This file is to be used only for a purpose specified by Palgrave Macmillan, such as checking proofs, preparing an index, reviewing, endorsing or planning coursework/other institutional needs. You may store and print the file and share it with others helping you with the specified purpose, but under no circumstances may the file be distributed or otherwise made accessible to any other third parties without the express prior permission of Palgrave Macmillan.
Please contact rights@palgrave.com if you have any queries regarding use of the file.

SMITH, Ron. Military Economics.
New York: Palgrave Macmillan, 2009.
This is a copyright-protected work to
be used for class work only; not to be
used for any further distribution.

PROOF

# 7

# Military Capability: How to Win?

Military forces are acquired to provide military capability, the ability to fight and prevail in combat against actual or potential opponents. This capability may be used to attack, defend, deter or maintain peace. The military capability provided by the forces depends on how they are used and what they are used for. How the forces are used involves all the military skills of leadership, strategy, tactics, training, logistics, morale and infrastructure. The elements of the infrastructure are often grouped under the heading C4ISTAR: command, control, communications, computers, intelligence, surveillance, target acquisition and reconnaissance. What the forces are used for involves the aims of the operation; military forces are used for a very wide range of different purposes and the different purposes have different criteria for success. The how and what interact. Forces organised and trained for war-fighting may be counter-productive when used for peacekeeping, their heavy-handed interventions provoking more conflict. The reverse can be true: a force trained and equipped for peacekeeping, with narrow rules of engagement, may not be able to deliver the required robust response to stop a conflict escalating. Casualty rates that are thought acceptable for one purpose may be unacceptable for another.

The economic perspective leads to a focus on the material factors such as budgets and forces. But the non-material factors, what Carl von Clausewitz called the moral factors, are usually more important. We will look at how the forces are employed, motivated and supplied. Then we will look at the use of military capability for a very specific security objective, peacekeeping.

## Force employment

Military capability will be treated as the probability of achieving military objectives in particular sorts of combat. The emphasis on objectives is important. Members of the military in Germany in 1918, France in Algeria in 1958 and the US in Vietnam in 1968 claimed that they had won a military victory but suffered a political defeat. This shows a misunderstanding of the instrumental functions of war, to achieve particular objectives. The emphasis on probability is also important. In peacetime, military capability is unknowable and overestimation of their military capability by both sides can be a cause of war. Sometimes capability is used to describe the ability to do certain things: keep an air defence system at full readiness, transport a battalion between specified points in a certain time. But these are better regarded as aspects of force structure; actual capability is performance in combat. These overlap, maintaining air superiority is a mixture of the ability to do things and combat performance. Much of the economic analysis uses a conflict success function in which the probability of winning is a function of the numbers and quality of forces on each side. This is useful in certain circumstances but does not seem to capture important aspects.

Voltaire commented that ‘God is on the side of the big battalions’. If so, God’s help does not always seem to have been an asset: it is very often the case that the small battalions win, particularly when those smaller forces fight in ways that surprised the big battalions, so called asymmetric warfare. The US withdrew from Lebanon in 1983 after a suicide bomber killed 241 troops and in October 2000 two suicide-bombers, using a small boat in Aden harbour, incapacitated the US navy destroyer USS Cole, killing 17 sailors. Ivan Arreguin-Toft (2005) examines 200 wars between 1800 and 2003 and estimates that the weaker side won 57 times. As with all quantitative work, one can argue over what counts as a war; what counts as being weaker (in terms of quantity or quality); or what counts as winning (a military victory may be a political defeat). However, it does appear that while strength helps, it is not enough. He argues that when the weaker side follows the same approach to fighting as the stronger side, they are likely to lose. However, when they adopt an opposite approach, which does not allow the stronger side to use his forces effectively, they can win. History is full of examples of powerful armies humbled. The Roman army of Crassus was defeated by Parthian horse archers in 55 BC, who did not allow the Romans to get close enough to exhibit their military superiority in close quarter battle. At Isandlwanda in 1879, Zulus were able to defeat a British column, killing over a thousand soldiers, including 850 Europeans. The defeat, which was partly the result of British failures in command and logistics, was the prelude to the British defence of Rorke’s drift, the subject of the film *Zulu*.

