# Yale university press

Chapter Title: The Pre-Revolutionary Eighteenth Century

Book Title: War and the World

Book Subtitle: Military Power and the Fate of Continents, 1450-2000

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Published by: Yale University Press

Stable URL: http://www.jstor.com/stable/j.ctt1npk2b.10

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# 5 The Pre-Revolutionary Eighteenth Century

The eighteenth through to the early nineteenth century presents a classic example of Eurocentrism in military history thanks to the influence of Frederick the Great, King of Prussia (1740–86), and Napoleon, First Consul (1799–1804) and later Emperor (1804–14, 1815) of France. This is paradoxical because, unlike say Philip II's Spain, the Dutch republic in the seventeenth century, or Victorian Britain, neither Frederician Prussia nor Napoleonic France had much direct military impact outside Europe. Frederick II and his forces did not fight at all beyond Europe, and the Prussian navy was both small and of slight consequence.

At the very end of the eighteenth century, Napoleon famously campaigned in Egypt, but his reign saw France contract militarily as its overseas empire was lost. To begin an account of military history in the period by arguing that attention should not primarily be devoted to Prussia or France is to draw attention both to other regions of the world, to the European power most able at this time to achieve global capability, Britain, and to Russia, the European power that achieved most gains at the expense of the Turks.

As in the two previous centuries, the direct European military impact in Asia and the Middle East was limited and, in a marked reversal of the situation between 1560 and 1660, China itself was one of the most expansionist powers of the century. Yet elsewhere the European military impact was increasingly apparent. As far as Gibbon's clash between civilisation and the 'barbarians' was concerned, the traditional route of nomadic irruption into Europe came under European control, as Russia, thanks to its successes against the Ottomans in 1736–9, 1768–74 and 1787–92, seized the lands north of the Black Sea. In addition, the annexation of the Khanate of the Crimean Tatars in 1783 by Catherine the Great of Russia brought to an end a power that had once threatened Moscow and marked the extinction of one of the leading names among the 'barbarians'.

The Europeans made appreciable gains in North America, but there were also important signs of 'barbarian' resilience. This was particularly the case in south-west Asia, as in the successes of the Afghans against the Persians in the 1710s and 1720s, the rebellions of Arab and Kurdish tribes in Iraq against Ottoman rule in the 1730s and 1740s, threatening Basra in 1741, and an Arab revolt against Persian rule in 1741. As part of a programme of response, in 1753 the Turks attacked the Yezidis of Sinjar whose raids were threatening the caravan routes between Iraq and Syria.

Whereas China made major gains at the expense of the Mongols, the Türkmen of Xinjiang and the Tibetans, and the peoples between China and Russia were mostly brought under the control of one or the other, no such process characterised the situation in south-west Asia. Russia, Turkey, Persia and Mughal India were unable to subdue both the intervening peoples and other neighbouring tribes, and Persia succumbed to

Afghan attack. More generally, it has been argued that the period 1720–60 witnessed a tribal breakout, especially by Afghan, Persian, Türkmen and Arab tribes invading the neighbouring states and increasing the importance of tribal cavalry in the region. Gibbon's sense that advances by nomadic peoples might not have ceased appeared justified.

Transoceanic initiatives rested with the Europeans, not least because their trading systems enabled them to acquire the naval stores, such as hemp, sailcloth and iron, essential for maritime power, while they also had techniques and systems for constructing, maintaining and supplying sizeable fleets of ocean-going warships. Indeed, in the eighteenth century, no non-European power emulated the seventeenth-century naval moves of the Omanis and of Coxinga which had both thrown the Europeans on to the defensive, albeit in a regional context. The Omanis had taken Mombasa not Luanda, Rio de Janeiro or Lisbon; Coxinga had captured Fort Zeelandia, not Malacca, Batavia or Amsterdam.

On land, the advances of the British in India from 1757 and the establishment of a British position in Australia in 1788 are well known, but there were also many other less prominent moves, such as the development of a French base at Cayenne in South America in the 1760s or the capture in 1785 by a Dutch fleet of Kuala Selangor and of Riouw, the island that controlled the eastern approach to the Strait of Malacca. In addition, the process by which European military experts and arms were used by non-European rulers continued. Both were important in the case of the Marathas of India. Kamehameha I, who fought his way to supremacy in the Hawaiian archipelago in the 1790s, did so in part thanks to his use of European arms. Guns replaced spears, clubs, daggers and sling-shots, leading to convincing victories, such as that of Nuuanu (1795) which made Kamehameha ruler of the archipelago.

34. The Battle of Fontenoy, 11 May 1745, by Louis-Nicolas van Blarenberghe. This battle contrasts with another punishing and long battle, that between the Afghans and Marathas at Panipat in 1761. At Fontenoy, which was mostly an infantry battle, cavalry played a far smaller role and cannon and field fortifications were more important. Although, like the Marathas, a coalition army, the Allies at Fontenoy fought in a more coherent fashion. In both battles, staying-power was crucial. Fontenoy was more a victory of the defence than Panipat.

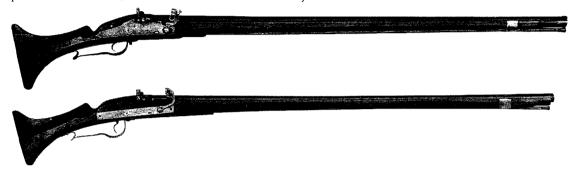


35. (*right*) Infantry plug bayonet by Timothy Tindall. Developed in the seventeenth century, the plug bayonet, a knife with a tapered handle that could be placed in the muzzle of muskets, enabled musketeers to stand up against infantry and cavalry attack, but muskets



could not be fired when they were in place and they also damaged the barrel. In the 1680s and 1690s, plug bayonets gave way to ring and socket fittings. Europeans embraced the use of the bayonet far more readily than other societies using gunpowder and this helped to make their infantry more effective.

36. Muskets, English or Flemish c. 1642 (above) and English c. 1640. Like the cannon, the musket was a weapon that experienced considerable modification in the early-modern period. The change related both to the weapons themselves and to their use. Disciplined volley fire was particularly important, not least because it compensated for the principal problems of the musket, its low rate of fire and limited accuracy.



This broad account is largely similar to that for the seventeenth century, and it is appropriate to seek greater detail in order to detect the nature and degree of change. The relative military capability of the Europeans was greater in the eighteenth than in the previous century, both on land and at sea. On land, pikemen were replaced by more musketeers, their defensive capacity improved by the bayonets on their muskets at the turn of the seventeenth and eighteenth centuries. Flintlocks replaced matchlocks. Both changes increased the firepower of European infantry. In addition, the essential standardisation of its weaponry improved the infantry's manoeuvrability. As drill and discipline were essential to firepower, the change in weapons system permitting more effective drill was also important. The development of the elevating screw and improvements in casting techniques increased the effectiveness of artillery.

In mid-century, Britain and France clashed for control of parts of India and North America. In the former, they both mostly employed Indian troops, but in North America, although native Americans and European settler militias were used on both sides, there was also a Europeanisation of the war, with the deployment of armies of hitherto unprecedented size for the region. Combined land—sea operations, lengthy sieges and broad-ranging strategic plans also came to play a major role.

# Naval Developments

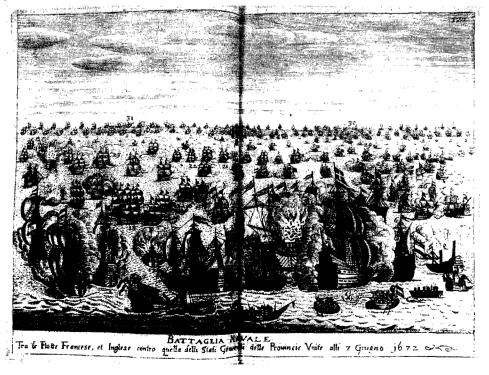
At sea, the large fleets of heavily gunned ships of the line employing line-ahead tactics developed by a number of European powers in the second half of the seventeenth century became more capable of long-distance operations in the eighteenth, thanks in part to changes in ship design.

No non-European power matched Europe's naval development. The British destroyed the base and fleet of the Angres of West India in 1756. This victory owed much to Maratha support. The Omani Arabs did not increase their naval range, although in 1717 or 1718 their fleet conquered Bahrain. Oman itself was the target of a military intervention by Nadir Shah of Persia, who sought to create a Persian Gulf navy based at Bushire, with a supporting cannon foundry at Gombroom. He forced the sale of ships by the English and Dutch East India Companies and by 1737 had a fleet that included four sizeable warships, two of which he had obtained from the English. After an unsuccessful attempt by the Persian fleet to capture Basra from the Turks in 1735, Bahrain was seized the following year. In 1737 the fleet carried 5,000 troops to Oman, in 1738, 6,000 men.

As more generally with many European expeditions, it is necessary to see the Persian campaigns not as a conflict between two clearly separated powers, but as a struggle in which elements of both sides cooperated. Thus, in 1737 and 1738 the Persians invaded in alliance with the Imam of Oman and were resisted by his rebellious subjects under Bal 'arab ibn Himyar Al-Ya 'riba, who was defeated in both years; but each year the allies fell out. The Persian expedition also suffered from a serious shortage of food and money, and in 1740 the navy, which had defeated the Arab fleet the previous year, mutinied.

A fresh attempt to build up the fleet was made from 1740. Nadir Shah sought to purchase foreign ships, ordered 11 from Surat in 1741, and more ships were built at Bushire from that year. After being reduced to a precarious hold on the port of Julfar in 1739–42,

37. The Battle of Sole Bay, 1672. In the Third Anglo-Dutch War, the Dutch under De Ruyter surprised the English under James, Duke of York, and their French allies, inflicting much damage and delaying a planned attack on the Dutch coast.



the Persians benefited from a fresh civil war in Oman in 1742. However, alternative commitments, especially against the Turks, led to a shortage of funds and provisions, leading the Persian troops to desert and surrender, and the Persian commander rebelled against Nadir.<sup>2</sup> A lack of reinforcements led to the abandonment of the Persian presence in Oman in 1744: wars with the Uzbeks and the Turks were more important. The Persians did not persist with their maritime schemes; pressure on the Mughals and Baluchistan was exerted overland, but not by sea.

The Ottoman Persian Gulf fleet based at Basra made even less of an impact than its Persian counterpart during the century. Ottoman naval power was far more important in the Black Sea and the Mediterranean, but the Turks were defeated by the Russians in the Aegean at the battles of Chios and Chesmé in 1770, with the loss of 23 warships, and in the Black Sea at the battles of the Dnieper (1788) and Tendra (1790): the Turks lost 12 warships in the latter two engagements, the Russians only one. The naval forces of the North African powers – Morocco, Algiers and Tunis – were essentially privateering forces, appropriate for commerce raiding, but not fleet engagements. The Sakalava and Betsimisaraka of Madagascar developed fleets of outrigger canoes that by the end of the century could raid as far as the mainland of northern Mozambique, but logistical factors limited their range, and these fleets were essentially for raiding. War canoes were used on the coastal lagoons of West Africa and in the 1780s a free Black from Brazil introduced brass swivel guns in the canoe fleets, but, again, the range of these forces was limited.

Greater European military capability, however, was of less effect in terms of the European/non-European balance than might otherwise have been anticipated. In large part, this was because the Europeans devoted most of their military resources to conflict with each other. Gibbon's account of European powers struggling with each other could be extended to encompass such conflict in different parts of the world, for example the Anglo-French wars in North America. Yet this did not generally lead to the deployment of substantial forces against non-Europeans, especially in the first three-quarters of the century. There was no attempt at this stage to use naval power to force the Chinese or Japanese to trade or to trade upon certain terms, no prelude to the gunboat commerce that was to come in the following century. Conflict with non-Europeans was more limited and was often a direct consequence of European rivalries, as in the Anglo-French struggle in India during the 1740s and 1750s which involved allied and client rulers.

