The Experience of Spain’s Early Modern Soldiers: Combat, Welfare and Violence

Lorraine White

Between 1500 and 1700, hundreds of thousands of soldiers served in the armies of the Spanish monarchs. Our knowledge of the conditions of service of these men is scant and largely limited to those who served in the Army of Flanders. This article examines the experience of soldiers in the regular armies and the militias in the Iberian peninsula during this period. With a focus on combat, physical and spiritual welfare and the culture of violence, it provides a range of insights into the reality of warfare in mainland Spain. It examines a number of variables which influenced or arose from that experience. These include rates of attrition arising from desertion and casualties; the availability, use and effectiveness of weapons and munitions, along with evidence for ratios of the deployment of artillery; the nature of medical and spiritual assistance; food and drink; association with women; and engagement in and subjection to violence. The article provides incidental evidence for the use in the peninsula in the mid-seventeenth century of tactics associated with the Military Revolution, and for the violent interaction of soldiers with civilians.

Since the 1970s historians have gone a long way towards reclaiming military history from traditional military historians. They have widened the focus from the conventional contemplation of leadership, strategy and battles to examine armies, the overall conduct of warfare and the study of warring societies.1 The ‘bottom-up’ approach of recent studies

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uncovers the internal workings of the army in action and examines warfare in a social context. It explores the conflicting interests, motivation and behaviour of soldiers, and the interaction of the military with the rest of society.²

The ‘war and society’ approach, however, is not without its critics. They claim that war drops out of what become simply administrative studies.³ While this article adopts a ‘bottom-up’ approach to study the soldiers of early modern Spain, it gives centre stage to war. Spain – or, more accurately, the composite Spanish monarchy⁴ – was one of Europe’s greatest military powers in the early modern period, and its armies were engaged almost continuously in conflicts. Some studies for this period have been made of Spain’s armies and soldiers in certain European theatres, yet relatively little is known about the soldiers who fought in the peninsula and defended the heart of the Spanish monarchy.⁵ Many, though by no means all, were soldiers of the militias of Castile, civilians who for brief – or not so brief – periods had the unusual and often terrifying experience of taking up arms and participating in war; others were professional soldiers, both volunteers and conscripts, attached to the royal armies.⁶ This article examines the reality of warfare in peninsular Spain through an analysis of the conditions of service of Spanish soldiers. It focuses on their experiences in combat and on their welfare, notably medical and spiritual care and

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³ The motivation and loyalty of soldiers in early modern Spain is explored in a companion paper, ‘Spain’s Early Modern Soldiers: Origins, Motivation and Loyalty’, War and Society XIX.

⁴ See e.g. M. Bennett, ‘The Development of Battle Tactics in the Hundred Years War’, in A. Curry and M. Hughes, eds, Arms, Armies and Fortifications in the Hundred Years War (Woodbridge, 1994), at p. 1.


physical comfort. It concludes with an examination of soldiers and violence.

I

Though the Spanish peninsula experienced a number of wars, revolts and enemy attacks in the course of the sixteenth century – two offensives to annex the neighbouring kingdoms of Navarre (in 1512) and Portugal (in 1580) to the Spanish monarchy; four revolts that had the potential to seriously undermine or even destroy royal power: the Germanías revolt in Valencia (1519–22), the Comuneros revolt in Castile (1521–22), the morisco revolt in Granada (1568–70), and the revolt of Aragon (1591); French invasions of Navarre and Rosellón (1503, 1512, 1521, 1542, 1543, 1579, 1589, 1592 and 1597), ‘side-shows’ as one military historian has described them;7 overt war with France (1547–49), nearly part of the regular ‘bickering’ between Spain and France along their shared frontier;8 and attacks by English naval forces on Cadiz in 1587 and 1596, and on La Coruña (as well as Peniche in Portugal) in 1589 – they were of short duration, and their impact was largely restricted to areas where the conflicts took place. In contrast, the peninsular wars and revolts of the seventeenth century were more prolonged, and had far-reaching effects over and above the actual loss of territory: war with France (1635–59 – which resulted in the loss of Rosellón and Cerdaña – 1674, 1684 and 1688–97); two major revolts: that of Catalonia (1640–52), which had French backing, and that of Portugal (1640–68), which culminated in its independence. In addition, coastal attacks by corsairs and pirates (including the English attack on Cadiz in 1625) were unrelenting.

Most of the soldiers recruited in the peninsula were shipped overseas, however, to fight in Spain’s imperial armies in north Africa, the New World and, above all, in Europe – in Italy, Flanders, Germany and other theatres of war. Unless professional troops were retained in the mainland or shipped to Spain, the defence of the peninsula was left largely to the companies of part-time militias which were established, languished and then were re-established several times in the course of the sixteenth and seventeenth centuries.9 After the start of war with France in 1635, these part-time militias were re-formed once

9 See Thompson, War and Government, pp. 121–45.
again and, two years later, organized into provincial *tercios*. From this time, because of the continual need to send reinforcements to the European war fronts, the militias came to form the backbone of peninsula defence, especially on the western front. On marching to their designated destination the militias were incorporated into the royal armies (and royal pay), and subject to the control of the army commander until he gave them leave to withdraw and return home.

What, then, was the experience of the soldiers who served in the peninsula in the sixteenth and seventeenth centuries? The description by a sixteenth-century Spanish historian gives us some idea of the general conditions under which soldiers served: ‘to fight each day, with enemies, with the cold, heat, hunger, lack of supplies and equipment; everywhere new harm, continuous deaths, until we see the enemy . . .’On top of these everyday conditions came the reality of battle. In *Don Quixote* Cervantes provided a short description that hints at the noise of battle, where ‘close by there pealed the harsh thunder of dreadful artillery; further off countless musket shots rang out; almost at hand resounded the shouts of the combatants’. Without doubt, for soldiers, and above all for raw recruits, battle provoked fear and alarm, and this in itself is enough to explain the high incidence of desertion prevalent in early modern Spain and elsewhere.