The transformation of forces to capabilities, the ability to win, depends on all the standard military virtues such as training, logistics, leadership, morale, tactics and strategy which determine force deployment. Luck also matters. The element of chance, the vagaries of weather and war, makes the transformation of forces to capabilities a very uncertain process. Benjamin Franklin noted that 'fortune favours the prepared mind' and luck may be a matter of having made the right preparation to take advantage of the opportunities of war; hence Napoleon's advice to hire lucky generals. Preparation requires plans, but no plan survives contact with the enemy. A good plan allows for various contingencies, exit strategies and fall-back positions and provides insurance, typically by maintaining adequate forces in reserve.

Good military leaders will also use surprise, deception and various tactics to outwit the enemy. The Mongols repeatedly used a very simple tactic, the feigned retreat, with great effect. A token force attacked the enemy, then seemingly beaten would retreat. The enemy would follow, often for a considerable distance, being drawn into a trap where the main forces could attack the flanks of the enemy, while the token force wheeled round and attacked from the front. Although simple, this tactic took considerable skill, training and co-ordination to implement. Even if aware of the tactic, the enemy commander rarely had sufficient control of his troops to stop them pursuing an enemy who seemed to be fleeing.

Tactics describes the way that individual military units are deployed, the manner in which they actually fight. Strategy is the way that the whole battle or war is fought, how all the forces are deployed in the theatre of conflict to achieve the military objectives. Some wars may involve many theatres. World War II involved the Western Front, initially the Germans against the French and British; the Eastern Front, the Germans against the Soviets; and the Pacific War, Japan against the US. The term 'grand strategy' is often used to describe the process of integrating strategies in different theatres with economic and diplomatic means. There is also an operational, or theatre, level between strategy and tactics. All these distinctions, while useful, can be vague: use of a tactical nuclear weapon would almost certainly be a strategic decision.

Over the years weapons technology has advanced and the destructiveness of weapons, such as artillery, has increased many fold, but casualties in battle have not increased correspondingly. Increased destructiveness of weapons is countered by changes in deployment. For instance, troops spread out and the lower density of dispersed troops means that fewer are within range of an artillery explosion. With changes in deployment, military organisation must also change. If soldiers were side by side in massed ranks they could not easily desert; if they were widely dispersed, skirmishing forward under cover, they could. Dispersed troops need to be motivated and trained quite differently from troops in massed ranks. With changes in the nature of war the ratio of civilian to military casualties also changes. Eric Hobsbawm (2007) notes

> The contrast between the First World War and the Second is dramatic: only 5 per cent of those who died in the former conflict were civilians; in the latter, that figure increased to 66 per cent. It is generally supposed that 80 to 90 per cent of those affected by war today are civilians.

However, earlier wars, like the Thirty Years War in Europe, also caused massive civilian casualties.

Dispersal is only one aspect of the adjustment. Stephen Biddle (2004, p. 3) describes how armies adjust to increased lethality.

> The modern system is a tightly interrelated complex of cover, concealment, dispersion, suppression, small-unit independent maneuver, and combined arms at the tactical level, and depth, reserves, and differential concentration at the operational level of war. Taken together, these techniques sharply reduce vulnerability to even twenty-first weapons and sensors. Where fully implemented the modern system damps the effects of technological change and insulates its users from the full lethality of their opponents' weapons.

He points out that the modern system is difficult to master because it is complex and poses painful political and social trade-offs.