If improved naval capability did not translate into new relationships with non-European powers, the greater effectiveness of European firepower was not without consequence. The British victory at Plassey in Bengal in 1757 might seem an obvious example of this process. However, such an analysis should not be pushed too hard. British victory at Plassey owed much to dissension among the Nawab of Bengal's army, while the Nawab had to divide his forces to meet a possible attack by the founder of the Afghan Durrani dynasty, Ahmad Khān.<sup>3</sup> Furthermore, Ottoman resilience was amply displayed in the Austro-Turkish war of 1737–9, and Russian victory over the Turks in 1768–74 involved more than simply better battlefield firepower.

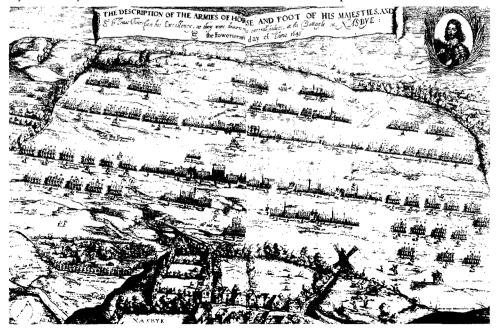
## European-Turkish Conflict

Nevertheless, and again clearly in contrast to the situation until 1683, the general trend in the struggle with the Turks was in favour of the Christian powers, although not initially. In 1710, concerned about Russian control in Poland and influenced by

opponents of Russia, especially Charles XII of Sweden, the Ottomans declared war on Peter the Great and he responded by invading the Balkans. As with many other European assaults in the early modern period, this involved an attempt to divide his opponents. The common tactic was to gain support from peoples who had been forcibly absorbed into the rival state: Spain and the Aztecs, Adal and Ethiopia, the Austrians and the Balkans in the 1680s, are obvious examples. Peter, who had gained effective control of the Ukraine through force in 1708–9, was himself vulnerable to this tactic. In 1711 he issued appeals for assistance to 'the Montenegrin People' and to 'the Christian People under Turkish rule'. Peter also signed a treaty with Demetrius Cantemir, Hospodar of Moldavia and thus, hitherto, client ruler for the Turks, providing for Russian protection over an independent Moldavia under his rule and Moldavian assistance against the Turks. If successful, this agreement would have taken Russian power to the Black Sea.

Peter's invasion was, however, a humiliating failure. The restructuring of army and state that had brought victory over Charles XII of Sweden at Poltava in 1709 did not have comparable results against the Turks: the ability to deploy strength effectively at a distance against them proved elusive. Advancing in 1711 from Kiev, the acquisition of which under Tsar Alexis had greatly improved Russian military capability in the region, the 54,000-strong army marched through Poland towards Moldavia, but was badly affected by supply problems and by Tatar harassment. Both had also seriously affected Prince Golitsyn's unsuccessful advances on the Crimea in 1687 and 1689, and indicated the problems of campaigning on what were in effect land oceans – regions without urban bases or a population from which supplies could be obtained.

38. The Battle of Naseby, 1645, seen from the parliamentarian side. Charles I had only 3,600 cavalry and 4,000 foot; Fairfax, the Commander-in-Chief of the New Model Army, 14,000 men. The royalist general Prince Rupert swept the parliamentary left from the field, but then attacked the baggage train, while Oliver Cromwell on the parliamentary right defeated the royalist cavalry and then turned on the royalist infantry in the centre which succumbed to the more numerous parliamentarian forces.



In 1711 Peter the Great received Moldavian support, but the speedy advance of a large Ottoman army dissuaded Constantine Brancovan, the Hospodar of Wallachia, from sending his promised forces, and he, instead, blocked the march of Peter's Serbian reinforcements. The failure of the Moldavian harvest further affected Russian logistics. The movement of a large army over a long distance into hostile territory was a difficult undertaking. Indeed, it was one in which naval power, where the ratio of force to manpower was higher, offered benefits if it could be employed. One of Russia's principal disadvantages as a power was that its access to water and its naval capability were limited, a problem that was to encourage Russian leaders to establish ports such as St Petersburg, Sevastopol and Vladivostok.

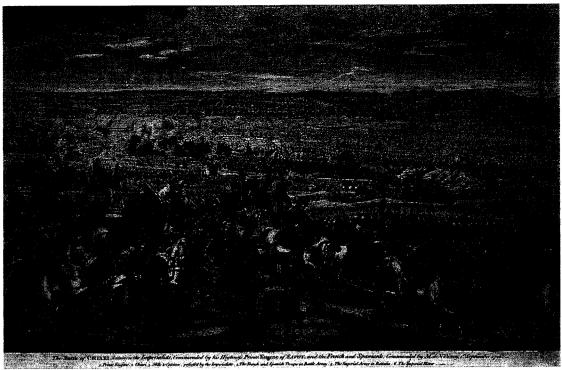
In 1711 Peter planned to reach the Danube before the Turks could cross and was encouraged by inaccurate reports that the Turks feared him. The Russians, however, advanced too slowly and lost the initiative. By advancing as one army they increased logistical pressures and made it easier for the Turks to encircle them. Far larger Turkish forces were already across the Danube and moving north along the right bank of the Pruth. Peter was surprised, outmanoeuvred and surrounded as he retreated. The mobile Tatars blocked the Russian avenue of retreat towards Jassy. Based on the hills dominating the Russian position, the Ottoman artillery bombarded the Russian camp. Ottoman attacks were repelled only with difficulty and, short of food, water and forage, Peter was forced to sign a peace agreement in July 1711.

This was not the sole Ottoman success in the 1710s; indeed in 1711–15 the Ottomans enjoyed more military triumphs than any power in Europe. The Turks drove the Venetians from the Morea in 1715, although that was in part a product of weak resistance. But the situation was very different on the crucial Hungarian front where war resumed in 1716. The Ottomans besieged the Austrian general Prince Eugene in a fortified camp at Peterwardein (Petrovaradin). Eugene, however, sallied out on 5 August with 70,000 men and beat his 120,000 opponents. The Turkish janizaries had some success against the Austrian infantry, but the Austrian cavalry drove their opponents from the field, leaving the exposed janizaries to be decimated. Possibly up to 30,000 Turks, including the Grand Vizier, Silahdar Ali Pasha, were killed. As on other occasions, for example Rocroi in the Thirty Years War (1643) and Naseby in the English Civil War (1645), a strong infantry force, exposed and placed on the defensive by the loss of the cavalry battle, became vulnerable.

Eugene successfully combined battles and sieges, a strategic ability that often eluded early modern generals and one that reflected both his own skill and the capability of the Austrian army. After his victory, Eugene marched on Temesvár, which had defied the Austrians in the 1690s, and which controlled or threatened much of eastern Hungary. Well fortified and protected by river and marshes, Temesvár, nevertheless, 'surrendered on 23 October after heavy bombardment.

In 1717 Eugene advanced to attack Belgrade, crossing the Danube to the east of the city on 15 June. Belgrade had a substantial garrison of 30,000 men under Mustafa Pasha, and in August the main field army, 150,000-strong under the Grand Vizier, Halil Pasha, arrived to relieve the city. They commenced bombarding the Austrians from higher ground. In a difficult position, Eugene resolved on a surprise attack, and on the morning of 16 August, 60,000 Austrians advanced through the fog to crush Halil's army. This led to the surrender of Belgrade six days later and in 1718 to the Peace of Passarowitz which left Austria with substantial territorial gains: the Banat of Temesvár, Little (Western) Wallachia, and northern Serbia.

The battle of Belgrade was a confused engagement. It was not a matter of clear-cut



39. Battle of Chiari, 1 September 1701. The Austrians under Prince Eugene defeated the Franco-Spanish army under Villeroi. Eugene's career — fighting both Turks and Bourbons — indicated the variety of opponent faced by some European armies. Victorious at Zenta in 1697, Eugene then transplanted the mobility of warfare in Hungary to western Europe, displaying boldness of manoeuvre in north Italy in 1701–2 and 1706. He did not allow the French emphasis on the defence to thwart his drive for battle and victory.

formations exchanging fire, and great caution is required before judging it a triumph for European firepower. Yet it did show the battlefield quality of some European units in the face of superior numbers. The firepower deficit that had characterised the Hungarians at Mohacs in 1526 had been amply rectified.

The next period of conflict was in 1735–9. This involved two related struggles: Russo-Turkish<sup>6</sup> and Austro-Turkish. The former involved fewer battles, largely because the lands to the north of the Black Sea were marginal to the central area of Ottoman military concern in Europe: the Danube valley. Instead, the Russians took the initiative in their conflict and the war was therefore a matter of how far they were able to exert their force successfully in a hostile terrain and at a considerable distance. If it apparently centred on successful sieges - Azov in 1736, Ochakov in 1737 and Khotin in 1738 - the true operational challenge was in fact that of distance and terrain. When in 1736 the Russians invaded the Crimea for the first time, the Tatars avoided battle and the invaders, debilitated by disease and heat and short of food and water, retreated. Further invasions of the Crimea in 1737 and 1738 were also unsuccessful. In the 1737 Crimean campaign the Russians lost 34,500 to disease, but only 2,114 men on the battlefield. The logistical task was formidable, although Russian logistical capability had increased with the creation of the Commissariat of War in 1711 and improvements in provisioning in 1724. The force that advanced on Ochakov in 1737 was supported by supplies brought by boat down the Dnieper and thence by 28,000 carts.

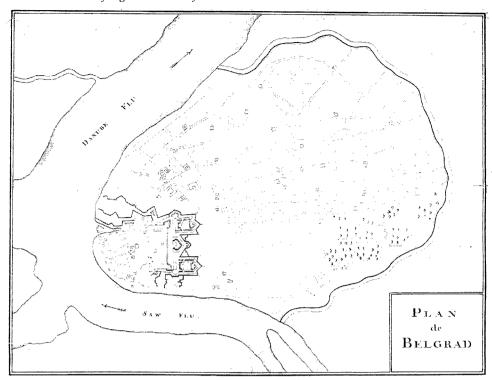
Disease and logistical problems prevented further Russian advances in 1737, and in 1738 the same difficulties ended Field Marshal Münnich's hopes of crossing the Dniester to invade the Balkans. Ochakov was abandoned in the face of a major outbreak of the plague which killed thousands of Russians. Tatar irregular cavalry was also a formidable challenge, employing a scorched-earth policy in which crops and forage were burnt and wells poisoned; this had already been used in the Crimea in 1736. In 1737, the Tatars burnt the grass between the Bug and the Dniester, hindering Münnich's operations after he captured Ochakov. Münnich, a German who was also President of the College of War, was overly influenced by German tactics and methods. His preference for heavy cavalry and heavy guns was inappropriate for war with the Turks, and robbed his army of necessary mobility.