A fighting force was naturally expected to suffer losses in its ranks as a result of going into battle. Some evidence of the rate of attrition for an active military force is provided by a muster taken in Zubiburu in the Basque region at the end of the 1637 campaigning season against the French. The soldiers recorded in this muster were from the three *tercios* of the adjacent provinces of the Basque region (Guipúzcoa, Vizcaya and Alava), the *tercio* of nearby Navarre, companies of the permanent garrisons of Guipúzcoa, several Castilian *tercios*, infantry from the mountain passes of Irun and a body of Walloon infantry. Only 61 per cent of the original force of 7719 soldiers (including 516 officers) remained. Twenty-four men were absent with

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10 The *tercio* was a Spanish military unit comprising, in the royal armies, anything from 3000 (around the beginning of the sixteenth century) to 1000 (more common by the seventeenth century) men. There is no suitable English translation, though ‘regiment’ is the term generally employed. On the formation of the provincial *tercios* see A(rchivo) G(eneral de) S(imancas), G(uerre) A(ntigua), leg(ajo) 1195, n(o) f(olio) 1195, n(úmero) 1195, n(o) f(olio) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmero) 1195, n(úmer


13 M. de Cervantes, *Don Quixote* (Harmondsworth, 1950), pt 2, ch. 34, p. 698.

14 The exact location of Zubiburu is unknown, but it now probably lies in French territory. The muster is in AGS GA leg. 1184, n.f., ‘Relación de los oficiales y soldados que parecieron y se hi cieron buenos en la muestra q se paso en 9 de octubre de 1637 . . .’.

15 These were listed as the ‘old’ *tercios* of Castile and three more Castilian *tercios*. 

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permission (as they were considered unfit for service); 1264 had deserted.

An analysis of those who deserted provides some interesting information: none of the deserters was an officer, and while the rate of desertion among the entire force was 16 per cent, the four local tercios suffered a much higher rate of desertion – 32 per cent. Among these four tercios, the one with the highest rate was that of the province of Guipúzcoa – very close to where the muster was passed – with 54 per cent, followed by the tercio of neighbouring Vizcaya (with 39 per cent). This suggests that a higher rate of attrition through desertion could be expected from forces composed of soldiers enlisted from the regions closest to the theatre of war, as has been noted elsewhere.

Why was the rate of desertion so high? One reason was that the daily wage of 1 real paid to a common soldier – and from which his food other than the daily munition bread ration, and the shot and gunpowder he used, were deducted – was far lower than that paid even to an agricultural day labourer. In Cáceres in seventeenth-century Extremadura, for example, a day labourer could earn three times the soldier’s daily wage plus three quarts of wine for each day he worked; in nearby Coria a wheat harvester could earn between four and a half or five times a soldier’s pay, with food. Even pioneers hired temporarily by the army earned three times as much as a common soldier, and received the same daily munition bread ration. It was not just that the pay was, in don Quixote’s opinion, ‘wretched’, but that it ‘comes either late or never’. It was no wonder, then, that to the conscripted – and often unpaid, hungry and destitute – soldier, the lure of higher wages and food or drink, even though the employment was only seasonal, was too great to resist. For this reason the highest rates of desertion generally coincided with the months of greatest agricultural activity – those in which sowing and harvesting took place. During the Luso-Spanish war of 1640–68, when summer arrived the militiamen of the garrisons of Extremadura deserted, almost to a man, to participate

16 The rate falls to 28.5% if we include the companies of the permanent garrisons of Guipúzcoa, which were probably composed of Castilians, not locals.
17 J. Mañeru López and C. Câmara Fernández, ‘El reclutamiento militar en Castilla a finales del siglo XVI: análisis de compañías de soldados levantadas en tierras de Burgos, Avila, Soria, Alava, La Rioja, Navarra, Segovia y Cáceres’, La Organización Militar en los Siglos XV y XVI, Actas de las II Jornadas Nacionales de Historia Militar (Malaga 1993) (hereafter Actas), pp. 179–89: ‘It should be emphasized that the high number of deserters is related to the proximity of their place of origin’ (p. 187); see too Thompson, War and Government, p. 103, and G. Parker, ‘The Soldier’, in R. Villari, ed., Baroque Personae (Chicago, 1995) p. 36, citing a commander of the Spanish Army of Flanders in 1630: ‘troops native to the country where the war is fought disband very rapidly . . .’.
19 In 1657 the commander of the Army of Extremadura offered to pay three reales a day to the pioneers needed to help for 8 days in the siege of Olivença. (A)rchivo (M)unicipal de (M)érida, (Libro de) Acuerdos 1657, fos. 363-v.
20 Cervantes, Don Quixote, pt 1, ch. 38, p. 342.
first in the harvest of neighbouring Andalusia and then in that of the province; in autumn they again deserted and returned to their homes to carry out sowing.\footnote{L. White, ‘Actitudes civiles hacia la guerra en Extremadura (1640–1668)’, Revista de Estudios Extremeños XLIII (1987), p. 495. Corvisier, in his Armies and Societies, p. 172, also states that desertion rates were higher in summer.}

Another reason was the risk of death, injury or illness. It is quite difficult to find data on the numbers who died or were injured or fell ill. The information we possess often contains little or no detail to allow average casualty rates to be calculated. In addition, figures are usually exaggerated – when stating the size of enemy forces and their casualties – or minimized – when giving the number of domestic troops and casualties. Nevertheless, some rough calculations can be made. In the battle of Montijo in Extremadura in May 1644, for example, according to the Spanish accounts, of a total Spanish force of some 5700 soldiers (4000 infantry and 1700 cavalry), a little under 8 per cent (433, including 276 infantry soldiers from the lower ranks and 100 cavalrymen) died on the day of battle. The sick and wounded constituted 7 per cent (375), divided equally between the infantry and cavalry forces. The Spanish casualty rate was therefore around 15 per cent. Among the estimated 8600 Portuguese soldiers there was a much higher mortality rate of 3060 (over 35 per cent), and among the 586 prisoners were 170 badly wounded men.\footnote{Figures from which calculations have been made can be found in ‘Relación verdadero de lo que sucedió el veinte y seis de mayo, pasado, en el reencuentro que tuvieron las armas de SM con las del rebelde portugués en la campaña de Montijo’, in S. Esteban Calderón, Obras completas de Don Serafín Esteban Calderón, Biblioteca de Autores Españoles LXXIX (vol. II), p. 89; Biblioteca Nacional de Madrid, MS 2376, fos. 18v–28v. Though the size of the Portuguese army is given as 7600–8600, the document gives a precise figure of 3060 ‘buried’. My calculation is based on the higher estimate of 8600. If accurate, the high Portuguese mortality rate may have been due to the mass killing of troops defending the artillery and baggage train in the middle of their battle formation, which occurred before their commander counter-attacked. Another contemporary account cites figures of 2500 for the Portuguese (1000 infantry, 1200 cavalry and 300 dragoons) and 2500 for the Spanish armies (1200 infantry – later 3100 – and 1500 cavalry), with at least 3080 dead on both sides, of which about 300 were Spanish. ‘Relación de la vitoria que tuvieron las armas de su Magestad . . . en 26 de mayo . . .’, BNM MS H.8, reproduced in Cortés Cortés, ‘Guerra en Extremadura’, esp. pp. 88 and 92.}

