainty regarding more quantifiable factors, due to poor intelligence), along with the
confounding effects of friction; and third, acute mental strain stemming from the danger and
violence of war, which affects the decision-making process.

Clausewitz is known to have read Machiavelli, and their similarities on the subject of
chance and uncertainty are so pronounced that he must have been an especially profound
influence.[94] Machiavelli himself was heir to an understanding of a concept of fortune which
had been prevalent in the classical era, deified as the goddess *Fortuna*. What is fortune?
anything out of human control, both the contingent event, and prevailing circumstances in
general – 'the times'.[95] Federico Chabod believes that for Machiavelli, fortune was "a
mysterious, transcendent grouping of events, whose incoherence is unintelligible to human
minds."[96] Conceptions of the extent to which fortune governed human affairs varied from age
to age; according to Thomas Flanagan, it was commonplace in classical times to debate the

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[93] Ibid., p.119
[94] Smith, p.59; Waldman (2010), p.380
[95] Thomas Flanagan, "The concept of *Fortuna* in Machiavelli" in Anthony Parel, ed. *The Political Calculus: Essays on Machiavelli's Philosophy*, (University of Toronto Press, 1972), p.128
[96] Federico Chabod, *Machiavelli and the Renaissance*, trans. D. Moore, (London: Bowes and Bowes, 1958), p.69-70.

relative importance of fortune and human effort in the affair of man, whereas by the Middle Ages fortune's vicissitudes were thought to be part of a divine order, and not to be resisted.[97] Machiavelli took a middle road: "Many think that the affairs of the world are so ruled by fortune... that the ability of men cannot control them. Rather, they think that we have no remedy at all... Nevertheless, so as not to eliminate human freedom, I am disposed to hold that fortune is the arbiter of half our actions, but that it lets us control roughly the other half."[98]

For Quentin Skinner the most fundamental lesson that Machiavelli is trying to convey is that success depends on "recognising the force of circumstances, accepting what necessity dictates and, harmonising one's behaviour with the times."[99] Machiavelli recognises that this is harder than it sounds, due to our being stuck in accustomed habits, and lack of skill when we do change, even to the point of doubting whether such a shift is actually possible.[100] How to accurately gauge the spirit of the times is not explicitly stated in Machiavelli's works; I suspect that a thorough knowledge of history and familiarity with the lives of the great men of the past would be Machiavelli's recommendation, as well as from personal experience: Pandolfo Pettruchi, the lord of Siena, who was renowned for his "tricks and intrigues"; confronted over these by Machiavelli, the then-representative of Florence, Pettruchi replied "wishing to make as few mistakes as possible, I conduct my government day by day, and arrange my affairs hour by hour; because the times are more powerful than our brains"[101], impressing Machiavelli enough to include Pettruchi as one of the few contemporary Italian princes to receive a favourable mention in his works.[102]

However, there is a more central quality which is the determinant of success in the face of fortune – *virtù*. What is this quality? Derived from the Latin *virtus* (man, male)*, textual analysis of Machiavelli's works shows *virtù* is variously opposed to indolence (*ozio*) and fury (*furore*); Machiavelli also uses it (as his medical contemporaries did) to denote life-force or vigour; mostly it is referred to as "energy of will, manliness, excellence... a kind of

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[97] Flanagan, p.131
[98] Niccolò Machiavelli, *The Prince and The Art of War*, (London: CRW Publishing Ltd, 1999), p.79
[99] Quentin Skinner, *Machiavelli: A Very Short Introduction* (Oxford University Press, 2000), p.43
[100] See Chapter 25 of *The Prince*, and Book III Chapter 9 of *The Discourses*, p.430-432
[101] Machiavelli *Legations* 111-112, quoted in Skinner, p.18
[102] Machiavelli (1999), p.116

energetic decisiveness"[103] – other meanings under its rubric are "foresight, self-discipline, constancy, strength of mind, fortitude, determination, purposefulness, decisiveness, manliness, bravery, boldness, vigour."[104] John Plamenatz gives a similar description: "Firmness of purpose, presence of mind, resourcefulness, the ability to see more clearly and further than others, fortitude in adversity... to display *virtù*... is to make your will and your person count for something in the eyes of other men and your own."[105] Wood's analysis of the *virtùosi* (that is men specifically referred to as possessing *virtù* in Machiavelli's works) is particularly informative. There are fifty-three identified by name – most are ancients, and most of those Romans from the Republican era; practically all are warriors. Wood summarises:

> "I conclude, therefore, that Machiavelli's men of *virtù* are predominantly warriors who in circumstances of extreme danger, hardship, and chance. Success is not always proof of *virtù*, if one fails, he must do a glorious fashion as Leonidas did at Thermopylae, or Cato the Younger at Utica. *Virtù* is most typically exhibited by an individual who (1) a commonwealth and secures it, or inherits a commonwealth and secures it; (2) conspires to seize power and, having seized it, secures it; (3) preserves or extends a commonwealth by organizing an army and commanding it, or by commanding an army already organized"[106]

The connection of *virtù* with the creation of order as well as military action is intriguing – but above all, *virtù* is a manly concept linked to war, as Wood shows. He argues, convincingly, in my view, that the various nuances of *virtù* can be considered part of a broader dynamic, intimately linked with war and conflict more generally, with chance permeating everything:

> To Machiavelli war is the archetypal contest between virtù and fortuna, between all that is manly, and all that is changeable, unpredictable, and capricious, a struggle between masculine rational control and effeminate irrationality... In war the best laid

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[103] Neal Wood, "Machiavelli's Concept of *Virtù* Reconsidered." *Political Studies* 15.2 (1967), p.160.
[104] Wood, p.169
[105] John Plamenatz, "In Search of Machiavellian *Virtù*." in Parel (1972), p.177
[106] Wood, p.165

plans go astray. The cautiously and skilfully executed manoeuvre may meet with unexpected accident. Certain victory may suddenly become the possibility of disaster. As the tide of battle changes adversely, as the peril mounts, and as the sand of time runs out, at such unnerving moments, the *virtù* of the captain is on trial... Against overwhelming odds, the leader often must discard his carefully prepared battle plan, and rally his forces by a determined and audacious improvisation. How many times has victory been snatched from defeat by a great general, and how often has the moral victory and the glory gone to, even in defeat!"[107]

This linkage of war and chance is shared between Clausewitz and Machiavelli, along with a shared circumspection on likelihood of success – a common theme which may have something to do with both thinkers' frustrations in their own lives: Machiavelli, exiled from Florence, and from any hope of resuming the career in politics with which he was obsessed; Clausewitz, similarly denied the field command he longed for, as a consequence of his controversial political writings and his principled resignation from the Prussian service in 1812. Each was forced to sublimate their energies into their writings; in both cases, these evince an appreciation of the tragic aspect of human striving in the face of obstacles which will at times be insurmountable – a humility lacking in some more self-congratulatory works, penned by figures who achieved recognition and success merely within the span of their own lives.

What is needed to thrive in an environment where chance and uncertainty are present to this extent? Clausewitz's answer is the 'genius' of the commander. Clausewitz's conception of 'genius' is very similar to Machiavelli's *'virtù'* – an emphasis on boldness, activity, resourcefulness and mental strength is common to both, and similarly, the key qualification of a commander of genius or *virtù* is ability to thrive in conditions of uncertainty, whilst being exposed to the storm of chance and contingency. There are two main qualities in Clausewitz's conception of genius – one is that the commander should have the strength of will, steadiness of purpose and calm confidence necessary to take bold risks when required, and drive on coordinated action in the face of rapid, confusing and potentially demoralising changes in circumstances: "a distinguished commander without boldness is

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[107] Ibid., p.170

unthinkable."[108] The second requirement that the commander has the intellectual ability to make sense of that same chaotic reality in a very short period of time. This can, in part, be inculcated through internalisation of those few principles of war which can be arrived at through theory,[109] and also by experience of war; repeated exposure to novel dangers lessens their terrifying effect and "breeds that priceless quality, calm..."[110] Even more important is some advice which Clausewitz gives regarding the understanding of terrain: this is especially important, he notes, as it is one of the few permanent factors in war.[111] Clausewitz recommends, as we are only able to see so much of a battlefield at once (and, unlike other activities tied to the land, will be moving from place to place rather than keeping to one particular area), that the would-be commander acquaints himself well with the natural environment, as to develop an understanding of the regularities of terrain, "*a sense of locality*". [112] A powerful talent for imagination is needed for this,[113] as is also the case with a similar concept which applies not only to the battlefield but to the battle itself – the commander's *coup d'oeil,* the ability to intuit at a glance the right course of action to take in an otherwise incomprehensible, violent and disordered setting.[114] Clausewitz makes frequent reference to the impossibility of codifying genius, with the claim that it lies "outside of the rules":[115]

> ...it is simply not possible to construct a model for the art of war that can serve as a scaffolding on which the commander can rely for support at any time. Whenever he has to fall back on his innate talent, he will find himself outside the model and in conflict with it… *talent and genius operate outside the rules, and theory conflicts with practice.*[116]

The commander has to incorporate a vast number of factors into his decision-making process, from tactical matters to strategic aims – and ultimately to the overall political and

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[108] Ibid., p.192
[109] Ibid., p.147; p.193
[110] Ibid., p.122
[111] Ibid., p.109
[112] Ibid., p.109
[113] Ibid., p.110
[114] Ibid., p.102-103
[115] See ibid., p.138, 184
[116] Ibid., p.140

historical context of the war. As a consequence, no two wars will be exactly alike, and prescriptive models will sooner or later be overtaken by the shifting flow of events. This is how Clausewitz conceives of the role of chance and uncertainty in war.

Why is war uncertain?

So far, we have seen that Clausewitz understands war as a particularly uncertain and changeable form of activity, not just in that it is exposed to chance events to a high degree, but also in that each of its manifestations throughout history are so varied and unique. Clausewitz appears to have arrived at this appreciation of chance's place in war from a number of directions: firstly, from personal experience (as can be seen most clearly in his descriptions of danger in war) and from his reading of military history; and secondly, from reading Machiavelli. As I have mentioned, he does not delve deep into the theory of *why* war should be so chancy and uncertain, at least on a conscious level, and the unique chanciness and uncertainty of war is something which Clausewitz almost seems to take for granted. Given Clausewitz's long experience and study of war, we should not be inclined to dismiss his judgement; however, we cannot fail to notice that none of the specific factors he gives to explain the prevalence of chance – unquantifiable variables, 'friction', danger, active opposition and the dynamics of interaction – substantiates his claim that war is the most uncertain form of human activity: none are the exclusive preserve of war, with the possible exception of danger and violence (though some sports are arguably exposed to these factors, not to mention the violent contests of duels, jousts and so on). More recent attempts to explain why it is that war is so uniquely uncertain have not adequately addressed this problem either: I take as an example Alan Beyerchen's "Clausewitz, Nonlinearity and the Unpredictability of War", probably the most technically sophisticated attempt to unravel Clausewitz's claims that has so far been made.

Beyerchen's thesis is that Clausewitz's message has been misunderstood and underappreciated over the years because he (unlike some of his readers and most other theorists) had an intuitive understanding of war as what we now call a 'nonlinear' phenomenon. Though mathematicians have been aware of the problems of nonlinearity since Poincaré, general appreciation of nonlinearity grew in the late twentieth century with the

application of computers to the area and the resultant popularisation of 'chaos theory', which describes systems where minute changes in inputs can lead to greatly divergent results. Nonlinearity is a concept, as we have seen, derived from mathematics and the physical sciences, which broadly refers to dynamic systems which do not proceed in a regular, predictable manner, 'linearity' describing those systems and processes which do (the most widely known example of a nonlinear process is the 'butterfly effect', where a tiny input into a weather system – the flapping of a butterfly's wings – is theoretically sufficient to change the location of storms and hurricanes). Beyerchen describes the significance of the difference:

> "Linear" applies in mathematics to a system of equations whose variables can be plotted against each other as a straight line. For a system to be linear it must meet two simple conditions. The first is proportionality, indicating that changes in system output are proportional to changes in system input... The second condition... is that the whole is equal to the sum of its parts. This allows the problem to be broken up into smaller pieces that, once solved, can be added back together to obtain the solution to the original problem.

> Nonlinear systems are those that disobey proportionality or additivity. They may exhibit erratic behavior through disproportionately large or disproportionately small outputs, or they may involve "synergistic" interactions in which the whole is not equal to the sum of the parts. If the behavior of a system can appropriately be broken into parts that can be compartmentalized, it may be classified as linear, even if it is described by a complicated equation with many terms. If interactions are irreducible features of the system, however, it is nonlinear even if described by relatively simple equations.[117]

In short, linear problems are easy to extrapolate from; non-linear ones, involving many variables (such as trying to predict the weather), are much more difficult. Beyerchen points out that science and mathematics have been, until very recently, chiefly concerned with linear equations, and that this was mainly for the reason that the mathematical tools available before computerisation were not powerful enough to handle anything beyond this.

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[117] Beyerchen, p.62-63

This did not stop scientists from trying to approximate linear solutions for nonlinear problems – a practice imitated by the Enlightenment-era military theorists who sought to apply geometric principles to warfare.[118]

On the face of it this is a promising approach, and brings to mind Chabod's "mysterious, transcendent grouping of events, whose incoherence is unintelligible to human minds."[119] Beyerchen's grounds for speculating that Clausewitz implicitly understood nonlinear principles and their relevance to war rests on his use of a particular metaphor, in his discussion of the 'trinity' of chance, passion and reason: "Our task therefore is to develop a theory that maintains a balance between these three tendencies, like an object suspended between three magnets."[120] Beyerchen explains the significance of this image:

> Positioned over two equally powerful magnets, the pendulum swings toward first one, then the other, and still settles into a rest position as it is captured by one of the points of attraction. But when a pendulum is released over three equidistant and equally powerful magnets, it moves irresolutely to and fro as it darts among the competing points of attraction, sometimes kicking out high to acquire added momentum that allows it to keep gyrating in a startlingly long and intricate pattern. Eventually, the energy dissipates under the influence of friction in the suspension mountings and the air, bringing the pendulum's movement asymptotically to rest. The probability is vanishingly small that an attempt to repeat the process would produce exactly the same pattern. Even such a simple system is complex enough for the details of the trajectory of any actual "run" to be, effectively, irreproducible.[121]

Whether Clausewitz was using the metaphor in this way is (at best) moot. In the context of the chapter, Clausewitz is primarily using the three-magnet metaphor to argue that the conduct of war should not be dominated by any one of the three aspects of the trinity (this, rather than a self-conscious allusion to nonlinearity, is the reason for that particular number), but instead he believed that war ought to maintain an equal distance from each, a

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[118] Ibid., p63-64
[119] Chabod, p.69-70.
[120] Clausewitz (1976) p.89
[121] Beyerchen, p 69-70

necessarily *static* balance – after all, we know the ultimate fate of the experiment is that the pendulum will settle directly above one of the three magnets, not to be moved away by the others.[122] Nevertheless, the experiment is a useful illustration of how little is needed to turn a linear relationship nonlinear: the source of unpredictable behaviour is, in this case, the mere presence of more than two magnets, and in war, there are a great many such variables to consider.

Beyerchen considers three types of uncertainty in war: uncertainty from interaction, uncertainty from friction, and uncertainty from chance. Interaction occurs in two ways; firstly, war does not take the form of action on a passive body (as in the science of physics), but against an active opponent who seeks to resist our attacks and to deal damage on his own account.[123] Secondly, our interactions with the enemy and the environment alter the dynamics of the contest; a successful cavalry charge might spark a small-scale rout which discourages other soldiers, whose own subsequent flight discourages still more troops and thereby builds momentum into a general rout – a case of "amplifying feedback", typical of nonlinear phenomena.[124] The second source of uncertainty is through Clausewitz's concept of friction, which frustrates the efforts of the commander by dissipating his effort, and which effectively denies us the possibility of a perfect understanding of the initial conditions of a war; with so many potentially relevant factors, and so many possible interactions between them, definitive predictions are effectively impossible.[125] The presence of these factors, and the impossibility of anticipating the developments which proceed from their interactions, is what brings about uncertainty from chance; this, and the relevance of the wider political and historical context of the war, is another reason why no two wars are quite alike; as Clausewitz noted,

> [Analysis] is bound to be easy if one restricts oneself to the most immediate aims and
> effects. This may be done quite arbitrarily if one isolates the matter from its setting
> and studies it only under those conditions. But in war, as in life generally, all parts of

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[122] It is not clear that Clausewitz would have been impressed with the application of chaos theory to war, either: "Battles in which one unexpected factor has a major effect on the course of the whole usually exist only in the stories told by people who want to explain away their defeats." Clausewitz (1976), p.249
[123] Beyerchen, p.73; Clausewitz, p.149
[124] Beyerchen, p.73; Clausewitz, p.253
[125] Beyerchen, p.75-77

the whole are interconnected and thus the effects produced, however small their cause, must influence all subsequent military operations and modify their final outcome to some degree, however slight.[126]

The understanding of war as a nonlinear phenomenon is a useful one, and can help us to appreciate the limits of any attempt to theorise principles for its conduct along classical 'mathematical' lines. But so far, just as we have not read of anything exclusive to war in Clausewitz's sources of chance, there is nothing about nonlinearity which is exclusive to war either. War might very well be a nonlinear phenomenon, but the question is *why* this is so, and why it is (if Clausewitz's claims are correct) more uncertain than other forms of interaction which also exhibit nonlinear characteristics. Beyerchen's specifications for a nonlinear conflict are essentially twofold: the presence of dynamics of interaction; and multiple potentially relevant 'variables'. Neither of these, alone or in combination, is exclusive to war – politics and commerce are similarly exposed to these influences: John Pocock after all characterised politics as "the art of dealing with the contingent event"[127] – what Harold Macmillan is famously said to have feared above all else – and nonlinear dynamics can be seen in stock and commodities trading – the need to appreciate the importance of unpredictable, unimaginable 'black swans' is currently popular knowledge.[128] Even if it may prove to be the most nonlinear form of human endeavour, war clearly cannot be defined exclusively by its nonlinear nature. What separates war from 'normal' politics and commerce? Clearly, the most notable difference is use of violence. Is this the deciding factor? To an extent, it is – war cannot exist without the use of violence (or at least the threat of its use). The use of violence, involving danger, introduces mental stress and thereby uncertainty; but again, this is not enough to explain the outsize levels of chance we have been told about. Furthermore, the use of violence as the means of a contest is not unique to war: martial arts and boxing are not wars, though their players attempt to make their opponent submit through the use of physical harm. Even duels, jousts, knightly melees and gladiatorial combats – contests where death is far from unknown – do not quite meet the criteria of war. What distinguishes not only these sports, but politics, commerce, and every other competitive

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[126] Clausewitz, p.158

[127] John G.A. Pocock, *The Machiavellian Moment,* (Princeton University Press, 1975), p.156

[128] See Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable*, (Random House, 2010)

activity from war? It is not Clausewitz's references to the magnet experiment which are significant, but another of his turns of phrase which hint at an underlying understanding of the true nature of war, regarding the quality of "genius, *which rises above all rules.*"[129]

In short, the one way in which war differs from *all* other forms of competition – martial arts, football, chess, jousts, elections, duels, court cases and so on – lies in the fact that these are 'constitutional' contests, interactions which are governed and structured by a framework of rules. All are processes for resolving (or enabling) conflict by means of an (at least partly) abstract mechanism, using symbolic interactions which have significance in the context of the constitutional framework of the contest (for instance, physical interactions are given significance not primarily because of their physical effects – as they are in war, where the destruction of the enemy force is the end in itself in this sense- but because of the 'rules of the game': kicking a ball past the opponent's' goal line for example, is understood as having the symbolic significance of 'scoring a goal').[130] I believe that this aspect of war – the fact that it does not have rules in this sense – explains its uniquely uncertain nature. Beyerchen himself comes close to identifying rules as a source of predictability and certainty – "many theorists tend, for the sake of analytical simplicity, to force war into the model sequence of move-countermove. But… war is not chess; one's opponent is not always playing by the same rules, and is often, in the effort to win, attempting to change what rules there are."[131] – however, he does not unpack the implications of his observation, which is that war has *no* rules (at least in the sense of the rules of chess), and that rules in other contests have served the function of mitigating many of the uniquely uncertain aspects of war. Rules can lessen different aspects and causes of chance: for example, a chance event such as an earthquake does not necessarily affect outcome of a chess game, even if one player's king is knocked over by the tremor; in a similar way, constitutional political contests, games, and

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[129] Clausewitz (1976), 184. More substantially, we have already seen how Clausewitz noted that war is not restrained from the 'absolute' form by any laws or regulations inherent to itself.

[130] Though a detailed discussion of this point is beyond the scope of this thesis, it is worth mentioning that Clausewitz did note some parallels between war and other forms of human competition: "*War is a clash between major interests, which is resolved by bloodshed – that is the only way in which it differs from other conflicts. Rather than comparing it to art we could more accurately compare it to commerce, which is also a conflict of human interests and activities; and it is* still *closer to politics, which in turn may be considered a kind of commerce on a larger scale.*" Ibid, p.149. It could be argued that all three activities are bound by a lack of structure; as has been noted already, the existence of business and political strategies indicates a certain similarity in this regard.

[131] Beyerchen, p.75

litigation are all, to varying extents, insulated from exogenous contingent events. As we have seen from Clausewitz's writings, in war nothing is 'exogenous'. Rules provide information and even if they do not facilitate perfect prediction, they at least allow certain things to be taken for granted: no football team will have to worry whether their pitch has been mined (at the very least, their opponents would be disqualified); coupled with the tendency of rules to limit damage and physical harm (most combat sports drawing a line before maiming or death), the fear of danger is lessened if not entirely eliminated, reducing this aspect of uncertainty. Accordingly, hesitation is less tempting than in war (or, in the case of some turn-based games, can be indulged without risk), and chance events associated with procrastination are thereby avoided.

Conclusions

The concept of war as a form of conflict which is not structured by rules therefore seems a promising explanation for much of what Clausewitz says about war – not just regarding chance, but its other unique aspects, like the drive to absolute war, its danger, the role of the creative 'genius' who operates in a chaotic environment, and so on. For Clausewitz, war was uniquely inimical to the kind of analysis which sought to identify comprehensive rules and laws which could be used to create a definitive guide to fighting and understanding it. Not only does war different from all other forms of human behaviour, but each war differs from the next in hugely significant ways – so much so that its more-than-chameleon-like nature presents manifestations so different and varied that identifying a common factor between the wars of different ages is no simple task. Added to this is the inherent uncertainty and unpredictability of war, brought about by the influence of unquantifiable moral and physical factors, the inherently unpredictable actions of the opponent, and the escalatory dynamic of war.

Common to all wars is in fact the very thing which gives rise to this great variety of conflicts and its pervasive uncertainty – its lack of rules, which would otherwise structure and give regularity to the process of warfare. As Clausewitz notes in his treatment of absolute war, there is no restriction inherent to war itself which limits the scope of the violence and effort with which it is prosecuted – the only things that do restrain this, and which give each

war its unique character, are circumstantial factors like the political aim of the given war, the passions this aim gives rise to – and the influence of the physical world and its interplay of probabilities and chance circumstances. This unique exposure to chance and uncertainty, as we have seen, is itself explicable when seen through the prism of war as ruleless activity; neither Clausewitz's own explanations, nor those of later writers like Beyerchen, fully explain this aspect of war – though each have much to recommend them in other ways.

In the rest of this thesis, I will apply this idea to other areas of war, and use it to explain how its idiosyncratic character and peculiar manifestations can ultimately be traced to a lack of rules. However, before we go on I must clarify exactly what I mean by 'rules' in greater depth. War, as we have seen, can indeed be hedged around with rules – even if only superficially – and there are a number of different types of regulation we must be made aware of before we proceed. However, once we are made familiar with the forms they take and the functions they serve, we will be better equipped to explore exactly how the absence of rules shapes – or does not shape – war. In the next chapter, I will explore in greater depth the nature, purpose and functions of rules, so as to enable us to appreciate exactly in what ways war differs from other forms of conflict, and how it is so unique a phenomenon as Clausewitz would claim.

A THEORY OF RULES AND THE CHARACTERISTICS OF RULE-BOUND CONFLICT

If concepts can be defined with reference to what they are *not*, we might say that war is not-peace. But what is peace? Clearly, it is not a lack of conflict in itself – elections, business competition and social conflicts of many kinds can be pursued without 'breaking the peace' – but rather, a lack of violent conflict. But one can have violent conflict in peacetime, whether in a boxing match or in a knightly joust; there is another factor which must be at play in demarcating peace from war. As I have already posited, such 'peaceful' conflict is facilitated by mutual consent to a system of rules, whether explicit laws or more informal strictures. Often peace is synonymous with 'law and order', the mutually acknowledged and socially enforced rules which structure social interactions in a predictable and 'safe' fashion. I would not say that war is completely free of rules – or indeed that it is free of rules at any time. But I would argue that what makes war 'war' is its basically un-ordered condition – the conduct of war does not proceed in an orderly way.

The chapter that follows will explain my 'theory of rules' in greater detail. Here I take a rather broad view of 'rules', drawing together disparate conceptions of regulation which would ordinarily be kept apart; for instance, I will be drawing from literature from both dedicated legal studies and sociology; this is because I believe we can understand all types of laws and rules to be members of the same family, structures and institutions which restrict behaviour. Both explicit law (for example, codified laws of the type made by states) and the interlinked concepts of implicit law and 'practice' (manifested by norms and other informal rules) order human behaviour – either individually, or more often as a collection of rules which constitute a certain form of behaviour. Some collections of rules are explicitly constitutive in that they structure conflict in the form of a symbolic interaction, as a game or constitutional process (one wherein certain actions have significance with reference to a system of rules). The way these rules are made manifest – the forms they take, the roles they play and effects they have, along with why and how they are followed, and from whence they originate – will be explained. In particular I will explore the link between material power and order, how bodies of rules are shaped by the distribution of material power within a society and how rules restrict the scope of material damage through enabling symbolic interaction.

Rules, particularly those which provide for abstract, symbolic contests, provide a number of benefits to those who obey them: a level of predictability can be taken for granted when engaging in a rule-bound contest, with certain eventualities able to be ruled out, including to some degree the effects of chance events; violence is typically restrained, and with it the prospect of material harm; and as mentioned, the interests of established powers can be met by reinforcing the status quo. Rules achieve this by regulating possible actions in a variety of dimensions – limiting action in space and time, imposing restrictions on the tools with which conflict can be prosecuted, and by providing an objective standard of arbitration for the resolution of the contest. War, which lacks rules (in the sense of a symbolic contest), lacks the benefits which rules provides: it is unpredictable, exposes those who engage in it to physical harm, and lacks a predetermined and mutually-acknowledged mechanism for deciding its outcome. That is not to say that war does not or cannot have rules applied to it – in the next chapter we will examine such a selection – but these are not 'constitutive' rules which transmute war into a symbolic interaction.

"*Order…* A method according to which things act or events take place; the fixed arrangement found in the existing constitution of things; a natural, moral or spiritual system in which things proceed according to definite laws… The condition in which the laws or usages regulating the public relations of individuals to the community, and the public conduct of members or sections of the community to each other, are maintained and observed; the rule of law or constituted authority; absence of insurrection, riot, turbulence, unruliness, or crimes of violence."[132]

'Order', like 'war', is a word that has a number of distinct meanings and connotations; and like 'war', it has rarely been defined to a level of precision required to avoid misunderstanding in academic debate. As can be seen from the definitions given in the OED, 'order' has at the least connotations of regularity and stability, of a pre-defined way of doing things. Scholars with an interest in the subject consider the defining feature of order its nature as a stable system – the more 'ordered' the order, the more stable a platform it provides for progress and the accumulation of material prosperity (Fukuyama); it is typically defined in

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[132] Oxford English Dictionary, Second Edition, (Oxford University Press, 1989), Vol X, 905

opposition to the use of violence – though as we shall see violence is not necessarily inimical to an ordered social system. I understand 'order', in the abstract, to mean a structured pattern of behaviour, in which human action is bound by a set of rules. Order in this sense can emerge 'spontaneously', but it is more often created and maintained by the imposition of laws and rules, regulations varied in origin and character but linked by a common mechanism of action – the restriction and regulation of behaviour.

The two principal types I will describe here are explicit and implicit rules. By 'explicit' rules I mean written laws, rules which have been explicitly codified. Perhaps the most immediately obvious form taken by explicit rules is 'the law'. The earliest explicit laws were developed in the early civilisations of the Middle East – the Babylonian 'Code of Hammurabi' being perhaps the earliest surviving example.[133] Such laws took the form of written commands which either compelled or prohibited certain actions (*thou shalt; thou shalt not*); if these were broken, specific punishments were inflicted – the punishment "an eye for an eye" dates back to Hammurabi.[134] These stipulations limited the extent to which a conflict could continue – an injury which might have provoked an extended feud was now answered with one proportional punishment. Ensuring social harmony has been the avowed purpose of many law codes; Hammurabi's professed aim was "to bring about the rule of righteousness in the land, to destroy the wicked and the evil-doers; so that the strong should not harm the weak..."[135] Nevertheless – as we shall see – explicit laws are also used to maintain the social status quo and serve entrenched interests.

Explicit laws are not necessarily strong, nor do all such laws regulate activity in the same way. In an article for *International Organisation,* "The Concept of Legalization", Abbott *et al.* provide criteria for this distinction: laws can be classified as 'hard' and 'soft' depending on the extent to which they meet the criteria of *obligation*, *precision* and *delegation*. *Obligation* refers to the level to which the law is binding – certain agreements which are explicit are in fact explicitly non-binding, being closer to norms than laws; others are more conventional in that they lay out binding obligations on those subject to laws.

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[133] Leonard W. King, (trans.) *The Code of Hammurabi,* Avalon Project http://avalon.law.yale.edu/ancient/hamframe.asp <accessed 13/12/15>
[134] Ibid., Code 196
[135] Ibid.

Precision is the level of detail and specificity to which these obligations are set out; the wording of the obligation can range from a vaguely-defined principle to an exacting set of requirements. *Delegation* refers to the extent to which the enforcement of law is referred to lower-level organs of state, away from the realm of politics – Abbott *et al.* characterise the theoretical minimum of delegation (as regards international law) as "pure political bargaining" between national representatives, opposed to the delegation of legal decision-making and the alteration of laws to independent third parties, who would carry out their duties in a less arbitrary fashion.[136] Whether a law which is 'hard' is necessarily stronger than one which is 'soft' is not necessarily so; while these criteria are suitable for judging 'explicit' laws, implicit rules and norms can bind human behaviour very strongly indeed without need for precision.

Examples of explicit law towards the hard end of the scale include contract law, which regulates commercial agreements and transactions: contract between two agents will commonly specify certain duties, to be fulfilled at an agreed time in a certain way, with penalties for breach of contract. However, a law may be explicit and still lack mechanisms for enforcement – the Hague and Geneva conventions are instances of explicit laws which seek to regulate the conduct of warfare as regards permissible weaponry and the treatment of prisoners, which do not provide for punishment of rule-breakers. This tendency was manifested to an even greater extent by the 1975 Helsinki Accords, an international agreement between the USA, the USSR and their respective allies which was relatively precise in wording, but explicitly non-binding in nature. Nevertheless, this agreement served a function in sharing information and conveying intentions, and was at least intended to influence the parties' future decisions and actions.

Explicit laws depend on their perceived legitimacy to be effective. This legitimacy is generally articulated with reference to external principles, and these are varied in nature according to the culture in which the law exists; in Western societies, one of the key distinctions has been that made between 'positive' and 'natural' law. From the approach of positive law, law is not merely enforced but is also given legitimacy by state authority, which

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[136] Kenneth W. Abbott, Robert O. Keohane, Andrew Moravcsik, Anne-Marie Slaughter, and Duncan Snidal, "The Concept of Legalisation" *International Organization* 54, 3, (Summer 2000), p.401-419.

aims to bring about results consistent with some objective stet of criteria – Bentham's utilitarianism, for example – in theory without being influenced by custom, tradition or precedent. The jurist John Austin's (1797-1859) 'command theory' of law defines law as such a system of rules commanded by a sovereign legal authority, and Hobbes' view of the role of the sovereign as the enforcer of a system of law which ensures peaceful social relations matches this description; Max Weber's legal-rational authority is an equivalent source and guarantor of a rational, self-contained system of hard law. Positive law is unusual in this respect – legal codes typically derive their legitimacy from other sources; pre-existing forms of order are generally appealed to in this capacity, religion and tradition being common influences. The concept of 'natural law' has been a particularly important source of legislation, having a marked influence on international law from its beginnings under Grotius, de Vitoria and Gentili. However it is justified according to God-given principles, the creation of law is generally influenced by less edifying factors, with international law in particular bearing the imprint of politically motivated compromises – one of the the most obvious instances being the constitution of the United Nations, reflecting as it does the balance of power following the Second World War rather than the influence of an abstract legal ideal. One might paraphrase Clausewitz – "law is a continuation of political intercourse, with the addition of other means."[137]

Where 'explicit' rules are characterised by codification, the rules I categorise under the term 'implicit' rules are not. These are rules which are commonly understood and acknowledged on a level that is 'felt' rather than consciously thought, originating from a number of sources – custom, habit, cultural beliefs, instinctive notions of justice and appropriateness being examples. That these laws are implicit does not mean that they are weaker than those written up in statute: as we have seen with the concept of hard and soft laws, there are varying degrees to which laws bind the behaviour of their subjects, and unwritten laws are no exception to this – often they are more potent in their effects, not being weakened by the lack of an 'artificial' legal authority or its enforcement agencies but rather being strong enough not to require them. Perhaps the most typical examples of implicit law are norms. Norms have been the subject of much recent analysis in International Relations: Theo Farrell gives a good description in *Norms of War:*

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[137] Ibid, p.44

"Norms are beliefs shared by a community about who they are, what the world is like, and given these two things, what they can and should do in given circumstances… Norms can comprise both identities and worldviews that collectively provide guides for action… A community's understanding of the natural world will determine what they believe to be possible, just as its view of the social world will determine what the community believes to be proper."[138]

As is clear from Farrell's definition, the concept of norms goes beyond explicit law's conscious framework of regulation, and moves into 'deeper' cognitive territory – what is considered appropriate, relative to an internalised system of beliefs, or even what is believed to be within the bounds of physical possibility. Norms in this sense include expectations and 'practical', pragmatic judgements of what will happen if a certain course of action is taken, as well as the moral sentiment regarding the ethical 'rightness' of a particular course of action. At the 'deep end' of this form of regulation, psychological mechanisms which drive and shape behaviour, internalised at a subconscious level, we get closer and closer to rules which have a force of their own, and do not rely on conscious artifice for their legitimacy or enforcement. The concept of *practice* is related to this sort of rule – strictly speaking, practice is a form of custom, an internalised system of rules as to what sort of social behaviour is appropriate at a given time. Practice Theory attempts to explain the interaction of agency and structure in social life by examining how the actions of social agents are shaped by wider social rules, and how the performance of action (i.e. *practice*) reinforces those rules. The concept is typically used to explain regularities in the actions carried out in a given society:[139] human behaviour, both individually and socially, is bound by rules of habit and precedent, and as we narrow our choice of actions by our unconscious adherence to the patterns of behaviour carried out by members of a society, the disposition to behave in these ways becomes 'natural' in the same way as the norms discussed above – and sometimes, even more unconsciously ingrained.[140]

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[138] Theo Farrell, *The Norms of War: Cultural Beliefs and Modern Conflict*. (Lynne Rienner Publishers, 2005): 1

[139] Joseph Rouse, "Two Concepts of Practices." in Karin Knorr-Cetina, Eike von Savigny, Theodore Schatzki (eds.), *The Practice Turn in Contemporary Theory*, (Routledge, 2001): 199

[140] There are many competing definitions and understandings of practice theory, and attempting to cover them all would be an exercise in futility; I base my conception mostly on the work of Pierre

This process is otherwise known as socialisation; the aggregate of the social rules and norms which are so internalised by a member of a society are known as *habitus*. *Habitus* bears great similarity to the concept of norms, in that *habitus* demarcates what is considered a 'normal' and socially acceptable choice of actions. The *habitus* is typically acted on not in a consciously strategic or instrumental way, but, as with norms, according to a feeling of what is appropriate for a given situation. Such observations have been made for a long time – the idea of *habitus* as an ingrained disposition brought about by repeated behaviours is first mentioned by Aristotle in the Nicomachean Ethics (in Greek, *hexis*);[141] Aristotle's focus was on virtue as a disposition brought about by behaviour, but the term came to be applied more widely in twentieth century sociology. Norbert Elias' *The Civilising Process* introduced the term in the sense we take here; looking at the development of ideas of what it meant to be 'civilised' from the middle ages onwards, Elias theorised that from the Middle Ages onward, a common *habitus* of attitudes to etiquette developed, especially regarding what sort of bodily functions were inappropriate in public. These developed as 'delicate' behaviour and bodily restraint became a mechanism by which nobles could differentiate themselves from their social inferiors, in in a time when European nobles moved from an independent military life to a one which took place at the court of increasingly powerful monarchs. As new generations (and as time went on, social classes) became socialised into the collective *habitus*, rules that once had to be explicitly stated fell out of the etiquette books, as they were internalised through repeated practice.[142]

The author most associated with *habitus,* however, is the French sociologist Pierre Bourdieu, who expounded his theories in his *Outline of a Theory of Practice*. For Bourdieu, *habitus* is again a set of dispositions and internalised social rules, and (again similarly to Elias' theories) is linked with questions of power. In Bourdieu's analysis, *habitus* grows out

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Bourdieu. For a summary of the practice discourse, see Joseph Rouse, "Practice Theory" in Dov M. Gabbay, Paul Thagard, and John Woods (eds.) *Handbook of the Philosophy of Science*, Vol 15, (Elsevier 2007), Vol 15, (Elsevier 2007): 499-540

[141] See Aristotle, *Nicomachean Ethics*, H. Rackham (trans.), Harvard University Press (1934), 1105b 25–26

[142] Norbert Elias, *The Civilizing Process,* (Oxford: Blackwell 1994). The earliest books from the Middle Ages explicitly discouraged habits like blowing one's nose into tablecloths or into one's fingers, farting at the table and so on – practices which must have occurred often enough to merit mentioning.

of the objective, material structures of society – these include purely practical aspects such as the rhythms of agricultural life and their accompanying tasks, based on physical changes (it is felt 'appropriate' to carry out certain tasks, such as planting crops or harvesting them, at certain times[143]), but it also includes areas like economic relations between social groups; reflecting these aspects, the *habitus,* which sets what are considered appropriate forms and standards of behaviour, is shaped by the underlying distribution of 'hard power' in a given society. Bourdieu is at pains to stress that adherence to the rules of the *habitus* is not deterministic – while there is a certain predictability to the encounter when two agents with the same *habitus* interact, there are a huge number of potential actions which could be chosen – as the term suggests, the *habitus* predisposes agents to certain mental habits.[144]

How rules are followed

Rules governing social order influence behaviour through a number of mechanisms. In the first instance, rules can be obeyed according to a rational cost-benefit calculation; following inconvenient rules may have its costs, but the threat of punishment – or the risk of destabilising an otherwise advantageous body of legislation – can encourage would-be rulebreakers to continue regulating their own behaviour. This is the approach taken by more positivist approaches to political science; other perspectives acknowledge that rules can be internalised and followed in more unconscious and non-instrumental fashions.