Yet it would be mistaken to stress failure, to argue that the Russian military machine was rendered useless by the combination of irregular or 'barbarian' opponents and a hostile terrain. The Russians were successful at siege warfare, so that, deprived of the cover of a field army, Turkish fortifications were vulnerable, as was shown at both Azov and Ochakov. In addition, in 1739 an advance across Polish territory was successful. Münnich avoided the lands and Tatars near the Black Sea, crossed the Dniester well upstream, and drove the Ottoman army from its camp at Stavuchanakh. The battle of Stavuchanakh initially looked like a replay of the 1711 débâcle. The Russians' forward advance road was blocked by 80,000-90,000 Turks dug in behind three lines of entrenchments, with 11 batteries totalling 70 guns; meanwhile Tatar cavalry had encircled the Russian flanks. However, the result was different. Münnich managed to extricate his forces by leading them over 27 pontoon bridges across the Shulanets River, with all their artillery and baggage. The Russians reassembled in one mass on the other bank of the river, placed their artillery on the heights, and advanced against the Turks, who broke and fled to Khotin. Russian losses were minor. Münnich ascribed his victory to his emphasis on aimed fire.7

Münnich then captured the major fortress of Khotin and the Moldavian capital of Jassy. The Moldavian nobility pledged loyalty to Empress Anna. Thus the Russian military system could deliver victory, although it was greatly helped by the degree to which the Turks concentrated on the Austrians. However, in 1739 this was also to let the Russians down, for the Austrians, having fared badly in the war, made a unilateral peace with the Ottomans.

Austria's poor performance in the war shows the danger of assuming either that the Ottomans were exhausted militarily or that military history moved and moves in terms of a smooth progression. The Austrian advance into Serbia in 1737 saw their most unsuccessful year of campaigning in the Balkans since 1695. Field-Marshall Seckendorf advanced into Serbia in 1737, but was then driven back, although Turkish attempts to subvert the Habsburg position in Transylvania were unsuccessful. The Turks ravaged Habsburg Wallachia and Serbia in early 1738, and in June they besieged New Orsova. Under their new commander, Count Königsegg, the Austrians set out to relieve the fortress, defeating the Turks nearby at Cornea. The Turks then lifted the siege but, in face of a second Turkish army, and, despite another victory near Mehadia, Königsegg retreated, abandoning both Mehadia and New Orsova. The Austrian army was decimated by disease: the Danube valley with its marshes was very unhealthy, especially in the summer.

Command in 1739 was entrusted to Count Wallis, an Irishman in Habsburg service, but at Grocka/Krozka, south-east of Belgrade, his advancing troops suffered heavy casualties when forcing their way through a defile in the face of the Ottoman army. Although the Austrians won control of the battlefield, Wallis erred on the side of caution



40. Plan of Belgrade c. 1720, showing proposed fortifications. Captured by the Austrians in 1717, after the Turkish relief army had been defeated, this crucial position on the Danube was then extensively refortified, with a new enceinte (perimeter) of eight substantial bastions. However, defeats in the field and a collapse of confidence led the Austrians to surrender the still unbreached fortress in 1739. In 1789 the Austrians regained Belgrade after a heavy bombardment, only to return it at the subsequent peace when under pressure from domestic disorder and the Anglo-Prussian alliance.

and withdrew. Taking advantage of the situation, the Turks besieged Belgrade. This had been refortified by the Austrians since its capture in 1717, but the local Austrian commanders, their confidence gone, surrendered, making peace at the price of Belgrade, Little Wallachia and northern Serbia. The Russians had to make peace also. Their gains in the southern steppe and the retention of an unfortified Azov still left them without a Black Sea coastline

The Austrian army was in a poor state in 1737–9, badly led, and battered by the recent War of the Polish Succession with France, Sardinia and Spain (1733–5): competition within the European system did not in this case increase effectiveness at the expense of a non-European power. In addition, the standard formation employed by the Austrians – a linear deployment with cavalry on the flanks – was inadequate, both because the numerically inferior Austrian cavalry could not protect the flanks, and because the Turks, rather than attacking on a broad front, used separate attacks on parts of the Austrian front, which made the line formation very vulnerable.<sup>8</sup>

The crisis of the late 1730s illustrated the potential advantage enjoyed by the Ottomans: their central position enabled them to decide which enemy to concentrate on, and it was very difficult for their opponents to coordinate operations. This had a political as well as a military dimension. In the 1730s the Eastern Question emerged in the European policy of the leading East European Christian powers: at heart it was a

struggle for the Ottoman succession between Austria and Russia. This greatly helped the Turks. Whereas, earlier on, European rivalry had facilitated Ottoman gains in the Balkans as well as further north and north-west, that same rivalry would delay the processes of de-Ottomanisation in the Balkans. The decline of Habsburg political pressure on the Balkans after 1739 helped to increase Russian influence and from the 1760s Russia replaced the Habsburgs as the crucial political hope of the Balkan Christians.<sup>9</sup>

Again, military developments have to be set in the wider international context. It is difficult to assess the relative development of Christian and Ottoman military capability because the two sides were not continually at war. Furthermore, as a widespread empire, the Ottomans faced problems on many fronts and their military system had to be able to respond. The Ottomans were greatly concerned about developments in Persia where Safavid rule collapsed in 1722 as a result of a successful invasion by Afghans. The Ottomans then overran much of western Persia, but were driven out in 1730 and forced in 1732–3 and 1743 to defend Baghdad from attacks by Nadir Shah, the new ruler of Persia. The Austrians similarly were under multiple threat and were drawn into a struggle to maintain their predominance in Germany when Frederick the Great of Prussia invaded Silesia in 1740, beginning the first of the four Austro-Prussian wars of his reign: 1740–2, 1744–5, 1756–63, 1778–9.

Indeed, war with the Turks did not resume for Russia until 1768, and, for the Austrians, until 1788. In the meanwhile two aspects of military change had occurred. On the Ottoman side there had been stirrings of Westernisation. The Turks achieved most success in developing their navy, altering their fleet from galleys to ships-of-the-line. They had made the change to a predominantly sailing battle fleet already in the late seventeenth century, at the same time as the Venetians built a sailing fleet. The Turks were indeed less conservative than most Italian navies which tenaciously kept several galleys until the end of the eighteenth century when the Turks had already practically abolished theirs, replacing them with small oared craft.

The lesser success of the Turks in modernising their army can be interpreted as a victory for conservatism, and a reflection of the more central role of the army in Turkish culture, society and politics. Conservatism, however, is a universal catch-all of military and other history, not least because it appears to be descriptive, analytical and explanatory as a concept. This is misleading. 'Conservative' societies have a dynamism and adaptability of their own and it is important not to neglect them.

In the case of the Turks it is difficult to show that their military system was obviously defective, and indeed without its strengths, in the mid-eighteenth century. They had captured Kirmanshah in 1723, although they were heavily defeated between Kirmanshah and Hamadan in 1726 and Nadir Shah drove the Ottomans from western and northern Persia in 1730, defeating their army at Nahavand. Nevertheless, the Mughals in 1739 and the Uzbeks in 1740 fared even worse at the hands of Nadir Shah, and the Ottomans successfully defended Baghdad and Mosul from him in 1732–3 and again in 1743. In 1744 Nadir Shah failed to take Kars, despite an 80-day siege, although the following year he routed an 100,000-strong Ottoman army near Erevan. The Russians had made significant gains from the Turks in 1739, but these had been less important than the Turkish success in driving back the Austrians.

Despite a number of successes, there was some support for military innovation in Turkey at the very top. Claude-Alexandre, Comte de Bonneval, a French noble who had fallen out successively with Louis XIV and Prince Eugene, converted to Islam and sought to Westernise the Turkish army in the 1730s. He also attempted to modernise the manufacture of munitions and in 1734 opened a military engineering school. Other foreign

advisers were brought in by Sultan Abdulhamit I (1774–89), who did not require them to convert and adopt Ottoman ways. Baron François de Tott, a Hungarian noble who had risen in the French artillery, was influential in the 1770s. In 1774 he established a new rapid-fire artillery corps, and he also built a modern cannon foundry and a new mathematics school. Such moves were aspects of the attempted diffusion of weaponry, tactics and military infrastructure, in this case aspects of Westernisation.

However, interest in Westernisation was resisted by sections of the official elite supported by the *ulema*, the religious judges, and an important section of the masses, leading at times to violent opposition, as in the Patrona Halil rebellion of 1730. There was a parallel with Petrine Russia, but there the elite offered less resistance, not least because it did not align with religious groups that opposed Westernisation. These groups were also less important within the structure of established religion, the Russian Orthodox church, than their equivalents in the Ottoman empire.

Aside from Westernisation, developments within a system, in this case the competitive emulation of European warfare, were also important. This emulation was at a high point at sea from the 1720s, as the French began to build a new fleet, and on land in the mideighteenth century, as Prussian successes led Austria, France and Russia to respond with major attempts to improve their military effectiveness. These responses to failure were matched more generally. Thus, for example, the French navy responded to defeat in the Seven Years War with a postwar programme of reconstruction and reform, and did the same after the War of American Independence.

Attempts to standardise weaponry were an important aspect of enhanced European effectiveness, a process that reduced the role of craft skills – knowledge of the characteristics and quirks of a particular weapon – and, instead, enhanced those of regularity. In this sense, arms manufacture heralded modern industrial techniques. It was part of the shift to modern industrial production, especially in terms of the declining role of the craftsman. In a similar way, American arms manufacturers were central to the industrialisation of American production in the nineteenth century. Thus, for example, José Patiño, the Spanish naval minister in 1718–36, sought to ensure that all six-pound cannon balls weighed six pounds.

Such standardisation was a counterpart to the emphasis on drill and discipline that was so important for the maximisation of firepower on land and sea. In the case of the Russians, a series of new cannon provided greater firepower, while exercises built up the speed and accuracy of the artillery so that it became more effective in battle. The Austrian artillery also improved greatly in mid-century. The daily rate of march in the Russian army improved. The Russians also made progress in the use of field fortifications, the handling of battle formations, and the use of light troops. The adoption of more flexible means of supply helped to reduce the cumbersome baggage train of the Russian field army, although logistics remained a serious problem until the development of railroads, not least because of the primitive nature of the empire's administrative system. <sup>11</sup> More generally, the Russians developed a professionalised officer corps concerned to transform Russian military capability through their own solutions rather than through the adoption of those of other European countries. This influenced strategic and tactical thinking and practice.

These improvements all helped the Russians against the Turks when war resumed in 1768, as, more generally, did the recent combat experience of the Russian army in the Seven Years War (1756–63), and their long tradition of adaptation to steppe warfare against Turks and Tatars. The aggressive, offensive tactics and strategy employed by the Russians in the Seven Years War and earlier conflicts were more successful thanks to the

improvements in the army introduced in mid-century. Combined, they proved very potent. Russian strategic planning was far better than in previous Russo-Turkish wars. In 1769 Golitsyn captured Khotin and Jassy, the position Münnich had only reached in 1739. Golitsyn's replacement, Count Peter Rumyantsev, was a firm believer in the offensive, both strategic and tactical. This was a matter of temperament, but also reflected Rumyantsev's awareness of the logistical difficulties faced by a large army and his grasp of the need to take the initiative. In 1770, he advanced down the Pruth, successively storming the main Ottoman positions at the battles of Ryabaya Mogila, Larga and Kagul. The Ottomans sustained heavy losses, while Russian casualties were relatively low.<sup>12</sup>

In battle, Rumyantsev abandoned traditional linear tactics and, instead, organised his infantry into columns able to advance rapidly and independently, and reform into divisional squares, while affording mutual support in concerted attacks. The columns included mobile artillery, which played a major role, and relied on firepower to repel Ottoman assaults. A major role, however, was also played by bayonet charges: firepower was followed by hand-to-hand fighting. In both strategic and tactical terms, Rumyantsev took the offensive. His campaign on the Pruth in 1770 was a great improvement on that of Peter the Great in 1711. The Russian army had become more professional and effective.