Reports of the Portuguese commander reverse the figures: of a total force of 9100 (7000 infantry and 2100 cavalry) the Spanish lost more than 2600 men – a casualty rate of 28.6 per cent (2000 dead, according to his second report, giving a mortality rate of 22 per cent). From his own army of 7100 (6000 infantry and 1100 cavalry), he claimed casualties were 300 killed or captured (4.2 per cent) and 400 wounded (5.6 per cent).\footnote{P. M. Laranjo Coelho, ed., Cartas dos governadores da província do Alentejo a El-Rei D. João IV e a El-Rei D. Afonso VI (3 vols, Lisbon, 1940) ii, pp. 38–40, letters dated 27 and 29 May 1644. The official Portuguese historian of the war, the Count of Ericeira, puts the size of the Spanish army at 8500 (6000 infantry and 2500 cavalry) and the Portuguese at a little over 7000 (6000 infantry and just over 1000 cavalry), with Portuguese losses of 900 dead and captured (12.9%) and more than 3000 Spanish killed (35% – the same rate calculated for Portuguese deaths from Spanish sources). L. de Meneses (Conde da Ericeira), História de Portugal Restaurado (4 vols, Porto, 1945–6) ii, pp. 60–8.}

\textsuperscript{21} L. White, ‘Actitudes civiles hacia la guerra en Extremadura (1640–1668)’, Revista de Estudios Extremeños XLIII (1987), p. 495. Corvisier, in his Armies and Societies, p. 172, also states that desertion rates were higher in summer.

\textsuperscript{22} Figures from which calculations have been made can be found in ‘Relación verdadero de lo que sucedió el veinte y seis de mayo, pasado, en el reencuentro que tuvieron las armas de SM con las del rebelde portugués en la campaña de Montijo’, in S. Esteban Calderón, Obras completas de Don Serafín Esteban Calderón, Biblioteca de Autores Españoles LXXIX (vol. II), p. 89; Biblioteca Nacional de Madrid, MS 2376, fos. 18v–28v. Though the size of the Portuguese army is given as 7600–8600, the document gives a precise figure of 3060 ‘buried’. My calculation is based on the higher estimate of 8600. If accurate, the high Portuguese mortality rate may have been due to the mass killing of troops defending the artillery and baggage train in the middle of their battle formation, which occurred before their commander counter-attacked. Another contemporary account cites figures of 2500 for the Portuguese (1000 infantry, 1200 cavalry and 300 dragoons) and 2500 for the Spanish armies (1200 infantry – later 3100 – and 1500 cavalry), with at least 3080 dead on both sides, of which about 300 were Spanish. ‘Relación de la vitoria que tuvieron las armas de su Magestad . . . en 26 de mayo . . .’, BNM MS H.8, reproduced in Cortés Cortés, ‘Guerra en Extremadura’, esp. pp. 88 and 92.

\textsuperscript{23} P. M. Laranjo Coelho, ed., Cartas dos governadores da província do Alentejo a El-Rei D. João IV e a El-Rei D. Afonso VI (3 vols, Lisbon, 1940) ii, pp. 38–40, letters dated 27 and 29 May 1644. The official Portuguese historian of the war, the Count of Ericeira, puts the size of the Spanish army at 8500 (6000 infantry and 2500 cavalry) and the Portuguese at a little over 7000 (6000 infantry and just over 1000 cavalry), with Portuguese losses of 900 dead and captured (12.9%) and more than 3000 Spanish killed (35% – the same rate calculated for Portuguese deaths from Spanish sources). L. de Meneses (Conde da Ericeira), História de Portugal Restaurado (4 vols, Porto, 1945–6) ii, pp. 60–8.
their greater precision and the closer correlation of the Spanish accounts to casualty rates given elsewhere, it is possible that these accounts are less exaggerated than those of the Portuguese commander. Whatever the actual figure, mortality rates doubtless rose as some of the wounded died days, weeks or even months after the battle. The Zubiburu muster of 7719 soldiers contains similar figures for those killed: almost 9 per cent (672) of soldiers had been killed and 13.5 per cent (1042) were in hospital, wounded or ill. The casualty rate was therefore 22 per cent – not far off the 25 per cent casualty rate noted for the infamous battle of Malplaquet in 1709, which was considered to have been very heavy.24

A longer-term assessment of casualty rates is possible in the case of 35 militiamen sent from the Extremaduran town of Trujillo to the Catalan war front in 1640, where it appears they served for two campaigning seasons. A little under half (48 per cent, 16 men) of them died whilst serving; just over one third (34 per cent, 12 men) returned home; the remaining seven (20 per cent) stayed on to join the royal army.25 This death rate over two years is similar to the suggested average of one death for every four or five soldiers who enlisted each year in Baroque Europe.26 These latter rates convert into a mortality rate of 200–250 per 1000, compared to 40 per 1000 calculated for the total population of Europe.27 Such figures indicate that mortality among soldiers may have been between five to six and a half times higher than the average for the rest of the population.