James March and Johan Olson refer to these two approaches as the *logic of consequences,* and the *logic of appropriateness,* respectively.[145] Acting according to a logic of consequences, actors base their actions on the basis of their preferences and their expectation of the likely consequences of action. Rules are to be obeyed if the cost of breaking them exceeds likely benefits, and ignored if vice-versa. A logic of appropriateness, however, is followed when the rules of a given order have been internalised and are *felt* rather than consciously thought. Here the actor might view a particular course of action with moral opprobrium, or consider it a poor choice of action on some vaguely conceived practical

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[143] Pierre Bourdieu, *Outline of a Theory of Practice*, (Cambridge University Press, 1977), 97-109
[144] Ibid., 73
[145] James G. March and Johan P. Olsen. "The Institutional Dynamics of International Political Orders." *International Organization* 52.04 (1998): 943-969

grounds (while it is an instinctively felt unwillingness to try something that diverges from common practice being the real motive). This dichotomous approach corresponds with the distinction between the sociological concepts of *gemeinschaft/gesellschaft*, societies where conduct is influenced by either an affective or calculating logic respectively.

The most extreme case of internalisation of rules is exemplified by the constructivist concept of the 'constitution of reality' – standards of behaviour, norms and so on become so ingrained and unquestioned that the order they form is 'mistaken' for reality, and possibilities for action outside of that system are dismissed as impossible, or otherwise neglected. As we might expect, this development can come about through repeated practice and mental habit, though there are other mechanisms whereby it can come about. Bourdieu speaks in similar terms when referring to *doxa* – a particularly strong *habitus* or worldview whose perfect convergence with reality is assumed. In Bourdieu's view, this is a result of the order/*doxa* being closely based on the underlying material reality: "in a determinate social formation, the stabler the objective structures and the more fully they reproduce themselves in the agents' dispositions, the greater the extent of the field of doxa, of that which is taken for granted"[146] (for instance, when legitimate power is held by those who hold material power).

Rules are rarely found on their own; more often, they function as part of a larger system of laws, norms, practices and so on. Various understandings of these bodies of rules and laws are found throughout various academic disciplines in a number of guises – Bourdieu's notion of *habitus* is an example of such a rule-system which provides a context for social interaction; the same concept is known by the term 'regime' in international relations, or constitutive rules. I will refer to these rule-systems as 'orders'. The most obvious variety of orders are explicit legal frameworks – the protocols governing the interaction of those who operate within bureaucratic or other corporate entities. Military establishments are especially good examples, being ordered by extensive disciplinary regulations which regulate a host of activities, and reinforce a clear hierarchy of command. 'International regimes' such as the Bretton Woods system are an example of another type of order on the international level – Stephen Krasner defined them in a special issue of *International Organization* as "implicit or explicit principles, norms, rules and decision-making procedures around which

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[146] Bourdieu, 165

actors' expectations converge in a given area of international relations"[147]. One example of a particularly informal order was that of the Cold War *détente* between America and the Soviet Union, whose rules enabled the two superpowers to interact peacefully on a basis of mutual understanding.[148] Though realist IR scholars might downplay the importance of normative standards at the international level, there exists a certain level of 'order' in the international sphere more generally, despite the 'anarchy' which prevails between sovereign states; the notion of an 'international society' especially presupposes at least some degree of shared values, assumptions and so on. Indeed, for any society to function, Kratochwil notes that there are a number of "fundamental" rules which are essential: "norms against lying… norms against the resort to violence… and norms against the breaking of promises"[149] (essentially, rules which compel the actors to carry out their interactions in a manner consistent with the order).

Rules are so pervasive in all walks of life that some – notably Kratochwil – claim that all meaningful behaviour is based on rule-following:

> "human action in general is "rule-governed", which means that – with the exception of pure reflexes or unthinking conditional behaviour – it becomes understandable against the background of norms embodied in conventions and rules which give meaning to an action."[150]

L. L. Fuller makes a similar argument when he discusses the nature of customary law, which he describes as

> *… a language of interaction.* To interact meaningfully men require a social setting in which the moves of the participating players will fall generally within some predictable pattern. To engage in effective social behaviour men need the support of enmeshing interactions that will let them know what their opposite numbers will do,

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[147] Stephen D. Krasner, "Structural Causes and Regime Consequences: Regimes as Intervening Variables." *International Organization* 36.02 (1982): 186

[148] Anthony Lang, Nicholas Rengger, and William Walker. "The Role(s) of Rules: Some Conceptual Clarifications." *International Relations* 20.3 (2006), p.278

[149] Friedrich Kratochwil, *Rules, Norms, and Decisions,* (Cambridge University Press, 1991), p.71

[150] Ibid., p.11

or that will at least enable them to gauge the general scope of the repertory from which responses to their actions will be drawn.[151]

For a rule to have 'meaning' in this sense is to say that it has significance beyond its immediate physical effects; this is determined by the rules which constitute the activity. To take an everyday example, kicking a ball through goalposts has no meaning by itself, beyond its purely physical consequences; only when this action is performed as part of a game of football does it take on a wider significance. This conception of action being meaningful in relation to a system of rules is rather broad, and has been applied to very basic forms of interaction; for instance, Searle argues that "speaking a language is engaging in a (highly complex) rule-governed form of behaviour."[152] The Wittgensteinian concept of a 'language game' is essentially an order within which speech acts can be performed; for example, in his case of the "builder's language," individual words have a symbolic meaning with reference to a set of rules:

> The language is meant to serve for communication between a builder A and an assistant B. A is building with building-stones: there are blocks, pillars, slabs and beams. B has to pass the stones, in the order in which A needs them. For this purpose they use a language consisting of the words "block", "pillar", "slab", "beam". A calls them out; — B brings the stone which he has learnt to bring at such-and-such a call. Conceive this as a complete primitive language.[153]

Here, communication depends on the two individuals' mutual knowledge of a set of rules (stating 'slab' is an instruction for the assistant to pass one, etc.). The implication of this is that all forms of human interaction which operate on the basis of communication are rule-bound to some degree; indeed, that communication is defined as symbolic interaction within the context of a set of rules. This is a rather broad understanding of rules, which as we have seen encompasses international and domestic political institutions, as well as economic transactions, bureaucratic procedures and even everyday conversations. At least on first

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[151] L. L. Fuller, *Principles of Social Order,* (Duke University Press, 1981), 213
[152] John R. Searle, *Speech Acts,* (Cambridge University Press, 1969), p.12
[153] Ludwig Wittgenstein and Gertrude Elizabeth Margaret Anscombe, *Philosophical Investigations* (Oxford: Blackwell, 1958), §2

impressions, war might be another form of interaction which takes place in a framework of rules (vide Quincy Wright's 'legalistic' definition of war mentioned in the introductory chapter), and as we will go on to see, war has had a number of rules and regulations attached to it throughout various periods in history; nevertheless, there is a clear distinction between the settling of disputes by war and through symbolic interaction.

Human social behaviour is therefore conducted within a context of rules which imbue actions with a wider significance. These systems of rules in a sense 'constitute' a certain type of interaction – for instance, the international legal order has the function of "defining the game of international relations",[154] and actions carried out within a certain *habitus* will have different implications and significance. Some thinkers of an especially constructivist bent have argued that all rules have this effect – Nicholas Onuf argues that as our understanding of what is possible and permissible 'constructs' our reality, there is no rule which merely regulates our behaviour without shaping our understanding of our world.[155] I wish to step back from such a sweeping definition – which is not to say that I disagree with it as such. However, this understanding of rules is rather too broad, and though it might be the case that all rules are constitutive, there are undeniably some rules which are more constitutive than others. I refer here to John Searle's application of constitutive (as opposed to regulative) rules, which *intentionally* and *explicitly* allow for new forms of interaction, for example sports and other such contests:

> Constitutive rules do not merely regulate, they create or define new forms of behaviour. The rules of football or chess, for example, do not merely regulate playing football or chess but as it were they create the very possibility of playing such games. The activities of playing football or chess are constituted by acting in accordance with (at least a large subset of) the appropriate rules. Regulative rules regulate a pre-existing activity, an activity whose existence is logically independent of the rules. Constitutive rules constitute (and also regulate) an activity the existence of which is logically dependent on the rules.[156]

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154 Kratochwil, p.251
155 Nicholas Greenwood Onuf, *World of Our Making* (Routledge, 2012), p.51
156 Searle, p.33-34

Whether or not Searle would agree that all rules have the effect of constituting certain activities, I wish to draw attention to the role of constitutive rules in establishing the framework of an abstract contest. The framework of rules which define what is possible in chess – the capabilities of the pieces, the turn-based format of the game, the criteria for victory, and so on – provide an 'abstract space', an artificial, conceptual environment in which the contest can be played out. These rules make it possible to do something novel – to win a game of chess (or a game of football, a court case, and so on) and be recognised as the victor by those who observe the same rule. Such rules are used to structure a wide variety of contests; democratic elections, legal trials, debates, boardroom votes, as well as games like chess – and even violent conflicts such as duels or jousts – are regulated and arbitrated by means of a set of constitutive rules. The crucial aspect of these rules as regards this study is that they enable the creation of a wholly or partially 'abstract space' in which conflict can be played out, and provide for a symbolic contest which is effectively a surrogate for physical competition (Kratochwil speaks in similar terms of the "bargaining zone" which legal procedures provide for conflict resolution).[157] The absence of such a mechanism in war is (along with its use of violence) what defines it as an activity; here I will go into more detail as to the properties of abstract contests to provide a picture of what war is not.

Mechanisms of abstract contests

Perhaps the most crucial quality of abstract contests, even their definitive characteristic, is that they provide a set of criteria which allows for the arbitration of a contest's result: a victory can be achieved either by reference to some objective standard, or is awarded by an arbitrator who interprets the rules as they apply to the contest at hand. Sports and games tend to the former; the number of points scored by the close of play typically decides the victor of a game of football, and a checkmate is easily identified with reference to the rules of chess and the placement of pieces on the board. More complex contests with more ambiguous outcomes due to a wider range of rules and potential outcomes, such as litigation, depend more heavily on the discretion of an arbitrator (a judge, or jury). The important thing to note is that the parties to the conflict agree to abide by the outcome as if it were 'real', despite it having been carried out by means of symbolic

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[157] Kratochwil, p.254

interactions. This is rather academic in the case of some of the most explicitly 'constitutional' conflicts, like sports and games, where the prize is to be recognised as the 'winner' of the contest in question, but it has important consequences in the case of litigation, where a wider quarrel is settled by the outcome of a contest governed by constitutive rules. Determining 'victory' is only one aspect of the rules of arbitration of an abstract contest – especially important is the notion of punishment of rule-breaking, particularly disqualification from the contest or the declaration that the result is invalid as a consequence of rule-breaking. In whatever case, the actors competing within the framework of rules are provided with a relatively explicit set of criteria which they can use to guide their actions; when preparing for the contest, they can take account of a number of 'givens' which form the basis of their strategy.

As I mentioned earlier, all social rules operate by restricting the scope of legitimate action (whether by compelling or prohibiting certain actions). These restrictions are exercised over a number of dimensions; here I speculate as to a number of these (though there are undoubtedly more) which are imposed to an especially high degree in abstract contests. First, such contests impose *temporal* restrictions – which include rules set determining the duration of a contest (for example, the 90 minutes given for a football match) and the particular time at which the contest is to be held (Prime Minister's questions are heard on Wednesdays at noon; trading in stocks is restricted to weekdays). The *'tempo'* of a contest can also be determined by rules – for example, board games follow a turn-based system where each player performs their actions at the same rate as their opponent; legal trials also take this form, with prosecution and defence arguing their cases one after the other, each taking turns to examine and cross-examine witnesses, and so on.

Similarly, *spatial* restrictions limit legitimate contests to a predetermined place or arena. In the most stylised cases, this can take the form of a chequered game board or a manicured football pitch. In legal and political contests, a courthouse or legislative chamber serves as the legitimate space. Even in less ordered proceedings there is a tendency for an 'appropriate' space for action of a certain kind – for instance, in the Classical world the forum or agora were seen as the proper place to make business deals. In most of these cases the space is carefully 'neutral', ostensibly affording no advantage to either side; sport and

game spaces are extremely formalised examples, being laid out to standard dimensions – typically symmetrical, with each side occupying their corresponding half of the field (those which are not, such as cricket and baseball, switch 'sides' at some point half-way through the match). Such scrupulous attention to neutrality is reflected in the metaphor, 'a level playing field' – i.e. one that does not give advantage to either side.

The last dimension – the *technological* – concerns the means by which the contest is prosecuted. The term 'technology' is here quite broad; I use it to mean any kind of tool or medium which is employed in the interaction. Physical contests are perhaps the ones most obviously bound by restrictions in this regard; sports paraphernalia (e.g. balls, bats, helmets and so on), and weapons (nothing but gloved fists in boxing – and no using them to hit below the belt) are all physical technologies which are hedged about with restrictions regarding their use (the number of players permitted in a contest is a related restriction). In more wholly abstract contests, the 'technology' used is symbolic: gaming pieces (chessmen, playing cards) have particular symbolic properties in the context of a game, their physical properties not being particularly significant. And as we have seen, speech acts can function as 'moves' in a language game – one could characterise court cases or parliamentary debates as highly sophisticated language games, where the use of language is restricted to certain forms of address and vocabulary, for instance the conventions of parliamentary language or legal jargon. Again, equality is a theme; particularly regarding physical equipment, each side is typically equipped to the same standard in a rule-bound contest, at least in principle.

What is order for?

What, then, is the purpose of such restrictions? The answer is that rules provide a number of benefits, both for all who engage in a given order, but in particular for privileged groups within it. The benefits of order which I wish to emphasise are the *predictability* it lends to social interaction; its use as a tool to reinforce and exercise *power* within a system; and its function of limiting the scope of conflict, specifically its tendency to curtail *violence.*

Predictability

As we have seen, the social order (along with other forms of ordering) restricts action, both through the physical enforcement of laws and by shaping perceptions of what sort of action is desirable, effective or even possible. The restriction of action in this way has the counterintuitive effect of *enabling* other varieties of action. As Hobbes noted, in time of war where there is no order holding men together -

"there is no place for industry, because the fruit thereof is uncertain, and consequently no culture of the earth, no navigation nor use of the commodities that may be imported by sea, no commodious building, no instruments of moving and removing such things as require much force, no knowledge of the face of the earth; no account of time, no arts, no letters, no society, and, which is worst of all, continual fear and danger of violent death, and the life of man solitary, poor, nasty, brutish, and short."[158]

Order – or the stability and predictability that it provides – enables us to act with an eye to the future, and to take a long-term view of our affairs. Living within a mutually acknowledged social order enables us to engage in meaningful action with other members of that order – to convey our intentions and operate on the assumption of a trust that we will act according to the rules and standards of the order. The physical restrictions I have listed above function to facilitate this state of mind – in an ordered system, we can act in the realm of mental abstractions, which are more efficient than the Hobbesian free-for-all. Whether provided for by a common expectation of trust or underwritten by the power of a political and legal authority, order provides a degree of certainty and confidence in the future – an expectation of stability, and by extension, predictability. This is achieved by reducing the number of factors members of a society need to bear in mind whilst acting: certain things, such as standards of behaviour, can be taken for granted – the cognitive load is lessened, as rules effectively provide information. Kratochwil makes this argument repeatedly in *Rules, Norms and Decisions:*

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[158] Thomas Hobbes, *Leviathan* (London: Everyman, 1947), p.64

"one of the most important functions of rules and norms... is the reduction of complexity of the choice-situations in which the actors find themselves. Rules and norms are therefore guidance devices which are designed to impart "rationality" to situations by delineating the factors that a decision-maker has to take into account."[159]

This is especially the case if the contest is especially tightly regulated, as in the games of poker and chess; in these cases the number of factors under consideration is so limited that it is possible to 'predict' the future course of the contest within a range of probabilities – though perhaps it is more useful to state that rules enable the contestants to predict what is *not* going to happen, rather than predict the future course of the contest. The psychological benefits of operating within an ordered system are considerable: these can extend beyond matters of mere practicality, and contribute to a sense of psychological security regarding the workings of the world and one's place in it (a condition Anthony Giddens has termed 'ontological security')[160]. In addition, abstract contests – not being bound to a moment in time and space *per se* – provide a sense of security in the sense that they are protected from chance and contingency; an earthquake will not unduly influence the verdict of an ongoing court case, nor a shower of rain the result of a tennis match – in these cases the final judgement will be postponed.[161]

Power

Rules have an intimate relationship with power; as Nicholas Onuf observes, "wherever rules have the effect of distributing resources unequally, the result is rule."[162] A concern for egalitarianism is a common theme in regulated contests – as we have seen, a great deal of effort is made in formulating rules to make sure that neither side has an in-built advantage over the other, formalised contests consequently tending to be 'symmetrical' in

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[159] Kratochwil. p.10. See also p.14; p.253-254
[160] Anthony Giddens, *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Cambridge: Polity (1991)
[161] Of course this does not apply in all rule-bound cases – *force majeure* clauses can release parties from their obligations under contingent circumstances. Interestingly, chance events are occasionally used in contests and social interaction, but precisely in order to ensure fairness, as in the coin-toss at the start of a game to decide who goes first – or when a contest is held to be arbitrated by the 'higher order' of supernatural forces, as in the medieval trial by ordeal. For more on the use of chance in social activities, See Vilhelm Aubert, "Chance in Social Affairs" in Dowie, Jack, & Paul Lefrere (eds.). *Risk and Chance: Selected Readings*. (Taylor & Francis Group, 1980): 74-98
[162] Onuf (1989), p.21-22

space, equipment, turns allotted and so on. John Rawls, in *A Theory of Justice,* sees a shared conception of egalitarian justice as a necessary foundation for social order more generally:

"Among individuals with disparate aims and purposes a shared conception of justice establishes the bonds of civic friendship; the general desire for justice limits the pursuit of other ends. One may think of a public conception of justice as constituting the fundamental charter of a well-ordered human association."[163]

However, these superficial shows of egalitarianism in the rules of many (but not all) social orders mask the unequal distribution of resources and power through a given society, and hides the truth that those with material power remain in a privileged position when it comes to engaging in even 'fair' ordered contests. Critical theorists have long argued that the social order tends to privilege the interests of the powerful, by presenting hierarchies as natural parts of social life; though Gramsci's concept of cultural hegemony is perhaps the most well-known treatment of this phenomenon,[164] there is a wider discourse of 'Critical Legal Studies' on the subject as it applies to formal laws.[165] In each case, material power (and in particular its distribution throughout a society) provides the foundations for the higher social order; as Bourdieu notes, it is the "material conditions of existence characteristic of a class condition" – e.g. the distribution of 'hard power' – which produce habitus.[166] This is of course related to the Marxist conception of 'base and superstructure', where the 'base' – the means and relations of production – shapes the cultural, legal and ideological 'superstructure'.[167] The mechanics of this practice are varied: in the first instance, material power is needed to create and enforce statutory rules – as those with power have a say in

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[163] John Rawls, *A Theory of Justice*. (Harvard University Press 1971), 176

[164] Antonio Gramsci, *Selections from the Prison Notebooks,* Quintin Hoare and Geoffrey Nowell Smith (Eds. and Trans.) International Publishers (1971), 195-196, 246-247

[165] For an overview, see Robert Gordon, "Law and Ideology." *Tikkun* 3.1 (1988): 14-18, 83-86

[166] Bourdieu, 72

[167] From Karl Marx, preface to *A Contribution to the Critique of Political Economy* (Moscow: Progress Publishers, 1977): "In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. **The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure**, and to which correspond definite forms of social consciousness... **The changes in the economic foundation lead, sooner or later, to the transformation of the whole, immense, superstructure.**" (My emphasis)

writing the laws, these often 'lock in' a powerful actor's dominant position.[168] The UN Security Council's distribution of permanent seats is perhaps the clearest example of this, reflecting the interests of the victorious coalition of the Second World War, rather than the result of disinterested calculation. Magna Carta is another such case – being primarily a confirmation of the rights of the nobility vis-a-vis the King, forced on the monarch by that materially powerful class. In some societies, domination by a ruling class is explicitly reflected in law – caste-based or slave-owning societies being the most obvious – and in political 'spaces' behavioural norms and customs can be explicitly hierarchical: court ceremony, for instance, requires repeated, ritualised acknowledgement of one's place in the political and social hierarchy (extreme examples being the Chinese kow-tow, or prostration before the Emperor in the Byzantine court). Polite forms of address and etiquette are a more quotidian variation on the theme, with each act reifying the social structure: this dynamic is incorporated even into the grammar of the Japanese and Korean languages, where specific tenses are used depending on one's social position relative to the speaking partner.

Knowledge of the rules is one area in which powerful elements of society have an advantage – when a large number of rules are involved, as there often are in cases of litigation, complexity increases and contests can be prohibitively expensive – unless one has had the benefit of a thorough education in law, or is wealthy enough to employ someone who has, then one is at a disadvantage in a court of law. A similar dynamic can be observed in other processes which are used to 'fairly' distribute resources in society, for instance, the ostensibly egalitarian Chinese imperial examinations: In principle, they were open to students of all classes of society and indeed raised several persons of low birth to high office; however, the odds were in favour of those who had spare time enough to digest classical Confucian texts (and not insignificantly, to undertake the extremely time-intensive process of learning the written language) – in practice, the children of established nobility. In a similar fashion, the 'neutral' space of legitimate contest may shape social order in ways that privilege the already-powerful. Geographic remoteness and expense associated with residence near to

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[168] This manifests in less formal circumstances – the international hierarchy of prestige, or the 'pecking order' of international society, is similarly based on the distribution of material power between states. See E. H. Carr, *The Twenty Years' Crisis,* (London: Macmillan, 1951), p.236, Ralph Hawtrey, *Economic Aspects of Sovereignty,* (London: Longmans, Green, 1952), p. 64-65, Robert Gilpin, *War and Change in World Politics* (Cambridge University Press, 1981), p.9-59.

the seat of power effectively excludes large swathes of society from the political process; the classic case is the court of Versailles, created specifically to escape the influence of the Paris mob (and one might note contemporary restrictions on protesting near the UK Houses of Parliament[169]). In short, lack of physical proximity to the space where politics is 'done' precludes involvement in politics.[170]

So, we have an apparently contradictory mix of principles which underlie social order: apparent egalitarianism, and the reinforcement and continued reification of the social hierarchy. Such a combination ceases to be confusing when we realise that in order to maintain the existence of a settled order, the needs and interests of both the wealthy and the dispossessed need to be met simultaneously. Aside from any other benefits they provide, the egalitarian character of the rules which govern social interaction satisfy the dignity of the less well-off – or at least, they are made oblivious to the uneven distribution of opportunities in society. In addition, these members of society are afforded at least some way to prosecute their interests; in societies where there is no effort made to obscure the master-slave dynamic or provide a vent for popular political expression, the slave revolt or its equivalent are a frequent interruption to 'normal' political life. Similarly, a given social order will need to reflect the interests of those who possess material power; in this case if social order is too restrictive, the materially powerful have a more immediate ability to go outside of the order to settle the issue. In both cases, there is a significant element of reliance on material power in the maintenance of order – this is not the only foundation of order by any means, but it is clearly significant. The role of power is most obvious in imposed orders, where an authority propagates and enforces law, typically by means of the state apparatus.

Violence

One of the most central features of order is the restriction it imposes on a certain type of behaviour – violence. The use of violence is considered 'out of order' in most social

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[169] *Liberty*, "Protest around Parliament" https://www.liberty-human-rights.org.uk/human-rights/free-speech-and-protest/protest/protest-around-parliament <accessed 21/01/16>

[170] The opposite also applies – several offices of state in different cultures derive their titles from lowly duties carried out in the court, such as 'chamberlain' – which originally meant a domestic servant – and the similar Byzantine office of *parakoimomenos*, literally meaning "the one who sleeps beside [the emperor's chamber]"

situations, and restricting the scope for physical harm in general is a common theme in most orders – with most thinkers drawing a distinction between physical conflict and ordered behaviour. In *Rules, Norms and Decisions* Kratochwil frequently refers to rule-bound behaviour as the alternative to violence; adhering to a rule-system is defined as "the process by which people can adjust their differences without resorting immediately to violence"[171] – a sentiment seemingly shared by Hugo Grotius: "The reason… why laws were invented, was to prevent any one from using personal violence, for wherein would peace differ from all the confusion of war if private disputes were terminated by force?"[172] However, the relationship between violence and order is more convoluted than this tendency would suggest. In fact, in the form of statutory laws order ultimately rests on the legal authority's ability to use violence and physical force to compel obedience – to incarcerate lawbreakers, or to administer corporal and capital punishment. The threat of physical harm is similarly implicit in the communal enforcement of customary law – ostracism from society will effectively expose the outcast to a great deal of potential harm. More peripherally, violence is not automatically denied as a means of settling disputes or contesting prizes – it occasionally features in sports, though strictly regulated: in a boxing match, one cannot hit below the belt or gouge the eyes; in past times violence was more often utilised, though similarly regulated – in a duel, joust, or knightly melee, the deadly contest is fought according to mutually acknowledged rules delineating certain spatial, temporal, and technological restrictions.[173] As mentioned earlier, by restricting the means available and providing an objective standard for arbitration (and compelling acceptance of the outcome), constitutive rules limit the scope of the conflict and act to prevent its escalation.

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[171] Kratochwil, p.16

[172] Hugo Grotius, *The Rights of War and Peace,* A.C. Campbell (trans.), (New York: M. Walter Dunne, 1901), p.56

[173] Sometimes, the ordered nature of the contest is stretched very thin indeed. Examples of such behaviour are often found in the absence of strong state authority, particularly in tribal or clan-based societies: the historic Albanian 'institution' of the feud was as close to war as could be imagined, but was still restricted by rules of hospitality – two feuding guests could not violate their host's hospitality by attempting to kill one another, for example (see Margaret Hasluck, "The Albanian Blood Feud" in Paul Bohannan (ed.) *Law and Warfare*, (University of Texas Press 1967) 381-408). In the contested border country of Scotland and England in the time of the 'reivers', armed conflict was a common state of affairs, though subject to some weak regulation by local legal authorities, the "Wardens" (see George MacDonald Fraser, "The Steel Bonnets." (London: Collins Harvill, 1971)

In order to limit the scope of conflict and yet allow some degree of coercion, some rule-systems provide substitute means of inflicting damage which are not overtly oppressive or coercive. Bourdieu has a particularly developed understanding of this function of order: conflict, when enacted within the bounds of the *habitus*, is carried out with what Bourdieu calls 'symbolic violence'. This is a controlled infliction of physical harm from one actor onto another, by means of an ostensibly unobjectionable act. Examples include the anthropological favourite, the *potlach,* whereby status is contested by means of lavish feasts and great bonfires of possessions which may financially ruin the contestants; richer chiefs would be able to humilate rivals by outspending them. Another is the 'white elephant' purportedly given as a gift to those who displeased the King of Siam – the elephant in question being symbolically valuable, but in material terms a liability, requiring a huge outlay in feed and unable to be put to work. In our own culture, the sacking of a public figure is more often transmuted into a face-saving 'resignation' or assignment to another position. Bourdieu notes that by means of such symbolic violence, damage could be inflicted without ending the relationship in question, which might be of use in the future. It is, as he calls it, "gentle violence."[174] The reason for such mealy-mouthed behaviour "is that the only way in which relations of domination can be set up, maintained, or restored, is through strategies which, being expressly oriented towards the establishment of relations of personal dependence, must be disguised and transfigured lest they destroy themselves by revealing their true nature; in a word, they must be euphemized."[175] Aside from providing ways of inflicting harm more 'efficiently' than mere violence, such euphemised activity has other uses. The inherently selfish nature of transactions between individuals, especially if there exists an unequal 'master-slave' power dynamic between them, is a potentially uncomfortable element in social relations: transmuting such self-interested activity into something else (i.e. behaving as if an economic transaction is a mutual gift-giving) provides a basis for a 'friendly' future relationship and saves face for all concerned.[176] In the economic sphere, this can take the form of something as simple as polite conversation before business is mentioned (as is customary in Arab culture, much to the exasperation of capitalist-minded westerners who want to 'get down to business' as soon as possible). Bourdieu mentions the Kayble custom of a communal meal shared with the builder at the end of a building project, and one case where

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[174] Bourdieu, p.192-193
[175] Ibid, p.191
[176] Ibid, p.171-172

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a tradesman, trained in France, scandalised a community by asking for the monetary equivalent of the meal instead of participating.[177] Such efforts seem to be a way of avoiding the mutual objectification which goes with a purely material interaction. If this argument has merit with economic transactions, I believe it is plausible to view customs and rules of war (the code of chivalry and so on) at least in part as an attempt to avoid the discomfort associated with the objectification which goes with treating another human as a material object.[178]

To summarise the main points of the chapter so far: many forms of human behaviour are bound by rules, restrictions on action – and in some cases, thought. These can be explicit, codified regulations; implicit, customary norms; or practices – accumulations of habitual action. Much of the time, human behaviour is governed by a number of rules at once – particularly in social situations, where behaviour is given meaning with reference to the *habitus,* the system of rules in which it is performed; this is especially the case when communication is involved. In this sense, rules 'constitute' various forms of activity – acting in accordance with the rules of language constitutes speech; acting in accordance with a political constitution (naturally) constitutes politics. One particular area in which rules constitute a new form of activity is in the realm of abstract contests. Here, a prize is contested or a dispute resolved through a rule-bound process, wherein contestants interact according to a set procedure, by means of symbolic actions; the contest is decided by the outcome of that process in line with a set of rules of arbitration, with the result taken as definitive by all involved.

The rules which bind these contests can prohibit particular actions (e.g. footballers cannot use their hands to touch the ball), or compel them (only golf clubs may be used to play golf). They can take the form of explicit, codified rules, or implicit, customary ones. Such rules can be followed either in an instrumental, calculating way (according to a *logic of consequences*), or they can be followed due to affective motivations – a feeling of what is right or wrong in a certain situation (a *logic of appropriateness*). Rules can be enforced in a

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[177] Bourdieu, p.173
[178] It is well-known that human beings have a reluctance to kill one another which needs to be overcome by training and conscious effort – perhaps the most prominent study in this area being Dave Grossman, *On Killing* (Black Bay Books, 1996)

number of ways; an authority or hegemon can underwrite the rule-system and punish those who break it, or the parties to the rules can enforce them with reciprocity – either through gaining mutual benefit or by tit-for-tat reprisals against rulebreakers. As regards the adjudication of a contest, this can be made in a number of ways; either the rules themselves are so specific that the outcome is easy to determine (as in a game of chess); otherwise, a judge, umpire, jury or some other adjudicator interprets the result and declares the winner (for example, determining a victory on points in a boxing match).

Adherence to a rules brings with it a number of benefits: communication, cooperation and other forms of productive activity are enabled; actors are provided with some degree of information, their choice of action being limited to a relatively small range of behaviour; furthermore, physical harm is minimised and the scope of the argument – its tendency to escalate – is curtailed. Rules also serve other purposes, particularly with regard to the exercise of power: those who had a share in the making of the rules (generally those with material power) tend to be privileged by them. Restrictions on action are not in the interests of any particular group – many might even resent such restrictions – but it is generally in the interests of all of society's members that all others are restrained in their ability to prosecute their interests. Actors can follow an order in two main ways – either as an emotionally uninterested, 'instrumental' process of cost/benefit calculation, or as a result of having internalised a system of rules which are followed according to a sense of what is an 'appropriate' course of action for a given situation; when specially strongly internalised, the rule-system can 'constitute' reality.

Not only am I arguing that that war is defined in part by the fact that it is a form of conflict which lacks the character of an 'abstract contest' – I also wish to determine whether it is more weakly bound by other rules as well. If we are to judge that war is less strongly bound by rules than other forms of conflict, a set of criteria which can be used to judge the strength of a given rule are needed. What makes for a strong rule has been discussed elsewhere, particularly with regard to international orders. Not all laws are equal in effect; as mentioned earlier, explicit laws can vary in their 'hardness' in respect to how rigidly and comprehensively they regulate behaviour in the dimensions of obligation, delegation and precision; and while these criteria are suitable for judging 'explicit' laws, implicit rules and

norms can bind human behaviour very strongly indeed without need for precision. A constructivist approach to implicit rules would categorise as 'strong' those rules which have been internalised to the point where they 'constitute' reality for those who operate within the order – that is to say, they are unable to conceive of actions beyond the conventional (Bourdieu's concept of *doxa* is analogous to this.)

The laws of war are also a subset of *international* law, which is an area which presents particular challenges regarding the effectiveness of rules. There are those in the discipline of International Relations – mainly of the 'realist' persuasion – who are largely dismissive of the possibility of international law effectively regulating the behaviour of state in any meaningful way; Eric Posner and Jack Goldsmith are among the most critical of the notion of international law having any force beyond its use as a tool of state power,[179] and even those who are more open to the possibility of international law having some force of its own, such as Lang, Rengger and Walker, admit that there are particular challenges which the international environment poses: there are three aspects to rules which present "special problems at the global level: legitimacy, enforcement and technological change."[180] Unless they are being enforced from above, or have some obvious benefit to them, rules are followed because they are considered legitimate. The legitimacy of rules – the recognition of their being – has been posited to come from a number of sources. There are some like Thomas Franck who believe that the legitimacy of rules (in this case, those which operate at the level of international anarchy) result more from the ways in which they have been made rather than their content[181] – "when rules are clear, grounded in accepted patterns, coherent and adhered to, they have the sort of legitimacy that makes them workable."[182] Others, such as Allen Buchanan, maintain that for a rule to be legitimate, the content of the rules must be considered just.[183] Whatever case holds, a rule which is considered illegitimate is not likely to be one that is obeyed in the absence of compulsion. This last point is problematic at the level

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[179] Jack L. Goldsmith and Eric A. Posner, *The Limits of International Law*, (Oxford University Press, 2005)
[180] Anthony Lang, Nicholas Rengger, and William Walker. "The Role(s) of Rules: Some Conceptual Clarifications." *International Relations* 20.3 (2006), p.275
[181] Thomas Franck, *The Power of Legitimacy Among Nations* (Oxford: Oxford University Press, 1990), p. 25.
[182] Lang, Rengger and Walker, p.284
[183] Allen Buchanan, *Justice, Legitimacy, and Self-Determination: Moral Foundations for International Law,* (Oxford: Oxford University Press, 2004)

of sovereign states, where there is no higher authority to enforce the rules as there exists at the domestic level. Therefore, argue the three, at the level of international anarchy the impact of rules is largely dependent on the agents subject to them and their interpretation of the rules[184] – hardly a guarantee they will be obeyed in a consistent manner. Finally, technological change is a particular problem with international law, especially of the explicit type; as the material and physical environment changes, laws must adapt to 'keep up' with the change. Lang et al focus on the aspect of environmental protection, which requires a great deal of cooperation over very large areas – but as we shall see, war's exposure to vast and rapid technological changes are a particular source of problems when it comes to enforcing rules on its conduct.

Ultimately, a rule (or a rule-system) is strong when it consistently restricts and regulates human behaviour; the type of rules which are necessary for the prosecution of conflict in an abstract space, through symbolic rather than material means, have to be strongly binding of human behaviour. Other 'regulative' rules can be considered particularly strong if they regulate behaviour *extensively* – a rule compelling certain actions (for example, 'chess must be played on a 8x8 chequered board') regulates behaviour in a more all-encompassing way than one which merely forbids them ('trading cannot take place on a Sunday'). Other cases are more ambiguous: if a rule is implicit and obeyed according to a 'logic of appropriateness', it might be stronger than an explicit rule (which are generally written to prohibit pre-existing behaviours) followed in a conscious, instrumental fashion and without any internal motivation; on the other hand, rules which are enforced by an authority or by society at large are likely to have more force behind them than ones which are agreed between parties to a conflict with no other guarantee than their cooperation. Perhaps the easiest way to identify a strong rule is by the extent of the benefits it provides: the more effective the rule, the more we can expect it to provide an increased sense of predictability (or at least regularity) with regards to social action; rules enable actors to take certain things for granted by restricting the number of relevant inputs and variables they need to consider – as Kratochwil says, they reduce the "complexity of the choice-situation in which the actors find themselves."[185] Effective rules will also restrict the scope of physical harm; this can be

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[184] Lang, Rengger and Walker, p.291
[185] Kratochwil, p.10

achieved by limiting the scope of the conflict, preventing escalation to more and more destructive stages, or by prohibiting the use of violence (or permitting it only under tightly regulated circumstances). Perhaps more controversially, strong rules will serve to maintain the social and political status quo. My thesis is that war lacks 'constitutive' rules which would otherwise give it the character of a symbolic contest, and accordingly those who engage in war lack the benefits which these rules would provide (as well as being freed from the restrictions which they would impose): there is no clear, predetermined process to victory, and war's course is doubly uncertain in that chance events can affect the outcome of the contest, and that it is 'uninsulated' from a myriad of potential influences from the physical world. Lastly, war exposes its participants to higher levels of physical harm than would be the case under rules. War does not necessarily lack any rules, but these are not inherent to it, being self-imposed and unique in each case, rather than applying to all wars at all times; furthermore, the prospects for strongly binding and comprehensive laws in war are not particularly promising.

Nevertheless, 'laws of war' do exist, spanning the whole range of explicit and implicit rules as we have examined them here; these are the focus of my next chapter. When considering the regulation of war, I will pay particular attention to rules which appear to create an abstract framework for the conduct of warfare, though I will also examine other forms of law in war and remark on their character – whether they are explicit or implicit; how wide-ranging their restrictions on action; how they are enforced; what functions they serve, and what benefits they provide – and particularly how they are shaped by and serve specific material interests. After clarifying how the existence of such rules does not invalidate my thesis, I will be able to move on to applying my theory of war to the practice of warfare.

THE RULES OF RULELESS CONFLICT – THE LAWS AND CUSTOMS OF WAR

Now that I have defined what I understand 'rules' to be, and how they shape and structure human activities, it becomes necessary to address what must be an obvious challenge to my thesis – the undeniable existence of laws, rules and customs which govern war. In the following chapter I will seek to demonstrate that I will analyse the laws of war in three periods – in Ancient Greece, the Middle Ages, and the modern era (following the birth of the modern laws of war, as made by the Hague and Geneva conventions). Each area serves to illustrate the properties of rules as I have outlined them in the last chapter, and indicates the strength (or lack thereof) of the rules which bind warfare; moreover, I have other reasons for looking at these areas in particular: the first two cases, of ancient Greek and Medieval laws of war, I have chosen because of their apparent attempts to render war into exactly the type of abstract contest which I claim it is not; the modern laws of war, which attempted to ameliorate war's more terrible characteristics in an age where it nonetheless approached levels of barbarity previously unthought of, I have chosen to examine in order to demonstrate the difficulties which technological change in particular poses to the regulation of warfare and the inherent impossibility of controlling a fundamentally 'open' activity. I will also examine less formal rules which govern the behaviour of participants in war, particularly the concept of 'strategic culture'. I wish to examine the strength and the nature of these various laws of war according to the criteria I have laid out previously: whether the laws prohibit a few behaviours, or compel many; whether they are obeyed through a logic of consequences or appropriateness; whether they are explicit or implicit; in what manner (if any) they are enforced; and, crucially, whether they act as constitutive rules which structure the contest as an abstract interaction. I believe that they do not, despite occasionally strong appearances of doing so. The lack of constitutive rules does not preclude the possibility of imposing other restrictions on the conduct of war – some of which are common to most wars, due to interests shared by humans in all times and places. Indeed, it could be argued that the uniquely stressful nature of otherwise-ruleless war provides a stimulus for the development of rules and customs which channel its destructive energies in a controlled and psychologically acceptable fashion. Nevertheless, war remains an unpromising environment for attempts at lasting and extensive regulation, for reasons which will become clear.