Only those who have a blinkered view of *ancien régime* European warfare can deny its capacity for change and development. It is misleading to imagine that offensive tactics were invented by the French revolutionaries: the column did not have to wait for ideological developments. Warfare in Eastern Europe often seems more innovative than in the West, and yet in the eyes of eighteenth-century Western European intellectuals and much subsequent scholarship the powers of the region were allegedly more 'backward', politically, culturally, economically and militarily.

After his victories over larger forces on the River Pruth, Rumyantsev advanced to the lower Danube, where he rapidly captured the major fortresses of Izmail, Kilia and Braila. Akkerman and Bucharest also fell. Having sailed from the Baltic to the Mediterranean in 1769–70, the Russian navy defeated the Turks at Chesmé (1770), a victory primarily due to the effective use of fireships against the closely-moored Turkish fleet. In 1771 the Crimea was overrun, but in 1772 the Russians were distracted by the First Partition of Poland and in 1773 by the Pugachev serf rising.

In 1774 Rumyantsev again made significant advances: he seized the major Ottoman Danube fortresses of Silistria and Rushchuk and his advance guard routed the main Ottoman army near Kozludzhi. The Ottoman fortress system had been totally breached, the Russians had pushed south of the Danube, and the Ottomans had lost the major agricultural areas of Wallachia and Moldavia. The Turks hastily made peace by the Treaty of Kutchuk-Kainardji (1774), by which the Russians gained territory to the north of the Black Sea, including the coast as far as the Dniester, and in the Caucasus, as well as the right to navigate the Black Sea. Victory over the Turks ensured that the latter could not prevent Russian gains at the expense of Poland in the First Partition of Poland. This success marked the culmination of the process by which Russia became the dominant Christian power in the region, rather than Lithuania, and later Poland-Lithuania, which had seemed, and had often been, more powerful in the region for most of the period since the fifteenth century.

Russian success was not simply a matter of the effective use of weaponry. The Turks were also handicapped by poor leadership. In 1770, for example, the Grand Vizier, Mehmed Emin Pasha, lacked military competence, had no effective plan and was unable

to arrange adequate supplies or pay for his army. Poor leadership was in part redeemable. Yet, whatever allowances are made, the Russo-Turkish war of 1768–74 was an impressive display of Russian military prowess, especially in contrast to earlier campaigns.<sup>13</sup>

### Russian Expansion

Russian victories were possibly the most pointed example of European military success over non-Europeans in the pre-revolutionary eighteenth century. Yet they were by no means the sole example. In the case of the Russians, it is also pertinent to note continued expansion in Siberia. The poorly armed Itelmens of Kamchatka, who relied on bone or stone-tipped arrows and on slings, were brutalised in the Russian search for furs. They rose in 1706 but were suppressed. When they rose in 1731 the Itelmen had some firearms obtained from the Russians and were able to inflict many casualties as a result, but they were eventually crushed, while their numbers were further hit by the diseases that accompanied their adversaries. Another rising in 1741 was defeated.

The Koraks of Kamchatka were more formidable than the Itelmens, effective with bows and captured firearms, fierce and willing to unite against the Russians. Relations were murderous and the Russians sought to kill as many Koraks as possible, not least in the war of 1745–56. The Koraks then submitted. The Chukchi of north-east Siberia were also formidable, defeating a Cossack expedition in 1729, and resisting genocidal attacks in 1730–1 and 1744–7. The Russians eventually stopped the war, abandoning their fort at Anadyrsk in 1764, although it had successfully resisted siege as recently as 1762. Trade links developed and the Russians finally recognised Chukchi rights to their territories.<sup>14</sup>

The Russians also expanded at the expense of Persia. Peter the Great advanced along the Caspian Sea in 1722–3. He hoped to benefit from the disintegration of Persia in order to gain control of the silk routes, annex territory and pre-empt Ottoman expansion. Derbent fell in 1722, Baku and Rasht in 1723. The Russian advance was preceded by careful planning: naval and cartographical missions explored and mapped the coastline and an army officer examined the roads. Yet aspects of the campaign were mismanaged: logistics were poor, especially the supply of food and ammunition. In this sense, more facets of warfare were becoming professionalised, but the key element of long-distance combat, logistics, remained poorly organised and arbitrary in part.

The Russians found their Caspian conquests of little use: large numbers of garrison troops, possibly up to 130,000 men, were lost through disease and, at a time of rising Persian power, the lands to the south of the Caspian were ceded by the Russians in 1732. The Russians also made gains to the north-east of the Caspian, although, further east, an expedition sent to discover gold sands in Dzhungaria was forced to retreat in 1715 in the face of superior forces that threatened their communications. A second expedition sent in 1719 was clearly defeated in spite of Russian superiority in firearms. Relations with the Dzhungars had already been exacerbated by the Russian advance into the upper reaches of the Ob. Biysk was founded as a base in 1709, but the Dzhungars responded by destroying it and besieging Kuznetsk unsuccessfully. This led to a standard Russian response: expansion and consolidation through fortification. In reply to the Dzhungars, a series of forts was built on the Irtysh, including Omsk (1716) and Ust'-Kamenogorsk (1719). Furthermore, the Russian position in the Altay foothills was protected by the Kuznetsk-Kolyvan' Line, designed to block Kalmyk raids.

Prince Cherkasskii, who founded two Russian fortresses on the eastern shores of the Caspian in 1715–16, was less successful when ordered to persuade the Khan of Khiva to

accept Russian suzerainty and, thereafter, to investigate the route to India. His force was attacked by Khivans, Uzbeks and Kazaks in 1717, and, although protected within their camp by firepower, the army was annihilated when it left camp. Nevertheless, the Bashkirs were suppressed in the 1730s and 1740s. Relations with the Kazaks improved from 1731 and the Kalmyks provided assistance against the Bashkirs. Control over the latter was anchored by a new line of forts from the Volga to the new fort at Orenburg, built from 1733. The Usinskaya Line based at Troitsk (1743) was constructed along the River Uy to protect the agricultural zone to the east of the Urals. The Ishim Line was superseded as Russian settlement advanced southwards, and was replaced by Petropavlovsk (1752) and its Presnogor'kovskaya Line (1755). These southward advances of fortifications paralleled the offensive tactics of Russian infantry and artillery. Gibbon's 'cannon and fortifications' were employed not only in a defensive fashion against 'barbarians', but also in an offensive manner, matching their transoceanic use by Western Europeans.

By the second half of the century, a chain of forts, over 4,000 kilometres in length, extended from the Caspian to Kuznetsk in the foothills of the Altay. They were more effective than the Spanish *presidios* in North America, not least because the Russians devoted more military resources to the task; five regular infantry regiments alone were added to the Irtysh Line in 1745. Rivalries between the Kazaks, Kalmyks and Bashkirs played a major role in enabling the Russians to conquer the last. The Kazaks had turned to the Russians for military assistance against the Dzhungars in 1731 and the Kazak Younger Horde became a Russian vassal, followed by the Middle Horde in 1740. 16

## North Africa

If conflict along the Christian-Islamic 'frontier' in Europe was frequent and in Asia less so, there was little movement in North Africa. The Algerians had captured Oran in 1708 at a time when Spain was convulsed by civil war and foreign intervention. In 1732 a united and stronger Spain retook the port, but that attack was the only one mounted in the region in a period of Spanish activity and expansion. Instead, Philip V preferred to launch attacks on Sardinia (1717), Sicily (1718, 1734), Naples (1734) and Savoy (1743). Ceuta resisted Moroccan sieges in 1694–1720 and 1732, and Melilla another in 1774–5; but the Portuguese lost Mazagam to Morocco in 1765, and a French attempt to land at Larache in Morocco in 1765 failed in the face of heavy fire. In East Africa, the Portuguese regained Mombasa in 1728, but lost it again in 1729, and another attempt failed in 1769.

#### South-East Asia

In South Asia, with the exception of India, the Europeans were most effective on islands rather than on the mainland. The Dutch East India Company played an important role in Java, intervening in disputes in the kingdom of Mataram in the First and Second Javanese Wars of Succession (1704–8, 1719–23). However, the Dutch army was weak and its ability to operate successfully away from coastal areas was limited, as was shown in the Third Javanese War of Succession in 1746–57, and in operations against Bantam in 1750. Dutch garrisons were forced to withdraw from Kartasura, the capital of Mataram, in 1686 and in 1741. By a treaty of 1749, the Dutch acquired sovereignty over

Mataram, but this authority amounted to little in practice, and indeed the Dutch had little interest in conquering the interior. Instead, they sought to ensure that the rulers there did not contest their coastal positions and trade.<sup>17</sup> The Dutch had only a small regular force and used local troops extensively.

In 1759 Rajah Muhammad of Siak in Sumatra destroyed the Dutch post at Pulau Gontong, but in 1761 a Dutch punitive expedition avenged the massacre and placed the Rajah's brother on the throne. Victory over Kandy in 1761–6 led to Dutch control of all Ceylon's coastal regions. The Spaniards, however, had scant success in subduing and Christianising the southern Philippines.

On the mainland of South-East Asia, European power was of little consequence. British and French attempts to establish a presence in Burma in the 1750s were unsuccessful. Further west, the Portuguese were hard pressed in India in 1737–40 when they were involved in a disastrous war with the Marathas. Salsette was taken in 1737, Bassein fell after a siege in 1739 and Goa was nearly lost the same year. Chaul was taken in 1740. The Marathas benefited from the support of disaffected peasantry. The peasantry provided an infantry to complement Maratha cavalry, and this infantry was crucial to successful sieges. Also in India, the Dutch were defeated by Travancore in 1741. The Persian Gulf remained closed to European power, and the Dutch lost their last base there in 1765. The English left Bandar Abbas in the Gulf in 1763 due to commercial difficulties.

#### The British in India

Regional conflicts in India brought the Europeans more opportunity for expansion, and a major change in mid-century led to the Europeans developing important land forces there. Both Britain and France came to play an important role in the internecine disputes of the rulers of the Carnatic (south-eastern India) from the 1740s. The French Governor-General, Joseph Dupleix, was a skilled player in the field of South Indian politics, but he was outmanoeuvred by the British and lacked the resources to sustain his ambitions.

Dupleix's ally, Chanda Sahib, became Nawab of the Carnatic in 1749, but a rival claimant was supported by the British. Robert Clive led a diversionary force of 500 which captured Chanda Sahib's capital Arcot, and then held it against massive odds. In 1752 both the French and Chanda Sahib surrendered. A French attempt under Lally to regain their position in the Carnatic during the Seven Years War (1756–63) was initially successful, with the capture of Fort St David in 1758, but the siege of Madras ended after the French were defeated at Masulipatam (1759) and Lally was later routed by Sir Eyre Coote at Wandewash (1760).

The combination of French commitments to European hostilities during the Seven Years War and British naval victories in 1759 prevented France from sending further aid to its colonies. The French revival in India during the American War of Independence (1775–83), when Britain was otherwise distracted and France was not at war on the continent of Europe, bears this out. There was a growing interconnectedness of war around the world: conflict in Europe affected North America or India and vice versa. This was a feature of the eighteenth century, and one that was growing in importance. The connection depended on growing European dominance, although this was still tentative.