## Morale

The old adage 'if it is not measured, it is not managed' is unfortunately often true. It is unfortunate both because the most important factors that need to be managed are often not measurable and because there is a temptation to try to manage by using measurable targets that relate to the real objectives only indirectly, if at all. Use of such quantitative targets, the body counts in Vietnam being an example, can distort the incentives of those in action and mislead the top decision makers. One of the most important characteristics that cannot be measured with any precision is morale. Morale is crucial to combat. Having confident, motivated, adaptable troops that are willing to continue fighting can make the difference between defeat and victory. Confidence comes from the troops' trust, sometimes misplaced, in their training, equipment and leaders. Motivation comes from their belief in what they are doing and enables them to risk their lives and take casualties in achieving their objectives. Adaptability comes from giving them responsibility and enabling them to flexibly respond to the vagaries of war. Although high morale can be recognised and there are various indicators, it cannot be directly measured because it covers so many dimensions. During the Cold War, Western analysis of the Soviet army indicated severe morale problems, such as bullying new conscripts and widespread alcoholism. However, historians pointed out that Russian soldiers had defeated Napoleon drunk; defeated Hitler drunk; and might well defeat NATO drunk. Napoleon said that in war three quarters of what matters is morale, the relative strength of troops only matters one quarter. But he did not indicate how to calculate the respective proportions.

There is clearly an economic dimension to morale – unpaid, poorly fed troops are likely to be less effective – but other dimensions are likely to be more important.

Morale is a complex mix, which involves leadership, training and all the factors that produce tribal loyalties and group cohesion: soldiers tend to fight for their buddies, not to let down their mates, rather than for their country. Motivating people to be willing to be killed, which is central to effective fighting, is more difficult than motivating them to kill. Leadership is fundamental, but difficult to characterise. An appraisal of a British officer, probably apocryphal, said of him, 'he is a born leader, his men would follow him anywhere; mainly out of curiosity about what he will do next'. Leaders need followers and military training emphasises the importance of knowing the members of the team and what they can do, looking after their interests and enhancing their skills.

## Logistics

Most of the components of military capability, like strategy, leadership and morale, are ones in which economists have no special expertise. However, one crucial component has a large economic dimension since it involves balancing supply and demand by the constrained optimisation of resources. To be able to fight effectively you have to get your troops to the right place and keep them provided with the food, water, fuel and ammunition they need to carry out the plan. The ability to do this, logistics, has determined many conflicts. There is a military saying: amateurs talk strategy, professionals talk logistics. Because it is less exciting than battles, logistics tends to get forgotten in military history. But many perplexing decisions can often be explained by logistics. The fact that a general retreats after a series of victories is more likely to be explained by a lack of supplies than a lack of nerve. *Supplying War* by Martin van Creveld (1977) is the classic account.

For much of history, more military were killed by disease, climate and malnutrition than enemy action. Often all that was required was to keep the opposing army engaged while disease killed them off. Supplying an army can mean facing mountains, mud, lack of roads and various other obstacles to supply. As you advanced, this gets more difficult because the lengthening supply lines are more vulnerable to attack, particularly by guerrilla enemies, and the suppliers have to carry their own supplies and protection. A mule that carried a 200-lb load of fodder, eating 12 lb a day, could go for about 16 days before starting to starve, without having delivered any useful supplies. Its effective range was 4 days out, delivering half its load, and eating the remaining quarter of its load on the way back. This range could be extended a little if you had enough mules to allow them to be eaten when they arrived at the front. The ratios are rather better with motorised vehicles or airlift. But modern transport can be almost as temperamental as mules, require a large team of specialists with spare parts to maintain them and cannot be eaten when they stop working.

With the industrialisation of war, the efficiency of transport and supply has increased; but the amount required to be supplied has tended to grow faster than the capacity of the supply lines, making logistics a continuing constraint. Modern weapons use ammunition at a very rapid rate, so troops can quickly exhaust their supplies. The capacity of the supply lines often depends on some critical point or bottleneck. The bottlenecks are often interfaces between modes of transport, where supplies are transferred from ship, rail or air to road for instance. Marc Levinson (2006, chapter 9) describes how the military build-up in Vietnam from 1965 was initially disrupted by the lack of either suitable ports, railways and highways to supply the US forces deployed there or a co-ordinated logistical system. The problem was eventually solved when the US military adopted containers, then a recent innovation, and constructed new container ports. The success of the 1991 Gulf War was as much a matter of logistics as of strategy and the general responsible for the logistics, Gus Pagonis, then went on to apply those skills to business.