The Greek Laws of War

You know as well as we do that right, as the world goes, is only in question between equals in power, while the strong do what they can and the weak suffer what they must.[186]

Ancient Greece is our first area of study of the laws of war, and from Thucydides' observation above, one might suspect it to be an unpromising one. Indeed, there is some debate over the nature and extent of the laws of war in classical times, and on how firmly they governed Greek military behaviour. It is generally accepted that the rules of Greek warfare rested on twin foundations – shared Greek culture, and the material interests of the hoplite class, who favoured a particularly stylised form of battle and a common campaigning pattern, which had some semblance of a constitutional process. After looking at the historical debate over the Greek laws of war and in particular the institution of the hoplite phalanx battle, we can come to an assessment of the nature of the laws of war as they existed in classical Greece: these were generally weak; not especially binding, or enforced by a higher authority; founded on a shared culture and certain material interests; and despite some signs of aspiration to a 'constitutional' character, they were only ever regulative in nature. Despite the widespread conventions of Greek warfare, when there existed the means to fight in a different way, Greek states would; with the emergence of new forms of warfare in the Peloponnesian War and afterwards, the Greek laws of war began to decline in effectiveness and become obsolete entirely.

Josiah Ober's chapter on the Greek laws of war contains a list of rules which he considers "to sum up the most important of the unwritten conventions governing interstate conflict."[187] It has been subject to some discussion, being a central part of the debate over the Greek laws of law – and as such is worth repeating in full:

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[186] Thucydides, *The Peloponnesian War*, Richard Crawley (trans.) (London: J. M. Dent, 1910), 5.89
[187] Josiah Ober, "Classical Greek Times" in Howard, Andreopoulos and Shulman (eds.), *The Laws of War: Constraints on Warfare in the Western World,* (New Haven: Yale University Press, 1994), p.13

1. *The state of war should be officially declared before commencing hostilities against an appropriate foe; sworn treaties and alliances should be regarded as binding.*

2. *Hostilities are sometimes inappropriate: sacred truces, especially those declared for the celebration of the Olympic games, should be observed.*

3. *Hostilities against certain persons and in certain places are inappropriate: the inviolability of sacred places and persons under protection of the gods, especially heralds and suppliants, should be respected.*

4. *Erecting a battlefield trophy indicates victory; such trophies should be respected.*

5. *After a battle, it is right to return enemy dead when asked; to request the return of one's dead is tantamount to admitting defeat.*

6. *A battle is properly prefaced by a ritual challenge and acceptance of the challenge.*

7. *Prisoners of war should be offered for ransom rather than being summarily executed or mutilated.*

8. *Punishment of surrendered opponents should be restrained.*

9. *War is an affair of warriors, thus noncombatants should not be primary targets of attack.*

10. *Battles should be fought during the usual (summer) campaigning season.*

11. *Use of nonhoplite arms should be limited.*

12. *Pursuit of defeated and retreating opponents should be limited in duration.*[188]

As mentioned, there is some disagreement over Ober's list. Adrian Lanni takes objection to the inclusion of 'humanitarian' rules such as the sparing of noncombatants and restraint in pursuing those fleeing battles. The Greek laws of war, such as they were, were not so much focused on humanitarian concerns but rather on matters of religion – and Greek religion was not so concerned with ethical standards, but rather it concerned places, objects of worship and observances.[189] Going through Ober's list, Peter Krentz similarly takes issue with the non-religious ones. Wars were not formally declared in Greece as they were in

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[188] Ober, p.14

[189] Adriaan Lanni, "The Laws of War in Ancient Greece", *Law and History Review,* Fall 2008, Vol. 26, No. 3, p.469-470

Rome, though there would be a pattern of the aggrieved side seeking reparations before finally resorting to conflict.[190] Noncombatants were not immune from fighting from any ethical considerations, but rather because in time of war they fled to walled cities or to the mountains – when cities were successfully invaded their fate was generally that of slavery or death.[191] Summer campaigns were similarly fought out of military necessity – smallholding hoplites needed to return home to gather the harvest, though wealthier states could pay their soldiers and conduct year-round fighting, as was seen in the Peloponnesian war (which led to an increased incidence of sieges being able to be carried on to a successful conclusion, which Lanni believes partly explains the decline of the Greek laws of war in the Peloponnesian War).[192] Pursuit of defeated enemies was similarly not prohibited as such – the risk of exposing soldiers to a counterattack when out of formation was reason enough not to do so, but there were occasions when efforts were made to kill routed enemies, such as an incident in the Peloponnesian war where the Athenians caught fleeing Corinthian soldiers trapped in a field surrounded by a ditch, stoning them to death.[193] Ransoming soldiers rather than killing them was equally decided on the merits of the particular case and was not a norm as such, but there is plenty of other evidence to suggest that prisoners were killed on occasion.[194]

One of the first things which can be noted about these rules is their shared religious aspect, a point agreed by both 'schools' of the Greek laws of war. Temples and sanctuaries were inviolate and when suspicion fell, the accused state was often quick to clarify and defend its actions – when Athens occupied Delium in their fight against the Boethians, they made a point of being scrupulously careful regarding their treatment of the temple – but had to excuse their use of the sacred water as military necessity.[195] Priests and other religious functionaries were similarly considered off-limits, and war was meant to be avoided when religious festivals were in progress (this rule was occasionally broken, most famously by Leonidas, who marched to Thermopylae during the festival of the Carneia). Ambassadors and heralds too were respected, not only because of their usefulness but also because heralds were

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[190] Peter Krentz, "Fighting by the Rules: The Invention of the Hoplite Agôn" *Hesperia*, Vol. 71, No. 1, (Jan. – Mar., 2002), p.25-27
[191] Ibid., p.27
[192] Lanni, p.486-487
[193] Thucydides, 1.106
[194] Krentz, p.31-32
[195] Thucydides, 4.98

considered the messengers of gods as well as men.[196] The return of bodies after a battle was another rule with a religious basis – funeral rites would be impossible otherwise – and seems to have been one which was followed particularly assiduously.[197] One explicit law based on broadly religious principles was that sworn by the members of the Amphictyonic Council (comprising the majority of Greek city-states), formed to protect the oracle's sanctuary at Delphi: according to the oath, members were "not to lay waste to any city belonging to the Amphictyonic Council, nor keep it from using any spring, neither in war, nor in peace; but if anyone violate these oaths, to take the field against him and lay waste to his cities..." It was not generally effective.[198]

The strength of the Greek laws of war is certainly up for debate. Concerning whether the rules were explicit or implicit, Ober is careful to note that none of the rules he mentions could be considered formal – he describes them as ranging from "what might be called neoformal rules to practices conditioned largely by practicality."[199] Indeed, there is a general agreement that the Greek laws of war were customary in nature (i.e. they were *implicit* rules); Lanni notes that the Greeks used the same term for written and unwritten laws – *nomos* – but suspects that the latter may have been more effective, having the weight of history and accumulated practice behind them.[200] Though the revisionists focus more narrowly on shared religious customs, the laws were also effective because of their being enmeshed in common Greek cultural values. In terms of the scope of their restriction of behaviour, the Greek laws of war were not enormously restrictive in terms of time or space – only certain times and places are inappropriate, but there is no 'set' location for the battle beyond ground which favoured both sides (which, as their armies were similarly constituted, was easily 'agreed' upon.)

There is also the factor of enforcement to consider, which as in many cases of the regulation of war was quite weak. The laws of war, as they were customary in nature, were not enforced as such, but retaliation was a potential source of compulsion – after the

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[196] Lanni, p.478
[197] Krentz, p.32-33
[198] Lanni, p.471
[199] Ober, p.14
[200] Lanni, p.472

Athenians 'desecrated' the temple at Delium, the Boeotians denied the burial of their dead following a later battle.[201] The retaliatory principle is in evidence in an excerpt from Thucydides:

> In 431 B.C.E. a group of Thebans attacked Plataea. In doing so, they contravened a peace treaty and violated the prohibition against attacking a state during a religious festival. The Plataeans defeated the invaders and took over one hundred prisoners, whom they later killed. A few years later, the Thebans and their Spartan allies attacked Plataea. After a long siege, the Plataeans surrendered on terms brought by a herald: "if they were willing, voluntarily, to turn their city over to the Spartans and accept them as judges, they would punish only the guilty, but no one contrary to justice." At the trial before the Spartan judges, the Plataeans argue that their assassination of the Theban prisoners was justified as a reprisal: "The Thebans have committed many other crimes against us, and you yourselves know of their latest crime, the reason we are now put to this ordeal. You see, we took action against them when they attacked our city during a truce, and, besides that, during a holy month. We did so properly, in accordance with a universal law that makes self-defense against an aggressor a divinely-sanctioned act; and now, it would not be seemly if we suffer because of the Thebans.[202]

Though the Spartans took on the duty of judges of Theban misconduct in this case, the Greek laws of war essentially lacked a higher authority to enforce them, depending on mutual enforcement of the rules via the mechanism of tit-for-tat reprisals, though as we see from the Theban argument above, this action could involve breaking the rules themselves. Otherwise the rules of war were based on a common cultural understanding: "these states shared a common language, worshipped the same gods, relied on the same Homeric epics as a guide to moral values, and shared cultural traditions at periodic panhellenic festivals"[203] – Lanni argues that within this shared cultural context, considerations of honour and status provided a kind of substitute enforcement mechanism.[204] As a consequence, the Greek rules of war only applied to inter-Greek warfare; in wars with the Persians, heralds were executed and at the

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[201] Thucydides 4.98
[202] Lanni, p.473, citing Thucydides 3.52, 3.56
[203] Lanni, p.470-471
[204] Ibid., p.470

battles of Marathon and Plataea fleeing or otherwise beaten Persian soldiers were slaughtered without mercy.[205] The belief that wars between Greeks should not approach the severity of wars against barbarians can be found in Plato's *Republic,* but the way the statement is made belies the fact of the matter*:*

> "Therefore, as Greeks, they won't ravage Greece or burn houses, nor will they agree that in any city all are their enemies—men, women, and children—but that there are always a few enemies who are to blame for the differences... "I for one," he said, "agree that our citizens must behave this way toward their opponents [i.e. other Greeks]; and toward the barbarians they must behave as the Greeks *do now toward one another*."[206]

In Plato's day, we may suppose, the laws of war were not observed perfectly. That the laws of war are have something of an aspirational quality is reflected in other mentions of them in historical texts – Krentz notes that Polybius' claims that the ancient Greeks fought 'battles by agreement' and shunned the use of ranged weapons is not substantiated in texts from the period he describes.[207] This distance between theory and reality is a factor which is often found in other laws of war, as we shall see.

Earlier, I mentioned that the ancient Greek rules of war seemed to serve as constitutive laws and made war approach the nature of an abstract contest. Without doubt the most significant 'constitutive' aspect of the Greek laws of war was the type of battle used to fight wars between Greek states. Ancient Greek warfare was predominantly based around the phalanx battle – two armies of hoplite spearmen, in heavy armour and round shields, pushing against each other on a wide open plain. Skirmishers and cavalry would be involved on the outskirts of the battlefield, but hoplites would play the starring role part in a battle which would take the form of a quick and decisive clash of phalanxes. The mutually 'agreed' pattern of battle and the customs stipulating that war had to be declared, battles ritually prefaced by a challenge and acceptance of that challenge, and that there were accepted ways

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[205] Ober, p.18
[206] Allan Bloom, *The Republic of Plato*, 2nd Edition, Basic Books (1991), p.151 (471 a,b) – my emphasis.
[207] Krentz, p.27-28

of declaring victory or admitting defeat (erecting a trophy, asking for permission to recover one's dead) implies that war and the hoplite battle were a form of constitutive conflict. Victor Davis Hanson has advanced a particularly infamous thesis that the Greek (and more broadly, the Western) "way of war" was based on the desire to stage "fair" fights such as these, fought between broadly symmetrical armies; these battles facilitated a quick decision and the avoidance of a long drawn-out conflicts.[208] Whatever the merits of Hanson's theory, to characterise the phalanx battle as an abstract contest played out as a series of symbolic interactions is wide of the mark. Many of the rules of the phalanx battle arise from the practical necessities of a form of combat, requirements which were amenable to both sides due to the fact that their armies were similarly equipped and constituted. The stipulations regarding declaration of victory were symbolic not so much in the sense that they gained victory in the context of a rule-system, but that they confirmed the obvious fact that one side had physically beaten the other. Erecting a trophy was not necessary to win, but the losing side was hardly in a position to do so – and though there might be reputational benefits of 'winning' a battle in the sense that one was able to erect a trophy, the true measure of victory rests in the destruction meted out to the enemy and to one's own troops, as Greek generals like Pyrrhus could attest.

The phalanx-centric battle had its roots in the material composition of the armies which fought it, in which hoplites were the key arm; these soldiers formed a class with its own particular interests, and these were reflected in the Greek laws of war. A hoplite was in the most general sense a free adult male who could afford the appropriate armour and weapons, able to go on campaign in the summer. "The typical hoplite", writes Ober, "was an independent subsistence farmer: a man who owned enough land – perhaps ten or fifteen acres – to support himself and his big family without the need for family members to work for wages on a regular basis."[209] However, economic circumstances were not overly deterministic and "we may suppose in the period 700 to 450B.C. hoplites typically represented roughly 20 to 40 percent of the free adult males of a Greek polis" – a substantial minority. Those poorer would serve as light infantry and the most wealthy would serve as cavalry; but the hoplite-centered battle gave the middle stratum of society a privileged

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[208] Victor Davis Hanson, *The Western Way of War,* (Oxford University Press, 1989)
[209] Ober, p.12-26

position in the life of the *polis*, and one which was not directly tied to economic factors.[210] It is instructive to note that a breakdown in the Greek laws of war took place in the Peloponnesian War, where this material and social foundation to the laws had been eroded. The roots of this degeneration were to be found partly in conscious strategy, and also in deeper social trends; the war was marked, claims Ober, by "the conscious employment of systematic pressure on the enemy's social system"[211] – citing Athenian attempts to foment a helot revolt in Sparta and a similar Spartan attempt to win away Athens' slave population,[212] though perhaps more important was the influence of Athens' atypical demography, wealth and democratic political system. Athenian society was less hierarchical than the other *poleis*, with adult male citizens technically equal in the court and assembly; hoplites had less of an identity than in other cities, and instead the key political force was formed by the rowers in the Athenian triremes, whose consciousness of their pivotal role in the wars against the Persians had, as Aristotle first noted, led them to take a more active role in Athenian politics.[213] The Athenians' empire provided Athens with a large strategic reserve and required a primarily naval military structure. At the outset of the Peloponnesian war, Pericles identified a strategy for the Athenians to follow, which radically departed from the traditional hoplite-focused strategy: Athens would refuse to venture out and fight the Spartan armies in the usual manner, instead hiding behind their newly reconstructed city walls while their navy operated elsewhere, attempting to bottle Sparta up in the Peloponnese by forcing the submission of the strategically important city-state of Megara.[214] The Athenians would lose in a traditional fight against Sparta, but had the option of fighting in another way entirely. As Ober notes:

> … so by the mid-fifth century BC the Athenians could afford to break the rules of war. Their unique social system meant that the Athenians need not fear social instability as a result of this breach of convention, and their unique political system meant that men with a primary stake in maintaining the rules were no longer in charge.[215]

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[210] Ibid., p.16
[211] Ibid., p.18
[212] Ibid., p.18
[213] Aristotle, *Politics*, Benjamin Jowett (trans.), (Dover Publications Inc., 2000), Book 2, Part 7
[214] See Thucydides, 2.66.7
[215] Ober, p.20-21

This is not, of course, how events played out, thanks to the plague which struck Athens and the Spartan adaptation to the changing situation. As demographic change occurred through war and particularly the plague, the laws of war began to break down and with them the social order – "without the mediating factor of the political and social dominance of the hoplite class, the underlying conflicts between rich and poor escalated more easily into bloody internecine conflicts"[216] – leading to instances of civil war and revolution such as the events on Corcyra in 427 B.C., described in gory detail by Thucydides,[217] whose history is one of the clearest examples of the ultimately uncontrollable course of conflict. Thucydides' account of the events in Corcyra is particularly interesting in the way he describes the breakdown of law and order; revolution and civic strife in one place spread "a general deterioration of character throughout the Greek world";[218] breakdown in order was contagious, and material circumstances grew straightened, which led to a further corrosion in mores:

> In times of peace and prosperity cities and individuals alike follow higher standards, because they are not forced into a situation where they have to do what they do not want to do. But war is a stern teacher; in depriving them of the power of easily satisfying their daily wants, it brings most people's minds down to the level of their actual circumstances.[219]

The dependency of the laws of war upon a material balance of power is even more clearly shown by political developments after the war, as other powers unconstrained by the traditional Greek modes of war arose: Philip II of Macedon had at his command torsion-powered catapults which were able to destroy previously redoubtable city walls, and individual city states were unable to afford the cash for this new technology – nor for the large mercenary armies of the Hellenic period.[220] These developments resulted in the eclipse not only of the Greek laws of war but of the Greek city-state as a viable political unit.

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[216] Ober, p.23-24
[217] Thucydides, 3.69-85
[218] Ibid., 3:83
[219] Ibid.
[220] Ober, p.25

The Laws of War in the Middle Ages

The laws of war in the Middle Ages bear a number of striking resemblances to those in classical Greece, from the attention given to a military 'caste' to similar protections afforded to religious groups and individuals. Naturally, the intellectual basis for the medieval laws of war was much different to that of the Greeks; but despite the influence of Christianity there remains a large overlap between the two. Here I will primarily draw upon the research of Geoffrey Parker, Robert Stacey (in particular their chapters in Howard, Andreopoulos and Shulman's collection on the laws of war) and Maurice Keen.

Geoffrey Parker notes five sources of the laws of war from the Middle Ages onwards: these included texts such as the Bible and written Roman and canon law, along with the writings of Augustine and Aquinas; the doctrines of the Peace and the Truce of God; the legal codes of the armies themselves; precedent of what had comprised acceptable behaviour in war previously; and finally, areas of mutual self-interest which established grounds for cooperation.[221] The problem of Christians fighting wars was partly resolved by the just war tradition and an appeal to the earlier Roman 'law of nations', *jus genitum*, was very much intertwined with the laws of war.[222] The Church and Christian teaching concerned itself mostly with considerations of *jus ad bellum*, the proper grounds for waging war, but did occasionally try to ameliorate the conduct of war itself. This most famously took the form of the aforementioned initiatives of the Peace and the Truce of God. The Peace of God attempted to make the clergy, women, children, the elderly, peasants, the poor – as well as church lands and property – inviolate during wars between Christians. The object of the Truce of God was to restrict fighting between Christians from Monday morning to Thursday evening, and not even that during Lent and Advent. Both are remembered as a slightly ridiculous attempt to square the circle of Christian violence, along with the attempt to ban the use of crossbows (indeed all types of bow). All were notoriously unsuccessful, but reflected an inclination to make war between Christians something different from the kind of brutal conduct meted out to the infidel. Similarities with the Greek laws of war can be noted,

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[221] Geoffrey Parker, "Early Modern Europe" in Howard, Andreopoulos and Shulman (eds.), p.41-42
[222] Geoffrey Best, *War and Law Since 1945*, (Oxford University Press, 1994), p.4

particularly with regards to the religious and cultural basis of the laws of war – and the differential treatment meted out to members of other groups who did not share this common foundation.

According to Maurice Keen, there were a number of distinct types of war in the Middle Ages. The first was *guerre mortelle* (or *bellum Romanum,* as the Romans had been assumed to wage war without restraint – as they often did)*,* in which the fight was unrestrained and where prisoners could be massacred. No ransoms were to be expected. The commonly acknowledged sign for a belligerent to advertise his intention to fight a *guerre mortelle* was a red banner.[223] *Guerre mortelle* could therefore be understood as a more 'absolute' form of warfare; appropriate only in cases of war against the infidel or against rebels. The common theme of restraining war against fellow Christians is one reason why it was not used so often, but there are perhaps other reasons it was not resorted to in the first instance. An interesting instance of the qualified use of *guerre mortelle* was that of Prince Edward (later Edward I) against Simon de Montfort at the Battle of Evesham. Whilst de Montfort was killed in the battle (his body being spectacularly mutilated afterwards), a number of his fellow rebels who were held out against a siege at Kenilworth Castle were eventually spared and allowed to ransom back their lands, originally held to be forfeit; the conflict was too expensive to continue on the lines of *bellum Romanum*. Stacey notes:

> The consequences of the battle of Evesham were thus, in the end, something less than they might have been. Under the laws of war, however, there is no doubt that the king's initial intentions were just under the conventions of guerre mortelle. Politically, however they were inadvisable because they would have made a lasting peace impossible. Such savagery made a mockery of the international brotherhood of knighthood; and insofar as guerre mortelle could admit of no lasting resolution short of the unconditional elimination of one force or the other, it was also a deeply unsatisfactory way for an individual soldier to pursue the business of war.[224]

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[223] Maurice Keen, *The Laws of War in the Late Middle Ages*, (Routledge & Kegan Paul, 1965), p.104-106

[224] Robert Stacey "The Age of Chivalry", in Howard, Andreopoulos and Shulman (eds.), p.34

It is important to note that the loss of a battle is not taken as the 'end' of the war; the conditions of *bellum Romanum* do not form a set of constitutive rules, functioning more as a signal of intent. A more 'satisfactory' form of warfare from a financial point of view was that of *bellum hostile,* or open war between Christian sovereigns; here the prince's banner was flown as a formal declaration of war, and ransoms and plunder shared out. To be legally entitled to a share of plunder a soldier had to fight under the banner of a prince[225] – this was no doubt intended to restrict participation in war, but in reality the letter of the law could be stretched to ridiculous extremes, such as the case of John Verney, an English freelancer who claimed as his patron a lunatic who had proclaimed himself the rightful king of France.[226] Technically, under the church-inspired rules, exploitation of the common people was forbidden in *bellum hostile*, but as soldiers depended on plunder for their livelihoods, arguments that the local people were aiding the enemy were frequently used to justify extortion and mistreatment. There were certain groups who were more effectively immune, striking in their similarity to the ancient Greeks – the clergy (if not their lands) were usually spared, along with pilgrims (contingent on proof of their *bona fides).* Heralds enjoyed the most comprehensive protection, enjoying freedom of movement and immunity from arrest – perhaps thanks to their usefulness, along with their being bound to stand apart from the fighting itself. The duties of a herald included:

> bringing the summonses of captains to towns before a siege, and the challenges of princes to pitched battle; obtaining safe-conducts for ambassadors, and for soldiers to parley or joust with the enemy; and helping to negotiate ransoms for prisoners with their relatives at home.[227]

Some of these duties hint at an attempt to render war into a constitutional process – quite often there were formal offers of battle on particular sites at particular times, the Battle of Crécy having been preceded by the French King's offer of a number of such options to King Edward (who excused himself by claiming that he had not been able to cross the

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[225] Keen, p.63-81
[226] Ibid., p.85
[227] Ibid., p.196

Seine).[228] Heralds also had a role to play at the end of battles, ostensibly as adjudicators of the result:

> When the king of England found himself master of the field of battle, and that the French, excepting such as had been killed or taken, were flying in all directions, he made the circuit of the plain, attended by his princes; and while his men were employed in stripping the dead, he called to him the French herald, Montjoye, king-at-arms, and with him many other French and English heralds... He then asked Montjoye, to whom the victory belonged; to him, or to the king of France? Montjoye replied, that the victory was his, and could not be claimed by the king of France. The king then asked the name of the castle he saw near him: he was told it was called Agincourt. "Well then," added he, "since all battles should bare [sic] the names of the fortress nearest to the spot where they were fought, this battle shall, from henceforth, bare the ever durable name of Agincourt."[229]

Monstrelet's account belies the redundancy of this particular duty; the fact that the French had already fled, and Henry V's men were busy looting the bodies of their fallen enemies, renders Montjoye's verdict something of a foregone conclusion. The effective refusal of the offer of battle by King Edward again indicates the weakness and formal nature of the ritual challenge; such offers (and similar ones, like challenges to single combat between kings) were typically declined or ignored.[230]

The heralds, and the chivalric laws of which they were the arbiters, were clearly instrumental to the 'war economy' of ransom, and this factor perhaps best accounts for their privileged position. Sieges, Stacey's third sort of war, required their services perhaps more than most. When invested, a town was given the opportunity to surrender unharmed; if it refused, then it was guilty of treason to its new lord and was liable to be plundered and its people massacred. Of course, admitting the enemy left the town open to reprisal from the erstwhile master, so in time contracts stipulating how long the settlement was expected to

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[228] John Huizinga, *Homo Ludens*, (London: Paladin, 1970), p.120-121

[229] Enguerrand de Monstrelet, *The Chronicles of Enguerrand de Monstrelet*, Thomas Johnes (trans.), (London: William Smith, 1840), p.343

[230] Huizinga, p.120

hold out for were agreed in advance; these could form the basis of a negotiated settlement in the event of a siege.[231] The extent to which this could be described as a constitutive conflict is doubtful, though it is worth noting that sieges did provide some of the benefits of a strong rule-system by dint of restricting combat to a particular space; battles, on the other hand, were risky affairs and were often actively avoided.[232] The laws of war in the Middle Ages were neither strong, nor sets of constitutive rules – instead being principally concerned with the rights of the individual soldier regarding capture and financial reward, rather than being of any humanitarian or even religious concerns. Keen notes of the more commercially inclined soldiers of the Hundred Years' War:

> If one was going to make a living out of the profits of war, as these men did, one needed to be sure that one's enemies were going to observe the rules of the game, and if they did not, that there would be ways of forcing them to do so. An enforceable code of chivalrous laws, acknowledged by all soldiers regardless of allegiance, would have met just this need.[233]

The more influential medieval laws of *jus in bellum* were secular in nature, and very much concerned with the material interests of the individual combatant, and one type of combatant in particular – a member of the knightly class. Between 1050 and 1100, there arose an increased demand for knights – the massed cavalry charge dominated the battlefield, and as knights paid for their own equipment, they were afforded a growing degree of dominance over their own subjects. A pronounced divide between the armed knights – the *nobilis,* and the commoners, *inerme vulgus,* which had already been present, grew more and more pronounced as the Middle Ages went on.[234] Increasingly, knights were seen as the legitimate 'warrior' class, the *bellatores*, as opposed to the *oratores,* the workers, who had no place in it. Naturally the distinction was something of an ideal, but when commoners did engage in conflict there was not much of an incentive to restrict one's conduct to them. The economic relationship of the knight and his lord was at the core of the laws of war in the Middle Ages. Knights paid for their own arms, servants and horses (though occasionally the

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[231] Stacey, p.38-39
[232] Keen, p.35-36
[233] Ibid., p.4
[234] Stacey, p.29

lord would compensate him for the loss of one in battle), and although he was paid for his service, the sum was a nominal amount which did not begin to cover a knight's costs – regular wages coming only in later centuries with the strengthening of the state. He fought not, as Stacey puts it, "as a salaried servant of the public interest", but rather out of obligation to his lord and for the potential spoils of war, a point reflected in laws which were markedly concerned with the distribution of spoils, to the extent that "war was conceived in law as a kind of joint-stock operation; by serving in the war a soldier acquired a legally enforceable right to a share of its profits, gained chiefly through plunder and ransom"[235]

Consequently the laws of war in the Middle Ages were not focused so much on humanitarian concerns, but rather on limiting the conduct of war for financial concerns and the broader self-interest of the knightly class. Commoners were not able to pay ransoms nor were able to take their social superiors captive in their own right; in consequence they could be killed with impunity – in the case of the Genoese crossbowmen at Crécy, by the knights of their own side. Such considerations occasionally cut the other way – as evidenced by the cheerful dispatching of the French nobility by the English archers at Agincourt. Swiss mercenaries were also noted for their propensity not to take prisoners, being politically and geographically isolated from the feudal system and its codes of chivalry (willingness to close to a decisive engagement being one of their notable selling points); for knights, however, the ransom system worked well enough – to the point where prisoners could appeal against their improper treatment when the captive of another.[236]

The nature of laws of war so far

Clearly, amongst the laws of war in ancient Greece and in the Medieval period there are many which are (exclusively) regulative, prohibiting and (though less often) compelling certain behaviours. Prominent among the rules and laws of war in these and other periods is the fact that they serve certain groups who share interests in common, specifically those who served as the central arm in their force. The almost ritualised pattern of phalanx warfare along with the restriction of fighting to before harvest, reflected the interest of the smallholding

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[235] Ibid., p.31-32
[236] Ibid., p.37

hoplite – as did the chivalric code which regulated conflict between members of the knightly class. Whether these restrictions on the time, place and 'format' of the battle can or do amount to a 'constitutional' process is debateable. In both cases, the restrictions on the time and place of the battle are first of all much less firmly institutionalised than in other constitutional conflicts, generally taking the form of ad hoc agreements between combatants (this does not rule out the possibility of a 'constitutional' status, but certainly indicates that these rules are less strong than they might be). The adjudication of the contest by means of erecting a trophy, or by the proclamation of a herald is rather superfluous, being an ornament on the true victory – the destruction or surrender of one of the combatants. Nevertheless, this is a puzzling area – especially when we consider such things as duels and trials-by-combat. The palpably un-warlike nature of such mechanisms is instructive; perhaps the *reductio ad absurdum* of war as a constitutive process is to be found in the popular imagination of the wars fought by the condottieri of Renaissance-era Italy, of which it was said that battles were settled by elaborate manoeuvres and a positive avoidance of bloodshed to the point where, at the battle of Anghiari in 1440, only one man died – when he fell off his horse and was drowned in the mud. This is an exaggeration (around 900 men were estimated to have died in that battle),[237] but the question begs an answer: would war fought in this way truly *be* war? Thinking along similar lines, Clausewitz scorned the 'geometric' military thinkers of his own day for seeming to promise a day when war could be reduced to calculations involving lines of communication and interior angles, when battle would cease to be necessary. The closest that wars seem to have approached constitutional conflicts was in cases of siege: the conflict was confined by nature to a specific place, and an agreement on time could be made between the two parties (this would be in part dependent on objective factors like food supply). This tendency reached an apogee in the age of the Enlightenment, when these factors were combined with the geometrically stylised fortifications most famously designed and built by Vauban – who also formulated tactics to be used against them: a fortified town would take roughly forty-eight days to capture, by means of parallel trenches.[238] Anders Engberg-Pedersen even goes so far as to characterise the sieges of the Enlightenment as a contributing factor to its rationalised conception of the world, which was later upset by the chaotic battles of the Napoleonic era.[239]

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[237] Mallett, Michael, *Mercenaries and Their Masters*, (Bodley Head, 1974), p.197
[238] Anders Engberg-Pedersen, *Empire of Chance*, (Harvard University Press, 2015), p.15
[239] Ibid, *passim*

Modern laws of war

As time went on, the wars of the early modern period began to become more regulated; Parker notes four factors which combined to make war less vicious and brutal. Firstly, as discretionary power moved out of the hands of the individual soldiers (i.e. knights who provided their own equipment), their officers or petty lords and into those of the state, greater central control of the military forces engaged in war enabled a more consistent engagement with the laws of war – similarly, the increased ability of the growing state to supply its troops made previously necessary yet morally dubious behaviour, like systematic looting, an option rather than a requirement. Second, the decline of the perceived importance of confessional identities as a driving force for armies removed one of the most potent enablers of atrocity; this was related to a third factor, a sense of horror at the destruction brought about by the religious wars of the mid-seventeenth century led to an anti-war movement of sorts, and a feeling that war had come close to totally destroying society. This led not only to a more 'limited' form of war but contributed to a trend towards absolutism, which increased the power of states to control their soldiery. Fourth, an increase in reciprocity: conflict between different groups over time enables a web of expectations to arise, so long as each side has experience of the other and expects to meet again – when this is absent, in the case of combat between commoners and the knightly class on the battlefield in peasant uprisings (or as was often the case when Swiss mercenaries fought) or when European forces fought in the New World.[240]

The first properly codified document on the laws of war is generally acknowledged to be that drawn up by Francis Lieber in 1863. Lieber, a German-born American jurist had been asked to formulate a legal document covering the laws of war for the Union in the American civil war, which was published as Army Order 100. In its articles, Lieber set out the rules for the treatment of inhabitants of occupied areas (and their property),[241] made provision for the swapping of prisoners on a man-for-man basis, and most notably clarified what treatment would be meted out to irregular fighters, ordered in a number of categories, from 'partisans'

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[240] Parker, p.54
[241] *General Orders No. 100*: The Lieber Code, http://avalon.law.yale.edu/19th_century/lieber.asp <accessed 7/12/14>, Articles 31-47

to 'war-rebels', in order of increasing illegitimacy.[242] Lieber's rules became the foundation of the 1899 and 1907 Hague Conventions and have shaped the Laws of Armed Conflict ever since. The motivations behind the Lieber Code were varied, focusing principally on providing consistent treatment of irregular fighters, who were a new factor in war and had certainly been neglected by the law of war previously,[243] but also aimed to limit the physical harm of warfare by restricting indiscriminate violence. In his letters, Lieber himself indicates the rationale behind his code and its consistent implementation. First, there is the 'containment' of conflict; the code, which stipulates that prisoners should be exchanged (or executed) on a one-for-one basis would prevent a vicious circle of reprisal by both sides:

> in retaliation it is necessary strictly to adhere to… the elementary principle which prevails the world over – tit for tat, or eye for an eye – and not to adopt ten eyes for one eye. If one belligerent hangs ten men for one, the other will hang ten times ten for the ten; and what a dreadful geometrical progression of skulls and cross-bones we should have.

Similarly, uncontained destruction has negative consequences in the long term, thinking to a time after war has ended:

> I know by letters from the West and the South, written by men on our side, that the wanton destruction of property by our men is alarming. It does incalculable injury. It demoralizes our troops; it annihilates wealth irrecoverably, and makes a return to a state of peace more and more difficult... [it provides] our reckless enemy with new arguments for his savagery. [244]

The next substantial step in the formulation of explicit laws of war came with the Hague conferences of 1899 and 1907, which drew heavily on the Lieber code. The 1899 conference was called at the behest of Russia, which was concerned at the increasing destructive power of new weapons of war (or rather, such weapons as were the exclusive

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[242] Ibid., Articles 81-85
[243] G.B. Davis, 'Doctor Francis Lieber's Instructions for the Government of Armies in the Field' (1907), *The American Journal of International Law,* Vol. 1, No. 1 (Jan. – Apr., 1907), p.15
[244] Letter from Francis Lieber to General Halleck, in ibid. p.21

preserve of the West and unavailable to Russia). The conference was especially notable in prohibiting several new weapons – the dropping of bombs from air balloons, expanding 'dum-dum' bullets (unsuccessfully defended by Britain as being necessary to more effectively kill restive native populations), and "the use of projectiles the sole object of which is the diffusion of asphyxiating or deleterious gases."[245]

These attempts to regulate warfare were less successful than hoped, with perhaps the key factor being the rapid developments in military technology in the twentieth century. One of the more instructive cases of the modern law of war and the problems associated with it is the history of the formulation of maritime law and its failure in the World Wars. The Declaration of Paris in 1856 was perhaps the first formal international agreement on the laws of war. According to it, privateers were banned, belligerent cargo on neutral ships (and neutral cargo on belligerent ships), providing it was not classed as contraband (a clear definition of which was not provided), were immune from capture, and blockade was 'official' only when ports were effectively blockaded by ships in their vicinity; this ensured the rights of neutral shipping. The question of whether blockade of the civilian population was acceptable was also a consideration. In a similar pattern to the decline of the Greek laws of war following Athenian strategic innovations, the Declaration of Paris, being formulated in the mid-nineteenth century, soon proved impractical as times changed and sailing ships made way for steam power. Close blockade of ports was made untenable by the use of mines and long-range coastal artillery,[246] but above all the laws of war at sea were swept aside by the use of submarines and total war in the First World War. The logic of total war made civilian targets a priority, if not legitimate, and certain properties of submarines – their extreme vulnerability when carrying out inspections on ship cargoes, for example[247] – made them unsuited to 'traditional' enforcement of blockade. Increasingly as the war went on, risks to the submarines had to be minimised as much as possible and surprise attacks on merchant shipping provided a means to cut these risks. The submarine continued to be used in the Second World War as it was the weak naval powers' weapon of choice; increased risks of

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[245] Hague Convention, IV,3 http://avalon.law.yale.edu/19th_century/dec99-02.asp <accessed 8/12/14>
[246] Brian Ranft, "Restraints on War at Sea Before 1945"in Michael Howard (ed.), *Restraints on War: Studies on the Limitation of Armed Conflict*, (Oxford University Press 1979), p.49
[247] Ibid., p.53

detection thanks to improvements in technology again mitigated a more conventional anti-military role for submarines.

Similar factors were at play elsewhere. Whereas it seemed the golden age of the law of armed conflict which began in the 1850s looked set to continue (the 1907 Hague Conference was set to be followed by another), what actually transpired were two global conflicts which cast aside much of the apparent achievements of the movement. The First World War was opened in the west by the German decision to invade neutral Belgium, instantly revealing the relative importance of legality and *realpolitik* (in German eyes at least); a point which, along with the severity of German repression in that country, born out of fear of partisan activity, was made the most of by Allied propagandists. The use of 'asphyxiating and deleterious gases' was another notable departure from the law, though the Germans could claim that, as the gas was released from cylinders and not from shells, they were not violating the letter of the law (the British were the first to make use of gas shells in September 1915 at Loos). The Second World War had even more egregious violations – 'strategic' bombing of civilian populations, culminating in the use of nuclear weapons on Hiroshima and Nagasaki. German atrocities on the Eastern Front were perhaps the most obvious examples of violation of the laws of war (though the German political leadership argue that the Soviet Union did not deserve to be considered a civilised foe, and could often point to their actions as anti-partisan operations), and the Japanese ill-treatment of Allied prisoners is well-known: when peoples from around the world with totally different and occasionally incommensurable cultures were thrown together, the results could be much the same as when Greeks fought barbarians or knights the infidel. The totalitarian states did not hold a monopoly on such behaviour, however – the case of Britain being an illuminating example. Unable for much of the war to risk a direct conventional military attack on Germany, it resorted to four means to strike at its enemy. One strictly military means was the use of commando raids on coastal targets; the other three were less conventional, and as Adam Roberts points out, "involved breaking down the distinction between soldiers and civilians which is at the heart of the laws of war"[248]: bombing of German cities; naval blockade; and the support of resistance movements in occupied territories. Similar to the

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[248] Adam Roberts, "Land Warfare: From Hague to Nuremberg" in Howard, Andreopoulos and Shulman (eds.), p.131

German use of U-Boats, the British made use of 'illegal' means out of inability to compete on the conventional level, and chose to do so and violate the laws of war as a consequence of a calculation of political expediency.