Rivalry with France also played a role in British intervention in Bengal, but Britain's opponent there was Indian, Nawab Siraj-ad-Daula of Bengal, who, in 1756, had captured

the East India Company's trading base, Fort William, and harshly confined his prisoners in the 'Black Hole of Calcutta'. Clive was sent from Madras with a relief expedition of 850 Europeans and 2,100 Indian sepoys, an important deployment of British strength. Fort William was regained, largely thanks to the guns of the British naval squadron under Vice-Admiral Charles Watson. The Nawab then advanced on Calcutta, but was checked by Clive in a confused action fought in a heavy morning fog. This led to a peace during which Clive used fire from Watson's warships to force the French base at Chandernagore to surrender. Clive then decided to replace the Nawab, whom he suspected of intriguing with the French. He reached an agreement with one of the Nawab's generals, Mir Jaffir, and marched on his capital. The Nawab deployed his far larger force at Plassey to block Clive's advance, but the Indians made little attempt to attack, apart from two advances that were checked by artillery and infantry fire. Clive's men then advanced and stormed the Indian encampment. The British position in East India was consolidated by further victories at Patna and Buxar in 1764, in each of which grapeshot fire halted indian attacks and inflicted heavy losses.

The value of European artillery was further demonstrated by the fall of Manila to a British force that had sailed from Madras in 1762. This revealed the vulnerability of European 'artillery fortresses' to an attack conducted by superior artillery and contrasted with the difficulties of non-European powers in taking such fortresses. Colonel George Monson of the British forces recorded:

An eight gun battery was finished about three hundred yards from the wall the 2nd of October at night, and opened the 3rd in the morning on the south west bastion which immediately silenced the enemy's guns and made a breach in the salient angle of the bastion, the fourth at night batterys were begun to take off the defences of the south east bastion and of the small bastions on the west side of the town; which were opened the fifth by ten o'clock in the morning and had so good an effect, that the general gave out orders for storming the place next day; which was done about seven in the morning, with very little loss, on our side. 18

However, the fortifications were weak, the garrison small and attack was not anticipated.<sup>19</sup> At Havana, the same year, British artillery was effective against more impressive fortifications:

our new batteries against the town being perfected (which consisted of forty four pieces of cannon) we all at once, by a signal, opened them and did prodigious execution. Our artillery was so well served and the fire so excessively heavy and incessant, principally against the defences of the place, that the Spaniards could not possibly stand to their guns.<sup>20</sup>

The scale of European firepower was dramatically on the increase. This was revealed in 1760 when the British captured Karikal, on the Carnatic coast of India, from the French. John Call, the British Chief-Engineer in the region, recorded, 'We found 94 guns . . . mounted, and about 155 altogether, 6 mortars and plenty of ammunition'. Call then began preparations to besiege the leading French base in India, Pondicherry, noting he would have '30, 24 pounders, and 20, 18 pounders, besides small guns, 6 large mortars, and 12 Royals or Coehorns [mortars], with ammunition for 40 days firing at 25 cannon [sic] per day'; it fell the following year. Call was inaccurate in his prediction that within ten years Europeans would intervene to determine who controlled Delhi, <sup>21</sup> but his career indicated the potential of European firepower. In 1762 he was responsible for the capture of the major Indian fortress of Vellore; British artillery could prove very effective against

native fortifications. In January 1760 Sir Eyre Coote wrote from Chetteput in the Carnatic,

I invested this place on the 27th at night. On the 28th the army encamped three miles from the garrison; the same night I raised a battery for two 24 pounders, and this morning at day light we began to batter the South West Tower of the Fort. About 11 o'clock beginning to make a breach, a flag of truce was flung out.<sup>22</sup>

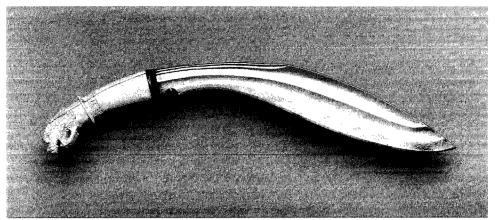
Firepower was not the sole key to Britain's victories in India and elsewhere. Mir Jaffir played an important role in Bengal in 1757 where political and military factors interacted. Similarly, in 1774 the British destroyed the Rohilla state in cooperation with Awadh, and it was annexed by Awadh.<sup>23</sup> Nevertheless, firepower was important and it is clear that in this respect the Asians largely failed to match European developments. At Buxar (1764), for example, the Indian army had more cannon and used them to considerable effect,<sup>24</sup> but British firepower was superior. In the 1750s the British East India Company was pleased when Indians in the Carnatic entered their service with their own muskets, but they saw these guns as less satisfactory than European counterparts and replaced them as soon as possible.

One important reason was probably the greater role and prestige of cavalry in Indian armies and a resultant inattention to infantry. Mobile light cavalry was crucial in the Maratha forces, playing for example a central role in their defeat of the Nizam of Hyderabad near Bhopal in 1737. The role of cavalry in Indian warfare was amply displayed at the largest battle of the century, the third battle of Panipat fought on the plains north of Delhi on 14 January 1761. The Afghan victors under Ahmad Khān consisted largely of heavy cavalry equipped with body armour, swords and spears, as well as mounted musketeers armed with flintlocks: the latter had largely replaced mounted archers, and thus represented the transition of traditional Central Asian warfare to gunpowder weaponry. Afghan cavalry attacks, first by mounted musketeers and then by heavy cavalry, were instrumental in the collapse of the Maratha centre. The Afghans, who also had camelmounted swivel guns, fought well, but their victory also owed much to a lack of coordination among the Marathas, specifically to the absence of an effective central command in what was a conglomeration of different armies; in short political-military factors played a crucial role in the sphere of command and control.<sup>25</sup>

Most of the cavalry of the Indian forces used horses far better than those of the British, and British generals were concerned about how best to respond to Indian cavalry. The Afghan role in supplying horses and cavalry gave them a military importance in India comparable to that of the British. <sup>26</sup> An effective use of light cavalry enabled Haidar Ali of Mysore to check the British in the First Anglo-Mysore War (1767–9).

Some of the Indian rulers undertook major efforts in the closing decades of the century to develop their artillery and to create effective infantry units after the European model. At Panipat the Maratha forces already included the trained infantry of one commander, Ibrahim Gardi. Prithvi Narayan Shah (1742–75), ruler of Gorkha, who unified much of Nepal, sought to adopt British methods of military organisation. In the late eighteenth century, after the combined introduction of flintlocks, bayonets and infantry drill, and under the impact of European challenge and the European example, gunpowder weaponry came to play a greater role in Indian battlefield tactics. Striking power came to replace the former emphasis on mobility.

Far less progress in adaption, indeed Westernisation, was made in South-East Asia. The use of firearms was extensive there, but the volley technique was not adopted. The war



41. Gurkha sword (kukri), nineteenth century. The Gurkhas used both traditional and European weaponry. The terrain ensured that their armies were composed of infantry. Tactics involved extensive use of ambushes, ruses and temporary fortifications, especially stockades. In their war with Britain in 1814–16, the Gurkhas were initially successful, thanks to a combination of defensive positions, especially hill forts and stockades, with attacks on British detachments. British victories in 1815–16 that owed much to the effective use of bayonet attacks, luck, the skill of commanding officers, and the failure of the Sikhs and Marathas to support the Gurkhas, turned the tide.

elephant, pikes, swords and spears were still the dominant weaponry, and firearms made little impact on tactics. By the eighteenth century the South-East Asians had abandoned the attempt to keep pace with new developments in the production of both firearms and gunpowder. Thus, wheel-lock and flintlock mechanisms were not reproduced in South-East Asian foundries; only matchlocks were made.<sup>27</sup>

Again, this did not pose a problem for the states of the period. It was possible to be successful and dynamic without European-style firearms, as the new Burmese dynasty, the Konbaung, showed in the second half of the century. This did not mean complete indifference to European firearms: in 1787 King Bo-daw-hpaya sought firearms from the French at their Bengal base of Chandernagore. However, without them in 1784–5, he had conquered Arakan, regained part of Laos, overrun the Kra Isthmus and advanced on Chiangmai in Siam.

#### China

Similarly in East Asia, in China and Japan, there was no attempt to transform armies, or indeed to develop naval power. The Chinese still used matchlock, not flintlock, muskets and scarcely seemed to need military modernisation. There was no maritime threat, and on land China expanded rapidly.

Having captured Formosa, driven the Russians from the Amur region and taken control of Outer Mongolia in 1690–7, the Chinese sustained the pace of their expansion. In part, they maintained the dynamic of their campaigns against the Mongols and moved into areas where Mongol power was at issue. Tibet had been under the partial control of the Mongols since 1642 when the last king was deposed, but their relationship with the Dalai Lama was not always easy. The important role Tibetan Buddhism played in Mongol politics encouraged Chinese intervention. A dispute over the succession to the Dalai Lama from 1705 led to Chinese diplomatic action. In 1717 the Dzhungars invaded Tibet

hoping to enlist Tibetan support against China. They captured Lhasa and killed the Chinese client ruler, Lajang Khan. The Chinese sent an army of 7,000 troops in 1718, but this was destroyed by the Dzhungars. In 1720 the Chinese mounted more wideranging attacks on both Tibet and Dzhungaria; Lhasa was captured, the Dzhungars withdrew from Tibet and the Chinese established a protectorate. Perhaps not so dissimilar to Chinese policies in the twentieth century, Lhasa was occupied, its walls pulled down and a Chinese garrison installed. In 1730 the Chinese assumed suzerainty over Bhutan, a Tibetan vassal.<sup>29</sup>

The Chinese were also active elsewhere: Urumchi in Turkestan was occupied in 1722 and an invasion of Ching-Hai led to the Chinese assuming control from 1724. In 1727 Sulu resumed the practice of sending tribute to China, although that was not due to Chinese military action.

There was fresh fighting with the Dzhungars in the 1730s. A Chinese army was annihilated in 1731 and the Dzhungars then attacked Mongolia in 1731 and 1732. Peace was negotiated in 1739. However, succession disputes from 1750 led to civil war and the loss of Dzhungar unity. As a result, the Chinese found local allies. In 1755 Dzhungaria was overrun by the Chinese, without serious opposition: their opponents were defeated on the Ili River. Nevertheless, the Chinese were then faced by rebellions which were not finally suppressed until 1757 when the Chinese were greatly helped by a smallpox epidemic which is reported to have killed half the Dzhungars. The Chinese army killed most of the rest and deported some of the survivors to Manchuria, and the very name Dzhungar was proscribed.<sup>30</sup> In contrast, in Kashgar and Tibet, the Chinese left local government in the hands of the indigenous elite.<sup>31</sup> A Tibetan rising in 1750 and a Khalka rebellion in Mongolia in 1756–7 were also both suppressed.

42. The Potala, citadel of Lhasa, from Athanasius Kircher's *La Chine Illustrée* (Amsterdam, 1670). Lhasa was the seat of much conflict. In 1706 the Dalai Lama was deposed by Lha-bzan Khan, a Chinese protégé, in 1717 Lhasa was stormed by a Dzhungar army that overthrew him, and in 1720 the Chinese captured the city. It was not only European-style fortresses that were important and effective in this period.



In the 1750s, Chinese power was therefore extended over Xinjiang to Lake Balkhash and to Muslim east Turkestan; Kashgar fell to the Chinese in 1759. As with the Russians in the Ukraine, direct power was now being employed in regions where China had hitherto largely relied on the ability to play off local peoples and factions. The Chinese also advanced into the southern Altay, which the Russians had annexed in 1756. Conflict was avoided, although neither side recognised the claims of the other. Some tribes were made to pay tribute to both powers.

Risings by non-Chinese peoples within China were crushed, for example by the use of mortars against high stone fortresses in the Second Jinchuan War of 1771–6,<sup>32</sup> and, although Chinese invasions of Burma in 1766–9 made little progress, they did weaken the Burmese and there was no Burmese invasion of China. The Chinese were less successful when they intervened in Vietnam in 1788.