In the sixteenth and seventeenth centuries, the risk of death or injury from firearms or cannon rose as the use of hand-held guns (notably arquebuses and muskets) and field artillery spread throughout Europe.28 Spanish cavalry as well as infantry in the peninsula used firearms. Cavalrymen carried carbines and pistols – sometimes two of the latter – while some arquebusiers (known as dragoons) were given horses to improve their mobility, though they still dismounted to fire.29

25 (Archivo) Municipal de Trujillo, 1–3-93–1, Acuerdos, fo. 133v. Soldiers from the neighbouring town of Mérida who were sent to Catalonia at the same time returned home at the end of Apr. 1642. AMM Acuerdos 1642, fos. 37–v.
26 Parker, ‘The Soldier’, pp. 48 and 52. He also gives a casualty figure of 62% in 3 months of action in 1628 in a troop of Scottish soldiers. Thompson, War and Government, p. 103, suggests an annual replacement rate of 20–30% for Spain’s armies in the sixteenth century, adding that most wastage was from desertion, not death.
28 On the spread of firearms and field artillery, see e.g. Tallet, War and Society, and Hale, War and Society.
29 AMM Acuerdos 1645, fo. 42; BNM MS 2374, fos. 623–4, recounting how a French cavalryman fighting for the Portuguese fired two pistols. According to the Real Academia Española’s Diccionario de Autoridades (facsimile edn, 3 vols, Madrid, 1990), the carbine is ‘similar to the shotgun [escopeta] or arquebus, but a little more than one yard [vara] in length’. A reference to the Portuguese capture of Villanueva del Fresno in 1643 indicates that 20% of the Portuguese cavalry force of 2000 were dragoons.
It was anticipated that over a third (almost 37 per cent) of the 2050 cavalrymen of the army of the Duke of Alba being mobilized in Extremadura to annex Portugal in 1580 would carry arquebuses; the rest of the cavalry was to carry javelins (lanzas) – successors to the jinetes (genitors) of medieval times. A plan to form an army in Aragón in the late 1570s envisaged that no less than 69 per cent of the total proposed force of 32724 men would be armed with arquebuses, with a further 12 per cent armed with crossbows; only 19 per cent were to be armed with pikes and lances. In the mid-seventeenth century the militias of Spain were armed with arquebuses, muskets and pikes. The proportion of firearms to pikes, at least by the early 1640s, ranged from three to one to three to two (similar to the ideal ratio for Spanish armies in 1600) – higher, apparently, than that achieved in the French army at that time.

However, the risk of being killed or injured, though increased by the use of firearms, was apparently not as great as one might expect. First, in the peninsula during this period the use of cannon, especially light field artillery, which could be devastating for infantry forces, was still quite limited. Nevertheless, cannon were not always so deadly for those protected by fortifications. In the short (but successful) siege in autumn 1642 of the castle at Ciudad Rodrigo, the Portuguese besiegers fired ten rounds from their cannon, but killed only four of the defenders. Few Castilian towns in the seventeenth century could afford to equip their militias as well as Jerez de la Frontera and Seville, which possessed six cannon each. Where the size of the army and its


31 J. M. Sánchez Molledo, ‘La organización militar en el Reino de Aragón durante el siglo XVI’, in Actas, p. 51. The total army size given is 31653, but the actual arms totals amount to 32724, the figure I have used in these calculations.

32 See AMT 1-3-94-1, Acuerdos 1644, fo. 94v; AMM Acuerdos 1641, fo. 62; op. cit., 1643, fo. 102v. On the proportions of arms in the sixteenth century, including an ideal ratio in the French army of 1 to 1, see Hale, War and Society, p. 52. G. Parker, ed., The Cambridge Illustrated History of Warfare: The Triumph of the West (Cambridge, 1995), p. 154, calculates a ratio of 3 to 1 in 1601. For the French army, see Lynn, Giant, pp. 469–72 and fig. 14.1 on p. 476, revealing that the ratio of 3 to 1 for firearms to pike was not reached until about 1680; it was 2 to 1 in the 1650s.

33 In 1646 the commander of Portugal’s army wrote: ‘the soldiers were not as firm as they should have been, in spite of this they were waiting for the shot from the seven cannon, which was what they killed our men with . . .’. Laranjo Coelho, Cartas dos governadores ii, p. 109. These field guns, however, were not as light as the three-pounder gun employed by Gustavus Adolphus of Sweden. M. Roberts, The Military Revolution, 1560–1660 (Belfast, 1956), p. 8.

34 Cartas de algunos PP. de la Compañía de Jesús (hereafter Jesuit Letters), MHE, XIII–XIX (Madrid, 1961–65) xix, p. 336. It was sufficient, however, to persuade the 400 defenders to capitulate, even though they had enough food and munitions to last for several more days.

35 On Jerez de la Frontera, which spent almost 3000 ducats on arming its 16 militia companies and buying 6 cannon, see Thompson, War and Government, p. 140; on Seville and its cannon in 1643, see AGS GA leg. 1465, n.f., consulta 2 Dec. 1643.
artillery train is specified it is possible to calculate the ratio of cannon to soldiers. Initial plans for the army being formed in 1580 under the Duke of Alba on Portugal’s border were for a total force of 17100 and 12 cannon (a ratio of 0.70 cannon per 1000 men).\textsuperscript{36} The 14000-strong royal army that entered Aragon after the 1591 revolt took an unusually large artillery train comprising 25 cannon (a ratio of 1.79 cannon per 1000 men), though it proved unnecessary to fire them.\textsuperscript{37} The high ratio of cannon to men in the latter example was not repeated in the wars of the seventeenth century, though occasional rises were in evidence. In the war against Portugal between 1640 and 1668, field artillery was rarely used because of the dearth of battles and major sieges until the end of the 1650s. In part this resulted from the desire of both sides to avoid major confrontations: the Portuguese could not risk the destruction of their armies, their sole defence, while the Castilians were reluctant to risk their honour and reputation by exposing their armies to possible defeat by so-called rebels.\textsuperscript{38} There was also a major logistical problem: a serious shortage of carts and draft animals to transport the artillery trains.\textsuperscript{39}

Cannon were employed, nevertheless, though less often in the field than for defence purposes in forts and strongholds, where they were used extensively. In the only battle between the two main armies in the 1640s – that of Montijo in May 1644 – the Portuguese had six cannon in an army of 8600 (a ratio of 0.70 cannon per thousand men); the Spanish possessed only four cannon in their army of 5700 (giving the same ratio). The Spanish opened fire with two small 10 lb cannon positioned in front of their main battle line. The Portuguese placed their cannon in pairs in three batteries, but fired only a few times.\textsuperscript{40} In 1642 a Spanish force of 2300 (1500 infantry, 800 cavalry) that marched to Elvas, the headquarters of the Portuguese army, took only


\textsuperscript{37} Sánchez Molledo, ‘Organización militar’, pp. 54–5.

\textsuperscript{38} Both sides were acutely aware of the impact of a defeat on their international standing. The Portuguese feared above all that their main army would be destroyed in battle, and that the country would then be left at the mercy of an invading Spanish army.