Andrew Roberts concludes that the causes of 'barbarism' in the two World Wars were found in a number of factors:

1. The opposition to liberal ideas of several early twentieth-century autocracies, and their positive belief in force.
2. The general body of ideas known as Social Darwinism, especially in its peculiar and virulent forms which saw races, nations, and/or classes as species; believed in the inevitability of violent struggle for supremacy between them; and saw that struggle as of cosmic importance.
3. Theories of war, derived from a shallow reading of Clausewitz, which saw battle and total war as being the essence of strategy.
4. The development of conscription and of machinery for moving conscripts, which created a new momentum to total war.
5. The development through the industrial revolution of a complex division of labor within and between countries, which made it hard to maintain a clear distinction between soldier and civilian, or between a neutral and a belligerent power.
6. The growth of a popular press in many countries which was virulently nationalistic.
7. The emergence of new weapons – machine gun, long-range artillery, aircraft, submarine – which took war to new environments, which increased man's capacity for destruction, and which in some cases facilitated the posing of threats, not just to the adversary's front line, but to its society as a whole, including its cities and civilians.[249]

Roberts chooses to place new weapons technology last as it has been somewhat 'overrated' as a cause of barbarism – he claims that much of the most horrific violence in the Second World War, particularly on the Eastern Front, was not particularly technologically

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[249] Ibid., p.138

sophisticated, rather being shaped primarily by ideology.[250] Restricting analysis to weapons technology perhaps obscures the truth of this matter – as we shall see later, it is not only weaponry which can bring about an intensification of war. In any case, there is clearly a tendency of the laws of war, both in the twentieth century and earlier, to be ineffective in the restriction of new weapons – as Best remarks, "the whole truth about the history of weapons innovations is that almost all of them, whatever the nature and strength of the objections at first encountered, slip into common use as soon as the objectors can acquire them for themselves, whereupon the law adapts accordingly."[251] The common factor in Roberts' analysis is that states were newly able to commit to more 'extreme' forms of war, being both *physically* able to do more, and *politically* able to conceive of extreme objectives and mobilise state resources to those ends. Roberts elsewhere voices scepticism that laws of war could possibly cover the myriad variety of circumstances and situations to which twentieth-century war can give rise[252] – in itself a consequence of the lack of structure which constitutive rules would provide.

The more extreme cases of the regulation of war are easy to dismiss as ineffectual and contrived. Nevertheless, the universal appeal of the regulation of war cannot be waved away: there are clearly some deeply-felt desire, even a need, on all sides to conduct war in some kind of ordered manner. John Huizinga in *Homo Ludens* comments on the game-like or *agonistic* character of war, at least in its more formal aspects. War is very often made into a game or a ritual, and has frequently been tied to a higher order in that victory in battle is ascribed to God's will (something which is often ascribed to the outcomes of other chance events);[253] within war itself, rituals and rules are applied to render confrontations 'legitimate'. Such an understanding is evidenced by the term "pitched battle", which refers to a rule-bound battle (at least with regards to space), where the battlefield is officially delineated – like a

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[250] Ibid., p.138

[251] Best, p.24. Despite the widespread failure of the laws of war in the World Wars, there was one case of their being obeyed – this was the conspicuous absence of chemical warfare (at least in Europe) in the Second World War. Why the chemical weapons were especially amenable to such an understanding is unclear; it may be that the vulnerability of large concentrations of civilian populations and their exposure to air attack was too much for either side to stomach, or perhaps it was the novel and 'cruel and unusual' nature of gas which gave it a taboo status. The relative ineffectiveness of gas in the trenches of the First World War may also have been a factor.

[252] Roberts, p.137

[253] Huizinga, p.122

sports pitch. The brutal reality of war belies the tenuousness and artificiality of such conventions; indeed, Huizinga himself notes that the effort to sanitise war by transmuting it into an orderly contest is something of an impossibility: "even in archaic surroundings war with its grimness and bitterness offers but scant occasion for this noble game to become a reality. Bloody violence cannot be caught to any great extent in truly noble form; hence the game can only be fully experienced and enjoyed as a social and aesthetic fiction."[254]

The extremes of experience undergone in war require rules and customs of their own: Karl Marlantes, who served in the United States Marine Corps in the US Marines, has written in his book *What It Is Like To Go To War* of the need felt by soldiers to undergo rituals which enable them to overcome this, the traumatic and unsettling experience of war – the stress of combat and exposure to death and destruction, and the mixed feelings of triumph and guilt over the killing of enemies. Marlantes sees parallels with ancient myths and legends, from Achilles' sulking in his tent after being deprived of his rightful spoils and recognition, to the rage of the Irish mythic figure Cuchulain who was calmed and welcomed back into peaceful society by the women of his lord.[255] It is Marlantes' belief that the neglect of these ritualistic ceremonies and processes – particularly those which govern the rehabilitation of the warrior into his community, and cleanse him of guilt associated with killing – has had lasting psychological damage, particularly in the case of the Vietnam war. Barbara Ehrenreich makes similar observations on the ritual aspects of war in her book *Blood Rites.* War, in her rather idiosyncratic analysis, has deeper significance than its ostensibly 'political' purpose: not only is it Clausewitz's rational instrument, it is an "alternative realm of human experience, as far removed from daily life as those things which we call "sacred.""[256] In this environment, ordinarily reprehensible actions are rendered permissible, even laudable; rituals such as Marlantes describes are necessary to return warriors to 'normal' life after engaging in such acts – and others (often with the help of mind-altering drugs of various kinds) are necessary to get him to engage in them in the first place.[257] Rather than as a calculated, rational project (a view she incorrectly ascribes to Clausewitz, whom, as we have seen, was well aware of the

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[254] Ibid., p.123
[255] Karl Marlantes, *What It Is Like To Go To War,* (W.F. Howes Ltd, 2012), p.250
[256] Barbara Ehrenreich, *Blood Rites: Origins and History of the Passions of War,* (London: Virago Press, 1998), p.12
[257] Ibid., p.11

irrational passions which drive war),[258] Ehrenreich speculates that the experience of war might be understood on a more primal level as a substitute for human competition with animals, citing mythic warriors (Gilgamesh, and ancient Greek heroes like Hercules) who were also characterised as mighty hunters. When prehistoric megafauna were made extinct by the early humans who had to turn to domestication of animals, the social role and status of men as hunters was threatened; as a consequence, the hunting drive was directed against other groups of humans as a means of maintaining a role for men. As Ehrenreich says, "war-making... is an activity that has often served to *define* manhood itself – which is exactly what we would expect if war in fact originated as a substitute occupation for underemployed male hunter-defenders."[259] The contest for trophies of limited practical value (scalps, severed heads, ears) belies the use of war as a cultural institution in which social status can be won and identities enacted, and which might be fought for those reasons alone – the codes of chivalry could be seen in a similar light.[260]

The benefits of rules we have already covered – to reduce harm, limit unpredictability, and preserve the distribution of power – are clearly in evidence in these cases, and those we have covered earlier, but what is perhaps most important is the desire of human beings to establish some kind of psychological control over their environment, whether real or imagined (the sense of 'ontological security' we met earlier). I believe that these ritualisations – whether ones which govern the conduct of the war between the two participants, or those which prescribe certain behaviours with regard to individual warriors – are attempts to cope with the stress of war, a state of existence which precisely due to the fact that it is not bound by inherent rules of its own, presents a uniquely stressful and discomfiting situation, exposing those who are party to it to an array of experiences which are far beyond those experienced in 'everyday' life. As regards the customs and rules that govern interactions between enemies, the construction of war – a brutally physical contest – as a 'higher' form of human activity with rules and customs brings to mind Bourdieu's observations on the function of rules as an insulation from the purely material nature of economic transactions. One might see in the rules and customs of war, not merely an attempt to limit danger or control unpredictability, but also a desire to maintain some kind of human

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[258] Ibid., p.8
[259] Ehrenreich, p.127
[260] Ibid., p.122-124

fellowship in a dehumanising setting where one if compelled to treat one's opponent as an object to be destroyed.

That human nature seems to require these regulations and rituals suggests that some forms of rules will continue to bind the conduct of war in future; even if war does not have restrictions that are inherent to its nature, human beings are themselves by preference (or even by their own nature) rule-following creatures. The human desire for regulation and order will be an influence which shapes the conduct of war for as long as humans fight it – but the point remains that these rules, though they might well manifest in some form in every war ever fought, are not inherent to war itself. Two peoples who had not previously interacted could engage in war straight away, whereas they would need to build a shared 'language' of rules before engaging in symbolic interaction; violence is in a sense the universal language. Similarly, war may well have specific cultural significance in different cultures, even to the point of being 'institutionalised'; however, this is again something which has been laid over war, and is not part of its own nature – though it might always be present when humans fight each other. We shall have to wait until Martians land before this aspect of my thesis can be put to the test.

In any case, the artificiality and non-binding nature of the various would-be constitutional laws of war has been shown up often enough: Athens' refusal to engage in customary forms of war with Sparta did not – could not – disqualify them from the contest, though no doubt a few Lacedaemonians muttered about poor sportsmanship when they saw the walls of the Piraeus. Medieval knights, though scrupulous in their dealings with their peers, put down peasant revolts with extreme ferocity, and the favour was returned, as evidenced by the cheerful dispatching of the fallen French knights by the English commoners at the Battle of Agincourt. Swiss mercenaries of the time were in fact esteemed especially highly in large part because of their unbridled savagery (perhaps not entirely unbridled – after all a law was passed in Zurich in 1444 which forbade troops to cut out the hearts of dead enemies),[261] a savagery exemplified by their disregard (or ignorance) of the code of chivalry which moderated knightly battles – in the battles of Morgarten and Morat, the Swiss slaughtered their knightly Hapsburg and Burgundian enemies without restraint, even when

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[261] John McCormack, *One Million Mercenaries,* Leo Cooper (1993), p.22, 31

offered heavy ransoms by fallen nobles.[262] This was complete victory, which did not depend on the consent of the defeated, and which no adjudication could deny.

Conclusions

It can be seen that the laws of war – as they have developed in Ancient Greece, the Middle Ages and the twentieth century – are particularly weak in their restriction and regulation of the conduct of war. Firstly, there is no enforcement of the rules by a higher authority, with reciprocity and mutual interest being the principal means of enforcement; as a result, they are often broken. The restrictions the various laws of war impose on the conduct of war are, moreover, weak, limited in the extent to which they restrict behaviour, and tend to reflect already extant material restraints, like the need for a certain type of battlefield or the need to cease fighting in harvest time. These material factors which place limits on the behaviour of armies are the true source of restriction on military action, and when it is materially possible to fight war in a different way, outside of the 'rules', armies can and tend to do so – whether in the case of Athens' exploitation of naval power, built on its particular demographic foundations, or by means of new technologies – as with the case of submarines in the World Wars. This material aspect of the laws of war extends to those with a putatively constitutional nature: arbitration is not provided either by external judges with the power to enforce a verdict, nor by a clearly defined set of conditions which demarcate victory; rules concerned with the declaration of hostilities and the confirmation of victory serve more as a confirmation of a physical reality than a mechanism in their own right. Despite war's lack of constitutive rules, which would transmute it into an abstract, symbolic contest, it is often hedged around by other regulations. These are limited in scope and effect, relying on mutual observance and tit-for-tat enforcement mechanisms rather than enforcement from a higher power – though shared material interests (such as similar class structures) can provide a firm foundation for cooperation between enemies. These are introduced into war to provide some of the benefits of rule-following, both material and psychological: however absolute it 'should' be on paper, at the heart of war as it is carried out in the real world is a compromise between capitalising on the benefits that freedom from legal bounds brings, and insulating oneself from the dangers unleashed by that departure from civilised discourse.

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[262] Ibid., p.7

As mentioned, one of the most important consequences of war's lack of rules is the absence of a system of arbitration. This deficiency is perhaps the most important aspect of our understanding of war as being defined by an absence of rules: without mutually understood criteria for victory, the resolution of war is essentially unique to every case, with no easy way for the strategist to identify the correct path to victory. It is this aspect of war which we shall examine in the following chapter on strategy, a subject which has always been associated with war – for this very reason.

THE PROBLEM OF STRATEGY – PLANNING IN UNCERTAINTY

So far, I have demonstrated that war, though its conduct can be made subject to rules and restrictions, does not have rules in of itself as other forms of competition do. In the following two chapters I will go on to explore the implications of this aspect of warfare, and show that the varied ways in which it is fought can be understood as responses to the unique problems and opportunities which this lack of an inherent regulatory framework presents. This chapter will focus on a concept closely associated with war, and one which I believe is defined (even called into being) precisely by war's lack of rules: strategy. Strategy, as I define it, is the process of achieving an end with the means available, in competition with an opponent trying to do the same, *in the context of a relationship which is not bound by (man-made) constitutive rules.* Strategy, along with the related concepts of tactics and operations, is central to the conduct of war because of its pervasive uncertainty and active opposition, but above all in its lack of rules which would explain how it can be won. In the absence of constitutive rules any warring power has to devise and apply a necessarily speculative theory of how the conflict will operate, particularly with regard to the effects of certain types of military action on the enemy – in other words, the task of the strategist is to identify the 'rules of the game' in a game which lacks them.

There are a number of ways in which strategists have responded to this challenge, some being less successful than others. I identify two broad categories of strategic doctrine: deductive, and inductive. Deductive strategies seek to form and impose an ordered conception of reality onto war: this assessment can be based on 'objective' factors, such as geography, terrain, or the capabilities of military technology; on the conclusions drawn by 'scientific' (or even, in the case of game theory, mathematical) reasoning; or simply by the application of habitual, purportedly time-honoured conceptions of "what war is like" and how it "should" be fought. These deductive approaches can be conceived (in a very broad sense) as answers to the *problem* of strategy, rather than an exploitation of its *possibilities.* Inductive doctrines, on the other hand, I characterise as implicitly – or even explicitly, in the case of 'irregular' war – acknowledging war's ruleless nature; by building upon this understanding, they embrace the opportunities afforded them by this lack of restriction and conduct war in innovative and creative ways.

Neither inductive nor deductive strategies exist in a 'pure' form in practice; every strategy will contain elements of each, though in varying properties. Here I will examine a number of strategic doctrines and approaches which I believe are especially representative of the two tendencies: first, I will examine deductive strategies, primarily exploring the concept of "strategic culture" – the habit of states to make war in a particular style. I will examine in particular Theo Farrell's arguments regarding transnational military norms and Jack Snyder's conclusions from *The Ideology of the Offensive,* both of which explain potentially counterproductive strategies through the prism of deductive strategic reasoning; the Enlightenment era's geometric strategies are another example of this line of thinking. I will also examine the geopolitical/geostrategical thought of Halford Mackinder and others, which works in a similar way – a plan of action for especially 'grand' strategy which is based on an assessment of 'objective' factors of geography. Another such objective factor is technological capability; I will examine strategies based on this – nuclear strategy and the theory of strategic bombing – in the following chapter on technology in war. These strategies impose an artificial order on a chaotic reality, satisfying the commander's need for a coherent conception of the world – in some cases, distorting the truth and operating to the detriment of effective military action.

One thinker who was all too aware of this problem was Clausewitz, who as we have seen was adamant that no theory of war could afford to ascend to rarefied heights of abstraction, war being too unpredictable and contextually specific a phenomenon to allow for elaborate theoretical models. In this he is contradicted somewhat by the ancient Chinese strategist Sun Tzu, who is more optimistic about the possibilities of planning and the use of creative stratagems, and is notably more enthusiastic about the utilisation of intelligence and deception than his German counterpart; though they apparently differ markedly, both approaches can be understood as perceptive responses to a conception of war as a ruleless form of conflict: I will examine two *inductive* strategic doctrines which explicitly drew upon the thinking of both strategists – maneuver warfare, and irregular war. Each has achieved great successes largely through an implicit acknowledgement of war's lack of rules, exploiting the chaos of war and maintaining the initiative against opponents by denying them the ability to make sense of the strategic reality; however, even these inductive doctrines risk

defeat if used inappropriately. However finely tuned an instrument and however successful in one kind of conflict, crystallised strategic doctrine is always at the risk of obsolescence in such a fluid medium as war.

The changing definition of strategy

Before I move on to the discussion of these varying forms of strategy, I will begin with a brief account of the changing definition of the concept – which has evolved greatly over the years. There are varying definitions of strategy, but they are in broad agreement in that the concept is concerned with the use of military means to achieve a desired end. Clausewitz, for instance, defines strategy as "the use of the engagement for the purpose of the war"[263] – Basil Liddell Hart defines it as "the art of distributing and applying military means to fulfil the ends of policy"[264] J.C. Wylie says strategy is a "plan of action designed in order to achieve some end; a purpose together with a system of measures for its accomplishment." Bernard Brodie puts it more succinctly: strategy is "how to do it".[265] Some make explicit reference to the fact that 'strategy' is carried out against an uncooperative opponent: as we have seen, Clausewitz's theory of war is based in part on the clash of two active opponents, and General Andre Beaufre similarly spoke of strategy as "the art of the dialectic of two opposing wills using force to resolve their dispute."[266] Williamson Murray and Mark Grimsley emphasise the pervasive uncertainty in which strategy is made, characterising it as a *process*, "a constant adaptation to shifting conditions and circumstances in a world where chance, uncertainty and ambiguity dominate."[267]

According to Hew Strachan, the concept of strategy has evolved over time in an increasingly refined way. At first 'strategy' was not very precisely defined: it was simply what a general did, the business of a *strategos*. Only in the late eighteenth century was a

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[263] Clausewitz, p.177

[264] Basil H. Liddell Hart. *Strategy: the Indirect Approach*, (London: Faber & Faber, 1967), p.335

[265] Bernard Brodie, *War and Politics*, (Macmillan, 1973), p.452

[266] André Beaufre, *An Introduction to Strategy*, trans R.H. Barry, (London: Faber and Faber, 1963), p.22

[267] Williamson Murray, and Mark Grimsley, "Introduction: On Strategy", in Williamson Murray, MacGregor Knox, Alvin Bernstein (eds.), *The Making of Strategy: Rulers, States, and War,* (Cambridge University Press, 1994), p.1

strong distinction made between the command of forces in battle (i.e. tactics) and the plane of strategy as it is now understood; this shift occurred because of the increasing size of armies, which (especially as the mass armies of the Napoleonic wars came to dominate European warfare) required much more specialised and dedicated coordination and logistic support than was previously the case. Coupled with this was the systematising influence of the Enlightenment; the urge to understand war in a scientific manner created an interest in the different 'levels' of war, especially the higher plane of strategy, seen as more amenable than tactics to the powers of reason.[268] The trend of increasing complexity giving rise to a correspondingly complex strategy continued into the age of industrial war, where the concept of 'Grand Strategy' was formulated by theorists like Basil Liddell-Hart:

> The role of grand strategy – higher strategy – is to co-ordinate and direct all the resources of a nation, or band of nations, towards the attainment of the political object of the war – the goal defined by fundamental policy. Grand strategy should both calculate and develop the economic resources and man-power of nations in order to sustain the fighting services. Also the moral resources – for to foster the people's willing spirit is often as important as to possess the more concrete forms of power. Grand strategy, too, should regulate the distribution of power between the several services, and between the services and industry. Moreover, fighting power is but one of the instruments of grand strategy – which should take account of and apply the power of financial pressure, and, not least of ethical pressure, to weaken the opponent's will.[269]

Grand strategy was explicitly articulated in the industrial age as the challenges of industrialised mass warfare necessitated an even wider approach to strategic issues. Originally, the means by which strategy was conducted were held to be purely military; as it developed in the early modern era, strategy increasingly involved consideration of areas like logistics and supply, moving away from the battlefield. Later, grand strategy extended the strategic remit to the management of the wider war economy and drew upon all the resources of the state. The same pressures acted 'downwards' to gave rise to the concept of 'operations'

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[268] Hew Strachan, *The Direction of War: Contemporary Strategy in Historical Perspective*, Cambridge University Press (2013), p.28-29
[269] Liddell Hart (1967), p.322

as an intermediate stage of warfare between the immediate conflict of battle and the strategic overview (operations being a string of planned tactical engagements). The concept was first developed by Soviet officers during the Russian Civil War, notably the generals Tukhachevsky, Frunze and Triandafillov. In a way, the concept can be explained as analogous to the earlier concept of a 'campaign', which similarly linked tactical engagements together; the concept of "Deep Operations" was, however, a specific product of the industrial age, its theorists recognising that the character of modern warfare required coordination over a greatly extended time and space – a campaign in this sense could involve a series of battles fought by a number of formations, the use of modern technology contributing to the increased material needs of modern warfare. In particular, supplies and their transport had to be handled in a more methodological way than previously done, and the enemy's forces would have to be dealt with in a way in which individual engagements (of a size which would previously have constituted the climax of a war) would need to be coordinated with each other in order to bring about a decisive victory. The historical influence of this school of thought in the Soviet Union has been questioned,[270] but it has had a great influence on doctrine since, and in many ways reflects the wider trend of increasingly elaborate and comprehensive strategy developing in responses to increasingly complex forms of social organisation.

Despite the nuances of difference between the definitions of strategy, tactics and operations, I am inclined to agree with Colin Gray's assessment that there is a fundamental unity behind them: "Strategy and tactics, and, one should say, policy, operations, and logistics, can be regarded more as distinctive points of view of a single complex phenomenon than as discrete subjects."[271] Ultimately, strategy, operations and tactics are different aspects of the same basic concept: they are the means, the process by which an actor seeks to achieve an aim in competition with an uncooperative antagonist (or antagonists), using the resources at one's disposal. As Gray puts it, strategy is "the bridge that relates military power to political purpose… *the use that is made of force and the threat of force for the ends of policy.*"[272] There is, however, a problem with this definition of strategy – Hew Strachan has noted that in recent years the common understanding of strategy has been so vague as to be useless: there are now government 'strategies' for things such as housing provision, pensions,

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[270] Earl F. Ziemke, "The Soviet Theory of Deep Operations." *Parameters* 13.2 (1983), p.23-33
[271] Colin Gray, *Modern Strategy*, Oxford University Press (1999) (1999), p.22
[272] Ibid., p.17

education, and so on; even businesses have 'advertising strategies' (no doubt dreamt up by a high-powered executive after reading a business-themed adaptation of Sun Tzu's *Art of War* – hopefully Sir Hew has not been informed that Clausewitz has been subjected to the same treatment);[273] it seems to have floated free of military matters altogether.[274]

I would agree with Strachan that strategy is above all a military concept, with its most complete expression to be found in military affairs. However, I do not believe that it has no place in other areas of life, like policy and business; as an activity based in an uncertain environment, strategy has its natural home in war, but it also has a place in forms of conflict which are similarly not so strictly bound and defined by constitutive rules – business perhaps foremost among them (perhaps this is the underlying reason why adaptations of Sun Tzu are so beloved of CEOs). Strategy, in my view, is the process of achieving an end with the means available, in opposition to another trying to do the same, and specifically *in the context of a contest which is not bound by constitutive rules.* In a sense, all forms of conflict require strategy and tactics to some degree, as they are dialectical in nature; however, a game of chess or a football match has much less scope for strategic activity than does a war, where very little is provided for in the way of guidance and in which little can be taken for granted. There is little need, for instance, to identify the unique strengths and weaknesses of an opponent's chess pieces, as they are constant from match to match – nor does one have to scout out the pitch before a football match to check if it has been mined. Likewise, surprise attacks are not possible in a courtroom where evidence has to be submitted according to due process. The constitutive rules which govern these contests provide many of the things which are otherwise within the remit of the strategist – as I noted earlier, such rules demarcate the time, place, tempo, and equipment for a contest, and most importantly for our purposes, they also provide rules of arbitration – standards for determining the winner of the contest. The strategist faces the singular challenge of determining *how* the war can be won – beyond the common denominator of the submission of one side or another. A great part of strategy is based on an understanding of the likely military, social, psychological and economic effects of action against the enemy, and the influences of differences in the variables of time, space and so on, which are unique in every case.

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[273] Tiha von Ghyczy, Bolko von Oetinger and Christopher Bassford, *Clausewitz on Strategy: Inspiration and Insight from a Master Strategist*, (John Wiley & Sons, 2002)
[274] Strachan (2013), p.27

Deductive Strategy

Strategy, as we can see, is potentially an extremely stressful activity. Planning and decision-making in the context of a non-abstract contest, i.e. one without rules to determine how it is to be fought and won, means that there are a near-infinite variety of potential courses of action open to the strategist. For many, the temptation is to consciously impose order on the chaos of war either by means of a concrete plan based on an assessment of 'objective' factors, or on traditional understandings of what war 'is', derived from cultural and historical experience. In practice, the strategy chosen will most often be a mix of these two. To pick the latter course is potentially useful – there are good reasons to act on the basis of experience, and to build on techniques which have proved their worth in the past – but doing so in the context of war is especially dangerous, due to the great variety of potential threats one can face because of the lack of restrictions placed on action. Cruelly, there is great pressure on a strategist to choose a pre-made strategy resulting from the same dynamic – as I mentioned in the earlier discussion of the customs and laws of war, the lack of structure in warfare presents a chaotic environment, and the psychological need to impose order upon it is so pressing that a strategist will feel lost without some kind of concept or theory of how the war (and war in general) is likely to develop.

In my treatment of rules, I noted the arguments made by Kratochwil and Searle that they are present in practically every manifestation of social behaviour, from the most basic level of language, to areas of life which are more normally defined as being governed by 'culture' than rules. Many of the rules of war which I have covered so far (particularly the conventions of war of the Greeks and the Middle Ages) were implicit rules concerning the appropriate (and effective) way to conduct war; in this sense, the conventions of warfare are a kind of construction of war as a particular form of cultural activity. These have overtones, but other constructions of war are based on more practical considerations – how war *should* be fought from a practical perspective. The notion that military decisionmaking is influenced by culture has been explored in some depth in the literature on 'strategic culture', of which I will

provide a brief overview here. It is important to note that the study of strategic culture is primarily concerned with the cultural aspects of the formulation of strategic decisions by *one* actor, rather than describing a wider culture of rules, laws and norms which bind the behaviour of two or more competitors as they go to war. I include this overview here as strategic cultures are an example of regulated behaviour – and because the tendency of human beings to limit their behaviour to what is conventional and familiar is of great significance in war, as I will go on to show in the next chapter on strategy.

Strategic Culture

The concept of strategic culture was first mooted by Jack Snyder in 1977, in his treatment of Soviet strategy for the RAND corporation; in contrast to the rational-choice analysis so favoured by other denizens of that institution, Snyder held that a country's strategic culture – "the sum total of ideas, conditioned emotional responses, and patterns of habitual behaviour that members of a national strategic community have acquired through instruction or imitation"[275] – was a formative influence on its strategic decision-making process. The "first generation" of strategic culture analysis not only opposed the assumptions which underlaid the 'rational actor' model-based strategic thought of the time, but also the apparent technological determinism of massively powerful nuclear weapons – instead positing that different societies had different national 'styles' of warmaking which were cultural in nature:

> Most of those who use the term "culture" tend to argue, explicitly or implicitly, that different states have different predominant strategic preferences that are rooted in the early or formative experiences of the state, and are influenced to some degree by the philosophical, political, cultural, and cognitive characteristics of the state and its elites. Ahistorical or "objective" variables such as technology, polarity, or relative material capabilities are all of secondary importance. It is strategic culture, they argue, that gives meaning to these variables. The weight of historical experiences and historically-rooted strategic preferences tends to constrain responses to changes in the

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[275] Jack L. Snyder, "The Soviet Strategic Culture: Implications for Limited Nuclear Operations." (Rand R-2154-AF, Santa Monica, CA, 1977), p.8

"objective" strategic environment, thus affecting strategic choices in unique ways. If strategic culture itself changes, it does so slowly, lagging behind changes in "objective" conditions.[276]

There followed a debate over the merits of the strategic cultural approach, notably between Alastair Johnston and Colin Gray. Johnston criticised the cultural approach as going too far in relegating 'objective' factors to the background: if everything – "technology, geography, organizational culture and traditions, historical strategic practices, political culture, national character, political psychology, ideology, and even international system structure" – is cultural, the term becomes meaningless; the model cannot not be tested against a non-cultural model because by definition a non-cultural model of strategy does not exist. Furthermore, it risks being overly deterministic.[277] Snyder himself backed away from such a broad conception of strategic culture, arguing that it should only be used when analysing cases where cultural factors were being seen to exercise an outsize influence on strategic planning;[278] Nevertheless, Gray argued in reply that – along the lines of Kratochwil, Searle and Bourdieu – all human action takes place in a context of culture. "strategic culture provides a context for understanding, rather than explanatory causality"[279] Though objective factors measured by more positivist theories are undoubtedly important, "the strategic cultural context thus constitutes and gives meaning to the material variables that realist theories typically rely on for explanation."[280]

Strategic culture, although being concerned with the decision-making process of one actor as opposed to a number of competitors, has much in common with the general characteristics of rules as I have laid out above. Cultural beliefs as to what is appropriate or effective serve a similar function to other types of rules, in that they reduce the number of options an actor needs to choose from; in much the same way as Kratochwil describes the

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[276] Alastair Johnston, "Thinking about Strategic Culture." *International Security* Volume 19, Number 4, Spring 1995, p.34
[277] Johnston (1995), p.37
[278] Jack Snyder, "The Concept of Strategic Culture: Caveat Emptor" in C.G Jacobsen (ed.), *Strategic Power: USA/USSR,* (New York: St Martin's Press, 1990)
[279] Colin Gray, "Strategic Culture as Context: The First Generation of Theory Strikes Back", *Review of International Studies*, Vol. 25, No. 1 (Jan., 1999), p.49
[280] Stuart Poore, "What is the context? A reply to the Gray-Johnston debate on strategic culture", *Review of International Studies*, Vol. 29, No. 2 (Apr., 2003), pp. 280

function of rules as a way of simplifying choices, Alastair Johnston notes that "strategic culture simplifies reality";[281] cultural beliefs can also reinforce the social hierarchy and distribution of power within an organisation just as much as explicit laws can, as Gramsci and other critical theorists would attest (a point which I will go into greater detail shortly, with an examination of Snyder's *The Ideology of the Offensive*). Theo Farrell notes the rule-based nature of strategic culture in his study *The Norms of War*, where he characterises those norms as "technical scripts and moral codes"[282], which govern an actor's perception of what is physically possible or likely to be successful in war, as well as what is morally permissible. Farrell pays particular attention to "transnational norms of military professionalism", which contribute to a common understanding of how war should be fought and prepared for; he chooses the case of the the Irish Army in the period following the Irish Revolution as a particularly puzzling case of military decision-making, which can be explained principally with reference to this aspect of strategic culture. After two years of irregular warfare against Britain, Ireland had gained some degree of independence from the British Empire. It was beset by two strategic threats: the most important was naturally that of Britain, but the most immediate was that posed by IRA rebels who objected to the conditions of the peace the Irish Government had assented to. In these conditions,

> Lacking the time and expertise to invent their own system of organization, Irish officers decided to adopt a foreign system and after looking around they opted for Britain's system. However, the British system was not chosen for its military success (after all, the British Army had itself failed to crush Irish rebellion), but for its familiarity… The Irish Army did need to quickly adopt a military system so it could get on with fighting the rebels, and the British Army was the most easily assimilated.[283]

The choice of a conventional armed force along the British model was a bizarre one, given the threat from the British in particular. A conventional defense against an expected British invasion (it was assumed that Britain would invade in order to control Ireland's Atlantic ports in the event of a European war) would have been batted aside with little effort;

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[281] Johnston (1995): 32-64.
[282] Farrell, p.4
[283] Ibid., p.27

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British troops and materiel outnumbered the Irish, and standards of training were much higher on the British side. The deployment of an irregular force which threatened to tie down a large number of British divisions sorely needed elsewhere would have been a much more promising strategy, but the Army chose a conventional force structure regardless.[284] Farrell points to other small states which have chosen to invest in a Western triservice (army, navy and air force) model, one that is capital-intensive and unsuited for developing nations which might rather be expected to focus on their comparative advantage in labour-intensive force structures; nevertheless, the military norm of a conventional force structure persists.[285] This choice can be interpreted as a consequence of the vast selection of options open to strategic planners; preconceived notions of how war should be done spares cognitive effort, and more importantly spares strategists from consciously addressing the uncertainty of war, and the implications this has for any planner who is trying to come up with a foolproof strategy. Adopting a preselected, 'tried-and-tested' force structure or strategic plan is naturally especially reassuring, despite whatever advantages an innovative strategy might have.

Another particularly well-examined example of inappropriate strategic doctrine leading to disaster was the choice of several of the great powers which fought the First World War – France, Germany and Russia – to opt for a strategy based on the offensive, one which was radically out of step with the prevailing technological conditions on the eve of that war – a thesis advanced by Jack Snyder in his book *The Ideology of the Offensive.*[286] In the years preceding the First World War, a system of alliances had bound Europe into two armed camps, with the Entente powers of France, Russia and the United Kingdom pitted against the 'Central Powers' of Germany, Austria-Hungary and Italy. When Austria invaded Serbia in the July of 1914, Russia mobilised to defend the smaller state, provoking a German mobilisation in response; French mobilisation in support of Russia was met with a German invasion according to the pre-war Schlieffen Plan, which aimed to knock France out of a two-front war (Russia being the other front). The invasion of Belgium as a means to this plan violated the Treaty of London which guaranteed Belgian neutrality, which brought the UK into the war. War on the Western Front became bogged down in the trench warfare for which it became notorious, while in the east German armies were able to manoeuvre more

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[284] Ibid., p. 28
[285] Ibid., p. 34-35
[286] Jack Snyder, *The Ideology of the Offensive,* (Ithaca: Cornell University Press, 1989)

effectively and defeat invading Russian forces which, though large, were poorly equipped and led.

In the cases of Germany, France and Russia, each state had begun the war with an offensive plan of action, each of which resulted in problems. Snyder's argument is that there were a number of motivations behind the choice of an offensive strategy in the case of these three countries, and that these were not exclusively based on a rational and objective strategic assessment. The relative advantages of the offensive and defensive depend on technological and geographical factors, and the political aims of the countries concerned; in the context of the First World War, there were a number of technological factors which greatly reinforced the strength of the defensive against the attack (the influence of which was, contrary to popular belief, widely understood from the examples of the Boer and Russo-Japanese Wars). Each of the three countries, Snyder argues, would have been better off fighting defensively – in the case of Germany, by invading Belgium and taking the offensive against France, its strategy brought the UK into the war – inviting a naval blockade it had consciously sought to avoid. Snyder argues that, despite some superficial evidence that suggests an offensive posture would be preferable, the choice of such strategies was not the result of detached strategic reasoning; instead, "the choice of offensive strategies by the continental powers was primarily the result of organisational biases and doctrinal over-simplifications of professional military planners."[287] Snyder points to two sources of bias which shaped the decisionmaking process of the countries' strategists: "the first, biases rooted in the motivations of the decision makers, especially in their **parochial interests**, and the second, biases that result from decision makers' attempts to **simplify and impose a structure** on their complex analytical task."[288]

France was the country whose strategy Snyder characterises as being most strongly influenced by the first sort of bias. Prior to the war, the French military establishment was striving to maintain independence from civilian control and the imposition of a reservist-based force structure, which led it to advocate an offensive strategic doctrine which could only be carried out by professional soldiers who were trained and practised over many

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[287] Ibid., p.16
[288] Ibid., p.18, emphasis added.

years.[289] Regardless of their importance, these narrow, 'parochial' interests are of course not exclusive to military organisations, being found in any corporate enterprise which relies on the cooperation of disparate sub-groups. More closely connected with the experience of war is the psychological role of doctrine and the needs it meets in this regard. In certain situations, what Snyder calls "decisional conflicts" are presented to the strategic decision-maker. These can take the form of a contradiction between preconceptions and reality; between the assumptions of a strategic plan and the realities of the unfolding war. Attaining an effective understanding of reality is a pressing psychological need for the commander; in war, there is a huge amount of information to process and is often confusing and inchoate; simplified doctrine provides a mechanism for making sense of the mass of perceptions and satisfies "the cognitive and organisational need for simplicity and stable structure."[290]

There are, Snyder postulates, five sources of bias from doctrinal simplification. The first is *focus of attention* – the fact that soldiers are preoccupied with fighting and war colours their perception of reality and blinds them to less violent and conflictual ways of settling disputes – as the saying goes, if all one has is a hammer, everything looks like a nail; the same could be argued to apply to armed force. From this perspective, the proactive use of offensive violence has an innate appeal prior to any situational reasons. The second source is the factors which shape the *formation of doctrine* – a small and potentially unrepresentative number of formative experiences, such as limited experience of past wars (and the repeated training based on those experiences), moulds the military mindset in a set way which is not updated to take into account changes which have occurred in the meantime, particularly with regards to technology. The third source is the *dogmatisation of doctrine*: "all doctrines are dogmatic in the sense that they are simple, narrow, deductive, and resistant to changes, but some are more dogmatic than others"[291] and doctrines are likely to become dogmas in centralised organisations which can effectively disseminate them, and when they are not

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[289] Ibid., p.16

[290] Ibid., p.27. Norman Dixon's *On The Psychology of Military Incompetence* (London: Jonathan Cape, 1976) advances a similar thesis – unimaginative generals are drawn to the ostensibly highly regulated and ordered military profession, in which they do well up to a point (especially in peacetime, where good drill order is much prized in career advancement), but ultimately become paralysed by untoward events on the battlefield – presented with a novel problem, the incompetent general reflexively applies the 'approved' manoeuvres despite their demonstrated unsuitability.