The rise in the Chinese population, combined with greater domestic stability, had thus supported widespread expansion. The Manchu dynasty can, in many respects, be seen less as the government of China than as an imperial authority ruling China, Manchuria, Mongolia, Tibet, Korea and, later, Xinjiang. The rulers consciously addressed themselves to different racial groups. Documents written in Chinese and Manchu, and originally thought to be simply translations, proved to say different things in the two languages. There was also an explicit use of Buddhism to control both the Tibetans and the Mongolians. Thus, characterising the conquests in Xinjiang in the 1750s as simply a Chinese conquest of Turkic people is problematic. Much of the army was composed of Manchu and Mongol bannermen, and their military system depended upon such innovations in organisation. The banner system enabled Mongols, Chinese and Manchus to work as part of a single military machine. In one light, it might be argued that the Manchus use of Chinese troops was much like the British use of sepoys (native troops) in India. However, the degree of acculturation and assimilation of the Manchus into Chinese culture was greater and therefore it is more appropriate to use the term China. Nevertheless, the strength of Manchu China owed a lot to the extent to which much of the territory that formed the initial Manchu homeland and acquisitions (the north-east, Mongolia) had been the source of intractable problems for the previous (ethnically Chinese) Ming

Japan, in contrast to China, was not expansionist. There was some concern about Russia and consequently greater interest within Japan in seizing Hokkaido, <sup>33</sup> but Russian pressure remained minimal until the nineteenth century. In the meantime, the Tokugawa shogunate committed its energies to political consolidation at home. Neither China nor Japan had any immediate rival facing them or appeared to have any need to match European developments in military technology and, indeed, European efforts to increase trade with China were made solely by diplomatic means and not in the threatening fashion that was to be displayed the following century.

Any consideration of military capability in the case of East Asia relative to Europe thus has to relate to technology – how weaponry compared – or to be counterfactual – what would have happened had war occurred? Neither approach, however, is terribly helpful. As already indicated, the Chinese army, like that of Burma, was well able to tackle the tasks in hand. It was highly bureaucratised, and had a tremendously sophisticated logistics system supported by a centralised state. Preparing for hypothetical wars with European powers that had no serious military presence in the region was scarcely necessary, and thus the relative redundancy of firearms and cannon was not yet of consequence. The Kazaks repelled a Dzhungar invasion in 1726–9 without either side requiring 'advanced' European weaponry. It is of course reasonable for the historian to note, in light of events

the following century, that developments or their absence in the eighteenth century later had detrimental consequences. However, this risks accusations of teleology, anachronism and chronological determinism. It is certainly unclear that the argument is appropriate as a means of judging eighteenth-century warfare and military technology in East Asia.

#### Persia

This approach is also appropriate for Persia. Campaigns such as that of 1730, in which Nadir Shah took Hamadan, Kirmanshah and Tabriz from the Turks, or 1735, when he defeated the Turkish general Abdullah Köprülü, or 1739, when Delhi was captured, rebut any suggestion of a redundant military system. Under charismatic leadership, *ad hoc* hosts of men whose traditions were warlike, but who essentially lacked formal training and discipline, were still capable of major achievements. Nadir Shah's artillery was adequate for his purposes. In advance of his cannon, he arrived at Ottoman-held Kirkuk in August 1743, and was unable to capture the town, but, once the artillery arrived, a day's bombardment led to the surrender of the fortress. Nadir Shah did encounter checks, but, significantly, they were similar to those that would have affected a European power. For example the harsh terrain of the Caucasus led to defeats and failures when he tried to conquer Daghestan in 1741–3, but the more militarily advanced Russians were also to find subjugation of the Caucasus difficult.

The situation changed after Nadir Shah's assassination in 1747. Divided and weaker, Persia became far less aggressive, although expeditions could still be mounted. Karim Khan Zand and an army of 30,000 men captured Basra in 1776 after a 13-month siege.<sup>34</sup> The eastern part of Nadir Shah's empire passed into the hands of Ahmad Khān (1747–73) whose Afghan Durrani empire, with its capital at Kandahar from 1748, included not only present-day Afghanistan but also much territory to the south, east and west, including Punjab, Sind, Baluchistan and Kashmir. These were gains from the Mughal world at least as important as the losses to the British elsewhere in India. Ahmad Khān also thwarted the Uzbek attempt to regain Balkh in 1768.<sup>35</sup>

Ahmad Khān organised his army on similar lines to that of Nadir Shah, not least with the use of mounted musketeers. There was a comparable stress on mobility which ensured that anything that was slow-moving was avoided, whatever its value for firepower. In place of heavy artillery, Ahmad Khān preferred to rely on mobile camel-guns: swivel-guns fixed to the saddle of camels, a device that the Afghans had successfully used against the Persians at the battle of Gulnabad (1722). The extent and nature of Afghan territories and campaigning were such that there was a stress on cavalry, not infantry. They captured Kirman in 1721 and Isfahan in 1722 by starvation, not bombardment.<sup>36</sup>

## Africa

The use of firearms increased in some areas in Africa, but one must be cautious before comparing developments with a European context. In West Africa, for example, Europeans were restricted to a few disease-ridden coastal bases, and posed little military challenge to the local rulers. Indeed, European forts, many of which were small and poorly defended, could be taken by Africans: the Dutch base at Offra and the French one at Glehue were destroyed in 1692, the Danish base at Christiansborg fell in 1693. However, although the minor secondary English factory at Sekondi fell in 1694, the leading English

base at Cape Coast Castle was never taken, and was successfully defended against African attack in 1688. British cannon drove off Dahomey forces that attacked their fort at Glehue in 1728, but these forces had already captured the Portuguese (1727) fort there and the French fort was partially destroyed by a gunpowder explosion in 1728.

In West Africa there was diffusion of European arms without political control, although the traffic in firearms developed more slowly at a distance from the coast. Muskets, powder and shot were imported in increasing quantities, and were particularly important in the trade for slaves. There is little evidence that Europeans provided real training in the use of firearms, although rulers showed a keen interest in seeing European troops and their local auxiliaries exercise in formation. The auxiliaries were crucial to the security of the European positions and to the offensive capability of European forces and were probably the key figures in the transfer of expertise. Since they often worked seasonably for the Europeans and were trained to use firearms, for example in the riverboat convoys on the Senegal, they had ample opportunity to sell their expertise to local rulers. There is evidence that the troops of some African kingdoms trained in formation. Further, there are a few cases of Africans capturing European cannon and putting them to use, but field pieces were normally not sold to them, although some were given as gifts. West African blacksmiths could make copies of flintlock muskets, which replaced the matchlock as the principal firearm export to the Gold and Slave Coasts from about 1690; but casting cannon probably exceeded their capacity.<sup>37</sup>

African firearms can be criticised by European standards, but they served their purpose and became the general missile weapon over much of Africa, for example in Angola<sup>38</sup> and on the Gold and Slave Coasts. The Kingdom of Dahomey owed its rise in the early eighteenth century under King Agaja (c. 1716–40) to an effective use of European firearms combined with standards of training and discipline that impressed European observers; weaponry alone was not enough. The Kingdom of Allada was overrun in 1724 and in 1727 Dahomey forces conquered Whydah, despite the widespread availability of firearms in that kingdom. Europeans on the Slave Coast had to take careful note of Dahomey views, not least in ensuring that their quarrels did not disrupt trade with that kingdom. Two French officers provided the Dahomians with military guidance in the 1720s, including instruction on how to dig trenches.<sup>39</sup>

The ability of Bekaffa of Ethiopia (1721–30) to regain control over rebellious provinces owed much to his recruitment of new units which he armed with muskets. In the 1760s, Mikail Sehul, the Ethiopian imperial Ras, built up an army, 8,000 of whom he equipped with muskets. In 1769 he defeated his master, the Emperor Iyoas. However, most Ethiopian soldiers were not equipped with muskets, and the majority of those who had them were from Tigre, the province nearest the coast. Ethiopian muskets, which were still matchlocks rather than flintlocks, were imported, mostly via Massawa, and were therefore relatively expensive and subject to interruptions in supply. Control of Tigre gave Ras Mikail a dominant position, but in 1771 another provincial potentate, Bäwändwässan of Bägémder, who had several hundred musketeers and also appreciated that shock tactics could disrupt their Tigre counterparts, defeated Mikail. The Tigre army was obliged to surrender its weapons, and this encouraged the diffusion of firearms. Thus, the weapons capability gap in Ethiopia was lost. 40

In central Madagascar, the Merina expanded, making effective use of firearms. Similarly, Moroccan and Mauritanian armies successfully invaded the middle valley of the Senegal valley. However, as in India, the role of firearms should not be exaggerated. Cavalry remained more important in the Sudan, and it was largely thanks to cavalry that the Kingdom of Oyo (in modern north-east Nigeria) was able to defeat Dahomey and

force it to pay tribute from the 1740s. The Lunda of eastern Angola who spread their power in mid-century relied on hand-to-hand fighting, particularly with swords.<sup>41</sup> Once again, military technology and tactics changed and continued according to local needs and conditions.

#### South America

In the Americas there was a rapid expansion of European territorial control in the eighteenth century. There was also some diffusion of European weaponry, although not of other aspects of European warfare. Moreover, the situation differed in North and South America. In South America there was an expansion of control from well-established colonies on both sides of the continent but there was little diffusion of technology. The Spanish made minor advances south in both Chile, where San Carlos de Ancud was founded in 1763, and Patagonia, where Carmen de Patgones was founded in 1779, but in Chile expansion was limited and warfare with the Araucanians, who themselves attacked in 1723, 1766 and 1769–70, decreased. The Araucanians also advanced across the Andes to challenge the Spanish position in Argentina. In territorial and economic terms, expansion into the interior of South America by the Portuguese in Brazil and by the Spanish east of the Andes and north from Buenos Aires, was more important. The discovery of gold and diamonds in Minas Gerais, in the interior of Brazil, led to extensive colonisation.

This European expansion was aided by superior numbers, firearms and the absence of large-scale organised resistance. Numbers and firearms also permitted the suppression of rebellions, of which there were over 100 in the Andes in 1742–82 alone, although major rebellions were rare. However, the rigorous collection of taxes led to a general insurrection in Peru in 1780–1, headed by Túpac Amaru, who was a descendant of the last Inca rulers. He sought the support of local colonists, but was executed. Over 100,000 people died in the war began by Túpac Amaru's rising. At Arequipa in Peru in 1780, superior firepower determined the defeat of local rebels armed with lances, sticks and the traditional Andean weapon, the sling. Similarly, firepower – cannon and muskets – were responsible for the victory of Caibaté (1756) by which a joint Portuguese-Spanish army smashed an Indian force, 'smothered in gunfire and shot', attempting to block their advance on the Jesuit missions of Paraguay and Brazil: the former claimed to lose only three dead compared to 1,400 Indians killed. The use of cannon fire led another Indian force to retreat.

Yet firepower capability could only achieve so much. In some areas, hostile terrain, determined opposition or an absence of major European pressure ensured success for native forces. The Spaniards failed in the 1770s to subdue the Guajiros Indians, residents of the Guajiro Peninsula in modern Colombia. Their control of Nicaragua, especially of the Mosquito Coast, was also very limited. In Amazonia, the Portuguese advance up the Tapajiós river was resisted by the Mawé, and in central Amazonia in the 1760s and 1770s the Portuguese were unable to resist guerilla attacks by the mobile Mura with their ambushes of Portuguese canoes and their attacks on isolated settlements. The Muras did not learn the use of firearms, but were very effective with their bows and arrows. Nevertheless, the Muras could never defeat the Portuguese and the peace they sought in 1784 appears to have reflected the need to reach an accommodation with colonial power. In the Yucatán, where there was a major revolt in 1746, the thick forests limited Spanish control.