\textsuperscript{40} As was pointed out earlier, there are conflicting accounts of the size of the two armies. A Spanish account in BNM MS 2376, fos. 18v–28v credits the Portuguese army with 7600 or 8600 men; the report of the Portuguese commander in Laranjo Coelho, \textit{Cartas dos governadores} 1, 38–40 gives figures of 7100 (producing a ratio of 0.85 cannon) for his army and 9100 for the Spanish army (giving a ratio of 0.44). Estébanez Calderón, \textit{Obras completas}, p. 87 states the Spanish had just 2 cannon, but another account on p. 134 gives a figure of 4.
two small cannon (a ratio of 0.87 per 1000 men) that ‘served no purpose’, as a contemporary remarked.\textsuperscript{41} The Spanish army of 15800 soldiers that laid siege (unsuccessfully) to the Portuguese town of Elvas in 1644 possessed ten cannon and two mortars (\textit{trabucos}) (excluding the latter, a ratio of 0.63 cannon per 1000 men). Elvas itself was defended by more than 50 cannon.\textsuperscript{42} In 1646, during the successful relief of the Portuguese siege of Telena, near Badajoz, the Castilian relief army possessed eight cannon in a force of 7700 (a ratio of 1.04 per 1000 men). The Portuguese with 16 cannon and 10500 soldiers (1.52 per 1000 men) clearly failed to make use of their advantage in both men and artillery.\textsuperscript{43} The 11000-strong Portuguese army that laid siege to Badajoz in 1657 possessed seven cannon, giving a ratio of 0.64 cannon per 1000 men.\textsuperscript{44} Even in the 1660s, when the size of both armies and artillery trains increased significantly, the ratio of cannon to men was little different. In 1663, for example, the Spanish army of 16000 at the battle of Ameixial had 18 cannon – 1.1 cannon per 1000 men. At Estremoz in 1665 the Portuguese had 20 cannon in their relief army of 25000 – 0.80 cannon per 1000 men.\textsuperscript{45} Though these mid-seventeenth-century artillery ratios on Spain’s main war front in the west seem modest, they were nonetheless similar to those calculated for the French army of the same period, which ranged from 0.75 to 1.36 per 1000 men.\textsuperscript{46} 

A second reason the risk of death or injury from artillery and small arms was not as great as one would expect was the limited supplies of gunpowder and shot which restricted their deployment. In September 1643 the 1500-strong garrison in the Castilian village of Valverde was forced to capitulate to the Portuguese besiegers because it had run out of cannonballs, and the town of Encinasola feared that it would be the next to be besieged as it had only two days’ supply of gunpowder.\textsuperscript{47} It is clear that armies and soldiers were continually undersupplied with gunpowder. In 1580 the Duke of Alba was provided with 3500 \textit{quintales} (about 161000 kilos) of gunpowder, but thought that

\textsuperscript{41} \textit{Jesuit Letters} xvi, pp. 281–2.  
\textsuperscript{42} \textit{Op. cit.}, xvii, pp. 508–9. For a list of the artillery of the Spanish army that marched on Elvas in late 1644, including ‘four \textit{trabucos} for bombs’, see Cortés Cortés, \textit{Militares y guerra}, p. 7. In contrast to the \textit{Jesuit Letters}, Cortés gives a total army size of 14861 and 12 cannon (excluding 4 mortars), which produces a ratio of 0.8 cannon per 1000 men. Unfortunately, he does not give his source.  
\textsuperscript{43} BNM MS 2377, fos. 231–32v, ‘Verdadera ralacion ...’. Once again there is a discrepancy in numbers: see the 7 cannon reported by the Portuguese commander in the same source as in n. 23 above.  
\textsuperscript{44} \textit{Op. cit.}, MS 2385, fos. 1–13.  
\textsuperscript{45} That same year, 1665, the Portuguese took 14 cannon on campaign to Galicia. Estébanez Calderón, \textit{Obras completas}, pp. 136, 148, and 177.  
\textsuperscript{46} Lynn, \textit{Giant}, pp. 508–9. The ratios given are 0.95 at Rocroi in 1643, 1.36 at Enzheim in 1674, 0.89 at Neerwinden in 1693, and 0.75 at Malplaquet in 1709 where, it has already been noted, there was a 25% casualty rate.  
\textsuperscript{47} \textit{Jesuit Letters} xvii, pp. 239 and 243. Before capitulating, the Neapolitan commander of Valverde had been forced to manufacture cannonballs by melting down all the available metal in the town.
this amount would meet less than two thirds of his needs.\textsuperscript{48} On the same war front almost 80 years later, the main Portuguese army in the Alentejo region was supplied with only 100 quintales (barely 4600 kilos) in 1641.\textsuperscript{49} When the commander of the Army of Extremadura requested 3000 quintales (about 138000 kilos) of gunpowder for the 1659 campaign, the central Junta of War for Spain revealed that total supplies for defence in the peninsula (that is, for the navy and coastal and frontier garrisons plus the three major war fronts in Catalonia, Extremadura and Galicia), were only 1427 quintales (65646 kilos) – less than half of what was required in Extremadura alone.\textsuperscript{50}

Supplies of gunpowder and especially shot available to individual soldiers were also limited. Spanish soldiers armed with small arms carried a flask of gunpowder, small flasks of measured gunpowder charges (frasquillas, probably on a bandolier), and a pouch containing lead shot.\textsuperscript{51} Even with the normal issue of gunpowder – one pound weight each – and a generous supply of lead shot – 20 bullets each (compared to 15 in the French army circa 1690) – well-trained soldiers who discharged their weapons continuously and managed to fire the maximum one or two rounds per minute (discounting the average of one in six misfires, one in four when conditions deteriorated) – would have exhausted their supply of shot in ten to 20 minutes.\textsuperscript{52} This occurred at Montijo in 1644. After opening the battle with artillery, arquebus and musket fire, the Spanish infantry then closed in with pikes and swords.\textsuperscript{53} However, even if they were well trained and did not waste gunpowder when charging their weapons, it is doubtful if soldiers and gunners in the peninsula ever possessed adequate supplies of munitions to reach even these moderate bursts of firepower. There is evidence to suggest that throughout the 1640–68 war, though militiamen in the regular and auxiliary companies were each issued with the standard one pound weight of gunpowder, and while some may

\textsuperscript{48} Thompson, War and Government, p. 248. He requested another 2000 quintales. One quintal was equivalent to 100 Castilian pounds in weight.