[291] Snyder (1989), p.29

tested against reality. Fourth, the *economy of calculation* – this is a consequence of the tendency of doctrine to function as a 'rule of thumb'; when confronted with uncertain information, particularly in technical areas like logistics, calculations can be excessively optimistic; as Clausewitz would say, the strategist might not make adequate allowances for friction. Lastly, the need for *reduction in uncertainty* can push strategic planning along offensive lines: when one attacks, one has the initiative and imposes one's plan of action upon the enemy, and by definition one knows what one is going to do (or at least try to do); however, when one defends, one is reacting to the unpredictable actions of the opponent. A defensive posture may not be so difficult to execute in the event of war – in fact, an attack always exposes one's forces to a degree of risk as they move and are unable to fight properly – but in planning for a war, it is much simpler to take the active role rather than speculate as to the enemy's potentially myriad plans.[292] Though a number of these factors apply to other pursuits, here we can see the pressures on the strategist which are central to war, key among them the need to simplify the informational demands of war and the difficulty of formulating a plan in an environment which is in a state of constant change. Ultimately, though, there is always a pressure to hold to some kind of doctrine – "the advantages of "keeping an open mind" do not compensate for the lack of a theory of victory"[293]

Geopolitics and geostrategy

Strategy can also be constructed on more objective foundations; as we have seen from Snyder's account, a key influence on German strategy was its geographic position between France and Russia, a factor which played a strong role in shaping the Schlieffen plan. This use of geography as a determinant of strategic planning has enjoyed a long career in the form of geopolitics, which has sought both to identify areas of key strategic significance on the basis of geographical properties (for instance, easily interdicted trade routes such as the Malacca straits), and to formulate general strategies based on theories of how geographic constants influence the distribution of power throughout the world. The most famous exponent of geopolitics was the British geographer Halford Mackinder. Mackinder believed that he had identified in world geography a strategic principle – even a law – in that control

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[292] Ibid., p.28-30
[293] Ibid., 32

of an area which he called the "Heartland" would determine who would dominate the entire world. This area was the vast expanse of land in Central Asia which stretched from Europe in the East to the Gobi Desert in the West, and from the Himalayas in the South to the Arctic Sea in the North. In past times, this land produced the steppe nomad tribes who occasionally burst onto their civilised neighbours; at the time Mackinder was writing, it was mostly under the control of the Russian Empire. Due to the invention of railways, the possession of such a large expanse of resource-rich land, with secure internal lines of communication and strong external barriers in the form of deserts, mountains and an unnavigable sea, would (so Mackinder claimed) enable the holder to dominate the rest of the world.[294] As he put it,

> "Who rules East Europe commands the Heartland;
> who rules the Heartland commands the World-Island;
> who rules the World-Island commands the world."[295]

Mackinder's observations were ostensibly objective, identifying the seat of power in world politics and commenting on the power dynamics which would result from it - but from the perspective of a power which did not occupy the Heartland, such theorising was obviously pregnant with possibilities: denial of control of this area to a continental power was a key strategic necessity. Mackinder's theory proved influential, appealing to a ready audience in two such powers, the United Kingdom and the USA (notably shaping Zbigniew Brezinzski's own strategic vision for the United States in his book *The Grand Chessboard*), but other thinkers interpreted the same map of the world a little differently. Nicholas Spykman, for one, saw the 'rimland' – the coastal fringe of the world island (analogous to the "inner or marginal crescent" on the map below) – as the key geostrategic resource, based on factors like its industrialisation relative to the more backward interior of the Heartland.[296]

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[294] Halford Mackinder, "The Geographical Pivot of History", *The Geographical Society*, Vol. 23, No.4, (April 1904), 421-437

[295] Halford Mackinder, *Democratic Ideals and Reality,* (National Defense University Press, 1996), p.150

[296] Nicholas Spykman, *The Geography of the Peace,* (Harcourt, Brace and Company, 1944); *America's Strategy in World Politics: The United States and the Balance of Power*, (Harcourt, Brace and Company, 1942)
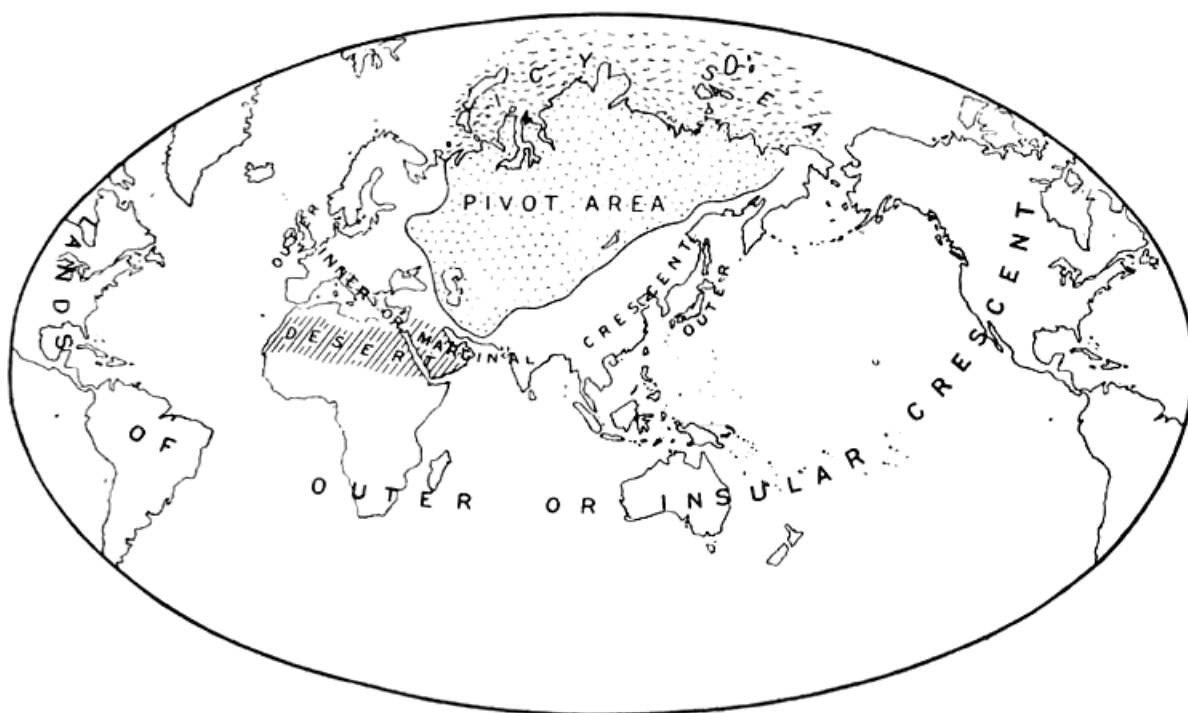
"The Natural Seats of Power" from *The Geographical Pivot of History*[297]

Similarly, Britain's unique geographical nature as an island nation (and its economic implications) has been posited as the source of a particularly "British Way of Warfare", most notably by Basil Liddell Hart. Deriving its power from maritime trade, Britain's interests laid in commerce rather than territorial domination of the continent of Europe; this geographical and economic position determined (or, *ought* to determine) its strategy, which should consist of the denial of that continental domination to its mainland rivals – the country coming to grief when this strategy was forgotten. Limited use of military force succeeded in frustrating the designs of those who sought to dominate Europe and threaten British commercial interests – from the Spanish in the days of Elizabeth I, to the Dutch in the time of Cromwell and Charles II, to the French, beaten by the Duke of Marlborough and later by Wellington. In these cases sea power played a central role and land warfare, when it occurred, was conducted with relatively limited numbers and a tendency to draw on the military resources of allies (such as the Dutch, in the War of the Spanish Succession).[298] Such a strategy, Liddell Hart claimed, would serve Britain's interests better than its uncharacteristic intervention into mass continental warfare in the First World War. Naturally Liddell Hart's thesis has proved

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[297] Mackinder (1904), p.435
[298] Basil H. Liddell Hart, *The British Way in Warfare*, (London: Faber and Faber, 1932)

controversial; Michael Howard argues in *The Continental Commitment: the Dilemma of British Defence Policy in the Era of the Two World Wars,* that British strategy in Europe had always relied both on naval power and the deployment of armies on the European mainland – a theme which continued to his own day, when the Cold War rivalry over Europe necessitated a strong British presence (that said, Howard does not deny the recurrent strategic theme of British efforts to prevent a territorial hegemon from controlling the continent of Europe).[299] Elizabeth Kier sees Liddell Hart's theories as a reaction to the First World War, rather than as a disinterested account of genuine traditions; opposition to a repeat of the First World War experience both within the armed forces and in the political establishment found Liddell Hart's analysis useful in pushing a limited military agenda.[300] Yet another school of geostrategy was founded by the German Karl Haushofer, who played an influential role in the formulation of German *Geopolitik*; here the need for *lebensraum* was accorded a central role in determining the shape of strategy, with racial theories colouring the analysis... As might be noted, the profusion of different schools of geostrategy and geopolitics, and their varying interpretations of the same 'objective' conditions, gives the lie to the assumption that a truly objective strategy might be arrived at; like all other aspects of war, geographic reality is filtered through a mass of cultural assumptions which lend emphasis to some factors and downplay others. Technological change (as Mackinder notes with the importance of the railways in making the Heartland so significant) again complicates matters, changing the significance of certain features of geography and terrain. The formulation of strategy primarily on the basis of technological capabilities is another factor entirely – I will explore strategies based on this aspect of war in the next chapter.

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[299] Michael Howard, *The Continental Commitment: the Dilemma of British Defence Policy in the Era of the Two World Wars,* (London: Maurice Temple Smith Ltd, 1972); see also "The British Way in Warfare: A Reappraisal" in Michael Howard (ed.) *The Causes of War and Other Essays* (London: Unwin, 1984)
[300] Elizabeth Kier, *Imagining War: French and British Military Doctrine Between the Wars,* (Princeton University Press, 1997)

Clausewitz on Strategy

Clausewitz's definition of war barely needs introduction: "a continuation of political intercourse carried on with other means."[301] But what are the means? Clausewitz is revealing, on the first page of *On War:*

> *War is thus an act of force...* Force – **that is, physical force, for moral force has no existence save as expressed in the state and the law –** is thus the means of war; to impose our will on the enemy is its object. To secure that object we must render the enemy powerless; and that, in theory, is the true aim of warfare. That aim takes the place of the object, discarding it as something not actually part of war itself.[302]

Nevertheless, the drive to pure destruction is modified by the object of the war, and political considerations have important implications for strategy. We have already seen from our previous study of Clausewitz that he had particular views on strategy and the limited possibilities of formulating principles which are both detailed and eternally valid. This is due in large part to the vast number of variables a strategist must take into account, and the historically specific characteristics of the war in question; this is especially the case regarding the political aim of war:

> To discover how much of our resources must be mobilized for war, we must first examine our own political aim and that of the enemy. We gauge the strength and situation of the opposing state. We must gauge the character and abilities of its government and people and do the same in regard to our own. Finally, we must evaluate the political sympathies of other states and the effect the war may have on them. To assess these things in all their ramifications and diversity is plainly a colossal task. Rapid and correct appraisal of them clearly calls for the intuition of a genius; to master all this complex mass by sheer methodical examination is obviously impossible. Bonaparte was quite right when he said that Newton himself would quail before the algebraic problems it could pose.[303]

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[301] Clausewitz (1976), p.87 – my emphasis.
[302] Ibid., p.75
[303] Ibid., 586

We may note that Clausewitz draws a distinction between war and peace on the basis of law and authority – two things he presumably sees as missing in war; nevertheless war is fought through physical force. In any case the means by which strategy is carried out is through the use of force. Once all has been said about mental calculation and subtleties of strategy in pursuing a desired end, Clausewitz is uncompromising about the means that can be used:

> There is only one: *combat*. However many forms combat takes, however far it may be removed from the brute discharge of hatred and enmity of a physical encounter, however many forces may intrude which themselves are not part of fighting, it is inherent in the very concept of war that everything that occurs *must originally derive from combat.*[304]

That is not to deny the use of feints and ruses -

> [this theory] holds good even if no actual fighting occurs, because the outcome rests on the assumption that if it came to fighting, the enemy would be destroyed. It follows that the destruction of the enemy's force underlies all military actions; all plans are ultimately based on it, resting on it like an arch on its abutment. Consequently, all action is undertaken in the belief that if the ultimate test of arms should actually occur, the outcome would be favorable.[305]

Physical destruction of the enemy's forces can give rise to a moral collapse,[306] and indeed the moral disintegration of an army could be said to destroy it in a sense. Destruction of the enemy's forces trumps other means, in that the changed physical capabilities of each side have a 'ripple-down' effect by dint of altering the raw material with which each side makes its calculations and estimates of future success or failure. There are obvious drawbacks to this means, however – as Clausewitz states, "the greater the success we seek, the greater

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[304] Ibid., 95
[305] Ibid., 97
[306] Ibid., 97

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the damage if we fail",[307] and to engage in the *vernichtungsschlacht* is to court irrevocable defeat as well as decisive victory. Given the chancy nature of battle, with all its friction and danger, there is no guarantee that even a well-prepared side will win. "The advantage that the destruction of the enemy possesses over all other means is balanced by its cost and danger; and it is only in order to avoid these risks that other policies are employed."[308]

How this force is used can vary, however; a war can be fought in a totally 'absolute' fashion, aiming at the total annihilation of the enemy, or instead the general can prosecute a 'limited' war. Influencing the enemy's expectations of future success or failure can be achieved through political machinations – breaking apart an alliance or forming ones of our own[309] and making the war more costly, by means of physical damage to the enemy. This can take two forms – the destruction of his armed forces, and the seizure of territory.[310] Modern parlance would define these as 'counterforce' and 'countervalue' attacks: the destruction of the armed forces destroys the enemy's present power and the seizure of his lands destroys his ability to supply them. Economic blockade could be considered an example of the latter sort of strategy (the exclusive mention of 'land' is perhaps one area where Clausewitz could justifiably be accused of irrelevance to contemporary war, in an uncharacteristic instance of under-theorising); strategy can proceed on the basis of 'centres of gravity' which are so identified. In any case the outright defeat of the enemy is not required for victory, merely his submission having recognised that continuing the fight is no longer worth the effort. However, there is an advantage bestowed on whichever side is more willing to engage in a decisive battle; if one is pursuing another more 'limited' strategy, one's resources and plans will be less adapted to the type of fight the opponent wants to engage in: by the nature of battle, initiative lies with the attacker, who can force the issue whether the opponent wants the fight or not.[311] Clausewitz does not insist that there are no valid strategies in war other than the pursuit of decisive destruction of the enemy forces – if we are sure our opponent is unwilling to resort to a battle we can limit our own exertions[312] – but the trump card of combat cannot be ignored:

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[307] Ibid., 97
[308] Ibid.
[309] Ibid., 92
[310] Ibid., 93
[311] Ibid., 98
[312] Ibid.

If the political aims are small, the motives slight and tensions low, a prudent general may look for any way to avoid major crises and decisive actions, exploit any weaknesses in the opponent's military and political strategy, and finally reach a peaceful settlement. If his assumptions are sound and promise success we are not entitled to criticize him. But he must never forget that he is moving on devious paths where the god of war may catch him unawares. He must always keep an eye on his opponent so that he does not, if the latter has taken up a sharp sword, approach him armed only with an ornamental rapier.[313]

Such considerations no doubt motivated the battle-averse generals of the *ancien regime* – whereas Napoleon, who was not risking the whole of France's vast strength in each engagement, could take the boldest course of action and force a series of battles that his enemies would have rather avoided – the prize for such decisive use of destruction being near-total domination of Europe.

The risks and dangers of battle are compounded by the inherently chancy nature of warfare – as we have already noted, Clausewitz had a heightened appreciation of the role of chance and uncertainty in war: danger and its effect on the psyche; physical effort; poor information; and the effects of 'general friction', all combine to frustrate the designs of the commander. It is instructive to note the physical element in most of these factors, just as Clausewitz defines war to be a physical exercise. Clausewitz is dismissive of attempts to build ornate theories and derive 'principles of war' in the fashion of his more geometry-minded competitors, and his appreciation of the physical side of war is no doubt a reason for this; what, then, can be done to overcome the difficulties inherent in warfare? Firstly, Clausewitz places the greatest emphasis of all on the person of the commanding general as the key force in overcoming the difficulties inherent in war, whose genius overcomes the obstacles inherent in war. A general of 'genius' has presence of mind, *boldness* and *perseverance* in dealing with the pervasive uncertainty of war. There are other limited principles of war (again, as examined earlier) which the strategist can adhere to, like the

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[313] Ibid., 99

concentration of force and mastery of technical routines: essentially, Clausewitz's most important qualifications are 'bottom-up' qualities which can be applied to any situation Clausewitz lists among other requirements of strategy the use of surprise; the superiority of numbers and their concentration in time and space in a way which reinforces their strength and exploits enemy weakness, and the maintenance of a strategic reserve – but only in such a way as it can reliably provide timely assistance.[314] These last three headings he groups under the concept of *economy of force*[315]*,* which does not mean eking out military resources, but rather refers to the need to make sure that all resources are being used in the most efficient manner.

Clausewitz does seem to argue that the strategic sphere is less uncertain than other levels of war. A potentially telling comment on the increasing influence of chance on military affairs is in Chapter 13 of Book 3 of *On War,* on "The Strategic Reserve". Clausewitz makes the assertion that uncertainty becomes less of a factor as one moves from the tactical to the strategic level ("it practically disappears in that level of strategy which borders the political")[316] The risk of strategic surprise is much less than tactical surprise, as whilst in battle we are only aware of an approaching enemy when they are drawing near, in the realm of strategy "the direction from which he threatens our country will usually be announced in the press before a single shot is fired." This, along with Clausewitz's claims regarding intelligence, are rather extreme interpretations of a general truth. Strategic surprise was utilised on a number of occasions in the Second World War, such as the Allied invasion of Sicily (deception operations, notably Operation Mincemeat, hinted at an invasion in Greece), as well as Operation Overlord (here, the pas de Calais). Strangely Clausewitz discounts the human dimension in strategic surprise – the German Ardennes offensive of 1940, Operation Barbarossa, and the Japanese attack on Pearl Harbour were all forewarned, but failure to act on intelligence made the obviousness of the threats irrelevant. He surely cannot have been unaware of Frederick the Great's bold invasion of Saxony at the outset of the Seven Years' War.

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[314] Ibid., 175-223
[315] Ibid., 213
[316] Ibid., 210

Following the First World War, Clausewitz's apparent avocation of destruction and 'total war' above all else was blamed for the strategy of attrition which inflicted such slaughter in the trenches. One such critic was the British military theorist Basil Liddell Hart,[317] who like many others in the inter-war years attempted to refine military doctrine and reintroduce manoeuvre to war in the West. Liddell Hart's vision of strategy was opposed to the unimaginative and profligate use of forces in the First World War, which he (wrongly) blamed on the pernicious influence of Clausewitz, and sought to identify ways in which armed force could be deployed with maximum effectiveness. This he found in the 'indirect approach': the use of manoeuvre in time and space to engage with the enemy on superior terms, magnifying the effect of the forces used. The 'indirect' aspect refers to the fact that manoeuvring in this way takes time and effort; attacking in the easiest and most predictable way is in Liddell Hart's model a *direct approach;* an attack from an unexpected direction, like Lawrence's assault on Aqaba from the Nefud Desert, is unexpected because the terrain it is launched from is (rightly) considered difficult (the same goes for other factors, like the time of day or year – for instance the 1944-5 Ardennes offensive, launched in winter); the payoff to the preparation comes when a comparatively small force is able to achieve results out of proportion to their numbers, achieving victory at a stroke.

To achieve this end Liddell Hart's strategy aims at what he calls *dislocation,* which is to say to break the cohesion of the enemy's forces, and not their destruction *per se.*

How is the strategic dislocation produced? In the physical, or 'logistical' sphere it is the result of a move which (a) upsets the enemy's dispositions and, by compelling a sudden 'change of front', dislocates the distribution and organisation of his forces; (b) separates his forces; (c) endangers his supplies; (d) menaces the route or routes by which he could retreat… In the psychological sphere, dislocation is the result of the impression on the commander's mind of the physical effects which we have listed. The impression is strongly accentuated if his realisation of being at a disadvantage is sudden, and if he feels he is unable to counter the enemy's move. Psychological dislocation fundamentally springs from this sense of being trapped. This is the reason

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[317] See Christopher Bassford, "John Keegan and the Grand Tradition of Trashing Clausewitz: a Polemic", *War in History,* November 1994 1: 319-336

why it has most frequently followed a physical move on to the enemy's rear… In contrast, to move directly on an opponent is to consolidate his equilibrium, physical and psychological, and by consolidating it to augment his resisting power."[318]

In many ways Liddell Hart resembles Sun Tzu, the author of *The Art of War*. Sun is supposed to have been a Chinese general in the service of the King of Wu, around the mid to late 6th Century BC. His book is held up by many manouvreists as presaging their own theories, not least Liddell Hart, who wrote a glowing foreword to a 1963 translation.[319] Sun's philosophy of warfare is centered around his advocacy of the ideal victory, one which is won before battle is joined – as Sun famously remarked, "a victorious army wins its victories before seeking battle; an army destined to defeat fights in the hope of winning".[320] The means of doing so are several: acquiring intelligence whilst deceiving the enemy; dividing the enemy's forces (whether in terms of strategic alliances or on the battlefield) whilst maintaining the cohesion of one's own; engaging in battle only under favourable conditions, both physical and moral; and acting in accordance with changing circumstances.

Intelligence and deception are the two areas in which Sun is markedly different from Clausewitz, who as we have seen, was rather circumspect about the possibilities of military intelligence, which he considered inherently unreliable. Sun almost takes the opposite extreme: "of all those in the army close to the commander, none is more intimate than the secret agent."[321] He describes various techniques through which intelligence may be gathered – identifying the composition of an enemy army by the height of the dust thrown up by their approach, and identifying supply problems through similar observations (troops leaning on their weapons indicates that they are hungry, and if water-carriers are spotted drinking at the source before carrying water back to camp, then one can assume the army is thirsty);[322] the use of secret agents is also advised, with intelligence-gathering made down to the level of discovering the names of garrison commanders, staff officers, gatekeepers and so on.[323] Deception – furnishing the enemy with false information and concealing one's own intentions

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[318] Liddell Hart (1967): 339-340
[319] See Sun Tzu, *The Art of War,* Samuel B. Griffith (trans.), (Oxford University Press, 1963), p.v-vii
[320] Ibid., p.87
[321] Ibid., p.147
[322] Ibid., p.32-33
[323] Ibid., p.148

– is the counterpart to this, denying the enemy the advantages of good intelligence and hindering his own efforts. "war is based on deception. Move when it is advantageous and create changes in the situation by dispersal and concentration of the forces."[324] Sun exploits to the full the possibilities of conflict unbound by a constitution: "the enemy must not know where I intend to give battle. For if he does not know… he must prepare in a great many places."[325]

Sun's focus on unpredictability similarly has two aspects, the need for one's actions to remain unpredictable, and the necessity of coping with an unpredictable environment: "as water has no constant form, there are in war no constant conditions."[326] Despite Sun's optimistic view on how a commander can plan his way to victory, there is a strong acknowledgement that every situation in war is unique, and that there are no set ways to do things – in a rather poetic turn of phrase, "Thus, one able to gain the victory by modifying his tactics in accordance with the enemy situation may be said to be divine. Of the five elements, none is always predominant; of the four seasons, none lasts forever; of the days, some are long and some are short, and the moon waxes and wanes."[327] Naturally one must do one's utmost to make this task as difficult as possible for one's enemy, altering tactics even after (or even, especially after) a victory so as to remain unpredictable,[328] and attacking when unexpected and when the enemy is unprepared.[329] "Speed" writes Sun, "is the essence of war."[330] This applies both on the tactical and strategic levels – rapid manoeuvring brings advantage on the battlefield, facilitating unpredictability, but avoiding the dangers of a prolonged conflict is also a recurrent theme in *The Art of War*.[331]

Though Clausewitz and Sun take different perspectives, their respective approaches to war are both based on an appreciation that in war anything is possible. Sun and Liddell Hart seem to be more optimistic about the possibilities for innovative strategies, whereas

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[324] Ibid., p.106
[325] Ibid., p.98
[326] Ibid., p.101
[327] Ibid.,
[328] Ibid., p.100
[329] Ibid., p.25
[330] Ibid., p.134
[331] Ibid., p.73

Clausewitz (despite acknowledging the possibilities of war) appears to be more circumspect regarding the difficulties inherent to war I will now examine two 'inductive' doctrines which strongly bear the influence of both thinkers: maneuver warfare, and irregular war.

Maneuver Warfare

"Speed is the essence of war. Take advantage of the enemy's unpreparedness; travel by unexpected routes and strike him where he has taken no precautions"[332]

As can be seen from Sun's aphorisms, manoeuvre has been a part of war for a long time. Perhaps the earliest recorded instance of it was the battle of Leuctra in 371 BC, fought between Thebes and Sparta; the Theban general Epaminondas arranged his troops to achieve local superiority of numbers on the Spartan flank, causing a rout which infected the rest of the Spartan army. The enlightenment era was particularly noted for the use of manoeuvre on the strategic level, where generals sought to avoid decisive (and risky) battles – either by trying to wage more predictable sieges, or by making elaborate marches which threatened to cut lines of supply, occupy advantageous ground, and so on – to the point where some military theorists aspired to uncover mathematical principles of strategy which would almost avoid the need for battle altogether. Both Clausewitz and Machiavelli were particularly damning of practice, whether carried out by cowardly *condottieri* or by risk-averse *ancien regime* armies, and since those days, 'manoeuvre' has been tarred with connotations of indecision and timidity.

The mass armies of the Napoleonic era brought about an increased emphasis on the decisive encounter and the clash of arms; this trend reached new heights in the slaughter of the First World War, as we have seen. Various manifestations of manoeuvre were born out of the experience of that war; the main focus of this chapter is the American response, 'maneuver warfare'. Despite its origins as a non-establishment theory and one seen as antithetical to an 'American way of war' characterised by attrition and overwhelming firepower, over a number of decades the doctrine exerted a profound influence on American military theory and practice, reaching its apotheosis in the lightning campaigns in the Gulf in

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[332] Ibid., p.134

1991 and 2003[333] and contributing in large part to the development of the 'AirLand battle' doctrine developed in anticipation of war with the Warsaw Pact countries in Europe. The doctrine was especially influential in the US Marine Corps, whose manual Warfighting is essentially a digest of Clausewitz's On War, combined with an exposition of the principles of maneuver. Maneuver warfare as a military doctrine grew out of theories developed by outsiders in the Pentagon in the late 1970s and early 1980s – notably the Air Force Colonel John Boyd, and the civilian theorist William Lind, author of the *Maneuver Warfare Handbook*.[334]

John Boyd began his military career as a fighter pilot in the Korean War, and later a flight instructor. Having flown F-86 Sabre jets in Korea, he was puzzled as to why they had a superior combat performance over the Soviet-built MiG-15s. Afterwards he spent time at the Pentagon developing his "Energy-Maneuverability theory" – a mathematical model which quantified the performance of a given plane, based on a calculation of its thrust-to-weight ratio, wing loading and other technical details. Boyd found the reason that the Sabre was better than the MiG was due to the fact it could transition from one manoeuvre to the next more quickly, and that its bubble canopy allowed better visibility and situational awareness than the MiG's more restricted cockpit.[335] The E-M theory went on to become the basis for US fighter training, and the design of new fighter aircraft, specifically the F-15 and F-16 (in which Boyd himself had a hand); it also provided the foundations of Boyd's own theories of war.

Boyd's theoretical work was never written down as a whole; he instead disseminated it through long lectures. The longest written part of his work is his essay *Destruction and Creation,* written in 1976. Boyd's views on war are nested within a very wide-ranging philosophy of life in general: in order to achieve our ends, human beings need to make

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[333] F. J. Bing West, "Maneuver Warfare: It Worked in Iraq" The Naval Institute: *Proceedings,* February 2004, http://www.military.com/NewContent/0,13190,NI_WAR_0104,00.html <accessed 3/9/15>; Major Stephen E. Hughes, "Desert Storm: Attrition or Maneuver" (Student monograph – School of Advanced Military Studies, United States Army Command and General Staff College, 1995), http://www.dtic.mil/dtic/tr/fulltext/u2/a300814.pdf <accessed 21/8/15>

[334] For a history of the period (written by one of the 'outsiders') see James Burton, *The Pentagon Wars,* (Naval Institute Press 2014)

[335] Frans Osinga, *Science, Strategy and War: The Strategic Theory of John Boyd,* (Delft: Eburon Academic Publishers, 2005), 44

decisions on what actions to take – and in order to make these decisions, we need accurate 'concepts' or 'theories' of the objective (and changeable) reality in which we live. A useful theory of reality can be arrived at by aggregating smaller concepts, on the basis of their "common qualities, attributes or operations" (Boyd implicitly likens this to Kuhn's theory of paradigms); however, Boyd noted, a perfect correspondence between a static model and the ever-changing reality it describes is an impossibility – we must constantly destroy and create new concepts of reality to keep up with the changing situation. Boyd argues this with an appeal to three scientific theories: the incompleteness theorem of Kurt Gödel; Heisenberg's uncertainty principle; and the second law of thermodynamics. Gödel's theorem states -

> that a*ny consistent system – that includes the arithmetic of whole numbers – is incomplete*. In other words, there are true statements or concepts within the system that cannot be deduced from the postulates that make-up the system.... *even though such a system is consistent, its consistency cannot be demonstrated within the system*.[336]

In other words, the assumptions upon which a theory is based cannot be proved to be true by the theory itself (for instance, the scientific method cannot itself prove the validity of empiricism – this has to be assumed) – a new theory will be needed to explain the assumptions, itself based on assumptions of its own. Any theory of reality will therefore ultimately be based on unproven assumptions:

> Likewise, our observations of reality must be incomplete since we depend upon a changing concept to shape or formulate the nature of new inquiries and observations. Therefore, when we probe back and forth with more precision and subtlety, we must admit that we can have differences between observation and concept description; hence, we cannot determine the consistency of the system—in terms of its concept, and matchup with observed reality—within itself.[337]

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[336] John Boyd, *Destruction and Creation*, http://pogoarchives.org/m/dni/john_boyd_compendium/destruction_and_creation.pdf (1976) <accessed 04/05/15>, p.4 (see Kurt Godel, "On Formally Undecidable Propositions of the Principia Mathematica and Related Systems," *The Undecidable*, Raven Press (1965), 3-38)
[337] Ibid., p.4

Heisenberg's Indeterminacy Principle states that we cannot know both the velocity and the position of a subatomic particle simultaneously – due to the 'observer effect', by which the observation of a process affects its outcome. The more involved the observer, the more uncertain the outcome; therefore (and here Boyd makes something of a logical leap, Heisenberg's principle being concerned with subatomic phenomena), when we are actively participating in the reality which we are conceptualising, our presence introduces uncertainty. The Second Law of Thermodynamics states that in a closed system, entropy (disorder) increases; our theories of the world become less useful:

> Accordingly, whenever we attempt to do work or take action inside such a system – a concept and its match-up with reality – we should anticipate an increase in entropy, hence an increase in confusion and disorder. Naturally, this means we cannot determine the character or nature (consistency) of such a system within itself, since the system is moving irreversibly toward a higher, yet unknown, state of confusion and disorder.[338]

Whether these rather esoteric theories are completely applicable to the kind of military decisionmaking processes Boyd analyses is debatable; certainly, they provide a compelling argument that the achievements of total accuracy, in our perception of reality, and certainty, in our theories of how reality 'works', is impossible. Somewhat ironically, for all his appreciation of the fallibility of such theoretical constructs, Boyd himself was inclined to believe the implications of his models over real life experience: on giving a lecture on his Energy-Maneuverability theory to a group of US Navy pilots, Boyd was insistent on the theoretical impossibility of American F-4 fighter beating a MiG-17 in a dogfight, despite disagreement from his audience, more than one of whom had done so themselves.[339]

How are we to cope with such pervasive uncertainty? Boyd held that by constantly updating our theories of reality, we could escape the accretion of errors and inaccuracies which ultimately overwhelm 'fixed' theories; this process of destruction and creation (after

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[338] Ibid, p.6
[339] Richard K. Wilcox, *Scream of Eagles: The Creation of Top Gun and the U.S. Air Victory in Vietnam,* (New York: J. Wiley 1990), 145-146

which the essay is named) underlies his most well-known intellectual tool, the OODA loop. The loop gets its name from the four stages in the decisionmaking cycle – Observe, Orient, Decide, and Act. 'Observation' is the process whereby information is gathered – the evidence of the senses, information communicated by others, orders from superiors and so on. 'Orientation' is the analysis of this raw information according to various conscious and unconscious processes – theories of how the world works, whether explicitly formulated or more unconscious and norm-based. 'Decision' (naturally) is the process of deciding a course of action based on the orientation stage; 'action' is the process of carrying it out. At each stage, feedback occurs – our own actions and thought processes having their own influence on events (vide Heisenberg's Principle), they are incorporated into another 'observation' stage.

Figure 1. The OODA Loop[340]

John Boyd's OODA Loop
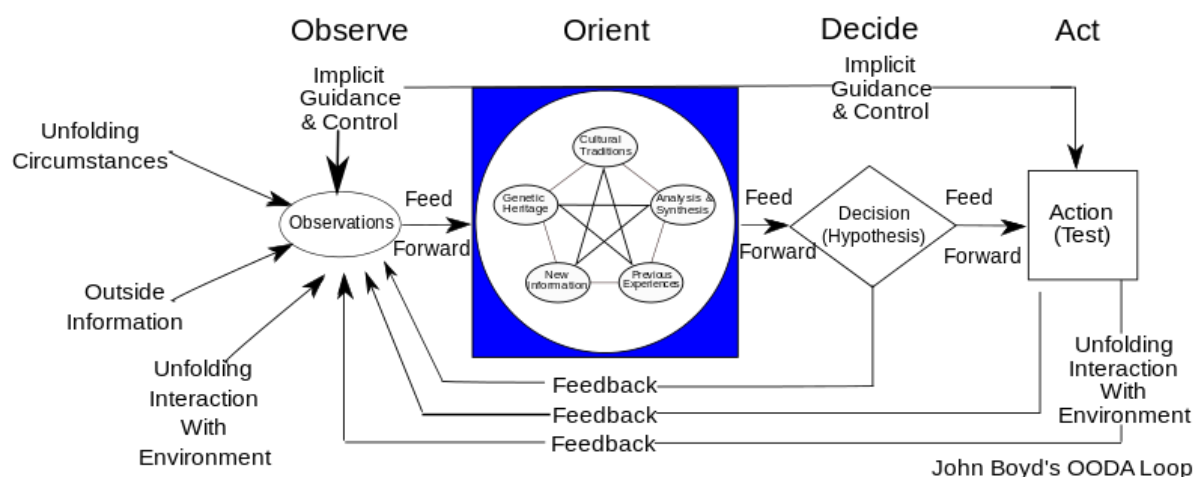
Boyd believed that the process of combat could – and would – be dominated by the actor who was able to carry out the cycle faster than their opponent. Given a fast enough cycle, a slower opponent would end up acting on observations which were effectively out of date; for example, in jet fighter combat between the Sabre and MiG, the Sabre's hydraulic

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[340] John Boyd, Patrick Edwin Moran (ed.),
https://commons.wikimedia.org/wiki/File:OODA.Boyd.svg <accessed 4/9/15> (Creative Commons attribution), Adapted from John Boyd, "The Essence of Winning and Losing" (lecture slides), edited by Chet Richards and Chuck Spinney (2010),
http://pogoarchives.org/m/dni/john_boyd_compendium/essence_of_winning_losing.pdf <accessed 4/9/15>

control system enabled a faster transition between manoeuvres from a turn into a dive, say –
and the MiG, despite its other mechanical advantages, would be lag behind the Sabre in the
decisionmaking 'tempo' as Boyd called it. The same process applies at various levels of
tactics and strategy; the actor able to 'get inside' the opponent's OODA loop will present to
them an increasingly disordered perception of reality, useless as a guide to action. Boyd
states, in lecture slides for his presentation, Patterns of Conflict:

> Operate inside adversary's observation-orientation-decision-action loops, or get inside
> his mind-time-space, to create tangles of threatening and/or non-threatening
> events/efforts as well as repeatedly generate mismatches between those events/efforts
> adversary observes, or imagines, and those he must react to, to survive;
>
> <div align="center">thereby</div>
>
> Enmesh adversary in an amorphous, menacing, and unpredictable world of
> uncertainty, doubt, mistrust, confusion, disorder, fear, panic, chaos … and/or fold
> adversary back inside himself;
>
> <div align="center">thereby</div>
>
> Maneuver adversary beyond his moral-mental-physical capacity to adapt or endure so
> that he can neither divine our intentions nor focus his efforts to cope with the
> unfolding strategic design or related decisive strokes as they penetrate, splinter,
> isolate or envelop, and overwhelm him.[341]

In Boyd's view, war is a chaotic and uncertain environment; however, we can take
advantage of this and 'funnel' the uncertainty toward our opponent. Whether Boyd
considered this to be a special characteristic of war is unclear – though others have adapted
his theories to other forms of conflict, such as business and litigation – certainly, such a
technique is less immediately feasible in turn-based conflicts as described earlier. Boyd
himself was concerned with military matters, and spent his career alongside other reformers –
the 'fighter mafia' and the proponents of Maneuver Warfare – trying to shape the way the US
military thought about war. It was on this latter theory that Boyd had a great deal of
influence.

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[341] John Boyd, "Patterns of Conflict" (lecture slides), edited by Chet Richards and Chuck Spinney
(2007), http://www.dnipogo.org/boyd/patterns_ppt.pdf <accessed 4/9/15>

Principles of Maneuver Warfare

Many years ago, as a cadet hoping some day to be an officer, I was poring over the'
Principles of War,' listed in the old Field Service Regulations, when the Sergeant-
Major came up to me. He surveyed me with kindly amusement. 'Don't bother your
head about all them things, me lad,' he said. 'There's only one principle of war and
that's this. Hit the other fellow, as quick as you can, and as hard as you can, where it
hurts him most, when he ain't lookin'!'[342]

The tenets of Maneuver Warfare are essentially as Field-Marshal Slim's old Sergeant-
Major puts it – attacking the enemy on advantageous conditions. There is more to it than that,
of course; what follows is a collection of principles derived from various 'maneuvrist'
publications – principally the US Marines manual MCDP 1 – *Warfighting*, and William
Lind's (another reformer) *Maneuver Warfare Handbook*. Maneuver warfare, as Boyd's
theories suggest, is primarily concerned with perception – presenting the enemy with a
confusing and chaotic situation, changing rapidly in front of their eyes. *Warfighting* puts it
thus:

> Rather than wearing down an enemy's defenses, maneuver warfare attempts to bypass
> these defenses in order to penetrate the enemy system and tear it apart. The aim is to
> render the enemy incapable of resisting effectively by shattering his moral, mental,
> and physical cohesion—his ability to fight as an effective, coordinated whole—rather
> than to destroy him physically through the incremental attrition of each of his
> components, which is generally more costly and time-consuming... Even if an
> outmaneuvered enemy continues to fight as individuals or small units, we can destroy
> the remnants with relative ease because we have eliminated his ability to fight
> effectively as a force.[343]

The alternative is a strategy of attrition:

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[342] Sir William Slim, *Defeat into Victory,* (London: Cassell and Co. Ltd, 1956), p.550–551
[343] MCDP 1 *Warfighting*, p.73

Warfare by attrition pursues victory through the cumulative destruction of the enemy's material assets by superior firepower. it is a direct approach to the conduct of war that sees war as a straightforward test of strength and a matter principally of force ratios. An enemy is seen as a collection of targets to be engaged and destroyed systematically... The attritionist tends to gauge progress in quantitative terms: battle damage assessments, "body counts," and terrain captured.[344]

Maneuver Warfare aims to bring about a breakdown in order among the enemy's forces – cohesion is undermined and an effective, coordinated response is (hopefully) made impossible. The way this is achieved is by identifying and attacking the enemy centre of gravity. This is a term borrowed from Clausewitz (the German term being *schwerpunkt*). A centre of gravity is, broadly speaking, whatever gives the enemy strength:

We ask ourselves: Which factors are critical to the enemy? Which can the enemy not do without? Which, if eliminated, will bend him most quickly to our will? These are centers of gravity. Depending on the situation, centers of gravity may be intangible characteristics such as resolve or morale. They may be capabilities such as armored forces or aviation strength. They may be localities such as a critical piece of terrain that anchors an entire defensive system. They may be the relationship between two or more components of the system such as the cooperation between two arms, the relations in an alliance, or the junction of two forces. In short, centers of gravity are any important sources of strength.[345]

A common characteristic of many of the 'centers of gravity' given above is their function as something that maintains the enemy as a cohesive force. A lone signalling station or field headquarters which coordinates the movements of an army group is an obvious centre of gravity, whose capture or destruction would radically diminish the enemy's capacity for resistance – as Antulio Echevarria puts it, "Centers of Gravity are focal points that serve to

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[344] Ibid., p.36
[345] Ibid., 46

hold a combatant's entire system or structure together and that draw power from a variety of sources and provide it with purpose and direction."[346]

Another key feature of Maneuver Warfare is an emphasis on decentralisation of command. Reliant as they are on speed, maneuverist tactics require rapid reaction to changing circumstances and the exploitation of fleeting opportunities. To this end, command decisions and responsibilities are entrusted to lower levels of the military hierarchy. Junior officers are expected to take the initiative, but equally must consider the implications of the situation from a vantage point at least two ranks above their position.[347] This is facilitated by the dissemination of the commander's intent to subordinate officers; these are expected to carry out the mission given to them, which is explained in the context of the commander's plan; therefore, if the situation on the ground changes, the subordinate can adapt to the new circumstances and act accordingly. All that is required is that the junior commander keeps his superior informed.[348] This is explicitly modelled around the need to maintain a fast OODA loop;[349] as soon as new information is received, it should be acted on as soon as possible to achieve the greatest effect. As George Patton noted, "A good solution applied with vigor now is better than a perfect solution applied ten minutes later."[350]

A corollary to rapid exploitation of new developments is the denial of the same capacity to the enemy; if the opposing commander cannot make sense of a rapidly changing environment then by definition he cannot keep up with the OODA cycle of his opponent. Key to this is the avoidance of recognisable patterns; Lind quotes the German General Hermann Balck:

There can be no fixed schemes. Every scheme, every pattern is wrong… never do the same thing twice… by the second time the enemy will have adapted… you can't be a great military leader just by imitating so-and-so. It has to come from within.[351]

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[346] Echevarria (2002), p.vii
[347] MCDP *Warfighting,* 90
[348] Ibid, 87-90; William S Lind, *Maneuver Warfare Handbook*, (Westview Press 1985), 13
[349] Lind, 6
[350] General George S. Patton, quoted in Charles M. Province, *The Unknown Patton*, Hippocrene Books (1983), p. 165
[351] Lind, 8

This avoidance of formulaic action, along with the preoccupation with operating at a faster tempo to the enemy, are both outgrowths of maneuver warfare's recognition of war as a form of conflict without constitutive rules. The exploitation of the lack of restrictions placed on movement in space and time is the most obvious area in which maneuver warfare takes advantage of this fact – manoeuvre, in its most basic sense, is defined as movement in these dimensions. There being no 'set' time or place for a confrontation, maneuverists can choose to launch their attacks from favourable ground and at a time which suits them (or at least from a time and place which is more inimical to the enemy) and to take advantage of enemies who have – by accident or design – fallen into a formalised doctrine. The unregulated tempo of the contest is, as we have seen, another area where maneuverists like Boyd consciously seek to take advantage of the possibilities of war, whether through conceptual tools like the OODA loop or by doctrinal emphasis on decentralised command. The strategy of dislocation and identification of centres of gravity, which is maneuver warfare's strategy developed in the absence of constitutional rules.