The European presence in South America in the eighteenth century was very different to that in South Asia. There was no major demographic imbalance; the Europeans were based in long-established colonies of settlement; they faced no powerful state structures in the territories they did not control; and within those that they did rule there had been an appreciable degree of interbreeding with the native population. As a result, the development of local military forces took place in a very different context to that of the French and Dutch, and still more the British, in South Asia.

Nevertheless, the essential military problem was the same. European governments and chartered trading companies were only prepared to afford a relatively small-scale deployment of troops anywhere outside Europe in the eighteenth century, especially in peacetime when there was no offensive goal that could justify a major deployment. Yet there were also reasons for such a deployment, not least policing of possessions and maintaining governmental authority, dissuading rebellion and deterring external attack.

The problem of external attack was especially serious for the Spaniards in Latin America, for the international context had already become more threatening for them. In the late sixteenth century, French and English privateers, such as Francis Drake, had raided Spanish possessions and on occasion launched more substantial expeditions. However, although they had inflicted damage, as when Drake's 1585–6 expedition had sacked Cartagena and St Augustine, the English and French were essentially unsuccessful. Although the French burnt Havana in 1552, their attempts to establish themselves in Florida had failed. In the Caribbean, Spanish defensive measures, including the organisation of effective convoys, improved in the sixteenth century<sup>47</sup> and Drake's last Caribbean expedition in 1595–6 was a failure. English attacks on Spanish interests were generally a matter of raiding, the search for profit rather than permanent control, and accordingly most English forces were small. The English lacked the infrastructure of bases and permanent land and naval forces necessary for a serious challenge to Spanish control. 48

By the eighteenth century, the situation was very different. The British had bases in the Caribbean, including Jamaica captured from Spain in 1655, and deployed substantial forces there in wartime. Attacks were mounted on the coasts of Latin America, for example Admiral Vernon's seizure of Porto Bello in 1739. This encouraged the development of defensive systems, as indeed did clashes between Spain and Portugal. Already, in 1672–87, in response to an unsuccessful attack in 1668 by Robert Searles, an English pirate, the Spaniards had constructed at St Augustine the Castillo de San Marcos, a massive stone fortress with a permanent garrison.<sup>49</sup>

In the eighteenth century, Spain created a system based on regular army units and fortifications, supported by militia, to which Blacks were increasingly recruited from 1764. This was a method well adapted to the logistical, environmental and ecological problems of warfare in the tropics; and when Spain gained Louisiana from France after the Seven Years War, the colony's defences were reorganised accordingly. Defence of the interior of the French colony of Cayenne was entrusted to native Americans and free Negroes who were organised into a company of soldiers. In the 1760s and 1770s auxiliary cavalry and infantry regiments were raised throughout Brazil, and black and mulatto Brazilians were recruited into companies of irregular infantry. However, these units were to serve as potential bases for hostility towards the mother countries, not least because in Latin America regular regiments brought in from Europe absorbed large numbers of native recruits and were increasingly officered by natives.

#### North America

The military experience of British colonists in North America was also to have ambiguous long-term political consequences. The British colonists acquired military experience fighting both native Americans (Indians) and other Europeans: the French in Canada and the Spaniards in Florida.<sup>53</sup> Both were formidable opponents. The native Americans resisted European advance with determination. There was resistance against the British near the eastern seaboard, along the northern border of French expansion from Louisiana, and against Spanish expansion north from Mexico. In the first, the Yamasee, with Creek support, nearly destroyed the British colonies in the Carolinas in 1715, while guerrilla warfare by the Abenaki in the 1720s kept British settlers out of Vermont.

Yet the native Americans were harmed by their rivalries. In 1711 the Yamasee helped the North Carolinians defeat an attack by the Tuscaroras; in 1715 the Cherokee helped the Carolinians defeat the Yamasee. Defeats had a crucial demographic impact on the native Americans. Tuscaroras' numbers fell from 5,000 to 2,500. Many took refuge with the Iroquois and those who remained, in a prelude of things to come, were grouped by the colonists in a reservation which, by 1760, contained only about 300 people. In 1715 most of the Yamasee were killed or enslaved. Such losses helped to ensure permanent moves forward in the frontier of European control.

As with the US army of the nineteenth century, the Europeans sought to anchor their presence with fortresses, the French, for example, expanding west with forts at Michillmackinac (1700), Detroit (1701) and Niagara (1720). This process accelerated with time, so that the British built more forts in the 1720s to 1740s than earlier. These forts were more formidable than the defences created by the native Americans, although the fort of the Fox (or Mesquakie) on the Illinois Grand Prairie had a heavily fortified palisade and maze of trenches that protected the Foxes from French gunfire in 1730. However, the Foxes lacked cannon.<sup>54</sup>

In contrast, the British fort of Fort William Henry at Pemaquid had an outside circumference of 737 feet, 28 gun ports and a complement of 18 cannon. Nevertheless, there was a major difference between the forts designed to fend off native American attacks, which were based on simple palisade designs, and the more elaborate fortresses built to resist European-style sieges, such as Charleston and Halifax where the British followed the models of Vauban's fortifications.<sup>55</sup>

The British and French forts built in the interior had, however, in the 1750s to face not just the prospect of native American attack, but also that of attack by Europeans. French regular forces under Louis, Marquis de Montcalm (1712–59), a veteran of the War of the Austrian Succession, supported by cannon and by native American allies and taking advantage of surprise, attacked British interior forts during the Seven Years War. In 1756 they drove the British from Lake Ontario and captured Forts Bull, George, Ontario and Oswego. In the following year, the French advanced towards the Hudson, capturing Fort William Henry after heavy bombardment by 30 cannon hauled over land to the siege. In turn, the British deployed far larger forces and captured Louisbourg and Fort Frontenac (1758), Niagara and Québec (1759), and Montréal (1760).

The French developed Louisiana, founding settlements at Biloxi in 1699, Mobile in 1710, New Orleans in 1718 and Baton Rouge in 1722. An 800-strong French force in Louisiana savagely crushed the Natchez in 1729–31, in a campaign of systematic extermination. Most of the prisoners were shipped to Santo Domingo in the Caribbean, where they became slaves. The Natchez were weakened by their failure to win support

from other tribes. The French suffered defeat at the hands of the Chickasaw in the late 1730s, and were hit by Chickasaw raids in 1747–8 and 1752. However, the use of extreme methods, destroying native villages and crops, forced the Chickasaw to terms in 1752.

The value of fortresses for European control was mixed. They could reduce a potentially mobile force to a fixed-point defence, and the latter could be of limited value. The Spanish, who had been forced out of the Santa Fe region of New Mexico between 1680 and 1692 by the Pueblo rebellion, attempted to create an impregnable cordon of presidios (fortified bases) to protect their northern possessions, but native American war parties bypassed them without difficulty. Santa Fe itself had resisted siege in 1680, but had then had to be evacuated. Population shifts on the Great Plains, especially the southward movement of the Comanches and the Utes, put pressure on the Spaniards. The Apache, Comanche and other Plains tribes were well mounted and armed, their firearms coming from trade with British merchants and with Louisiana when it was under Spanish rule (1763-83): there the established policy was to win them over through commerce. The spread of firearms and houses among the natives forced the Spaniards to reconsider their military methods. The native tribes were able to respond with considerable flexibility to Spanish tactics. Spanish expeditions, such as those against the Apache in 1732 and 1775, were hindered in turn by the lack of fixed points for them to attack. Punitive expeditions, which were dependent anyway on support drawn from a shifting pattern of native alliances, were, at best, of limited value. In 1751 the Pimas of Arizona rebelled. In 1758 the Comanche attacked the San Sabá mission, eighty miles north-west of modern Austin, killing all bar one of the missionaries and most of the population. This led the Spaniards to abandon efforts to convert the Apaches and by the end of the century most of the missions and presidios in the north had been abandoned. The Yuma rebellion of 1781, in which Spanish positions were destroyed, thwarted plans for expansion through the Colorado valley and into central Arizona.

However, it would be misleading to concentrate on Spanish-native hostility as there were important rivalries between the native Americans. These had helped the Spaniards reoccupy Santa Fe in 1692. The Comanches defeated the Penxaye Apaches in the 1700s and in the second half of the century had a lengthy struggle with their former allies, the southern Utes, who had themselves defeated the Navajos in the 1710s to 1750s.<sup>57</sup>

If differences between native American tribes hindered resistance, there were also European rivalries, although there was a crucial difference in the number of powers among which the two 'sides' were divided: there was only Britain, France and Spain on the European side. Furthermore, these intra-native and intra-European rivalries were inevitably connected. This further compromises any attempt to approach the question in terms of European versus non-European. Looked at differently, such rivalries should be seen as a crucial aspect of the opposition between Europeans and non-Europeans and a means by which the Europeans furthered their interests and influence as well as an important cause of the diffusion of firearms. The British and French colonisers actively competed for trade in the interior, and this exacerbated or incited conflict. For example, suspicious that the Fox tribe from the Mississippi-Illinois region was plotting with the British, the French, with native American support, launched five attacks on them in 1712-34, finally breaking Fox resistance, particularly thanks to a victory on the Illinois grand prairie in 1730. In 1721, Governor Shute of the British colony of Massachusetts sent an expedition into modern Maine to destroy the mission of the French Jesuit Sebastian Râle, and thus French influence among the eastern Abenakis. French attempts in the 1740s to prevent their

native allies from trading with the British led to British-incited resistance: the Miami people sacked Fort Miami (1747) and Fort Vincennes (1751), while the Huron burnt Detroit. The French responded vigorously, forcing the Miami back into alliance (1752) and establishing new posts in the Upper Ohio (1753–4), which helped to provoke the Seven Years War with Britain, a conflict known in North America as the French and Indian War.<sup>58</sup>

Indeed, it was the French determination to rely upon forts, rather than on alliances with native Americans held together by trade, that led to the war. As was to be repeatedly the case with European expansion, the attempt to increase the degree of control over native peoples, and to make it concrete through fortified positions, led to a reaction not only from these peoples but also from other European powers. This was to be more the case in Africa, Asia and Oceania in the nineteenth than in earlier centuries, but in North America it was in the eighteenth century that this process occurred; although in the nineteenth there was competition between the USA and other European powers, and in the case of Spain and Mexico war.

In 1755 a force of British regulars and Virginia militia under General Edward Braddock was defeated at the Monongahela River when it marched on Fort Duquesne. The well-aimed fire of a smaller French and Indian force using forest cover proved devastating to a column that simply did not know how to respond. The absence of native American allies and of experience in forest warfare were crucial to Braddock's defeat.

The Seven Years War was followed by renewed British-native American tension. The peace had not taken note of native American views and tension rose as the British failed to provide the native Americans with anticipated presents, while British American settlers moved into native lands. This led to Pontiac's War (1763–4), which involved a number of tribes, especially the Ottawa under Pontiac. Successful attacks were made on a number of British forts while the British were forced to abandon several others; British field forces were also ambushed. The British were less effective at fighting in the woodlands of the frontier zone than their opponents, and British dependence on supply routes made them more vulnerable to ambush. However, owing to the British conquest of Canada in 1758–60, the natives had no access to firearms other than those they captured. The Anglo-French rivalry that had given a measure of opportunity to the native Americans, providing for example arms and ammunition to the Abenakis of Vermont, had been ended. Native Americans opposed to the British had lost their French supporters.