Apart from, perhaps, the Mongols who carried everything with them and could live off the land, supplying war has always been a crucial factor. Even the Mongols needed to ensure that they had adequate grazing land for their animals and planned their campaigns to exploit available grasslands.

## Peacekeeping

Military capability can be used not merely to make war but also to make peace and SIPRI estimates that there were 61 peacekeeping operations in 2007, with roughly 170,000 people involved, all but 20,000 military. About 40 per cent of the peacekeepers were located in Africa. There are two dimensions to peacekeeping, demand and supply: the situations that demand foreign intervention and the willingness to supply that intervention by other states. Peacekeeping missions are mainly sponsored by the UN, but are also conducted by individual countries, by NATO and by regional organisations, like as the Organisation for Security and Co-operation in Europe (OSCE), which had observers in Georgia, and the African Union, previously called the Organisation of African Unity. The top 20 contributors listed in Table 7.1 provided just under 70,000 troops to the UN. All except Italy, France and Spain, which are well down the list, are poor countries, for whom the payments for contributing troops to peacekeeping missions can be a useful source of revenue.

Although peacekeeping is not specifically mentioned in the UN Charter, a distinction is made between actions taken under Chapter Six of the Charter (Pacific Settlement of Disputes) and actions taken under Chapter Seven (Action with respect to threats to the peace, breaches of the peace, and acts of aggression). The latter, which involve the direct use

*Table 7.1* UN Peacekeeping: Top 20 Contributors of Uniformed Personnel to UN Peacekeeping Missions March 31 2008

| Country | Number | Country | Number |
|---|---|---|---|
| Pakistan | 10629 | Senegal | 2558 |
| Bangladesh | 9047 | China | 1978 |
| India | 8964 | France | 1924 |
| Nigeria | 5415 | Ethiopia | 1828 |
| Nepal | 3667 | South Africa | 1771 |
| Ghana | 3312 | Morocco | 1562 |
| Jordan | 3077 | Benin | 1345 |
| Rwanda | 3008 | Brazil | 1277 |
| Italy | 2873 | Spain | 1251 |
| Uruguay | 2589 | Egypt | 1230 |

PROOF

of force, are sometimes called peace enforcement. The US and its allies fought the Korean War as UN forces under Chapter Seven, but that was unusual since the Soviets had boycotted the meeting and not vetoed the action. Normally one or more of the five permanent members of the Security Council, the P5, would veto such actions. The 1991 War after the invasion of Kuwait was also carried out under Chapter Seven, during a short interval when the P5 were on good terms. The distinction between Chapter six and Chapter seven actions is not clear-cut and there are references to Chapter six and a half missions. The traditional peacekeeping mission was installed with the agreement of both parties, for instance, to monitor a border after a cease-fire, and if the conflict resumed the mission would withdraw. With the end of the Cold War more robust missions were attempted. The role of a mission is defined by the mandate agreed by the UN and the rules of engagement (RoE) which define when and how the mission is allowed to use lethal force. Rules of engagement under Chapter Six tend to allow the use of force only for the self-defence of the mission, whereas under Chapter Seven, force may be used on the basis of a reasonable belief in hostile intent, either to the mission or to the local population.

In either Chapter Six or Seven missions, one needs clear objectives, the means to achieve those objectives and rules of engagement that are consistent with those objectives. The relationship to local security forces is often a difficult issue. Part of the mandate may involve training or reforming the police and army of the state being supported. Such security sector reform (SSR) is more difficult when you are simultaneously fighting an insurgency and when the police or army are the main perpetrators of the crimes against the local population. Trying to impose typical western army and police structures may not mesh well with local patterns and cultures, particularly where there are powerful militias with local loyalties.