Such an approach has much to commend it; a strategy (or tactics) based on maneuver warfare makes efficient use of the resources at a commander's disposal to achieve the end of defeating the enemy, exploiting the possibilities of war in a way that avoids the high costs of a strategy of attrition. Maneuver warfare has an impressive intellectual pedigree, drawing on Clausewitz in its acceptance of chance and uncertainty as an integral part of war, whilst at the same time taking inspiration from Sun Tzu's more optimistic teachings on the use of surprise and deception – not to mention deriving instruction from a great variety of military thinkers and their campaigns throughout history. It is in many ways a doctrine of warfighting which in its design implicitly recognises and acts according to an understanding of war as a form of conflict unstructured by rules. However, maneuver warfare – for all its acknowledgement and internalisation of these principles regarding the uncertainty of warfare, is not a doctrine which can win *any* war. Maneuver warfare is, like all strategies, a tool for a particular type of conflict, with its origins in a certain military context. The ability of irregular war to frustrate the aims of maneuver-minded armies has been noted by one of the founders of maneuver doctrine, William Lind, who acknowleged that its techniques are not suited to opponents

playing to a different script, undermining the public support of their enemies rather than eroding their material capabilities.[352] It is to this type of war we now turn.

Irregular War

Irregular war, broadly interpreted, is another form of 'doctrine' which, like maneuver warfare, embraces the possibilities provided by war and exploits its lack of constitutive rules. This chapter will unpack the concept of irregular warfare (its various manifestations as guerrilla war, people's war and so on) and explain how its techniques and strategies are based on the implicit understanding of war – indeed, the *explicit* understanding – as a conflict not bound by rules. The term 'irregular war' presupposes the existence of 'regular' war; somewhat counterintuitively, this latter concept is a fairly recent development dating from the early modern period, when European states began to be able to monopolise control of military power within their own territories; irregular war, on the other hand, has been around for as long as war itself. Some of the earliest mentions of what we would recognise as irregular and guerrilla tactics can be found in Caesar's wars in Gaul, marked by the Gallic use of irregular tactics under Vercingetorix; Roman campaigns in Judea and Spain were similarly characterised by hit-and-run methods employed by Rome's enemies. The term 'guerrilla' of course dates from another Spanish war, that against Napoleon's forces, the 1807–1814 Peninsular War. Partisan activity in Spain and Russia was in this context a novel development, though irregular tactics and the use of troops like Croatian *pandurs* and Native American light infantry were becoming increasingly prominent from the time of the Seven Years' War onward. It was around this time that theoretical interest in irregular or 'small' wars began in earnest; Clausewitz wrote of irregular tactics in the context of a 'people's war' which served as an adjunct to a regular campaign, and in response to irregular conflicts in a colonial setting, British Colonel Charles Calwell's book *Small Wars: Their Principles and Practice* was published by the British War Office in 1896. Gérard Chaliand characterises the

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[352] William S. Lind, Keith Nightengale, John F. Schmitt, Joseph W. Sutton, and Gary I. Wilson, "The Changing Face of War: Into the Fourth Generation," in Terry Terriff, Aaron Karp, and Regina Karp, eds., Global Insurgency and the Future of Armed Conflict: Debating Fourth-Generation Warfare (New York: Routledge, 2008), 13-20

would-be rebellions against the British in Burma (1824-1825, 1852, and 1885) and that of the Boers in the 1899-1902 as 'irregular'.[353]

During the early twentieth century, irregular war remained a complement to regular campaigns in various theatres of war, from T. E. Lawrence's campaigns in the First World War to the use of partisans in the Balkans and on the Eastern Front in the Second. However, irregular war increasingly began to be associated with particular kind of campaign for national liberation against colonial powers, distinct from previous iterations of small wars in its incorporation of an overarching political strategy which used irregular tactics not as a supplement to a 'regular' strategy but as the basis of a strategy in their own right. This was revolutionary 'people's war', most famously fought by the Chinese communists under Mao Zedong and the Cuban revolutionaries of Fidel Castro and Che Guevara. Mao and Guevara themselves furnished the seminal theoretical and instructional texts of this form of warfare, which provided the blueprint for many revolutionary movements in the Cold War; to counter such efforts, colonial powers developed their own counterinsurgency doctrines, with varying levels of success.

Mao is credited with the theorising of guerrilla war, particularly with regards to its rural setting. Marxist-Leninist theory held that the urban proletariat was the class which would be mobilised to overthrow bourgeois regimes, but Mao's experiences led him to believe the peasantry of China were a more viable revolutionary class. Mao and Che both implore their readers to 'serve' the local inhabitants, before going on to win them over to the revolutionary cause. Whether this is true is one thing; the main advantage a rural guerrilla force has is that the territory in which it operates is far from the reach of the state – indeed, a guerrilla base is in the first instance best sited in areas unsuited to habitation, whether through isolation or difficult terrain. In its most essential respects, guerrilla war is the weapon of the weak against the strong, fought according to the advantages of the former – "the war of the flea", as Robert Taber puts it. Whereas conventional war usually has a 'front' where the antagonists face each other, each occupying a certain territory, guerrillas instead take up

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[353] Gérard Chaliand, *Guerrilla Strategies: An Historical Anthology from the Long March to Afghanistan*, (University of California Press 1982): 2

residence within territory under the nominal control of their enemy, and do not 'hold' land in the conventional sense.

There are broadly two strategies of irregular warfare, the first being an adjunct to a regular campaign, and the second an independent guerrilla war (though the latter will ultimately involve the formation of a regular force). Both strategies rely on the use of low-level skirmishes, ambushes and raids, carried out only under conditions advantageous to the guerrilla force. Such attacks are carried out as part of the overall strategy to acquire weapons and ammunition, inflict casualties and sap morale, and to invite the enemy to overextend himself and risk further reverses. In combination with a regular force, for instance the Spanish guerrillas' cooperation with the British and Spanish armies in the Peninsular War, irregular fighters force the enemy to devote a great deal of manpower and effort into securing lines of communication and maintaining control over what in earlier times would have been a relatively quiescent occupied territory, hindering the enemy's ability to concentrate his resources on the 'regular' foe. Historical examples of this use of irregular war include the *francs-tireurs* in the Franco-Prussian war, partisans of both sides in the American Civil War, and the resistance movements in occupied Europe and partisans in the occupied areas of the Soviet Union in the Second World War.

In Mao's model, the guerrilla war is carried out in a number of stages: the first is a process of "organization, consolidation, and preservation" of the initial guerrilla force; the second, an expansion into new areas; and the third, the transition into a more regular force which openly confronts the enemy with a view to its destruction.[354] In the first stage, the guerrilla forces inhabit an isolated territory difficult for the central power to get at, and use it as a base for recruitment and occasional attacks on the enemy. Once the base area is secure and the local population won over, adjacent territories are infiltrated in the same way. Again, as with the above strategy, attacks on the enemy are carried out only made under very advantageous conditions and at the discretion of the guerrillas, but are primarily made to acquire weapons and ammunition, at least in the initial stages. In a revolutionary war this activity exposes the pretence of control by the central power and erodes its authority, along

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[354] Mao Tse-Tung, *On Guerrilla Warfare,* trans. Samuel Griffith (Urbana, IL: University of Illinois Press, 2000), (from introduction by Griffith), p.21

with providing the guerrillas with more material benefits and diminishing the morale of the enemy soldiers. The cost of dealing with such activity is exorbitant: according to Taber, who was present in the country at the time, in 1961 in (post-revolutionary) Cuba, 600 anti-Castro guerrillas carried on an insurgency in the Escambray mountains, supplied with American airdrops but without popular support, which took almost three months to be suppressed by more than 60,000 Cuban militia. Certain regimes will be more vulnerable to this pressure than others; ones in which popular grievances, social divisions, economic problems and an exploitative, oppressive ruler are present are likely cases,[355] and even the effective defeat of the insurgency's military capability is Eventually – a point which Mao and Che share, but which has been obscured by the example of the Vietnam war – the irregular forces are moulded into a regular army capable of destroying the now-weakened central power in a decisive 'conventional' campaign or battle.

Despite the unpromising nature of their settings, weak in materiel and manpower, guerrilla forces see themselves as sitting on a vast, unexploited political resource – the rural peasantry. In the Chinese case, as well as in many others, the peasant had previously been economically exploited by the landowning gentry, being politically disenfranchised and coerced into serving the empowered social classes. Mao's guerrilla strategy sought to mobilise the peasants as a political force by instilling a sense of class consciousness (often subsequently tied to nationalism) which enabled the guerrillas to utilise an untapped reserve of manpower much as the French Revolution had done in the early 19th Century. In order to win the peasants over, guerrillas were to behave towards them in a courteous manner, paying for goods and not openly exploiting them, and ultimately winning them over to the guerrilla's cause by means of political instruction. Famously, Mao made a specific mention of the need to replace the door of a peasant's house in summer, after it had been used as a bed.[356] It is fair to point out, however, that many irregular armies resort to intimidation and forced contributions as a means to getting the people onside. Nevertheless, the orthodox strategy, as espoused by Mao and Che, is for the people to be educated and be made conscious of their ability to act as a political class.[357] According to Mao, while guerrillas can do without an

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[355] Richard Taber, *War of the Flea*, (Washington, DC : Potomac Books, 2002) p.151
[356] Ibid., p.92
[357] Ibid., p.89

armoury and use the enemy as a source of weapons and ammunition, a printing press and materials for propaganda are essential.

In Mao and Che's experience, rural areas, unlike urban settlements, were attractive prospects because they were effectively only nominally under the central government's control. As a (possibly apocryphal) Chinese proverb has it, "The mountains are tall, and the emperor is far away". Cities and towns, being geographically compact, are more easily policed, and have indeed been remade precisely in order to negate the advantages of urban insurgency and to facilitate the movement of troops (Haussmann's renovation of Paris being at least in part motivated by such considerations). However, there have been very few governments which could be said to have had complete control of their countryside, and probably none which have had sufficient military resources to maintain an effective presence in all areas of their territory. Inhospitable and inaccessible territories which do not have any particular strategic or economic importance will be neglected most of all, and setting up base areas in these places exploit the effective political vacuum on the margins of the state or in areas under-occupied by an invading army.

The individual guerrilla has to be extremely well-motivated, internally motivated. Mao insisted on volunteers – conscripts would be useless for guerrilla war, given the harsh conditions, and commitment to a higher ideal, a revolutionary cause, must be what sustains the individual fighter through the privations which come with an irregular war. If the guerrilla fighter has much demands placed upon them, the leader is even more so; coercive discipline is counterproductive, and the guerrilla low-level leader derives authority from the example he sets to his followers, whose hardships he shares. According to Mao, "All these must have leaders who are unyielding in their policies – resolute, loyal, sincere, and robust. These men must be well educated in revolutionary technique, self-confident, able to establish severe discipline, and able to cope with counterpropaganda."[358] Essentially, they must be good at maintaining order in extremely trying circumstances. In addition, leadership in a guerrilla struggle demands that the leader be intelligent, alert and capable of adapting to and exploiting changing circumstances in the course of his duties, as Che Guevara notes: "Another fundamental characteristic of the guerrilla soldier is his flexibility, his ability to adapt himself

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[358] Ibid., p.45

to all circumstances, and to convert to his service all of the accidents of the action. Against the rigidity of classical methods of fighting, the guerrilla fighter invents his own tactics at every minute of the fight and constantly surprises the enemy."[359] Mao speaks in similar terms: "Guerrilla commanders adjust their operations to the enemy situation, to the terrain, and to prevailing local conditions. Leaders must be alert to sense changes in these factors and make necessary modifications in troop dispositions to accord with them"[360]

Initiative is key to guerrilla war; confrontations with the enemy happen only when the guerrilla wants them to, and they occur at a speed too fast for the enemy to properly respond to. Equally quickly, the guerrilla must be ready to extract a squad from an engagement if it loses the initiative.[361] Guevara describes a typical attack:

At the moment in which the enemy is detained in some chosen place, the rearguard guerrilla forces make an attack on the enemy's rear. Such a chosen place will have characteristics making a flank maneuver difficult; snipers, outnumbered, perhaps, by eight or ten times, will have the whole enemy column within the circle of fire. Whenever there are sufficient forces in these cases, all roads should be protected with ambushes in order to detain reinforcements. The encirclement will be closed gradually, above all at night. The guerrilla fighter knows the places where he fights, the invading column does not; the guerrilla fighter grows at night, and the enemy feels his fear growing in the darkness.

In this way, without too much difficulty, a column can be totally destroyed; or at least such losses can be inflicted upon it as to prevent its returning to battle and to force it to take a long time for regrouping. When the force of the guerrilla band is small and it is desired above all to detain and slow down the advance of the invading column,

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[359] Ernesto Guevara, *Guerilla Warfare,* (Rowman & Littlefield, 1985), p.59
[360] Mao, p.101
[361] The importance of mobility for attack and preservation is clearly implied from Che's instructions on shoe-repair, repeated throughout his writings: "The vital necessities of the guerrillas are to maintain their arms in good condition, to capture ammunition, and, above everything else, to have adequate shoes. The first manufacturing efforts should therefore be directed toward these objectives. Shoe factories can initially be cobbler installations that replace halfsoles on old shoes, expanding afterwards into a series of organized factories with a good average daily production of shoes." Guevara, p.65

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groups of snipers fluctuating between two and ten should be distributed all around the column at each of the four cardinal points. In this situation combat can be begun, for example, on the right flank; when the enemy centers his action on that flank and fires on it, shooting will begin at that moment from the left flank; at another moment from the rearguard or from the vanguard; and so forth. With a very small expenditure of ammunition it is possible to hold the enemy in check indefinitely.[362]

Here, exploitation of the lack of constitutive rules governing military engagements is clear to see – the guerrilla attacks on ground with which he is familiar, and at a time of his choosing (in this case, at night, when the guerrilla force's relatively small numbers are disguised). The character of the 'tools' used in the ambush – snipers who are hidden from sight – are another aspect of the total lack of cooperation, for want of a better word, between the guerrilla and the stronger opponent. This is most clearly manifested in the seizing of the initiative by the irregular fighters – Mao's writings on guerrilla tactics with regards to this topic seem to owe a great deal to the teachings of Sun Tzu: "When guerrillas engage a stronger enemy, they withdraw when he advances; harass him when he stops; strike him when he is weary; pursue him when he withdraws."[363] Mao has a similar approach as regards defeating the enemy before battle is joined, and shares Sun's confidence in preparation and planning, though he does acknowledge that only limited plans are possible.[364] The point of maintaining the initiative is effectively to put the enemy in an uncertain position, whereas the guerrillas set the 'rules of the game'. Against an army utilising conventional tactics not expressly designed for the situation, their actions are illegible whilst those of their opponents are predictable and dependable. Mao goes so far as to say that if initiative is lost then the unit must either regain it or disengage from the fight.[365]

It is worth noting that the guerrilla tactics of local superiority owe something to the overall strategic situation – the central power is nominally in charge, but is spread too thinly over its territories to deal with the insurgent threat in any one of them. In an already undermanned province, the guerrilla army will have a strategic local superiority as only a

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[362] Ibid., p.92
[363] Mao, p.46
[364] Ibid., p.104
[365] Ibid., p.104-105

fraction (in Mao's model, locally recruited militia) are tied up with controlling the area, leaving a portion of troops free to invest in dedicated military operations. The guerrilla's insistence on attacking only under conditions which favour them amplifies this effect, and their refusal to fight over a territory and instead melting back into the hills makes a central response very difficult (in this sense, the viability of a given guerrilla campaign is to an extent determined by geography). Nevertheless, victory cannot be won by isolated ambushes; common to most kinds of irregular warfare is the expectation of the final defeat of the enemy army by a conventional force of one's own. Mao was quite clear that he did not consider irregular warfare the be-all and end all of strategy:

> In sum, while we must promote guerrilla warfare as a necessary strategical auxiliary to orthodox operations, we must neither assign it the primary position in our war strategy nor substitute it for mobile and positional warfare as conducted by orthodox forces.[366]

Irregular war is incapable of bringing about the final decision in war, the conclusive defeat of the opponent's military power;[367] this could be achieved by the withdrawal of the enemy armies (as in the cases of Vietnam and the Soviet war in Afghanistan) but in the original theoretical conception of irregular war, this would be won by a regular campaign, as in the Chinese Civil War and the expulsion of the French at Dien Bien Phu. The revolutionary strategy which Mao and Guevara described and advocated is one of the aspects of irregular war which most clearly illustrates the possibility of innovative strategies in war, which exploit the unique strengths and weaknesses of the combatants, with the weaker combatant refusing to fight to a pattern desired by the stronger. But the political strategy of people's war and other revolutionary projects is not unique to war. In 'normal' politics, identification of potential constituencies is a big part of overall political strategy, as is market research in business. As economic and demographic shifts occur within a democratic state, political parties and individuals will alter their political strategies based on their interpretation of these shifts. This is possible due to this area of politics not being bound to rules (though certain pieces of information will be provided by the mathematics of the competition –

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[366] Ibid., p.57
[367] Ibid., p.50

'swing' seats or states will identify themselves as valuable targets). The difference with war is the form of the conflict between the actors. In democracies this is typically a vote – in the most general case, an election, but voting on a bill-by-bill basis is another form of democratic conflict. Here, each side enters into the contest agreeing to the mechanism by which the conflict is resolved and already agreeing to abide by the result. In war (including irregular war) the conflict goes on until one side or the other decides to submit to a regulated interaction or is destroyed. In this sense the political strategy of irregular/revolutionary war is not so unique as it first appears, but is nevertheless necessitated by war's lack of constitutive rules.

Conclusions

Understanding war as being defined by its lack of rules gives us a new insight into the task of strategy, and the roles it needs to perform in war. Indeed, as a concept strategy itself can be more accurately defined as the process of planning and decision-making in competition with another actor, in the absence of rules which would otherwise govern the course of the contest; the fact that the route to victory in any given war is not mapped out in advance necessitates strategy (so defined) to a qualitatively greater extent than in any other form of conflict. War's lack of rules makes strategy especially important in other ways, too; the exposure to uncertainty in war, the lack of information which would otherwise be provided directly or indirectly by rules, the danger of combat and the high political stakes of war all contribute to a heightened psychological need for order and control. This order can be provided by strategies and doctrines which consist of a collection of preconceived notions of what war 'is' and how it should be fought, or by the construction of a plan which addresses the particular needs of a given war. Strategies can vary in how far they innovate, too – that is, how far they push the boundaries of what can be done in war, which as we have seen has imposes no inherent limits. In this, the role of the strategist is something like that of an architect or an engineer, but rather one who works in a constantly changing environment. The opportunities presented to a strategist may be great, but the challenges are immense: there is of course no guarantee that a novel strategy will succeed, and success in one war is similarly no assurance that the same strategic principles will hold true in the next.

One of the greatest challenges in this regard is the exposure of war to a myriad of extraneous factors, the source of Clausewitz's 'friction' - the physicality of war. Not only is this physicality naturally a potent source of the unique challenges which face the strategist; it is also the source of some of the most idiosyncratic aspects of war, from its chance and uncertainty, to the prominent role played by technological innovation, to the political implications of material change brought about by unrestrained conflict. The physical aspect of war is intimately connected to many other aspects of its nature, and an examination of it will serve to highlight how complex and significant an activity war truly is. It is to such an examination which we now turn.

THE PHYSICALITY OF WAR AND THE MEANS OF DESTRUCTION

If the uniquely important role of strategy in war is a consequence of the lack of arbitration which a system of rules would otherwise provide, then the subjects of this chapter – the physicality of war, and the tools used to fight it – are consequences of a lack of restrictions on other areas of its conduct. It is impossible to deny that one of the most idiosyncratic features of war is the central role played by the tools with which it is fought: throughout human history vast sums have been spent on increasingly complex and deadly technologies, which even if ultimately left unused will be wheeled out as a show of power on ceremonial occasions – a state of affairs which probably dates to the Bronze Age. Weaponry is only the most obvious example of military technology – transport, communications and other 'support' services are just as integral a part of the material panoply of warfare as rifles and artillery – the individual soldier, too, is an instrument of war, along with the unit in which he fights. Perhaps most significantly, over the course of history various forms of social organisation have developed in response to the challenges of warfare, with the modern state the latest in a long line of bureaucratic adaptations to armed conflict. The ways in which these tools are used, along with their technical limitations and requirements, shapes the conduct of war. The central role of *materiel* in war is due to its lack of constitutive rules; other forms of conflict are played out either wholly or in part in an abstract space with strictly limited means, but war is a physical phenomenon unbound by restrictions as to where, when, or how it is to be fought. Attempts at regulation may discourage the use of certain weapons or tactics, but in the last resort there is no limit on what tools can be used to fight a war; accordingly, warfare has been a constant source of technological innovation as each side escalates to ever-more complex and effective technologies.

The ruleless nature of war not only enables the proliferation of military technologies, but, as I have previously discussed, is the primary reason for the singularly chancy and uncertain nature of warfare. We have already revealed a number of the mechanisms by which this uncertainty is generated; in this chapter I will go on to show how the physical nature of war in general, and the development of technology in particular, further amplifies this trend:

not only do new military technologies introduce novel threats and opportunities which are incompletely understood, but their adoption also brings about social and political changes within the societies which make use of them, adding a new source of change and unpredictability. I will first describe the broader implications of war's physicality with reference to Clausewitz, before going on to explore the various ways in which the tools of war

The Physicality of War

Firstly, and most importantly, the fact that restrictions on location are absent in war necessitates that it be fought in a physical space – in the countryside, a town, in forests and so on. However, no such physical space is set. This has long been understood to be a natural aspect of war – practically taken for granted – but it is Clausewitz who once again appreciates the theoretical implications of war's various characteristics better than any other military thinker:

> Now we must address ourselves to a special feature of military activity – possibly the most striking even though it is not the most important – which is not related to temperament, and involves merely the intellect. I mean the relationship between warfare and terrain.

> This relationship, to begin with, is a *permanent factor* – so much so that one cannot conceive of a regular army operating except in a definite space. Second, its importance is *decisive in the highest degree,* for it affects the operations of all forces, and at times entirely alters them. Third, its influence may be felt in the *very smallest feature of the ground*, but it can also dominate *enormous areas*.

> In these ways the relationship between warfare and terrain determines the peculiar character of military action. If we consider other activities connected with the soil – gardening, for example, farming, building, hydraulic engineering, mining, game-keeping, or forestry – none extends to more than a very limited area, and a working knowledge of that area is soon acquired. But a commander must submit his

work to a partner, space, which he can never completely reconnoiter, and which because of the constant movement and change to which he is subject he can never really come to know. To be sure, the enemy is generally no better off; but the handicap, though shared, is still a handicap, and the man with enough talent and experience to overcome it will have a real advantage. Moreover it is only in a general sense that the difficulty is the same for both sides; in any particular case the defender usually knows the area far better than his opponent.[368]

As he points out, this is easier said than done, and requires a quality of mind which is hardly a common quantity. As Clausewitz points out above, war is not tied to one place; armies march and fight through a variety of locations through the course of a campaign, and the physical characteristics of each of these locales will have particular implications for the armies which operate there, as we will go on to see later in the chapter. So important is the role of terrain in war, that Clausewitz claims that the commander must possess a talent, honed through experience, of recognising the various regularities which occur in terrain, and must internalise the local geography to a high degree: "a commander-in-chief... must aim at acquiring an overall knowledge of the configuration of a province, of an entire country. His mind must hold a vivid picture of the road-network, the river-lines and the mountain ranges, without ever losing a sense of his immediate surroundings."[369] Even when a commander finds himself revisiting a battlefield upon which he has fought before, the contrast to the preordained 'level playing field' of an abstract contest is easily appreciated; the promise of some predictability and familiarity can be dashed by changes in the physical environment, such as the results of a landslide or a flooded river, or as a consequence of changed different weather conditions – a blizzard, sandstorm or heavy fog can obscure vision.

This of course invites discussion of the lack of restrictions around *when* war can be fought. As there is no set time for engagements in war, they can occur whenever the commander feels able and willing to commit to action – and attacks can likewise be launched against him at any moment. This has obvious tactical (and strategic) implications, in that different times effectively have different physical properties: as we have seen with maneuver

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[368] Clausewitz (1976), p.109
[369] Ibid., p.109-110

and irregular warfare, surprise attacks commonly take place at times (and places) which actively discourage effective military action, and are therefore assumed to be safe. Night attacks have a long history in warfare, perhaps most famously being used by Vlad Tepes ("the Impaler") in 1462, which took the form of a raid and an attempted assassination of Mehmet II in his camp. Similarly, the "Battle of the Bulge" of 1944-1945 was an ambitious attempt by the German armed forces to launch a winter offensive, predicated on the belief that the western Allies would assume that offensives would not (rather, could not) occur in the depths of winter. The timing of a surprise attack need exclusively exploit the physical properties of a certain time of day or year; there may be cultural reasons an attack is unsuspected or otherwise unfeared. The classic example of an attack launched on such an occasion is the Tet Offensive of 1968, where North Vietnam launched coordinated assaults on targets throughout the South after previously announcing that it would observe a week-long truce over the period.[370] As we have already seen in our earlier discussion of John Boyd's OODA loop, the tempo of war is not set either; there is no turn-system imposed and the operational tempo is restricted only by the physical and organisational abilities of the armies in question.

The physical nature of war presents a number of difficulties to the commander, and contributes a great deal to the idiosyncratic character of warfare, as noted by Clausewitz and others. Indeed, it is perhaps telling that Clausewitz uses the physical concept of 'friction' as a metaphor for the influences which combine to generate war's pervasive uncertainty. Physical effort itself is identified as a source of friction (due to its unquantifiable nature);[371] Clausewitz's famous comparison of war to a carriage journey is yet another case where war's nature as a physical process is acknowledged as a source of difficulty:

> Imagine a traveller who late in the day decides to cover two more stages before nightfall. Only four or five hours more, on a paved highway with relays of horses: it should be an easy trip. But at the next station he finds no fresh horses, or only poor ones; the country grows hilly, the road bad, night falls, and finally after many difficulties he is only too glad to reach a resting place with any kind of primitive

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[370] Clark Dougan and Stephen Weiss, *Nineteen Sixty-Eight*, (Boston Publishing Company, 1983), p.12
[371] Clausewitz (1976), p.115

accommodation. It is much the same in war. Countless minor incidents—the kind you can never really foresee—combine to lower the general level of performance, so that one always falls short of the intended goal.[372]

As Alan Beyerchen might note, this description is an account of a nonlinear process, where small influences have outsized effects, rendering the activity unpredictable by conventional means;[373] it is clear that if war is an especially nonlinear phenomenon, it is so in large part because it takes place in the physical world, exposing the combatants to a host of potentially important influences – a point seemingly not lost on Clausewitz, even down to the mathematics of the situation:

> Circumstances vary so enormously in war, and are so indefinable, that a vast array of factors has to be appreciated – mostly in the light of probabilities alone… Bonaparte rightly said in this connection that many of the decisions faced by the commander-in-chief resemble mathematical problems worthy of the gifts of a Newton or an Euler.[374]

Furthermore, not only is war fought in the physical *world*, it takes the form of physical *action* – i.e., combat, with its ultimate aim being the destruction of the enemy (to be achieved as the enemy attempts to do the same to you). As Clausewitz notes, this aspect of war brings about its own friction – the unquantifiable effects of mortal danger and the attendant psychological stress which disorders our thought processes, particularly if we are unfamiliar with war.[375] In addition to its psychological effects, this friction wears down the mechanisms with which war is fought and changes the environment it is conducted in; absent a system of rules which enable disputes to be carried on through symbolic channels, physical combat (or the threat thereof) is the instrument of warfare, which brings with it a whole host of implications which must be appreciated.

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[372] Ibid., p.119
[373] Nonlinear processes seem to be linked to war even in the popular imagination; as the proverb goes, *"For want of a nail the shoe was lost. For want of a shoe the horse was lost. For want of a horse the rider was lost. For want of a rider the message was lost. For want of a message the battle was lost. For want of a battle the kingdom was lost. And all for the want of a horseshoe nail."*
[374] Clausewitz (1976), p.112
[375] Ibid., p.113

The Tools of War

I have a rather broad definition of the tools of war – the 'means of destruction', as I call them. Broadly speaking they are of two types: technology (physical tools) and *techne* (the ways in which they are used). Naturally, the concept of *techne* intrudes on the realm of tactics and strategy; I will focus on the more immediate use of technology in this section. The most obvious form of military technology is of course weaponry – objects or machines which inflict destruction upon the enemy. Generally weapons work on the principle of applying energy to a target[376] – focusing the power of an arm's thrust onto the tip of a spear, transferring chemical energy in the form of gunpowder into the flight of a bullet, or using nuclear fusion to explode a hydrogen bomb. The earliest weapons involved mostly muscle power provided by the soldier, but modern armaments draw on a number of sources of power. These weapons are matched by 'defensive' weapons such as shields and armour which absorb or disperse the energy of the offensive weapon; an evolutionary dynamic occurs as a result, with armour advancing in step with ever more destructive threats – reaching the contemporary state of affairs where tanks are somewhat counter-intuitively covered in explosive panels, which, when detonated by anti-tank munitions, deflect the incoming blast. There are other approaches to avoiding damage; increased speed is another answer to the challenge of enemy attack, and enables effective shock action in its own right. This is provided by another of the most recognisable technologies of war, weapons platforms. For most of human history the horse was the preeminent weapons platform, first serving as a means of transport to the battlefield, later being used in battle as part of a chariot team and then ridden on horseback; a similar role was played by ships, used as transport before being employed as dedicated military vessels. New platforms have been developed to great effect since the age of industrial warfare: airplanes and submarines rapidly came to exert a powerful influence over war since their comparatively recent invention; in our time, unmanned aerial vehicles (or 'drones') have come to characterise contemporary warfare like no other weapon.

Military technology and its associated *techne* exploit the possibilities of acting in ways which rules usually prohibit. For instance, there is no set space in which war must be fought: technologies are invented to exploit new spatial dimensions can be found from which

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[376] I borrow this analogy from Norman Dixon (*On The Psychology of Military Incompetence),* p.27

to attack the enemy – land, (under)sea, and air, even from outer space (and now cyber-space). One can engage the enemy from whatever angle one wishes, as long as you can get there. There are no 'turns' in war; the *tempo* is not determined by mutual agreement but by the actors' physical capabilities. Frequency of attacks can be increased by drill and practice, or by the introduction of new technology – barrel-loading muskets were replaced in time with magazine-fed breech-loading rifles, later supplanted by machine guns – each new development enabling more attacks to be carried out in the same time; as we have already seen, Boyd's recommendations for fighter design were based on the facilitation of a faster tempo, the ability to transition from one manoeuvre to another faster than the enemy. We can understand each of these technologies as ways of exploiting the possibilities provided by war, and at the same time being compelled by its lack of binding rules. Many of the laws of war are concerned with restricting the use of weapons; however, in all but a few cases the pressures to adopt new military technologies are too great to be resisted. Even if efforts are made to ban certain weapons as at the Hague Conferences, there is no disqualification for an actor who uses one; to an extent it does not matter whether the victors used poison gas on enemy troops (as in the First World War) or massed bomb drops on civilian targets (as in the Second), so long as they win. Furthermore, explicit laws of war can hardly regulate entirely new weapons; sometimes the use of especially deadly technology is not so much a case of breaking the rules, as there being no rules to break.

Weapons and their platforms are only the most salient forms of military technology; there are a host of other, less glamorous examples. Indeed, in the modern day the proportion of 'teeth' arms to support services tends to be weighted towards the latter, with one estimate of the proportion of combat units in the American forces in the Iraq War as low as 25% of the total strength.[377] One support arm (though sometimes considered a combat service) is engineering, one with a long history in warfare and which is hardly needed in other forms of conflict. Compare Hannibal's transportation of elephants across the Rhone on rafts – and his subsequent crossing of the Alps, where boulders and other obstacles had to be removed from the path of his army – to the relatively minimal preparations required for a court case or a quiet game of chess. As the space for conflict is not provided for, the combatants must make

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[377] John J. McGrath, *The Other End of the Spear: Tooth to Tail (T3R) Ratio in Modern Military Operations,* (Combat Studies Press, 2012), http://usacac.army.mil/cac2/cgsc/carl/download/csipubs/mcgrath_op23.pdf <accessed 23/11/15>, p.53

their own 'infrastructure' for the contest; whether it takes the form of building (or blowing up) bridges or the construction of logistical bases, roads, and fortifications, engineering effectively serves to remake the physical environment to the advantage of oneself and to the disadvantage of the enemy.

Logistics and supply is another vital aspect of military *techne*. The weapons of war and those who use them require constant provisioning, and these supplies (along with the soldiers themselves) require transportation to where they are going. In all ages, individual soldiers have taken on some of these duties themselves (the Roman legionaries being the classic example), and have been helped by the use of beasts of burden. Supply needs of armies were met locally until comparatively recent times, where the growth of mass armies required a more predictable and consistent supply system – as I will go on to cover in greater detail later; this was especially the case in industrial warfare, with railways providing transport of food, clothing and materiel as well as men. Some of this provisioning was technologically advanced itself – canned food being one of many inventions born out of military necessity (the canning process being the winner of a competition by the Napoleonic French government calling for a method to preserve food for its armies). The power of supply was proved most conclusively with Allied victory in the Second World War, as the vastly better-provisioned Allied forces in the West were able to defeat a German enemy which was arguably its superior in war-fighting.[378]

The need for information and intelligence is another important driver of military technology, which as we have seen is necessitated by the lack of information which would otherwise be provided for by the rules. If we take the various dimensions of regulation in turn, the scope for intelligence technologies can be appreciated. As there is no set space for force to be deployed, there is no automatic knowledge of the physical properties of the environment which can be taken for granted. In response to this, military establishments invest a great deal in technologies related to navigation – whether hi-tech GPS systems, or maps on paper: the British Ordnance Survey maps began as an attempt to map the Highlands of Scotland following the Jacobite Rebellion of 1745, particularly with reference to which roads and bridges could be used to transport heavy guns (i.e. ordnance). Similarly, the

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[378] See Max Hastings, *Overlord,* (Book Club Associates 1984), p.24-25

location of the enemy is not a given, technologies have been developed for increasingly thorough intelligence-gathering in this respect, which range from the use of scouts ahead of the main army, to U-2 spy planes, to satellite photography (to say nothing of more traditional spycraft). The counterpoint to this phenomenon is of course the use of camouflage and concealment, which again is a possibility provided for by war's lack of rules. A lack of restriction in physical space is not the only factor which encourages increasingly sophisticated intelligence-gathering technology – as there is no restriction on the *time* in which war can be fought, there are certain information deficits which this aspect of war can present: attacking at night or through a thick fog may be a potent source of surprise, but doing so obscures the view of the battlefield and the enemy. In the case of night attacks, technology has developed over the years from Verey lights and flares which enabled surprise attacks after dark – but illuminated the battlefield for the enemy as well – to more sophisticated night vision and infrared technologies, which enables vision but denies it to the enemy.

We can note that the peculiarities of the physical, technological side of war can ultimately be attributed to war's lack of rules, which necessitates it be fought outside of an abstract space. Lack of rules also contributes to a number of dynamics which escalate its conduct to ever more complex and expensive levels. Most obviously there is the evolutionary arms race between offensive and defensive weapons technologies, with developments in one responded to by improvements in another, and so on; equally important is the trend towards increasing complexity within the armed forces of an individual actor. As technology advances, soldiers and their weapons systems require an increasing amount of logistics, maintenance and so on. Not only does this development prompt the invention of other military technologies which serve combat arms in a support role, but in a wider sense the increased complexity and 'baggage' of war creates a need for coordination, organisation and other forms of management.

Increasing levels of sophistication and complexity naturally apply to *materiel,* but this trend is evident in the case of one particular tool of warfare – the human being. The human element is of course one of the chief sources of uncertainty in war, as Clausewitz noted, and the psychological qualities of each individual are of a variable quality. Not only that; practically every aspect of 'human capital' is equally uncertain. The training a soldier

receives will improve their effectiveness in many regards, but can leave them unable to adapt to new situations; battle-hardened veterans might be expected to fight more effectively than raw troops, but they may turn out to act more cautiously (as was the case with the British 8th Army in the Second World War, who having 'done their bit' did not exhibit the same daring in Normandy as they had in North Africa).[379] Cultural influences, along with other environmental factors, will give some nations a comparative advantage when it comes to fighting wars; Machiavelli and Ibn Khaldun, amongst others, note the tendency of urban populations to be lacking in soldierly qualities. Interestingly, it has been noted that rural populations are more suited to war than urbanites, and miners in particular have been noted to make good soldiers – possibly as a result of acquaintance with physical exertion and exposure to hazardous conditions.