Furthermore, in 1763–4 major British positions with sizeable garrisons and artillery, such as Detroit, Niagara and Fort Pitt, successfully resisted attack. The British also planned to distribute blankets infected with smallpox, an early example of biological warfare, and the tribes were indeed affected by an epidemic of the disease. In the late summer and autumn of 1764, the native Americans, who found it difficult to sustain long conflicts and were probably short of gunpowder, settled the conflict. They were also threatened by a British advance towards the Ohio native American towns in the Muskingum valley, and affected by smallpox.

The problems created for the native Americans by their dependence on European munitions were not new. The 'Achilles heel' of the Iroquois in the second half of the seventeenth century, when they were the most powerful military force in the interior of North America, had been their increasing dependence on European firearms and iron weapons, and, in particular, gunpowder. This indicated a major limitation to the argument that the diffusion of European arms lessened the military advantage enjoyed by

Europeans. This was only the case if there was a combination of unlikely circumstances. First, it was necessary to be able to develop the capability to make and repair the arms and to make any ammunition that might be required. Secondly, it was important to acquire proficiency in their use, either by emulating European tactics or by integrating the weapons with tactics developed for the particular societies and environments in question. Otherwise, the very adoption of European weaponry would weaken the states and peoples that were impressed by them.

In the eighteenth century, native Americans were under great pressure in the eastern states of what was to become the USA, not least because of the greater European-American numbers. After the Peace of Paris, European-American settlement increased west of the Appalachians, while in northern New England the western Abenaki of Vermont were threatened by spreading settlement after New Hampshire militia cut a road through the Green Mountains.

This pressure was not yet the case, however, in the west. Indeed, the diffusion of European weaponry increased the military potential of the native Americans. Tribes which acquired firearms in quantity, such as the Cree and Chipewayo, were able to establish trading and fur-trapping empires at the expense of rivals. Once the Chipewayo had matched the armaments of their rivals the Cree, they could block Cree expansion northward to the west of Hudson Bay.

One of the most important European transfers of military technology to America was the horse. Native peoples living near Spanish settlements in the early seventeenth century had first acquired the animal, and it spread northward, by trade and theft, to the Rocky Mountains and the Great Plains. The Apache and Comanche had the horse before the end of the century, the Cheyenne and Pawnee by 1755. In the eighteenth century, more were acquired from Europeans trading from the St Lawrence Valley. A major equestrian culture developed on the Great Plains. The native Americans had therefore become more mobile, and the combination of firearms and horses made the tribes of the Plains a formidable military challenge.

By contrast, the native Americans on the distant Pacific coast lacked both guns and horses. In the first clash for control of Lower California, the battle for Loreto Conchó of 13 November 1697, a missionary party drawn up in a position protected by a barrier of thorny mesquite branches was attacked by Californians armed with bows and arrows. The victorious defenders had a stone-throwing mortar that blew up, a pair of tripod-mounted swivel guns and muskets. In a second, smaller-scale clash the Spaniards lost no men while the natives had six casualties. O Victory was followed by the spread of Christianity; as elsewhere during the Iberian conquest of Latin America, smaller, weaker native groups proved more receptive to conversion. Spanish power expanded rapidly from Mexico into California in the 1770s, although in 1775 the Ipais burnt the mission at San Diego.

Thus, in North and South America a relatively small deployment of European troops had a much greater effect in terms of territory gained than was the case in Africa or South and East Asia, and that despite the greater willingness of the native population in North America to adopt European weaponry. The principal reason was demographic, not military. European colonists went in considerable numbers to the Americas, but not to Africa or South Asia. In the Americas the settlement of land took priority over trade: seizure over symbiosis. In addition, North America supported a much smaller native population than South Asia. The only point of comparison was with the Russian conquest and consolidation of Siberia. There the number of settlers was lower, but the native population was only 200,000–240,000.<sup>62</sup> Furthermore, the native Americans were divided, their

politics often factionalised, and they lacked the infrastructure as well as the demography for a sustained, large-scale, organised opposition to the European advance.

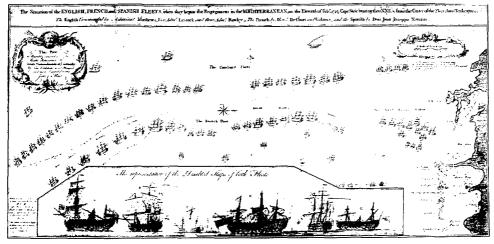
Yet it is necessary to be cautious before assuming that the overrunning of, say, North Carolina represented success, while the failure to make any territorial impact on China was a sign of weakness. In practice, more wealth was derived from trade with Canton than from settlement in Carolina. The bullion Europeans had seized from the New World most contributed to European economic hegemony by buying Europe's way into the lucrative Asian trade, although, in addition, from 1757 the British territorial presence in India drained bullion from it to the benefit of Britain. Gibbon referred to India's 'riches . . . now possessed by a company of Christian merchants, of a remote island in the Northern Ocean' (VII. 71).

Nevertheless, the India Act passed by the British Parliament in 1784 declared that 'schemes of conquest and extension of dominion in India are measures repugnant to the wish, the honour, and policy of this nation'. <sup>63</sup> The European powers were more concerned with fighting each other, both in Europe and overseas, than with conquering non-Europeans. The British sought to capture the French base of Québec, rather than Kentucky. The Spanish naval bases in the New World, Havana, Guayaquil in Ecuador and, from 1776, Montevideo, were designed to enable Spain to confront other European powers, not native resistance or rebellion.

#### Britain as the Global Power

The struggle between the Europeans led in the Seven Years War (1756–63) to one power – Britain – gaining a position of global control only previously attained by Philip II of Spain after taking over the Portuguese empire in 1580. This Spanish position had been challenged by Dutch attacks on the Hispanic world, and the seventeenth century had seen Britain, France, Spain and the Dutch all powerful, but none enjoying a position akin

43. Battle of Toulon, 11 February 1744. The role of politics. It was not easy to decide how best to engage a Franco-Spanish fleet when Britain was not at war with France. The British pressed the Spaniards hard, while the French exchanged fire at a range from which they could not inflict much damage. The rear did not engage due to Vice-Admiral Richard Lestock's determination to keep the line. The British squandered their numerical advantage and their commander, Admiral Thomas Matthews, was cashiered.





44. The Action between the Centurion and the Nuestra Señora de Covadonga, 20 June 1743, by Samuel Scott. The British assault on Bourbon trade was world-wide. Anson captured the treasure-laden Manila galleon off the Philippines.

to that of Philip II in the early 1580s or of Britain in the mid-1760s. The British overran French bases in West Africa in 1758, conquered French Canada in 1758–60, French positions in India in 1760–1, and seized Havana and Manila from Spain in 1762. British successes exposed the vulnerability of French overseas bases in the face of regular attack. In 1744 the British diplomat Robert Trevor wrote of the Dutch barrier fortresses in the Austrian Netherlands:

I dare not preach up the doctrine of putting their fortresses into an impregnable condition . . . I had rather see the places secured by an army in the field, and opposed to the enemy; than the army secured in the places. I confess, I am one of those, who cannot understand how a country is the weaker, in proportion to the number of fortified places, it has; which must however be the case, if they are to absorb, instead of ekeing out, the troops of a state.<sup>64</sup>

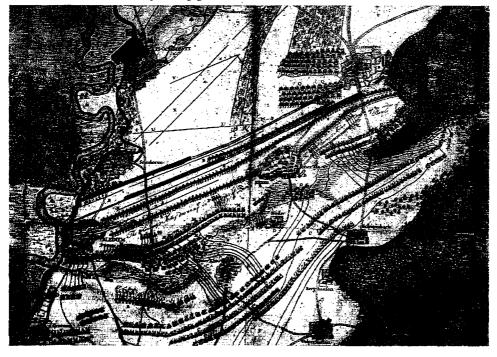
In the imperial context during the Seven Years War, the French and Spaniards found themselves unable to protect bases, whether they relied on armies (or navies) to cover the positions, or simply on the defences of the bases themselves. In the former case, the French were defeated, on land outside Québec (1759) and at Wandewash in India (1760).

Britain's triumphs rested on secure control over the home base once the Jacobite challenge had been defeated at Culloden (1746), and on naval power and success. Thanks to captures and shipbuilding, the British navy in 1760 had a displacement of about 375,000 metric tonnes, at that point the largest in the world. Gibbon's thesis that a similarity in weaponry would prevent any one European power from achieving a position

of hegemony was completely inaccurate as far as the maritime and extra-European world was concerned. Indeed, the British navy was very similar to its opponents in the weaponry it employed. Sir Thomas Slade, Surveyor of the British Navy 1755–71, worked from Spanish and French warships captured in the 1740s, to design a series of two-decker 74-gun warships that were both manoeuvrable and capable of holding their own in the punishing close-range artillery duels of line of battle engagements. Fourteen were in service by 1759 and they played a major role in the British victories of the Seven Years War.

This was part of a system in which European powers copied each other's developments, including both the 'sailing battle fleet concept and the bureaucratic form of warfare at sea'. This copying could take the form of hiring foreign shipwrights and designers, as with Peter the Great's reliance on the Dutch and English, and of purchasing foreign warships. Jean Orry, the chief minister of Spain 1714–15, sought to rebuild the Spanish navy after the War of the Spanish Succession by buying ships from abroad. In 1749–50 Jorge Juan travelled from Spain to study English naval design and construction. He was responsible for *Examen Maritimo* (1771), a guide to both subjects, became Director General of Naval Construction, and hired three English specialists, creating the English school of Spanish naval architecture. One, Mathew Mullan, was sent to Havana where he was responsible for the *Santissima Trinidad* which, when launched in 1769, was the most heavily armed ship in the world.

45. Battle of Blenheim, 13 August 1704. The scale of victory. A hard-fought engagement with over 30,000 casualties out of the 108,000 combatants. Victory was largely due to the tactical flexibility of John Churchill, in particular to his ability to retain control and manoeuvrability. The decisive factors were mastery of terrain, the retention and management of reserves and the timing of the heavy strike. Having pinned down much of the French infantry in defensive engagements, Marlborough launched the substantial force he had kept unengaged in the centre.



In overseas conflict, the British used weapons and tactics similar to those of their European rivals, although they benefited from a greater capability to apply force at particular points. A gap in weaponry capability was not therefore responsible for British success. The British navy was more effective than its opponents, but this was largely due to more ships, to its extensive and effective administrative system, to the strength of public finances, to a more meritocratic promotion system and more unified naval tradition than that of France, to good naval leadership, and to the greater commitment of national resources to naval rather than land warfare, a political choice that reflected the nature of public culture and national self-image. The last contrasted greatly with China, and thus the two strongest powers of the period, both of which greatly expanded territorially around 1760, were very different politically, geopolitically and militarily.

Sir Horace Mann, a British diplomat, pointed out the particular basis and economic context of British power when he told the House of Commons in 1779,

what has been and is looked upon to be the source of our power and greatness: our trade and commerce, the consequent number of our seamen, and our naval superiority, which all inseparably give us riches and power, and everything derived from an extensive commerce, numerous dependencies, and transmarine dominions; and the means of retaining and protecting them. Strip us of our marine pre-eminence, and where must we find ourselves? Not among the first powers of Europe, far from it. Many countries exceed us infinitely in extent of dominions, others in native produce, and perhaps manufactures. If, therefore, we should ever even come to an equality upon our proper element, with any other power, our importance must go; every thing we possess out of this island will be held by a very precarious tenure, and our influence and consequence among the great powers of Europe must depart with the cause which chiefly created it.<sup>67</sup>