\textsuperscript{49} J. Veríssimo Serrão, História de Portugal v (Povo de Varzim, 1980), p. 29.

\textsuperscript{50} AGS GA leg. 1934, n.f., consulta 26 Apr. 1659.

\textsuperscript{51} AGS GA leg. 1208, n.f., letter 10 Dec. 1637; F. Cortés Cortés, El real ejército de Extremadura en la guerra de la restauración de Portugal (1640–1668) (Cáceres, 1985), 76; O. Valtuena Borque, Reales ejércitos: análisis social del pensamiento militar de Cervantes (Madrid, 1997), p. 25. Though Valtuena states that each soldier carried 2 flasks, the archival evidence suggests they were only supplied with 1. The number of small flasks is not specified, but they were commonly known as the ‘twelve apostles’. A. Manzano Lahoz, ‘La uniformidad y las banderas’, in Historia de la infantería española (2 vols, Madrid, 1993–94) 1, p. 369. While R. Quatrefages, Los tercios españoles (1567–77) (Madrid, 1977), p. 74, states that Spanish soldiers made their own shot using individual moulds, evidence for peninsular practices in the seventeenth century indicates that as a rule they did not.

\textsuperscript{52} BNM Ms 430, fo. 580v: ‘they ordered . . . that each soldier should be given one pound of gunpowder . . .’. The figure of 20 shot per soldier is from Valtuena Borque, Reales ejércitos, p. 25; for France, Lynn, Giant, p. 461. On the rate of fire, see B. S. Hall, Weapons and Warfare in Renaissance Europe (Baltimore, 1997), p. 149. On the estimated rate of misfires, see below.

\textsuperscript{53} Estébanez Calderón, Obras completas, pp. 33–4.
have received as many as 20 shot each, most were issued with a much smaller number – just four or six bullets each.\textsuperscript{54} Clearly this placed severe restrictions on the deployment of small arms. Some soldiers were issued with even fewer shot. When militia soldiers of Seville were issued with muskets – a mere ten per company! – to patrol the streets and avert a possible uprising by Portuguese residents, they were given just two bullets each.\textsuperscript{55} Additional supplies may, it is true, have been held in reserve for the soldiers. At the 1644 battle of Montijo, each squadron of Castilian infantry had gunpowder, shot and match in the rearguard.\textsuperscript{56} It is unlikely, however, that soldiers could access them in the heat of a land battle, unlike those on board Spain’s galleys, who could rush to recharge their flasks from barrels of gunpowder and obtain shot and cord placed on every fifth oarsman’s bench.\textsuperscript{57}

Shortages in the peninsula, however, were not just limited to munitions. Arms were generally in short supply in the peninsula. Surveys carried out in 1588 revealed dire shortages of serviceable modern arms (above all handguns) across Castile, especially in the interior regions and, within these, in rural areas.\textsuperscript{58} In the 1630s and 1640s, with the constant supply of arms to the peninsula’s eastern war fronts, the militia companies of Castile’s towns and villages were left virtually unarmed.\textsuperscript{59} Significantly, ‘unarmed’ meant that though soldiers might

\textsuperscript{54} The figure of 4 shot per soldier is calculated from the proposed allocation of 25 lb of shot to each of the captains of Coria’s militia companies, which each comprised 100 men, and an estimate of 16 shot per pound, at 1 oz per shot (the typical weight of an arquebus ball). AyC 7, Acuerdos 1647–49, n.f. Ojo cit. 7–3, Acuerdos, fo. 304v, specifying the distribution of 1 lb, or failing that half a pound, and 20 or 6 shot to each man. At 6 shot per pound of gunpowder, each shot would have consumed 2.67 ounces; at 6 shot per half pound, consumption would have fallen to 1.33 ounces each; at 20 shot per pound each would have consumed 0.8 ounces. The latter figure is closer to a 1742 test where the musket was charged with ‘about half’ the ball’s weight [i.e. one ounce] in powder: Hall, Weapons and Warfare, p. 136. Muskets, it should be remembered, required larger charges of gunpowder to fire their heavier shot. Carlton, Going to the Wars, p. 118, indicates that musketeers at Edgehill in 1642 had a dozen or so rounds of ammunition each.

\textsuperscript{55} F. Morales Padrón, Memorias de Sevilla (1600–1678): noticias sobre el siglo XVII (Cordoba, 1981), pp. 102–3. Besides the 10 muskets, each captain was to be issued with 20 shot and 1.5 lb of gunpowder, suggested consumption of 1.2 oz each.

\textsuperscript{56} Esteñáez Calderón, Obras completas, p. 88, noting that each of the 7 Spanish infantry squadrons who fought had a supply of gunpowder, shot, and cord in their rearguard. Se see too Jesuit Letters XVII, p. 339, where soldiers on a cross-border raid into Portugal in 1643 carried additional supplies of munitions.


\textsuperscript{58} I. A. A. Thompson, ‘Milicia, sociedad y estado en la España moderna’, in La guerra en la historia (Salamanca, 1999), pp. 123–4.

\textsuperscript{59} See e.g. AMT 1-3-87, fos. 125–6, 12 Dec. 1637: ‘he is still trying to arrange if the said company of 100 soldiers can be armed and he will report on progress and he also sends a testimony of the arquebuses and arms he has, advising that most of the militiamen are unarmed because there are no more arquebuses or arms than those that have been registered’; and A(rchivo) M(unicipal de) A(royo de la) L(uz), leg. 2, Acuerdos, 1607–70, n.f.: ‘it seems that there are no suitable arms available for what has been ordered . . . because those we had were taken by the company that left this villa for Catalonia’; AGS GA leg. 1347, n.f., memorial of the Duke of Medina.
carry a sword, they lacked small arms.⁶⁰ In 1632, over 70 per cent of the 43,541 men enlisted in Castile’s militias were without arms. The best two of the 16 districts respectively had only 3.5 and 9.8 per cent unarmed men; the worst eight indicated that over 90 per cent of their men were unarmed, and three of these had failed to arm a single man.⁶¹ The situation did not really begin to improve until the later 1630s, when serious steps were taken to supply the militias – which from that time formed the core of the peninsula armies – and local auxiliary shock troops (socorros) with arms. A review of over 100 militia companies in about 1636 revealed that only around one quarter of the more than 11,000 soldiers were unarmed. Almost half were armed with firearms, while the remaining 25 per cent had pikes.⁶² By the end of the century, however, the situation had deteriorated once again, for more than 87 per cent of the 465,000 militiamen listed in the registers were unarmed.⁶³