The ways and means by which bodies of men are organised and led are a particularly important aspect of military *techne* – more important than the qualities of the individual soldier, is his use along with others in a larger formation. The coordination of a relatively small number of individuals, even under the most favourable circumstances, is an administrative challenge – to do the same with hundreds of men under the conditions of war is nothing short of a nightmare. As Clausewitz notes of soldiers, "each part is composed of individuals, every one of whom retains his potential for friction… A battalion is made up of individuals, the least important of whom may chance to delay things or somehow make them go wrong."[380] Out of this fact of life has grown another of the most distinctive elements of military life – discipline. It is somewhat ironic that war, though itself defined by rulelessness, for compelling extremely regulated behaviour in those who fight it; that soldiers are 'ordered' by their commanders is perhaps revealing in its etymology. I speculate that this emphasis on strictly rule-bound behaviour is a response to the fact that soldiers operate in a disordered environment, the effects of which would otherwise be particularly corrosive to organisational structures and hierarchies (which ultimately consist of rule-systems): constant engagement in ordinarily deviant acts such as killing, looting and so on can lead to contempt for order and authority in general. We have already seen that war can have corrosive effects on domestic politics, as in Thucydides' account of the revolution in Corcyra. More obviously, the threat of

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[379] See Antony Beevor, *D-Day: The Battle for Normandy* (Penguin, 2009)
[380] Clausewitz, p.119

physical harm and violent death are powerful incentives to detach oneself from the collective;[381] the stress of being in combat for extended periods of time is immense, with combat exhaustion typically setting in around 30 days of continuous activity.[382]

There are other ways to make soldiers function more effectively as a fighting whole; if discipline is an example of a set of rules obeyed in an instrumental fashion, then efforts to instil *cohesion* aim to internalise a sense of group identity within the individual soldier and generate that centripetal force from within. The importance of strong cohesiveness has been noted for many centuries; Ibn Khaldun's notion of *Asabiyya* is perhaps the earliest manifestation of the concept to Machiavelli's *virtu* Shil and Janowitz's seminal analysis of German cohesiveness in the Second World War.[383] According to William Darryl Henderson,

> cohesion exists in a unit when the primary day-to-day goals of the individual soldier, of the small group with which he identifies, and of unit leaders are congruent – with each giving his primary loyalty to the group so that it trains and fights as a unit with all members willing to risk death to achieve a common objective.[384]

A shared identity and *esprit de corps* distinguishing the most successful formations, and a priority of military training is to break the individual down and produce a soldier who thinks and acts as an integral part of a greater whole. The regimental ethos of the British Army is one example of this effort, where pride in one's unit is assiduously cultivated; the Army as a whole promotes "core values" of Loyalty, Integrity, Courage, Discipline, Respect for Others, Selfless Commitment (all of which exhort the soldier to behave as an integral part of a greater whole).[385] As we have already seen, the inculcation of revolutionary zeal is another tool which can be used to reinforce cohesion in a military force – particularly necessary given the physical challenge presented to irregular fighters operating in extreme

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[381] It is interesting to note that the other uniformed (or 'emergency') services who deal with contingent events also place emphasis on uniform appearance, drill, and symmetry.

[382] Grossman (2009), 44

[383] Edward A Shils and Morris Janowitz. "Cohesion and disintegration in the Wehrmacht in World War II" *Public Opinion Quarterly* 12.2 (1948): p.280-315.

[384] William Darryl Henderson, *Cohesion, The Human Element in Combat* (National Defense University Press 1985), 4

[385] British Army, *Join as an Officer* http://www.army.mod.uk/infantry/regiments/parachute/24346.aspx <accessed 16/12/15>

environments, exposed to a great deal of danger and exertion, and engaged in an interminably long struggle against a stronger foe. However, cohesion is necessary in any environment; as we have seen in our study of strategy, the dislocation of an enemy force and the breaking of its cohesiveness is a key aim of maneuver warfare.[386]

Not only do soldiers need to be conditioned to act in unison with each other in their own units, but they must also be coordinated with other formations in the wider context of a strategic mission. As mentioned in our earlier discussion of maneuver warfare, this can be brought about by dissemination of the commander's intent throughout the army, so lower-level commanders act in accordance with a wider plan; in other cases, communications technologies are instrumental in enabling rapid coordination of effort. Armies have proven to be early adopters or innovators in this field of military technology, but like other sources of strength can prove to be a vulnerability, being a key target for espionage and for any force pursuing a maneuverist strategy of 'dislocating' the enemy. Improving the security of communications nodes, or decentralising communications as much as possible, is one adaptation to this challenge – indeed the internet began as just such an attempt to ensure communications networks remained operable in case of a nuclear war, when centralised relays could easily be destroyed. This is only to speak of the most immediate forms of coordination – cohesion is most often analysed in the context of small groups, but it is equally applicable to the larger and more impersonal social organisations which prosecute war. With armies of an increasing size and complexity, there is above all a need for administrative technologies and *techne* which can facilitate coordinated strategic action, including the management of a domestic war economy which can ensure the physical maintenance of the forces themselves.

The state as military technology

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[386] Most casualties occur when order breaks down, as Thucydides could tell us: "[the Ambraciots] were set upon by the rest of the Arcananians, and it was only with great difficulty that they managed to get back to Olpae. Many of them were killed, since in trying to break through they kept no order and showed no discipline – all, that is, except the Mantineans, who kept in a compact body and preserved better order than any other part of the army during the retreat." (Thucydides, 3:108)

The next form of military technology is one of the most important – the state (or indeed, whichever institutional form is taken by the collective which fights the war). That the state and its institutions grew at least in part as a response to the problems of war has been covered by a literature on state formation (notably the works of Tilly and Mann);[387] Mancur Olson is one of a number of scholars who posit that monarchical states were founded by 'bandits' who wished to prey off the people they exploited in a more institutionalised manner.[388] We have already seen in our examination of the Greek laws and customs of warfare that the Greek city-states were ultimately beaten by larger entities which were able to effectively invest in siege weaponry; it is the modern state, however, which is particularly illustrative of the state as a military technology – specifically with regard to its bureaucratic and administrative apparatus which is is increasingly necessary in complex wars where strategic coordination of resources to achieve a political aim requires a great deal of organisation. As we shall see, this form of military technology is itself greatly shaped by innovation in other forms of military technology.

The argument that military technologies and organisation have wider political ramifications is not a new one – it was perhaps most famously advanced by Michael Roberts in his lecture on "The Military Revolution, 1560-1660" in Belfast in 1955.[389] Roberts argued that advances in musketry in the early modern period prompted the emergence of large standing armies (particularly the Swedish), which were composed of conscripted soldiers who were increasingly armed with firearms. These soldiers were trained to a higher level than previously, with clothing and food supplied by the state, and due to the tactical advantages of massed musketry armies grew in size, with important political consequences. The reason behind the increase in the size of armies was due to a number of developments; firstly was the development and refining of 'linear' tactics, which had found their earliest form in the armies of Gustavus Adolphus. These operated on the principle that with a greater 'frontage',

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[387] Charles Tilly, *Capital, Coercion, and European States,* Oxford: Blackwell (1990); Mann, Michael "The Autonomous Power of the State: its Origins, Mechanisms and Results." *European Journal of Sociology* 25.02 (1984): 185-213

[388] See Mancur Olson, *Power and Prosperity* (New York: Basic Books, 2000)

[389] Roberts was not the earliest to do so, however – the Austrian economist Joseph Schumpeter had in 1918 noted the connection between the rise of the 'tax state', as he called it, and the military demands of the Hapsburg Empire as it struggled against the Ottomans in the Balkans. See his chapter "The Crisis of the Tax State" in Richard Swedberg, *The Economics and Sociology of Capitalism*, (Princeton University Press, 1991), p.99-140

an army of muskets could direct more firepower upon the enemy;[390] Maurice of Nassau is credited with discovering that with multiple ranks of musketeers, a continuous rate of fire could be maintained – provided they were able to carry out their drill effectively. One rank would fire, then move behind the others to reload, to return to the front after the other ranks had taken their shots. To carry out these tactics to good effect, large numbers of men would be needed, and these would need to be paid on a regular basis. More than that, all would need to be well trained in their drill and manoeuvres. Geoffrey Parker noted another contributing factor to the growth of these armies, developments in siege warfare (specifically the new *trace italienne* fortresses with earth and brick outworks, which could effectively resist cannon fire) which necessitated large besieging armies: a city's defences could no longer be obliterated with cannon fire as stone walls were; instead, large numbers of troops would have to encircle the fortress and work their way past the earthen outworks before they could assault the inner walls.[391] Such pressures, the revolutionists claimed, resulted in an arms race where European states attempted to field ever-bigger armies. Prussia was a particularly extreme example, at some times employing one Prussian in 13 as a soldier in wartime; in 1692, Spain numbered more than 495,000 troops on its militia rolls,[392] with the cost of maintaining its army rising from £200,000 to almost £900,000 a year between 1547 and 1598.[393] Armies were not the only expense which was laid out by early modern states; the fortresses which Parker studied were extremely expensive in their own right. Some states (particularly in Italy) were bankrupted by the cost of their fortifications; the Dutch spent £100,000 on fortifying Antwerp alone, and from 1529-1572 spent £1 million on the construction of fortresses.[394] Added to this (for some states at least) came the considerable costs associated with building a navy. This is not only in terms of the capital costs associated with building a ship (which were considerable – it took the British £63,174 to build a 100 gun ship of the line in 1765) – but as Nicholas Kyriazis points out, while armies can supply

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[390] Michael Roberts, *The Military Revolution*, in *Essays in Swedish History* (University of Minnesota Press, 1967) p.18-19.
[391] Parker FIND
[392] Michael Duffy, *The Military Revolution*, (University of Exeter Press,1980) p.3-4
[393] Roberts (1967), p.61-62
[394] Ibid., p.12

themselves relatively easily in the field, naval forces needed to lay in a considerable supply of provisions before undertaking a campaign, and furthermore required regular maintenance.[395]

In order to maintain these new military forces, new forms of administrative machinery were needed – bureaucracies that could collect the taxes to pay for the increased cost of war being among the most important. Even this was not always enough – increasingly sophisticated financial institutions and instruments such as central banks and war loans. Along with bureaucracies, increased demand for the supply of material provisions contributed to the growth of nascent industries. As Michael Howard notes:

> It was not any superiority in weapons systems, neither the fieldpiece nor the musket, that set eighteenth-century Europe on the road to world conquest. Rather it was these disciplined professional armies with their volley firing, their capacity for maneuver in the battlefield, and their steadiness under fire. Their adversaries had to imitate them or go under… and they had to imitate not just the weapons, which was easy, and the discipline and the drill, which was harder, but the administrative efficiency that produced the regular pay making both drill and discipline possible.[396]

The theory of a military 'revolution' has attracted criticism, but primarily in that the wording implied a sudden, instantaneous change; the pattern of incremental adaptations which occurred were more accurately described as an evolutionary dynamic.[397] The pressures of war, combined with the lack of restriction on the tools with which it is fought, contributes to an escalation in development of forms of social organisation, just as much as it does with regards to mere 'arms races', and this tendency took on an even greater importance after the early modern period with the rise of industrial war and the need to coordinate globally enmeshed economies to meet its needs.[398] The increasing complexity and expense of

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[395] Nicholas Kyriazis, "Seapower and Socioeconomic Change", *Theory and Society*, Vol. 35, No. 1 (Feb., 2006), p.80-81

[396] Michael Howard, "Tools of War: Concepts and Technology", in John Lynn (ed.) *Tools of War,* (University of Illinois Press, 1990), p. 240

[397] Clifford Rogers, "The Military Revolutions of the Hundred Years' War", in Clifford Rogers, (ed.) *The Military Revolution Debate: Readings on the Military Transformation of Early Modern Europe* (Boulder: Westview Press, 1995), p.55-78

[398] For an informative study of this phenomenon, I highly recommend David Edgerton's *Britain's War Machine* (London: Allen Lane, 2011).

the most advanced military technologies requires ever-more sophisticated and complex forms of social and economic organisation, and as societies change to meet these needs, they introduce a new source of uncertainty into the realm of strategy.[399]

This uncertainty is not only generated by the effects the new technological adaptations exert on war itself; the development of new technologies and new forms of social organisation have important implications with regard to the internal dynamics of the societies which use them. As we already explored in our discussion on the nature of rules, from a broadly Marxist, materialist perspective the cultural, legal, and political structure of society is determined by material factors at its base. The "ownership of the means of production" is, in this analysis, the factor which grants power in society; those who control capital, the supply of inputs or raw materials, labour, land (or those who control a bottleneck in one or more of them) have the power in their society, and can shape its institutions to reflect their dominant material position and serve their interests. But there is another form of material power, alongside the ability to create wealth – the ability to destroy. A monopoly of the control of violence within a given territory was of course Weber's definition of what made a state – control of the 'means of destruction' (weaponry, ammunition, soldiers) enables the owner to seize power or otherwise exercise political influence within a given society – the state formation literature, as already mentioned, points to the central role of a military group in the establishment of institutionalised state structures, with 'bandits' using them to extract resources from producers.[400]

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[399] Norman Augustine, an aerospace businessman, made a celebrated observation on the implications of the increasing complexity of military technology in the 1980's: "In the year 2054, the entire defense budget will purchase just one tactical aircraft. This aircraft will have to be shared by the Air Force and Navy 3½ days each per week except for leap year, when it will be made available to the Marines for the extra day." Norman R. Augustine, *Augustine's Laws* (American Institute of Aeronautics, 1983)

[400] As mentioned, the means of destruction can take a variety of forms depending on the circumstances: on an Bronze Age battlefield, the soldiers and their metal weapons in particular would be a 'means' (the soldiery perhaps corresponding to 'labour' in the classical understanding of the means of production), whereas in the eighteenth century control of depots and supply infrastructure (in other words, "military capital") would decide the course of the conflict. In the modern day, the communications technology which enables the coordination of the separate parts of the varied and complex military system would perhaps be the crucial factor. The means of production can also include individual armies, leaders, the political basis for alliance – any bottleneck in the use of force, the seizure of which would significantly weaken the military effort.

The theoretical concept of the 'means of destruction' has obvious potential, being applicable to the same areas which have been studied with reference to the means of production. This is a potentially

That this control has been jealously guarded is a commonplace; the civil military relations literature focuses on the threat inherent in the military establishment, which can be used by ambitious military leaders to mount coups. Likewise, political literature dating back at least to Machiavelli acknowledges the link between military and political power. Ruling castes throughout history have been noted for their tendency to monopolise control of the means of destruction; to bear weapons, specifically swords, was the exclusive privilege of the knightly class in Europe and the Samurai in Japan, for instance. The problem of praetorianism – soldiers using their access to the leader to interfere in politics – was a concern of many imperial leaderships. In the Middle and Near East, individual rulers often tried to ensure the loyalty of their most intimate armed followers by recruiting them from a foreign race, so as to avoid empowering a group already enmeshed in court politics – the Byzantine Varangian Guard (Norsemen), Ottoman Janissaries (Christian slaves from the Balkans) the Egyptian Mamluks (Circassian slaves) are particular examples. Even this conscious recognition of the problem was not enough – the latter two groups eventually began to exercise power themselves, the Mamluks establishing a dynasty which was ultimately destroyed by Napoleon. The use of mercenaries posed similar problems – Seljuk Turks, the Catalan Company, the Italian condottieri all posed grave threats to the powers which nominally 'controlled' them. The involvement of the wider population in the Napoleonic Wars was for similar reasons a source of great concern to the ruling elites of the ancien regime; as mentioned earlier, Clausewitz's career troubles stemmed not only from his principled resignation from the Prussian service, but also from his advocacy of the politically

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vast area of research; I also speculate as to some potential uses of the concept in military theory and practice. One potentially useful utilisation of the concept is in the identification of a 'centre of gravity', as defined by Clausewitz and the maneuver warfare theorists. The centre of gravity is most intuitively thought of as a physical thing, and is often identified with a physical object – a piece of terrain, or a military formation – despite the fact that it can take immaterial forms such as leadership or morale. The concept of a 'centre of gravity' is perhaps given to this physical association, being a term derived from the physical sciences; however, making use of the more economic conception of the 'means of destruction' (i.e. 'that which enables the use of destructive force') is a better way in which to frame one's thoughts on the matter. War, being physical, is often described using physical terms ("kinetic operations", "momentum", "mass" and of course "friction") despite the fact that the discipline of physics is generally concerned with action exerted on inanimate or otherwise passive objects – rather than with active opposition, as one sees in warfare. The vocabulary of economics may, therefore, be a more appropriate conceptual tool upon which less experienced commanders can rely in order to deconstruct and understand their task: the identification of 'bottlenecks' in the processes of the opponent's war machine is perhaps an easier task than to think in terms of the interaction of physical objects.

problematic *Landwehr,* an institution which threatened the Junker aristocracy's hold on military power.

That this dynamic injects a certain amount of uncertainty into politics is obvious; a host of independent actors (or actors with the potential to become so) are present, adding new variables in the already chaotic political dynamic. Technological improvements to weaponry and other warmaking paraphernalia are not automatically welcomed by those who control the means of violence; as is the case with those who control the means of production, new technologies pose a threat to established interests who are not in the best position to exploit new developments, and who have 'sunk costs' invested in the old technologies and techniques[401] (a knight who had spent his life learning to fight from horseback would be loath to take up a crossbow, however effective it was). Institutions which seek to regulate and restrict new technologies (and *techne*), such as guilds, are commonly seen in the economic world, and as we have seen from the development of the laws of war, there is a similar tendency operating in warfare; a notorious example of military conservatism is the case of the Mamluks, whose adherence to previously successful military techniques and contempt for gunpowder weapons became a byword, [402] and the attempts made by the medieval church to ban projectile weapons are similarly motivated by a desire to retain a status quo which favours the dominant group. When opposing groups which both make use of the same means of destruction meet, there will be some incentive to cooperate – smallholder hoplites who all need to go back to gather the harvest and whose weapons are most effectively used in a similar way (in a phalanx). However, despite the occasional attempts which have been made to control war's means, and despite its similarity to commerce in many respects, there is much less scope for this kind of regulation than in economic behaviour – being a matter of life and death, the incentive to introduce new tools once exposed to them is much more vital in wartime, and the lack of trust and common norms and expectations in wartime make cooperation a less likely prospect overall. War exposes societies to new weapons and forms of social organisation which must be adapted to and often copied in order to avoid defeat,

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[401] One of the best known examples is the case of Kodak, which dominated the camera film market and whose research and development department developed one of the first digital cameras. Unwillingness to upset their established business model ultimately resulted in the company's collapse.

[402] James Riddick Partington, *A History of Greek Fire and Gunpowder*. (Johns Hopkins University Press, 1999), p.208

even at the risk of politically empowering previously disenfranchised elements of society; war's inherent lack of restriction makes it particularly corrosive to established political orders.

Carles Boix makes this point in an extended analysis of the development of major military technologies and their political implications in his book *Political Order and Inequality*. One of the earliest military technologies was bronze, used for armour and weaponry; the control of deposits of copper and in particular the more geographically limited tin gave certain groups the ability to monopolise control of weaponry and form a military caste, dominating their societies[403] – strong state institutions in the form of absolute monarchies and the early empires of Middle East and in China date from the same time as bronze weapons.[404] Iron weapons, made from much more easily accessible ores, enabled a decentralisation of military technologies and an according democratisation of politics – around 1200 BC, practically every bronze-age city in the eastern Mediterranean collapsed, with Mycenaean palace cultures falling at the hands of Dorian invaders, who were armed with iron weapons and organised in a more decentralised political structure.[405] Perhaps one of the most important military technologies with political consequences was that of cavalry. Horses enabled rapid movement, intimidation, a high platform from which to attack infantry and after the introduction of the stirrup, added the mass of the charging horse to the tip of a lance. So effective was the horse as a military technology that those with access to it reshaped the political and economic systems of their societies in their interest; a small cavalry class developed in many societies which were able to make use of horses as a military asset, and various ranks of nobility explicitly reference the animal: *chevalier*, *caballero*, *equites* are all examples of such (the German equivalent *ritter* meaning 'rider').

To use a horse as a military technology was extremely expensive, both in terms of time taken to learn how to ride and fight from horseback and in terms of the financial costs needed to outfit and maintain the cavalryman and his equipment – one aspect of which was

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[403] Carles Boix, *Political Order and Inequality*, (Cambridge University Press, 2015), p.132
[404] Boix, p.132-133. Boix notes that in China, bronze appears to have been used exclusively for weapons and ritual objects, rather than agricultural tools – state formation was therefore not driven by technological improvements in farming.
[405] William H. MacNeill, *The Pursuit of Power*. University of Chicago Press, 1982, p.12-13

owning land on which the horse could be raised. This combination of a small class of horse-owners with a need for land and an ability to dominate the rest of society shaped the politics of the feudal system.[406] The range of the horse as a military technology was effectively restricted to flat country – mountainous regions and swampy ground rendered it less effective (along with large areas of Africa rendered inhospitable due to the presence of the tsetse fly) – and it was at these boundaries that feudalism gave way to other forms of political organisation. It is no accident that the Swiss, living in a mountainous country where horses could not dominate the terrain, developed a democratic political structure, and the same was true for in Sweden, where heavy forests militated against cavalry and whose free peasants who took part in regional assemblies.[407] Urban populations with republican political structures, it is true, could also mount a decent defence against cavalry armies – as at the Battle of Courtrai, where Flemish militia were able to beat a French army of knights. However, this applied more to large populations which were able to field with particular advantages in terms of being based in terrain unsuitable to horses (marshes and so on) and the urban populations, though rich, needed to work for their wealth and could not devote their lives to war as an exclusively military caste could. As we have already seen, the introduction of gunpowder weapons allowed for the possibility of fielding large armies of men who did not need extensive training, a development which empowered not a specific warrior caste but the larger states which had the financial and demographic resources to field large armies. in the modern day, with war (at least in the west) being dominated by increasingly complex military technologies, the need for a strong state with advanced economy is all the more felt, with military-industrial complexes wielding a great deal of political power, as well as a degree of political representation of the population of the state – the logic behind granting the vote to all men in the UK after the First World War.

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[406] Boix, p.158

[407] Boix, p.156. More quantitative approaches have found that the theory of state formation as a function of exposure to intense warfare holds weight in computer simulation; by reconstructing a model of the Old World with appropriately distributed resources (specifically cavalry technologies, and fertile or rugged ground), Turchin et al. were able to map the emergence of complex societies in a way which closely corresponds to the historical record. See Peter Turchin, Thomas E. Currie, Edward A. L. Turner, and Sergey Gavrilets, "War, space, and the evolution of Old World complex societies." *Proceedings of the National Academy of Sciences* 110.41 (2013): 16384-16389.

The mechanisms by which this political change can be effected have been varied; the act of providing weapons obviously has the potential to empower those who receive them, but this is hardly the only means by which this is achieved. More often we can find that the increasing complexity of military technologies and the subsequent need for specialisation in their development requires the input of various groups who provide funds, expertise and labour (i.e. those who controlled the means of destruction), and who are subsequently accommodated in the political system; Nicholas Kyriazis, in his article "Seapower and Socioeconomic Change" points out that naval states such as Britain and the Netherlands had particularly strong democratic political systems (if not in terms of widespread suffrage, then at least regarding property rights)[408] for this reason, due to the economic needs imposed by the cost of maintaining fleets. Empowerment can be even more direct – we have already seen that organisation and coordination is a vitally important part of military *techne* – Saumitra Jha and Steven Wilkinson have speculated that non-elite groups can even be empowered by their acquisition of organisational skills, which enables them to more effectively engage in collective action once they have left the battlefield.[409]

Technological change newly empowers certain groups in society, and in so doing, reshapes the superstructure of the wider group. This aspect of war, that it is fought between actors which are products of a unique process of historical development, introduces another element of uncertainty – particularly when the practice of war itself introduces ever more changes which reshape the society or state concerned. Different societies will, as Clausewitz noted, go to war in different ways. The variability of these forms of social organisation precludes (or at least militates against) certainty, which would require detailed knowledge of the political, economic, sociological nature of one's own society and that of the enemy; the alternative being adherence to more generalised principles and theories which would by necessity be unable to make specific predictions. The influence of technology and war's physicality does not stop at its reshaping of political institutions and the introduction of more sources of chance; it also has important implications when it comes to the making of strategy.

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[408] Nicholas Kyriazis, "Seapower and Socioeconomic Change", *Theory and Society*, Vol. 35, No. 1 (Feb., 2006), p.71-108, p.81

[409] See Saumitra Jha and Steven Wilkinson. "Does Combat Experience Foster Organizational Skill? Evidence from Ethnic Cleansing During the Partition of South Asia." *American Political Science Review* 106.04 (2012): 883-907

Technology and Strategy

Technological change influences strategy in a variety of ways. As technology develops, the necessity for new material inputs needed for the exercise of armed force has strategic consequences; previously unimportant resources and the places in which they are found become strategic priorities: the Royal Navy's shift away from coal to oil made the Middle East an area of great geopolitical importance, and present-day French intervention in African states has at least some connection to uranium deposits.[410] Physical changes brought about by war have their own effects. As certain elements of society take damage faster than others, the political balance of power begins to shift; the same goes when certain groups benefit disproportionately from war. The classic case of such a development is the fall of the Roman Republic; victories in war brought about an influx of slaves who dispossessed lower class citizens who became a potential power base for a would-be dictator. Caesar was such a man, who also effectively controlled his own means of destruction in the form of his legions – in part because geographical distance (brought about by repeated conquests) inhibited effective central control of Rome's armed forces. The Republican system had been based on physical foundations – demographic, economic and spatial – which shifted as a result of military expansion, and the ones which had developed were much more favourable to imperial rule.

New technology requires new *techne* – new ways of using these tools. This applies both at the level of the individual soldier and the statesman; innovations in technology, particularly since the industrial revolution, have transformed the making of strategy, from the Schlieffen plan (which was enabled, and constrained by, the capabilities of the German railway system) to the nuclear strategy of the Cold War. The nature of strategy – the process of planning a course of action without the guidance of constitutive rules – is made ever-clearer by its constant reinvention on the emergence of new technology. New tools exacerbate the violence and uncertainty of war firstly by introducing the promise of increased destruction (or protection from it) and secondly by presenting would-be strategists with tools

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[410] Andrew McKillop, "What's Really Behind France's Sudden Scramble to "Save Central Africa"?" *Global Research* (December 6, 2013), http://www.globalresearch.ca/whats-really-behind-frances-sudden-scramble-to-save-central-africa/5360522 <accessed 04/10/15>

whose effects are essentially unknown. This is compounded by the fact that no *information* is automatically provided in war as it is done in other conflicts where rules provide information which can be taken for granted. Therefore, intelligence must be gathered and analysed – put into the context of the purpose of the war. The unique nature of each of the war's combatants means that this process will require a huge amount of information beyond merely military factors like troop movements; the enemy policy may be unclear, the likely reaction its society will have to certain types of attack is uncertain, especially when new technologies are involved (bombing of population centres in the Second World War did not have the effects military planners anticipated).

These pressures and possibilities are why war has been a perennial source of technological innovation; effective tools are in demand and there are relatively few barriers to their introduction. Military technologies are intimately bound up with war's nature as a physical contest, either enhancing physical capabilities or facilitating their use. The central role of technological advances in the last hundred years has bewitched many theorists, with the power of modern technologies leading some to believe that such advances can guarantee victory, evaporate the fog of war, and enable complete control of one's own forces. A notable example of such technological enthusiasm came with the development of air power – Guilio Douhet's theories and the widespread notion that "the bomber will always get through" portrayed air power as an irresistible force which would totally revolutionise warfare, expectations which were not entirely borne out by reality. More recently, advances in precision munitions, the "revolution in military affairs" have held out the possibility of 'surgical strikes' and risk-free warfare (at least from the attacker's point of view); "Network-centric Warfare" similarly promises the total control of one's forces and fully integrated intelligence feeds.

There are of course obvious criticisms of such optimism; the casualty-free campaign in Yugoslavia was less than perfect in crippling the Serbian armed forces who camouflage their military equipment, and although the 2003 Iraq war was won with relative ease, when faced with insurgent tactics the US military was at a disadvantage. New technologies are

invariably adapted to.[411] Criticism of such attitudes has been advanced from modern-day acolytes of Clausewitz, who make his point that war is inherently uncertain and aspirations to complete control and certainty are ephemeral. I wish to contribute to this argument by pointing to the ways in which technology itself contributes to uncertainty in warfare, reinforcing the trend engendered by the rulelessness which gives the means of war such a prominent role. The performance of new technologies has always been uncertain – there are limits to the human imagination, and the effects of new weapons are often other than what their creators imagined: for instance, poison gas did not have the revolutionary effects some had guessed at in the First World War, while at the same time some weapons have exceeded their potential – the German 88mm anti-air cannon proved to be an excellent improvised anti-tank weapon. What obscures our prognostication is the intrusion of interest, a lack of intellectual foundation in our understanding of society and human nature, the inherent unpredictability of non-linear domains, and in part a lack of imagination. Unintended consequences of new technology are hard to anticipate. Technological capabilities are an obvious basis for strategic calculation, but constant change and uncertainty inherent in innovation have important implications for the strategist.

Nuclear Strategy

The clearest examples of this problem are to be found in the technological advances of the twentieth century, particularly air power and nuclear weapons. Even before the First World War, H. G. Wells had written *The War in the Air,* speculating in lurid detail the possibilities of aerial combat, and aerial bombardment seemed so unstoppable that politicians despaired of the possibility that it might be guarded against, Stanley Baldwin making his famous pronouncement that "the bomber will always get through" in 1932. Air power theorists like Guilio Douhet and Sir Hugh Trenchard rhapsodised over the possibilities of their new arms, being able to strike at the industrial base of the enemy without having to go through his armed forces first; this, they held, would bring about moral collapse in the civilian population. Wars would begin, it was speculated, with a counter-air power strike,

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[411] For a more contemporary example, see "Revealed: al-Qaeda's 22 tips for dodging drones" *Daily Telegraph,* (21 February 2013), http://www.telegraph.co.uk/news/worldnews/al-qaeda/9886637/Revealed-al-Qaedas-22-tips-for-dodging-drones.html <accessed 23/11/15>

one's own airplanes bombing airfields and shooting down enemy planes *en masse*,[412] with subsequent attacks breaking civilian morale – even before a physical collapse. The focus on civilians was in part a reaction to modern 'total war', where civilians had increasingly become central to the war effort – and partly based on an assumption that, for a variety of reasons, civilians were promising targets for raids. They were less inured to hardship and danger than soldiers, and were presumed to be alienated from their leaders; bombing population centres would cause mass hysteria, and calls for peace would be inevitable; as Douhet speculated, "a complete breakdown of the social structure cannot but take place in a country being subjected to… merciless pounding from the air."[413] That these claims were not borne out in reality was due to a variety of reasons, not the least of which was the obviously self-serving nature of the predictions; it was in the professional interest of the proto-airmen to exaggerate the capabilities (especially, the strategic capabilities) of their new technology – all the better to achieve independent strategic responsibilities, and the budgets and 'turf' that come with them. Laurence Freedman another of the reasons – the uncertain intellectual foundations of air strategy, a tool which had never been used on settled populations:

> Much advocacy of strategic bombardment was immoderate and simplistic, relying on intuition more than analysis. In part, this was because it was propaganda for a new branch of the armed services. But even the most detached writers on this subject were working in the realm of speculation. *They could not be sure what changes new technological advances would bring; they could only guess at the impact of bombardment on modern social structures.* (In Britain, for example, much of the RAF's confidence in strategic bombing derived from its apparent efficiency in controlling wild tribesmen in Somalia and Iraq.) Under the influence of these theories, military writers were straying beyond their area of competence. It might be hard to challenge military expertise on the tactics of battle; but now they were commenting on the ability of civilians, indeed whole societies, to withstand a certain sort of pressure.[414]

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[412] Giulio Douhet, *The Command of the Air*, trans. Dino Ferrari, (New York: Coward-McCann Inc., 1942), p.220
[413] Ibid., p.58
[414] Lawrence Freedman, *The Evolution of Nuclear Strategy,* 3rd Edition*,* (Palgrave Macmillan, 2003), p.6

As it turned out, air power did not have the overwhelming impact its advocates had promised. However, its impact on strategy was less than the next great technical advance of the century – nuclear weapons. On reading a newspaper headline about the dropping of the atomic bomb on Hiroshima, the naval strategist Bernard Brodie said to his wife "everything I have done up till now is obsolete."[415] As Brodie (later to become one of the most prominent nuclear strategists of the Cold War) noted, the introduction of nuclear weapons represented a sea change in strategic thought. Old assumptions about the conduct of strategy, and of the very utility of war, could no longer be relied on. The prospect of nuclear annihilation served to focus the minds of strategic planners on the possibilities of nuclear war, and how these weapons might be used (or not) in pursuit of policy ends. New methods of modelling strategy were introduced in order to give greater certainty to the understanding of human behaviour (game theory being particularly popular).

Could nuclear weapons be used in a conventional war? Basing forces in cities or other fixed positions would invite the use of nuclear weapons against them and their hosts; an army with no fixed base or static front line would be better able to survive nuclear combat. Henry Kissinger at one time imagined land warfare could transform into something more like war at sea, with mobile units roving around Europe, less reliant on lines of supply, engaging each other with tactical nuclear weapons.[416] Even if the reality did not turn out to be quite so extreme, the potential use of nuclear weapons for conventional tactics – concentrating troops in a mass, tactically advisable in earlier times, would invite nuclear bombardment. Doctrine would have to change accordingly – introducing yet another source of change and uncertainty, as the enemy would be forced to adapt, and so on. The possibility of fighting a limited war with nuclear weapons was speculated; Colonel Richard Leghorn's concept of 'graduated deterrence' postulated that by restricting nuclear attacks to military targets, and inflicting damage proportional to the threat they posed (whilst unilaterally refraining from escalation and in particular attacks on civilian population centres) nuclear weaponry could be used without risking a general conflagration.[417] This supposed that the enemy would return

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[415] Bernard Brodie, quoted in Barry H. Steiner, *Bernard Brodie and the Foundations of American Nuclear Strategy,* (University Press of Kansas, 1991), xi
[416] Henry Kissinger, *Nuclear Weapons and Foreign Policy*, (New York: Harper, 1957), 174-183
[417] Freedman (2003), 107-108

the favour; indeed, much nuclear strategy involved the possibility of a kind of communication between both sides. Thomas Schelling spoke of the possibilities of the "diplomacy of violence" wherein force could be used as a bargaining chip.

All of these questions were particularly difficult to answer because of the completely unsettling effects nuclear weapons would have on warfare, which thanks to their limited use existed almost entirely in the minds of theorists. Beyond the findings of nuclear tests and the cases of Hiroshima and Nagasaki, all of the hard evidence on which to base nuclear strategy was uncertain – there were simply no precedents for this phenomenon. This nuclear planning would rely on speculation as to the great variety of effects of a nuclear exchange: the likelihood a counterforce strike could wipe out the enemy nuclear capability; its effects on civilian morale; even the environmental effects of a nuclear exchange, all were potentially relevant. Nuclear strategy was something of a growth industry after the Second World War, and there were a number of notable theorists who worked on nuclear strategy, particularly the American strategists who worked at the RAND corporation. Three of these merit particular consideration, reflecting as they do a variety of approaches to the problems of strategy in the age of nuclear weapons: Albert Wohlstetter, who devised strategy based on an assessment of the objective technological capabilities of nuclear weapons and their associated weapons systems; Herman Kahn, who speculated as to a great variety of the potential effects of nuclear weapons use; and Bernard Brodie, who was most conscious of the unique implications of nuclear technology as regards the use of war as a political instrument.

Albert Wohlstetter was one of the most influential strategists of his time, particularly in regards to his influence over policymaking and the practice of 'systems analysis' which for good or ill formed the intellectual foundation of much of American strategic thinking in the Cold War. Wohlstetter made two principal contributions to nuclear strategy;[418] the first was his application of systems analysis to an assessment of the vulnerability of Strategic Air Command bases – the so-called "base study" series which first began in 1951. The SAC, then under the command of the pugnacious Curtis LeMay, was primarily concerned with their own capacity to deliver an attack on the Soviet Union, being rather more ignorant of its own

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[418] Here I draw in particular from Richard Rosencrance's arguments in his chapter, "Albert Wohlstetter" in John Baylis and John Garnett, *Makers of Nuclear Strategy* (London: Pinter Publishers, 1991), p.57-69

vulnerability to Soviet attack. Wohlstetter and his colleagues, after making an assessment of the technical capabilities (i.e. the range and firepower) of the Soviet Union's own bomber fleet, and accounting for the locations of the American bases relative to the Soviets's own, concluded that by 1956 the Soviet Union could wipe out 90% of the United States' bombers and tankers.[419] A particular problem was posed by the SAC's use of air bases in allied countries which were closer to the Soviet Union; American bombers therefore needed to use the foreign airbases irregularly – and only to refuel – as the Soviet Union would presumably not expend resources attacking the bases if it could not guarantee that there would be bombers there to destroy. Such specific conclusions of course depended on accurate data on the armed forces of the Soviet Union (and of course, on those of America itself – figures which, though easier to come by, again required a deal of administrative effort). Furthermore, these base studies had to be repeated[420] as new developments, such as the invention of intercontinental ballistic missiles and more destructive hydrogen bombs, made the old studies' conclusions obsolete, and allowances for future technological developments had to be incorporated into current strategy (bombers had to abandon forward air bases entirely and be refuelled mid-air in order to avoid the threat of ICBM strikes, for instance). Despite these inherent difficulties of a strategy based on physical capabilities, the use of such data nevertheless did provide a useful intellectual foundation to the technical (if not political) strategic choices which had to be made in the nuclear age.

This approach was of course paralleled by the emerging mathematical science of game theory, which (like the geometric strategies of the Enlightenment before it) sought to base military decision making on supposedly firm mathematical grounds. The use of such behavioural models to calculate the trade-offs of different strategic choices was a key part of the study of deterrence, the second area in which Wohlstetter made a principal contribution. Wohlstetter observed that deterrence required not only the possession of a powerful nuclear arsenal, but rather the possibility of carrying out a successful 'second strike', i.e. a nuclear strike which could be delivered after being hit oneself.[421] There were six requirements for

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[419] *Special Staff Report: The Selection of Strategic Air Bases,* RAND Corp, R-244-S, (1 March 1953)
[420] See Albert Wohlstetter and Fred Hoffman, "Defending a Strategic Force after 1960", RAND Corp, D-2270, (1 February 1954), and *Staff Report: Protecting US Power to Strike Back in the 1950's and 1960's*, RAND Corp, R-290, (1 September 1956)
[421] Albert Wohlstetter, "The Delicate Balance of Terror", *Foreign Affairs,* 37:2 (Jan. 1959)

such a strategy to be effective: military forces used for deterrence had to be maintained through peacetime, ready to act, on an acceptable budget; these needed to be able to survive a first attack by the enemy forces, either by receiving and acting on early warnings, or by being protected in durable bases; and furthermore, they required the ability to receive an order to attack (which required a communications system that could survive a nuclear attack). The retaliatory forces finally needed to be fuelled to the extent that they would be able to get to their targets, be able to penetrate Soviet air defences, and deliver firepower sufficient to defeat the ground defences of their targets. This presented a whole range of challenges, and the danger was that a Soviet first strike would be able to knock out even a superior American force before it was able to retaliate – such an occurrence could result in a Third World War in which the Soviet Union sustained fewer casualties than in the Second. The disposition of nuclear forces should therefore be based around their potential use as second-strike weapons – basing missiles close to the Soviet Union, for instance, was inadvisable in that it made them very vulnerable to a first strike.

Here Wohlstetter was grappling not only with the physical capabilities of technology but of their unique strategic implications, an exercise which required a great deal of speculation and imagination. Another of the nuclear strategists, Herman Kahn, was similarly given to speculation about the possibilities of nuclear war, to an especially florid degree. Reputedly the inspiration for the character of Dr Strangelove, Kahn's remorseless pursuit of the line of his reasoning led him to alarming conclusions, which he would present in a deliberately shocking way. His idiosyncratic thought experiments on the subject of hypothetical "doomsday machines" which would destroy the world if triggered by the detection of a set number of nuclear blasts are a good example, but even in his more concrete analyses of more probable nuclear wars, Kahn was unique in his tendency to explore the horrific implications of nuclear strikes in a detached, matter-of-fact manner. Moral qualms over the use of nuclear weapons did not factor into his analysis, and he explored the possibilities of strategic action after a nuclear exchange as if they were just another weapon of war.