The UN reviewed its peacekeeping after a series of failures. These included Somalia in 1992, the basis of the film *Black Hawk Down*; Rwanda, in 1994, where UN forces were unable to prevent genocide; and Srebrenica in 1995, where UN forces withdrew allowing the Bosnian Serbs to conduct a massacre. The 2000 report by Lakhdar Brahimi highlighted the need for the UN to integrate various elements in its peacekeeping including the military, political, legal and humanitarian resources. Getting 'the boots and suits' to work together can be a problem.

A larger, more aggressive, peacekeeping force in Rwanda or Srebenitza may have stopped the subsequent massacres. General Romeo Dallaire

(2003) provides an account of the difficulties of being force commander of the UN Assistance Mission for Rwanda from July 1993 to September 1994 and his inability to stop the genocidal extermination of Tutsis by extremist Hutus after the Rwandan President's plane crashed on 6 April 1994. Generals hope that they will be given the means required to meet specified military objectives, in order to achieve some political purpose. In Rwanda the UN and international community did not provide the mission with means, objectives or purpose.

There have also been a large number of peacekeeping successes, though in some cases they were by individual countries, with particular interests in the conflict zone, working under UN auspices. Examples of these are the Italian intervention in Albania, the Australian intervention in East Timor and the UK intervention in Sierra Leone in support of UN troops. Because these interventions were largely by rich countries in poor countries that had once been colonies, they could be presented as forms of neo-imperialism. In Sierra Leone after the British intervention, there were even people within the country who advocated making it a British colony once more. Collier, Hoeffler and Soderbom (2008) provide quantitative evidence suggesting that UN expenditures on peacekeeping are cost-effective in stopping conflicts restarting. Doyle and Sambanis (2006) conduct a detailed analysis of the factors contributing to success or failure of peacekeeping interventions.

Patrick Cammaert (2008) provides a commander's perspective on peacekeeping. He served in Cambodia, Bosnia-Herzegovina, Ethiopia-Eritrea and as General Officer commanding the Eastern Division of the UN Mission in the Democratic Republic of the Congo 2005–2007. He argues strongly that peacekeepers must be impartial rather than neutral. Neutrality cedes opportunity, initiative and advantage to others; impartiality allows the seizing of all three. Peacekeeping requires logistics, often heavy airlift since roads are bad and insecure, engineering to provide infrastructure such as roads and bridges both for forces and for local population, as well as basic necessities like water and electricity which may not be available. Budgets are needed for local projects, to pay for intelligence and access to satellite imaging and communications intercepts. Secure communication for the mission is also required as is integration of the military, political and economic dimensions.

An attempt to try and learn the lessons from recent peacekeeping and peace-building experience is the Tswalu Process Protocol in Mackinlay, McNamee and Mills (2008). The process involved getting people from various backgrounds who had been involved in peacekeeping operations, mainly in Afghanistan and Africa, to try to share the lessons. These are summarised in a six-page document, which sets out in short lists the shortcomings of past interventions; the principles that should govern the international response; the priorities in successful peace-building (security, development and governance); the hard choices that are involved in implementing those priorities and the steps needed towards operational coherence. The hard choices involve issues like peace versus justice; reliance on formal law versus customary law; and working with or working around the state. As they recognise there can be no general answers to these choices, it depends on local circumstances.

Peacekeeping involves all the elements examined in this book. There is a security objective, establishing peace, and to attain that objective requires military capability to complete certain tasks. To provide that capability requires forces with the appropriate training, weapons and logistic support. There has to be an adequate budget to finance those forces and some decision-making structure for command and control. The same basic question arises for such a multinational operations as for a national state: should the decisions produced by this structure be regarded as those of a rational actor or the outcome of the interaction of competing interest within a framework of standard operating procedures?