The shortage of firearms and other conventional weapons, however, did not stop soldiers from fighting or prevent them from wounding or killing their opponents. In their place they employed whatever weapons came to hand. During the revolt of 1568–70 in Granada, the moriscos employed large catapults, traditional weapons of war. From the peak of Fijliana overlooking Torrox, some of the 3000 moriscos pelted the Christian attacking force with a hail of stones. Some managed to pierce or penetrate the Christians’ round shields, killing at least 20 men and wounding 150.⁶⁴ In 1641 a troop of hastily levied Castilian militias which went to relieve a siege mounted by the Portuguese on the frontier stronghold of San Martín, supplemented the few arquebuses they possessed with slings. With these they rained down stones on the enemy, inflicting serious casualties, and helped to save the fort

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⁶⁰ See BNM MS 2376, fos. 246–47v, copy of letter, 26 May 1644: ‘Up to 3000 infantry of the militias and socorros were massed in this garrison, and 1400 cavalry, many disarmed with only their swords . . .’; AMT 1–3–87, fos. 125–6, 12 Dec. 1637. See too Thompson, ‘Milicia, sociedad’, pp. 124–5, including a reference of 1588 to 4000 petty nobles (hidalgos) specifying: ‘they have no arms useful for fighting in these times, though few lack swords and daggers and old lance-type arms [armas viejas en hastadas].’

⁶¹ Contreras Gay, Problemática militar, calculated from figures provided on p. 23. The best 2 districts were Murcia and Llerena; the worst 8 were Burgos, Avila, Guadalajara, Cuenca, Ciudad Rodrigo/Almagro and (those which were totally unarmed) Segovia, Madrid and Toledo.

⁶² Figures calculated from the list in AGS GA leg. 1195, n.f., undated Relación de las armas . . . de los 10V soldados . . . (probably for 1636) covering the districts of Guadalajara, Siguienza, Mondejar and Pastrana, Ocaña, Santa Cruz, Villa Escusa de Haro, Cuenca, Guete, Moya y Canete, Molina y Atienza, Soria, Agreda, prioratos of San Juan and Campo de Montiel, Alcaraz, Murcia, Albacete, Sandeonce, Alarcón and Burgos.


from capture. Even in major encounters during the Thirty Years War, soldiers resorted to these basic weapons: stones as well as musket shot and grenades were hurled down on four Spanish soldiers who made a midnight sortie across a moat to mine a wall during the 1642 siege of La Basse.66

Regarding the firearms in use in early modern Spain, arquebuses were used in greater number than muskets, perhaps in a ratio of two to one in the mid-seventeenth century.67 Arquebuses were often preferred for their relative ease of use: muskets were anything from a quarter to three-quarters heavier than the 11–12 pound arquebus and, with their six feet overall length, could only be fired when propped up on a forked rest.68 Muskets had a calibre of between 0.7 and 0.9, compared to 0.6 for the arquebus, and fired a heavier shot – between one and half to two ounces, compared to just one ounce for the latter.69 In contrast, soldiers in the Spanish peninsula continued to use both types of weapon. Though elite companies of grenadiers (granaderos) armed with flintlock guns and plug bayonets were first established in 1685, matchlock muskets and arquebuses continued in general use until early in the eighteenth century.71

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65 Estebanez Calderón, Obras completas, p. 30. The Portuguese besiegers who managed to capture the wall of the stronghold also employed stones against the defenders.

66 Jesuit Letters xvi, p. 407. Stones were also thrown from the tops of masts on Spanish ships: Pérez-Mallatna, Men of the Sea, p. 184.

67 As in the case of the militias of Mérida, where the town decided to buy 1000 arquebuses and 500 muskets. AMM Acuerdos, fo. 102v, 28 Sept. 1643. A year later, however, Trujillo took delivery of an equal number of muskets and arquebuses – 300 each – while 2 years earlier Mérida had armed 2 companies of soldiers with muskets and pikes only. AMT 1–3–94–1, fo. 94v, 17 June 1644; AMM Acuerdos, fo. 62, 13 July 1641.

68 Muskets could weigh 15–20 lb and had an overall length between 5.6 and 6.2 ft. Weights and dimensions, however, are only approximate, as at this time there was no standardization of weapons. Moreover, the size, calibre and weight of the musket was reduced in the later seventeenth century to around 4 ft, 13 lb, and around 0.8 calibre. The later musket was therefore only slightly larger than the average arquebus, and ‘musket’ became the generic name for all small arms. See Tallet, War and Society, p. 22; Hall, Weapons and Warfare, p. 176–8; Lynn, Giant, pp. 455 and 458–9; J. F. Guilmartin, Gunpowder and Galleys: Changing Technology and Mediterranean Warfare at Sea in the Sixteenth Century (Cambridge, 1974), p. 149, who gives the weight of the arquebus as 10 lb or less.

69 Tallet, War and Society, p. 22; Hall, Weapons and Warfare, p. 177–8; Lynn, Giant, pp. 455 and 458–9; Carlton, Going to the Wars, p. 100; Guilmartin, Gunpowder and Galleys, p. 149, who gives a weight of about half an ounce for the arquebus ball.

70 Lynn, Giant, pp. 458–9.

71 Though French influence after 1700, and particularly after the outbreak of war in the peninsula over the succession, was significant, the general introduction of the fusil was first proposed to Charles II in 1698. A real ordenanza of 10 Apr. 1702 ordered the adoption of ‘a type of arm they call the fusil’, while a decree of 29 Jan. 1703 abolished the use of the musket, arquebus and pike as standard equipment. See J. Alvarez Abeilhé, ‘Los armamentos’, p. 424, and II, Entre la ilustración y el romanticismo, pp. 399–423, ‘Los armamentos’, pp. 402–3; Kamen, The War of Succession in Spain, p. 61. Because of the cost and shortages of supply, the fusil could only be
In the peninsula (as elsewhere) muskets were employed to best effect for defensive purposes, though they also had uses in offensives. Hence they were deployed from or against city or castle walls by besieged (who sometimes loaded them with scattershot for even better effect) and besiegers alike, or against cavalry, especially by infantry in skirmishing parties. Because of their value in defence and for skirmishes, muskets made regular appearances in the lists of firearms purchased for town militias in the border and coastal regions.