The uncertainties of nuclear life among the general population was one such area which provided him with material for his musings: for instance, he posited that the fear of

radiation sickness (which manifests first as nausea, followed by an apparent recovery lasting two to three weeks) would be a threat to the morale of survivors; the government should therefore lay in a stock of radiation detectors which could be used to reassure radiation hypochondriacs that they had only a small dose of exposure, and were merely nauseated by other factors (presumably not hard to come by in such an environment)[422] The effects of specific radioactive isotopes also excited his imagination; Strontium-90, for instance, accumulates in the bones, and would contaminate a large amount of the food supply. Kahn drew up a plan to sort food into four categories, allocating the most isotope-free foods to pregnant mothers and children, with a category for over forty-year-olds (whose bones were growing at a slower rate). Cancers would of course result from eating such food, but this system would ameliorate the worst effects (with Kahn cheerfully pointing out that in any case "most of these people would die from other causes before they got cancer").[423] His flippant treatment of such grave subjects such as these and his glib remarks on aspects of nuclear war, like casualty figures which would number in the millions, was a habit for which Kahn received a great deal of criticism from members of the public and from others in the strategic establishment (Bernard Brodie objected in particular to the levity implied by Kahn's rather Freudian term for unrestrained nuclear war, the so-called "wargasm"). However, of all the nuclear strategists he was perhaps the most appreciative of the myriad effects that a nucleatr exchange would bring about. As J. C. Garnett comments, "Instead of righteous indignation, condemnation and despair at the folly of war, there was, in his writing, a clinical acceptance of thermonuclear war as a fact of life like other facts of life. Whereas most people have a mental block when it comes to nuclear war, Kahn didn't, and the fact he didn't gave his writing a chilling flavour of immorality."[424] In this sense, his work represented an appreciation of war's inherent lack of restriction, which enables it to drive itself to greater and greater levels of violence; war had no moral rules in itself, and Kahn decided not to be anachronistic in applying them to his speculations.

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[422] As Kahn explained, with his customary flippancy, "You look at his meter and say, 'You have received only ten roentgens, why are you vomiting? Pull yourself together and get back to work' Herman Kahn, *Thinking About the Unthinkable in the 1980s* (New York: Simon and Schuster, 1984), p.119
[423] Herman Kahn, *On Thermonuclear War,* (Princeton University Press, 1960), p.66-67
[424] John Garnett, *Herman Kahn*, in Baylis and Garnett (1991), p.72

Kahn was heavily criticised, however, for a number of his conclusions – and more to the point, the way in which he reaches them. For instance, in *On Thermonuclear War,* Kahn provides a table which contains a list of estimates as to the time needed for a nation's post-nuclear recovery, given set levels of casualties;[425] Philip Green has asserted that Kahn's methodology in compiling the list (presented as fact) was in fact completely unscientific, and in fact was completely speculative.[426] Similarly his conclusions regarding post-exchange life were based on very flimsy evidence, given the confidence with which he makes his pronouncements. This speculation differed from other assessments in its scale, if not its scope; whether or not Kahn's conclusions were correct, he was certainly right to cast his net so widely. In any case, hard evidence of the effects of a nuclear war was largely unavailable. Nuclear weapons (and only relatively weak fission ones at that) having only been used on human targets twice, there was a great deal of information which was unavailable to the nuclear planners which might have turned out to be strategically relevant in a post-exchange world; this is particularly so with regard to the social effects of nuclear attack, the area in which the earlier assumptions of strategic bombing were so badly disproven.

Kahn's lack of a historical approach was perhaps an extreme case of the capabilities-based and 'scientific' treatment which was particularly popular in the American strategic establishment. Being a physicist by training, he had a very limited ability to put the events of his own time in a wider historical perspective – such an approach was the opposite of perhaps the most intellectually distinguished of the nuclear strategists, Bernard Brodie. Brodie began his academic career studying under Quincy Wright, who authored the magisterial tome *The Study of War,* a wide-ranging approach to the subject which explored it in its various aspects and historical manifestations, and Brodie's own graduate dissertation was a study linking military technology with politics, concerned with the influence of naval technology on diplomacy in the nineteenth century.[427] Brodie continued to work on naval strategy and other aspects of strategy in general, and as mentioned earlier he instantly recognised the transformative effects of the introduction of atomic weapons on his subject. This manifested

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[425] Kahn (1960), p.34

[426] Philip Green, *Deadly Logic: The Threat of Nuclear Deterrence,* (Ohio State University Press, 1966), p.15-92

[427] Ken Booth, *Bernard Brodie,* in Baylis and Garnett, p.19. See the introduction to this thesis for more on Wright's thoughts on war.

in his editing and co-writing of the book which was the earliest comprehensive treatment of nuclear strategy, *The Absolute Weapon*, published barely half a year after the bombing of Hiroshima. Brodie made eight conclusions on the realities of war in the nuclear age in *The Absolute Weapon*:

1. The power of the present bomb is such that any city in the world can be effectively destroyed by one to ten bombs;

2. No adequate defence against the bomb exists, and the possibilities of its existence in the future are exceedingly remote;

3. The atomic bomb not only places an extraordinary military premium upon the development of new types of carriers, but also greatly extends the destructive range of existing carriers;

4. Superiority in air forces, though a more effective safeguard in itself than superiority in naval or land forces, nevertheless fails to guarantee security;

5. Superiority in numbers of bombs is not in itself a guarantee of strategic superiority in atomic bomb warfare;

6. The new potentialities which the atomic bomb gives to sabotage must not be overrated;

7. In relation to the destructive powers of the bomb, world resources in raw materials for its production must be considered abundant; and

8. Regardless of American decisions concerning retention of its present secrets, other powers besides Britain and Canada will possess the ability to produce the bombs in quantity within a period of five to ten years hence.[428]

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[428] Bernard Brodie (ed.), *The Absolute Weapon: Atomic Power and World Order*, (New York: Harcourt, Brace and Co., 1946), p.24ff

In the book, Brodie also made his most famous observations on the effect of nuclear weapons on strategy, in a statement that has practically become cliché:

"Thus, the first and most vital step in any American security program for the age of atomic bombs is to take measures to guarantee to ourselves in case of attack the possibility of retaliation in kind. The writer in making that statement is not for the moment concerned about who will *win* the next war in which atomic bombs are used. Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to prevent them. It can have almost no other useful purpose."[429]

Despite this conclusion, Brodie continued to work on areas of nuclear strategy such as target selection (including, for instance, the idea of keeping certain cities unbombed as 'hostages' for future behaviour), enduring an unsuccessful attempt to influence the thinking of SAC chiefs away from their preferred technique of 'city-busting'. However, shortly after his move to RAND in 1951 Brodie was faced with a problem presented by the development in nuclear technology: the introduction of hydrogen bombs, which greatly increased the destructive potential of nuclear strikes. The shift from fission to fusion as the source of explosive power increased the potential of nuclear firepower from a mere 15 kilotons of TNT equivalent of the 'Little Boy' bomb dropped on Hiroshima to the range of megatons (that is thousands of tons, to millions) for hydrogen weapons. For Brodie, the invention of these weapons definitively shifted the foundations of nuclear strategy; whereas before he had entertained the possibility that nuclear war might be possible to conduct with restraint, the presence of such destructive new weapons rendered war unusable as an instrument of policy and threatened the realisation of Douhet's prediction of the weapon which could not be defended against.[430]

In 1959 Brodie published *Strategy In The Missile Age,* which proved a landmark in the nuclear strategy literature, and which was rather pessimistic in its conclusions. He was

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[429] Ibid., p.76
[430] Booth, p.27

particularly anxious about the possibilities of deterrence; in the book, Brodie frequently took a pessimistic view of the strategic future, based in no small part on his understanding of human nature. One of the central problems that Brodie identified was "the ever-widening disparity in accomplishment between man's military inventions and his social adaptation to them."[431] Old ways of thinking about the use of force were no longer effective or safe in the new environment of nuclear strategy, and the human factor was to him as much as it was to Clausewitz a source of uncertainty: "It is also impossible for us to predict with absolute assurance our own behaviour in extremely tense and provocative circumstances… The wrong kind of prediction in this regard might precipitate that total nuclear war which too many persons have lightly concluded is now impossible."[432] Brodie dabbled in more scientific methods of strategy, but though he saw its use he was soon sceptical about the possibility of making strategy a scientific endeavour. *Strategy in The Missile Age* closed with a chapter entitled "The Uncertainty of the Outcome" which reflected his Clausewitzian concern with chance and uncertainty:

> However, our experience thus far with scientific preparation for military decision-making warns us to appreciate how imperfect is even the best we can do. Those of us who do this work are beset by all kinds of limitations, including limitations in talent and in available knowledge. Where the object is to predict the future, for the sake of appropriate action, we simply cannot wait until all the relevant facts are in. Besides, we can make progress only as we cut off and treat in isolation a small portion of the total universe of data and of problems that confront us, and every research project is to that extent "out of context." In addition, we are dealing always with large admixtures of pure chance.[433]

Brodie's final book, *War & Politics,* was extremely Clausewitzian in its stress on the connection of war with politics more generally, and in his discussion of the unpredictability and sometimes uncontrollable nature of military activity. Brodie included in his analysis irrational influences on strategy, like passion and subconscious drives, along with the influence of individual personalities – factors which would already be familiar to

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[431] Brodie (1959), p.5-7
[432] Ibid, p.274
[433] Brodie (1946), p.407

Clausewitz's readers. In the book Brodie also voiced a critical attitude to the 'experts' in the military establishment, who were overly concerned with 'winning' in a narrowly militaristic sense; civilian control of armed forces was therefore imperative if war was to be properly used as a political instrument.[434] Brodie was himself a keen reader of Clausewitz, providing an introductory essay and a commentary to the Paret-Howard translation of *On War*, and indeed it is interesting to note the similarities between the two theorists. Like Clausewitz, despite a degree of professional success Brodie was frustrated in his career, and had a limited impact in policymaking circles; his involvement with SAC was abortive, presenting a paper on target selection which was ignored by less sophisticated thinkers who had won their laurels with the 'city-busting' strategy (in particular Curtis LeMay, whose firebombing campaign destroyed most of Japan's cities in the Second World War), who were unreceptive to his more nuanced approach.[435] This was but one episode of a recurring theme in Brodie's career – frustration at translating his strategic thinking into policy. His professional frustrations resurfaced in particular on the occasion of John F. Kennedy's presidency, as he was passed over for a role in the administration; instead, systems analysis strategists were invited into the McNamara Pentagon to directly shape American policy.[436] Nevertheless, Brodie's theories, like those of Clausewitz, have stood the test of time – precisely because they incorporate the timeless aspects of war, particularly its inherent unpredictability. This aspect of war, combined with the destructive capability of nuclear weapons, pointed to a clear conclusion:

> "What we have done must convince us that Thucydides was right, that peace is better than war not only in being more agreeable but also in being very much more predictable. A plan and policy which offers a good promise of deterring war is

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[434] Brodie (1973), p.496

[435] Booth, writing of LeMay, notes that "he had the 'right stuff' to lead men into battle but the wrong stuff to oversee the integration of strategy and policy. But the world war was a recent event, and famous fighters exercised enormous authority. Civilian academics like Brodie possessed little." (Booth, p.26). The need for intellectual specialisation is arguably a much more pressing concern in modern wars, particularly when so destructive a technology as nuclear weapons are involved; however, the human attribution of respect based on battle performance seems to trump more intellectual qualifications.

[436] Booth, p.32

therefore by orders of magnitude better in every way than one which depreciates the objectives of deterrence in order to improve somewhat the chances of winning."[437]

Much like the previous approaches to strategy outlined in the previous chapter, nuclear strategy is an exercise in devising a plan of action on how to win a war, without being able to refer to a clear set of constitutive rules. Some strategists, such as Wohlstetter, dwell narrowly on the capabilities of weapons and the physical execution of the war in a strictly military sense; others, like Brodie, think more widely of the political goals of the war, and how these influence (and are influenced by) the means with which it is carried out. Nuclear strategy is perhaps the clearest example of the extent to which this task of strategy is an inherently uncertain activity, and expresses a number of phenomena in their clearest form. Firstly, the effects of nuclear war were uncertain; though this is true of any war, the physical and social effects of the wide-scale use of nuclear weapons could only be guessed at, due to their limited use, and the fact that their destructive power increased over time. This leads to the second point, the fact that the material with which the nuclear strategists made their calculations was ever-changing; even if a 'perfect' nuclear strategy was arrived at, it would quickly become obsolete with changes in technology. Lastly, there was the human element – the behaviour of decision-makers in situations of extreme stress has always been a factor in war, and in the case of a potential nuclear exchange, the fate of all life on the planet would hang in the balance. Most of these implications and conclusions are ultimately traceable to the fact that war is not bound by rules; the threat of nuclear war has been (so far) the highest expression of the dynamics of war as violent conflict without rules, with the lack of an abstract framework of rules and the absence of effective restriction on its tools driving on to new and ever-more destructive forms. This process reached a qualitatively new stage in nuclear warfare, where the tools of war greatly exceeded in destructive power their utility to prosecute anything but the most extreme of political ends.

Conclusions

In conclusion, we can find that the lack of an abstract mechanism for conflict and the subsequent conduct of war in the physical environment has a number of important

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[437] Bernard Brodie, *Strategy in the Missile Age,* (Princeton University Press, 1959), p.408-409

implications for our understanding of war. Exposure to the vast number of potentially relevant variables in the physical world is, as Clausewitz noted, a potent source of chance and uncertainty, and a lack of restriction on the tools with which war can be fought similarly contributes to this – enabling and compelling opposing sides to develop and produce a bewildering variety and array of military technologies, each presenting a more-or-less unknown element into war. Some weapons have a more unsettling effect than others in this respect – as we have seen, the development of airpower and nuclear weapons in the 20th century had a particularly destabilising influence, introducing new dimensions to war which were so unprecedented that new schools of strategy had to be developed to conceptualise their possible uses.

Perhaps the central aspect of the physicality of war, and its chief contrast with rule-bound conflicts, is its connection with change. In other forms of conflict, the space is set and remains constant; in war, anywhere is a potential battlefield. Furthermore, the physical properties of even the same location can change over time, either through the effects of weather or other natural phenomena; man-made changes brought about by military engineering; or, in a more abstract sense, by the introduction of new technologies which alter the significance of a given piece of terrain; a flat plain may be excellent ground for the manoeuvres of a cavalry army, but its lack of cover proves deadly with the introduction of machine-guns and dive-bombing aircraft. The constant movement of war into new areas brings with it new sources of uncertainty, not only in the sheer novelty of new technological developments, but also through the transformative effect that technological change and physical combat has on the actors themselves. This can be as simple as the physical wastage of armies – the constant depreciation of what might be called 'military capital' – but can also be manifested in the opposite direction. As can be seen from the literature on the so-called 'Military Revolution', new forms of administrative and political organisation are one of the most vital tools of war, necessitated by the need to supply and coordinate the constantly expanding material needs of warfare; this increasing complexity of social arrangements has obvious strategic implications, with the economic capabilities of the state being factored into 'grand strategy'; furthermore a host of new (and potentially unknown) weaknesses and vulnerabilities can result from this rise in social complexity. The political implications of technological and material change are another important aspect of warfare; changes in the the

distribution and control of the means of destruction within a society have important political consequences, and again change the nature and aims of the actors who fight wars in a manner which, if not unpredictable, is at least unique to every circumstance.

The contrast with rule-bound conflict is clear to see – whereas the conduct of regulated contests is tightly controlled, the open-ended nature of warfare and its manifestation as a physical phenomenon introduces a vast array of variables (in the form of physical objects and technologies) which have to be taken into account; as a consequence an equally vast number of potential courses of action are presented to the soldier. Because of this aspect of war's nature, the *"complexity of the choice-situation in which the actors find themselves"*[438] is extremely pronounced, adding to the huge cognitive burden of the commander. Naturally, the other benefits which rules provide are also absent – physical harm is not guarded against, and there is no 'ceiling' to the conduct of war which would otherwise be provided by rules governing the limits to the scope of conflict. Finally, war has particularly corrosive effects on the material foundations of the status quo, a process which rules (in their constitution of symbolic rather than physical conflict) seek to limit as far as possible.

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[438] Kratochwil, p.10

CONCLUSIONS – THE MEANING OF WAR

I began this thesis seeking to provide an answer to a research question concerned with the theory of war: is it possible to develop a more 'basic' theoretical understanding of war's nature than is currently provided by the Clausewitzian paradigm; and could such an understanding help us to explain aspects of war which have previously been left unexamined and taken for granted? I believe that the theory of 'war as violent conflict which is not bound by rules' satisfies both of these conditions. Though this understanding of war does not replace – and should not be taken as an attempt to replace – the Clausewitzian understanding of war, it addresses the nature of warfare at an even more basic level; this understanding complements and enables a more intuitive understanding of other, more developed conceptualisations of warfare and is, as far as I am aware, the most parsimonious description of the essence of war. Moreover, by conceptualising war as a form of conflict which is not structured by rules, we can quickly grasp the fundamental differences between it and other forms of conflict which are bounded by them. This is especially with regard to the pervasive chance and uncertainty which besets military activity – but we can also understand the unique implications of war's physical nature when we explicitly compare war to 'abstract' contests played out with symbolic interaction, 'safe' and predictable contests which are insulated from exogenous influences and enabled by the rules which war lacks. War has been characterised by various thinkers as uniquely uncertain, stressful, destructive, violent, unpredictable and varied: these qualities are ultimately explainable as consequences of war's ruleless nature, as I have attempted to show. Furthermore, as we appreciate the various roles played and benefits provided by rules and laws, we can better understand what features war lacks and how it differs from other forms of conflict; and in particular, we can appreciate the mechanisms by which war is able to brings about momentous political changes – not merely as a result of the victory of one side or the other, but by provoking material changes in technology which have important implications for the social structure of the societies which fight war themselves. Here I will briefly summarise the arguments and findings of my thesis before going on to speculate on the potential uses of this theory of war, and in particular as to what sorts of studies and practitioners of war could best make use of such an understanding.

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Firstly, it can be shown that Clausewitz's theories of war can be more fully explained by (or at least can be shown to be compatible with) the idea of war as a form of violent conflict which is not bound by rules. The escalatory dynamic tending toward absolute war, which is enabled by the fact that war is not moderated by anything inherent to itself, is perhaps the clearest case – indeed, that this is due to war's lack of regulation was identified by Clausewitz himself. Though his own explanations of other aspects of war are perfectly adequate (particularly his claims that each age has its own form of war, and that theories of war should not – indeed, *cannot* – go beyond certain fundamental principles), these again can be understood as consequences of the fact that war is unbound by rules and restrictions – things which would otherwise produce more pronounced regularities across time, and provide the basis for relatively more elaborate theoretical models than we can construct. However, it is perhaps most significant that Clausewitz's characterisation of war as an inherently chancy and uncertain activity – rather, *the* most chancy and uncertain – which can be most fully accounted for by this understanding of war (his own explanations, and even more sophisticated appeals to nonlinearity theory, being inadequate to make such sweeping claims). The simplicity and parsimoniousness of the theory of war as ruleless conflict means that it can be more easily understood than Clausewitz's theories, which require a laborious extraction from his writings. Because of this, I believe the theory of war as conflict without rules could conceivably serve as a primer to Clausewitz's own thought, drawing together the different strands of his writing and showing how each aspect can be explained with reference to war's lack of inherent regulation; this would have the benefit of presenting the kernel of the concept before exposing the reader to the difficulties of the text of *On War;* forearmed with the 'common denominator' of war, misunderstanding will hopefully be less likely.

Recognising that war is not a rule-bound form of conflict affords us a new perspective on its nature; understanding the properties and purpose of rules, allows us to appreciate what war is *not*. Rules provide a number of benefits, particularly security – both in the sense of security from physical harm and violence, but also so-called 'ontological' security, a psychological sense of safety which results from operating in an environment which is perceived to be understandable and predictable (even if only in the sense that certain occurrences can be ruled out, and their 'impossibility' taken for granted). Indeed, this sense of order and predictability can even extend to the "construction" of reality, where actors

mistake the artificial framework of rules and strictures governing what is possible and permissible for that which is actually possible. Along with bestowing predictability, rules restrict the scope of physical harm. This has the effect of reinforcing and maintaining existing power dynamics within a society (domestic or international), maintaining the social status quo and otherwise reflecting the interests of the materially powerful – who often make the rules in the first place. The 'strongest' variety of rules, those which war lacks, are the "constitutive" rules which structure a distinct form of competition and allow for conflict to be carried out either wholly or in part in the form of a symbolic contest (where actions, whether physical, verbal or otherwise, take on certain meanings in the context of the rule-system). The absence of such mechanisms has profound implications for those who fight war, as do the other provisions of 'constitutive' rules: typically, a specific time and space for a conflict is demarcated, with the tools with which it can be prosecuted being subject to strict regulation; furthermore, a specific tempo or turn-system moderates the pace of interaction in rule-bound conflict.

Its lack of rules means that war lacks many of the characteristics of a rule-bound conflict, which are provided even in superficially similar physical contests like combat sports and duels. In war, mental stress is occasioned by the insecurity of operating in an environment where nothing can be taken for granted; physical damage and bodily harm are similarly much more likely when there are no definitive rules against them. The political and economic status quo of a society at war is also at risk; the ideational superstructure of a society is profoundly influenced by its material base, and rules which limit the scope of material change accordingly have a conservative influence in this regard. To say that war lacks constitutive rules does not mean that it lacks all forms of regulation, however; indeed, war's very lack of order, and its subsequent exposure of those who fight it to heightened levels of danger and uncertainty, is a strong incentive to the development of other, 'regulative' rules agreed between parties to a war. These include explicit regulations of what is 'permissible' in war, whether in terms of weaponry or tactics used, or with regards to the treatment of prisoners and noncombatants. The universal appeal of avoiding harm and cognitive stress means that some forms of regulation and restraint can be found in practically wars, and there are particularly strong incentives to the development of such rules when the combatants have similar material or class interests, as can be seen in the laws of war which

governed hoplite- and knight-based battles. However, as these rules are not innate to war itself, the precise character of this regulation will differ from war to war – in any case, it cannot meaningfully be said to have a 'constitutional' function. In this respect, perhaps more significant than the regulation of behaviour in war is our cultural understanding of what war 'is' – our intellectual and cultural construction of war as a particular type of social institution, imbued with various levels of cultural significance. War can, for instance, be understood as a rite of passage, a quintessentially 'male' activity, or as a religious or spiritual endeavour; this treatment of war as something other than a one-dimensional 'ruleless conflict' is again found in most wars to some extent. Human beings' psychological needs for predictability and regularity are so universal, and war in its 'raw' form so unsettling and corrosive, that any warring parties are likely to overlay the conduct of war with meaning and significance beyond its basic nature, in order to escape some of its more unsettling implications. Nevertheless, these constructions are external to war in its 'pure' theoretical sense – after all, it is perfectly possible to imagine a war being fought between two groups which have had no previous knowledge of each other, whereas any other form of meaningful interaction would require the existence of mutually understood rules.

The imposition of order on the chaos of war is also manifested in the conduct of strategy, the practice of identifying and prosecuting a plan of action to win a war. The need for strategy, though not exclusive to war, has its clearest expression in warfare; this is because of war's lack of rules, particularly with regard to the arbitration of its result. In every other form of conflict, rules stipulate conditions which are required for victory, and provide either a clear set of such criteria which can be used to determine victory, or an external arbitrator which interprets the result. The lack of arbitration and structure in war means that it is up to the actors concerned to identify how it can be won – a course which (beyond the lowest common denominator of military victory, the total destruction of the opposition) is unique to each case. The fact that war has no rules which would insulate it from the wider political, geographical and historical context exacerbates this problem, presenting an immensely complex, multifaceted problem to the strategist. There are two broad approaches to addressing this challenge of strategy: firstly, we can impose a sense of order on reality by means of 'deductive' theories of war, including culturally constructed understandings of what war is, and how it should be fought, along with more consciously-derived doctrines which

draw on calculations involving objective factors like terrain, technology, or mathematical or scientific theories as were postulated by Enlightenment-era military thinkers. These have the benefit of reducing the complexity of war (and the stress associated with it) to a manageable level by imposing a cognitive filter on the variables the strategist should consider relevant. The other approach to strategy is to embrace the possibilities of innovation afforded by a mode of behaviour in which 'anything goes': the two doctrines of maneuver warfare and irregular warfare exemplify the exploitation of this aspect of war's nature, taking full advantage of the freedom of movement it provides in both time and space; war's lack of a turn-based dynamic, in particular, explains the validity of John Boyd's theories on the importance of outpacing the enemy's tempo. Neither the deductive or inductive approach is invariably superior; effective strategies have been produced both by adhering to traditional understandings of war (operating within the paradigm of 'normal' war, as Thomas Kuhn might say); by calculating on the basis of physical capabilities (as systems analysts were able to do to an extent in the realm of nuclear strategy); or by innovating new strategies which actively exploit the freedom of movement which war provides. However, the ruleless nature of war presents special challenges to the strategist which must be taken into account whichever approach is chosen.

The understanding of war as a form of conflict which does not have rules inherent to itself, is also useful in helping us to understand the physical character of war, and the wider implications of this aspect of warfare. Not being fought in an abstract space, war is prosecuted in the physical world – and this physicality exposes it to innumerable influences, such as inclement weather, changing terrain, and a myriad of near-imperceptible factors which can potentially have 'non-linear' effects, in that each have the potential to influence the course of the conflict in totally unpredictable ways. The physical tools with which war is fought are also in a constant state of change, there being no inherent restrictions on their development and use. This fact has important consequences for any attempts to theorise war, as the continued introduction of new (and therefore incompletely understood) technologies will defy any attempt to construct a conceptual understanding of war which is both specific to a given conflict, and applicable to war in all ages. Indeed, the influence of even individual technological developments can be so pronounced that entirely new theoretical models are required to address them, a point best illustrated by the development of nuclear strategy,

whose creators had to conceptualise the likely course and effects of nuclear war on the basis of a very limited base of evidence.

Not only does the physical nature of war and the lack of restrictions on the development of military technology directly add to war's uncertainty – these aspects of war also have 'secondary' effects which contribute to the unpredictability and changeability of warfare. Different forms of social organisation have developed through history as responses to the problems of war, from the feudal system to the modern state; war's inherent escalatory tendencies, unrestrained by regulation, require an increasing complex and costly war effort which requires ever-more sophisticated organisational techniques to supply and coordinate it. These novel forms of social organisation, like other technologies, have uncertain implications, and this is especially the case with regard to their internal dynamics. Control of the ability to exercise violence (or 'the means of destruction') is a source of material power which, when redistributed by technological and organisational innovation, has the potential to change the political and social character of the community concerned. As we have noted, the structure of society is one of the most important sources of the 'rules of war', which often restrict the right to participate in armed conflict to certain social classes – foregoing the advantages which would result from a wider participation in combat, for the sake of maintaining the social hierarchy. A redistribution of material power and access to the 'means of destruction' within a society (both domestic and international) therefore has the potential to upset its order; as war goes on, and continues to alter the material balance of power, its effects ripple out in unpredictable and immensely significant ways – unrestrained by rules, which in other contests would insulate society from these corrosive effects.

This understanding of war, though novel in its way, is not dramatically different from previous theories and doctrinal approaches – as I have mentioned, many of these have already either implicitly or explicitly referenced war's lack of rules without fully exploring the implications of this fact. Perhaps this is a point in its favour; to claim to have produced a totally innovative theory in a field which has been worked over for literally thousands of years is probably an indication of error. However, there are some advantages to conceiving of war in this way. The first such benefit is that which should be provided by all theoretical models – a better understanding of its subject. I hope I have provided enough evidence to

show that understanding war through an appreciation of its lack of rules provides a new and fruitful perspective on a number of its other theoretical aspects and physical manifestations; I believe this is the case. Theoretical understanding of any complex concept or process is important: theory simplifies a complicated reality and allows us to make sense of what would otherwise be chaotic and confusing, and as we have seen, war is by its very nature one of the most elusive concepts that we might seek to grasp. Up to this point, the most influential theoretical understandings of war have largely been exegeses of Clausewitz's thought, and despite the validity of his ideas and writings, they are not easily digested; as recent experience has showed, confusion often accompanies his writings even when they are read by trained academics. It could be argued that theory should be simple, as well as simplifying: the theory of war as violent conflict without rules has a number of advantages in this regard. The conclusions I have come to in the various chapters of this thesis are very readily arrived at through an understanding of war in contrast to a mode of behaviour (i.e. rule-bound behaviour) to which we all have some experience; by approaching war from this angle, the essence of war can perhaps be more readily understood by those who have had no direct experience of it, even if their understanding of the function of rules in social life is less comprehensive than the one I advance here. I believe that the insights which can be derived from this understanding are potentially considerable, capable of putting a great deal of confusing information into perspective and also serving as a theoretical scaffolding on which to construct more academic analyses of war in sociological or political contexts. Not the least factor in its favour, is that the formulation of the theory is mercifully simple, certainly when compared to the occasionally confusing metaphors and analogies used in Clausewitz's work - beyond clarifying the meaning of 'rules' as constitutional rules, there is much less scope for misunderstanding in this theory of war.

Taking my thesis as a whole, we can see how the theory of war as violent conflict without rules explains a great deal about war which has been inadequately addressed by the existing literature. The obvious subjective characteristics of war such as violence, chance, the unique characteristics of each form of war – each can both be explained individually, and understood as parts of a greater whole, when we look at them through the prism of this theory. For instance, war is often defined with reference to its nature as a violent political conflict. Though this is undeniably true (there is no such thing as a war which does not

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involve violence, or at least the threat of violence), this is not in itself the common denominator which links all wars together. Two states could theoretically agree to settle a political dispute by means of a boxing match; this would fit the definition of war as violent political conflict, but to call such a case war would be plainly ridiculous. Rather, it is the use of violence which is *ungoverned by a framework of rules*, which defines war as such: most of the idiosyncratic aspects of war which I have examined in this thesis can also be explained either wholly or in part with reference to this fact, where in the past they had either been ignored or unsatisfactorily dealt with. The escalatory dynamics of violence, and technological innovation; the changing character of war from age to age (and war to war); the nature of war's political effects; the unique problems the strategist has to deal with in war - all can be understood as consequences of war's unique nature as violent conflict without rules.

The lack of rules inherent to war means that there are no set limits on the use of violence, as there are in other violent contests[439] and, as Clausewitz noted, this is the reason why war tends to behave in accordance to a logic of escalation to the 'absolute' – with any barriers to this being external to war's nature. The escalatory dynamic of technological innovation and arms racing associated with war are part of the same process as the escalation of violence, and both dynamics have the effect of actively undermining attempts to bind war's conduct with rules and restrictions – the former, by incentivising ever-increasing levels of violence, and the latter, by introducing rapid technological changes which can outpace attempts at regulation. This change has profound implications with regards to war's changing nature; the unique ways in which it is manifested from age to age have for so long confused attempts to derive a comprehensive and detailed theory of war. With each war differing from all others in so many ways, it seems to elude a clear definition; perhaps ironically, 'war as ruleless conflict' can provide such a definition, but one which explains why war cannot be defined and conceptualised beyond a very basic level. Each war is like all others in two respects; first, it is a violent conflict; and second, this violence is not conducted in accordance with a set of rules which constitute war as a symbolic, arbitrated contest. For a form of behaviour to exhibit regularities, it must by definition act in accordance with rules, but war lacks these; therefore there is nothing shared by all wars beyond the use of violence and their

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[439] The fact that rule-bound violence is not often used to settle political disputes nowadays should not blind us to the possibility that there are other forms of political violence than war – at least in theory.

very lack of regularity. War's conduct in the physical world, and not in an abstract rule-governed environment means that the only 'rules' that can be observed are those which are imposed by physical limitations and the consequences of physical action - and the dynamics of escalation which I have discussed. The human factor might also be considered a constant, but with developments in military technology and robotics even this source of regularity might be removed.

The ruleless nature of war also introduces secondary sources of irregularity, in the form of new sources of change, which again make one war differ from the next. As I have mentioned, the unrestrained escalatory dynamic of war incentivises the development of technologies – both in the form of *materiel,* and of new forms of societal organisation. Novel forms of technology and organisation, particularly the state, tend to be either wholly or in part uncertain quantities –
as most clearly evidenced by nuclear weapons, and this is not just with regards to their direct military applications; accompanying the development of each new technologies, shifts occur in the distribution of material power both at the international level and within societies, which further alters the environment in which war is fought and the actors which fight it. This holds true both with reference to the effects of destruction, and the implications of growth which comes about as a result of war. The expansion of a state through military conquest will change its internal dynamics, thanks to shifts in material power; a prominent historical case is that of the Roman Republic, whose expansion into distant lands empowered generals and governors who might use their provinces as political bases, with the influx of slaves from war altering the material balance of power in Rome itself.

These factors all have profound implications for strategy. Strategy, as I have mentioned, is defined as the coordination of resources to achieve an end, in the face of active opposition, *without benefit of rules to guide its formulation.* What strategy must be based on, then, is the unique physical, social, economic and technological circumstances of a given historical moment – an array of variables so numerous and complex that their strategic interpretation will necessarily be subjective and incomplete, and which is further complicated by the fact that these factors are in a constant state of turbulent change. As we have seen, not only will the enemy change his strategies and tactics in response to us, but he himself will

change along with them. This constant change is ultimately due to war's escalatory dynamics and the physical destruction and creation associated with it – factors which can in turn be traced to the fact that war is not kept constant by a system of rules. This dynamic provides the theoretical justification for the familiar claim that "every war is unique", in a way which cannot be said of every chess game, court case or general election. Such an understanding of war also explains the qualities required of a battlefield commander: such an individual must certainly thoroughly master what little he can and internalise what few regularities can be observed in war; but moreover, he must be possessed of a certain cast of mind, one which maintains its composure in unpredictable and stressful surroundings. Such a commander of 'genius' as Clausewitz has it, also needs to be be able to intuit at a glance a likely course of action in rapidly changing and turbulent circumstances - in short, he needs to operate in an environment characterised by unpredictability and chance. As we have seen, the Clausewitzian sources of chance and uncertainty can be explained with reference to war's absence of rules. Danger is much more prominent in war for this reason, and the presence of the various sources of friction can be explained with reference to the fact that war is not fought in an abstract space with symbolic means, which would insulate the conduct of war from extraneous physical influences. The uncertainty that results from the reciprocal action of two combatants might not on first appearances be attributable to war's lack of rules, but the escalatory dynamic of conflict and the abundance of options open to both sides is certainly a consequence of this, and these are themselves prime generators of chance and uncertainty.

The conclusions and implications of my thesis have obvious use in the academy, where much if not most of the theorising on war is done. In terms of future research potential, I believe that there are several areas of the study of war (and possibly of politics more generally) which might be explored in greater depth using the ideas I have advanced in this thesis. As I have mentioned, there is ample possibility for the understanding of war as 'not-law' to provide the theoretical framework for future studies in various disciplines, including but not limited to sociology; there are probably a vast array of functions of laws and rules which I have not included in this thesis whose absence in war is worthy of comment. Also, there are some areas of this thesis which could be more fully explored; the role of customs of war as psychological coping mechanisms for the stress, uncertainty and dehumanisation of conflict is one of these; and it is certainly easy to see how the conceptual tool of the 'means

of destruction' could be more fully articulated – there of course already exists a large Marxian literature on the means (and modes) of production, and their role *vis-a-vis* the generation of power in a given society; applying the concepts and terms which have been used to discuss the productive, economic base of power to the destructive, military one should be relatively straightforward. Once this has been achieved, a synthesis of these two aspects of material power could be used to furnish a more comprehensive theory which explains the dynamics of power within a society, or at least provide a new perspective on the subject.

Turning to the thesis of war as ruleless conflict as a whole, another area which might prove amenable to analysis is one which has not often been linked to political theory, the aesthetic experience of war. As Glenn Gray, Karl Marlantes, Ernst Jünger and many other soldiers through history have noted, war exerts a powerful appeal on our minds even as it horrifies us: the joy of destruction, the exhilaration felt when participating in spectacular events, the pronounced feelings of comradeship, anger, grief and so on, which are aroused by the experience of war – the intensity of these feelings and the nature of the experiences which provoke them might be better understood if we think of war as a form of human activity which is uniquely 'raw' and unfiltered. Comparisons might be made with the world of art, which has long been concerned with attempts to represent the sublime – something beyond which we can experience in 'normal' life. It has also been argued (most notoriously by Duchamp, with his 1917 sculpture *Fountain*) that there are no restrictions inherent to art itself, as to the means with which it can be performed. If we understand war as not being bound by rules – an environment "in which the creative spirit is free to roam", as Clausewitz characterises it – an exploration of the 'art of war' in this way might prove a viable and illuminating research project.[440]

Another potential application of the theory of war as ruleless conflict could be in the examination of the arguments concerning nonlinearity in the social sciences. Beyerchen's

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[440] Such a project may be more directly relevant to war itself than might be thought - it has been argued that the Israeli military has been using theories drawn from the world of art and architecture in the planning of its operations, one of which in the town of Nablus apparently being inspired in its design by a reading of a number of post-structuralist theorists. See Eyal Weizman, "The Art of War", Frieze (06 May 2006), http://www.frieze.com/article/art-war <accessed 14/03/2016>

arguments that war is a nonlinear process are certainly useful; and as I have said, I believe that they can be understood as a consequence of war being a fundamentally unregulated process. All conflicts, thanks to the interaction of two independent actors, have the potential to be nonlinear and unpredictable, but there may well be a correlation to be discovered between the rule-boundedness of a conflict and its nonlinearity, however defined. Though the precise relationship of rules to nonlinear dynamics is something which could be explored in greater detail, this is an area where much greater scientific and mathematical knowledge than I currently possess would be required, and I would give way to those who have a greater literacy in this regard.

In the world of policy, obvious potential beneficiaries of this new theory of war might include military think-tanks, particularly those concerned with the formulation of strategic doctrine and the analysis of the impact of new military technologies. I think that perhaps the most promising application of the theory is as a teaching aid in military academies: by comparing war to the rule-bound contests with which officers in training are already familiar, the idiosyncratic aspects of warfare are perhaps more likely to be understood and internalised than by a book-bound study of war undertaken without this knowledge. This is certainly the case where Clausewitz is concerned - as I have argued earlier, being 'primed' with an understanding of war as a ruleless activity may help to alleviate some of the difficulties associated with interpreting his work. Perhaps more importantly, training scenarios can be developed with a specific emphasis on the task of acting and making decisions within an ever-changing and unpredictable environment; however, I will not make any claims that this will take the form of revolutionary developments in military pedagogy – after all, the experience of war has taught many of the lessons of my theory over the course of thousands of years. Practitioners aside, policymakers too will be better placed to make decisions when they understand the basic nature of their ultimate 'political instrument'; the parsimoniousness of the theory and the ease with which its implications can be grasped might well make it a useful tool in the briefing of political leaders who might not have the time or inclination to undertake a reading of Clausewitz. Certainly, the theory is an effective way of presenting the potential drawbacks (and benefits) of entering into armed conflict which will be readily understood by those who operate in heavily rule-bound environments.

Nevertheless, some recurring themes in my studies suggest that the theory of 'war as violent conflict without rules' may have a limited use; again, much of what 'ruleless conflict' explains is already incorporated into effective military doctrine, if not explicitly so: I would treat the concept as a 'polishing' of existing theory rather than as a paradigm-shifting breakthrough for this reason. However, there are other reasons to suspect that its application in policymaking in particular may not be quick in coming. As the experiences of Clausewitz and Brodie show, conceptual understandings of war which do not have an immediate, direct application often lose out (if only in the short term) to theories which have a more tangible sense of utility: to claim once more that there is no certainty to be had in war is possibly unlikely to find a particularly enthusiastic following. It is possible that the more straightforward, mechanical explanation provided by my thesis will appeal to those who would otherwise wish to construct 'scientific' models of war, which claim that a certain strategy or technology can guarantee success; perhaps more likely, and more important, is that the understanding of 'war as ruleless conflict' can be added to the corpus of theory on war and function as other theories do – as an aid to the understanding of warfare.

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