Nevertheless, though muzzle velocities of round shot in this period were supersonic or nearly supersonic (depending on the gunpowder charge), heavy drag reduced a bullet’s kinetic energy by about one half during the first 100 metres of flight. This limited the musket’s lethal range to about 110–30 yards, while that of the arquebus was around 60 yards. The Duke of Alba, however, recommended an effective distance ‘of a little more than two pike lengths’ – around 12 yards – to his arquebusiers. These killing zones were even narrower if the opposing forces wore some form of body armour.

introduced gradually. The Spanish fusil is also known as the miquelet. See D. Chandler, The Art of Warfare in the Age of Marlborough (London, 1976), p. 77. On the introduction of the fusil in France, see Lynn, Giant, pp. 459–64.

See e.g. in an incident near the Galician border in Oct. 1643, the use of muskets alongside artillery in the northern Portuguese castle of Montealegre, and the Spanish raiders’ deployment of a line of musketeers with cavalry: Jesuit Letters xvii, p. 338. On loading with scattershot, Tallet, War and Society, p. 22. For an example of Castilian defenders of the castle of Piaos charging their artillery with musket shot, nails and other things, which killed most of the besieging Portuguese’s cavalry and many infantry soldiers, leaving up to 500 dead, see Jesuit Letters xvii, p. 227.

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Fraga (in Catalonia) in October 1642, for example, the Marquis of Aytona was hit by two muskets shots. Though they severed the crossband he wore (which was probably made of leather), he was saved because of his armour (armas fuertes).\(^7\) Even so, muskets had a range of 200 yards or more.\(^7\) This was clearly appreciated by the soldiers themselves, for they spoke of being ‘within musket range’ (a menos de un tiro de mosquete) or ‘out of arquebus range’ (a más de un tiro de arcañu)\(^8\).

While muskets and arquebuses had a serious inherent problem with accuracy,\(^8\) apparent feats of individual marksmanship were not unknown. In November 1640, a soldier in the Spanish army deployed to put down the revolt in Catalonia fired his musket at an elderly woman who climbed a tower to raise the alarm. He hit his target, and the unfortunate woman fell to the ground.\(^8\) Such feats of marksmanship must have been rare, however, for besides the inherent inaccuracy of small arms, an added problem was the effect of the recoil, especially from muskets. As a result, they tended to fire high, especially when they were handled by new recruits.\(^8\) Many Spanish soldiers must have been as thankful as the English captain who came under fire from raw Scots levies in the enemy army and declared that ‘they shot at the skies’.\(^8\) This tendency to fire high led Robert Munro, a Scottish vet-

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\(^7\) Again, opinions vary as to the maximum lethal range of muskets, with distances ranging from 250 yds to 500 yds. Lynn, Giant, p. 458, gives 250; Alvare Aceñilè, ‘La armas’, p. 432, gives 328 (converted from metres); Carlton, Going to the Wars, p. 100, gives 400; Guilmartin, Gunpowder and Galleys, p. 149, is the highest with 500. On the devastating effectiveness of volleys of fire from the Spanish musketeers on the Elector of Saxony’s men across the River Elbe, 200 yds wide, see Oman, Art of War in the Sixteenth Century, pp. 249–50.

\(^8\) See ‘Relación de la vittoria que tibieron las armas de su Magestad’, in Cortés Cortés, ‘Guerra en Extremadura’, pp. 90 and 91.

\(^8\) This was because of the unpredictable lateral deviation (the Magnus effect) of the shot fired from their smooth-bore barrels, which increased, moreover, with distance. Hall, Weapons and Warfare, p. 144. Again, opinions vary over accuracy. For the arquebus, Parker, Military Revolution, p. 17, states that it was accurate up to 109 yds; Tallet, War and Society, p. 23, says 60 yds. For the musket, Guilmartin, Gunpowder and Galleys, p. 149, states that ‘hitting an individual man at 75 or 80 yards would have been an exceptional feat’; Lynn, Giant, p. 458, declares that aimed fire was effective only to about 80 yds (though it is unclear if this refers to the heavier or lighter version); Parker, Military Revolution, p. 236, n. 6, cites Thomas Digges, who claimed 131–64 yds when balls fitted the barrel tightly, otherwise 82 yds (converted from paces).

\(^8\) Jesuit Letters xiv, p. 76, letter 20 Nov. 1640.

\(^8\) Carlton, Going to the Wars, p. 100.

\(^8\) Op. cit. Duffy, Military Experience, pp. 208–9, relates that, in the wake of an investigation conducted in the early 1740s, Frederick II of Prussia recommended that soldiers ensure the butts of their muskets were held firmly against their shoulders and that they point their barrels at the ground 8 or 10 paces away from approaching troops to compensate for the kick of the weapon and the natural tendency to fire.
eran of the Thirty Years War, to counsel that soldiers should aim ‘never higher or lower than levell with the enemies’ middle’.85

It seems likely, however, that many musketeers did not aim at all, or that they did not aim at a particular human target.86 Indeed, new recruits were terrified of firearms and took some time to grow accustomed to firing them.87 In 1568 a commentator described just how badly some Spanish soldiers handled their weapons:

To fire their arquebuses they charge them to the mouth [of the gun] with powder; they take hold of them half way along the barrel with their left hand and move their arm as far away as they can, to prevent the fire from touching them (as they are so afraid of it); and when they light it with the wick in their other hand they turn their face away, just like those who are waiting for the bloodletter to open a vein; and even when they fire they close their eyes and go pale, and shake like an old house.88

On top of this, the performance of muskets and arquebuses deteriorated and the rate of misfires increased as their barrels fouled up with combustion residues. Even with regular cleaning, misfires might average between one in eight and one in six; they increased to one in two as conditions deteriorated.89 In wet weather, as both the match and the gunpowder were affected, small arms could not be fired, and strong winds also impeded their use.

The inaccuracy and unreliability of the weapons, not to mention the variable skill of the user, especially under battle conditions, clearly affected the efficacy of small arms in battle. Their effectiveness lay, however, not in individual feats of marksmanship, but in volume when employed in volley fire,90 especially against large targets. On the battlefield, massed infantry in line formation provided a suitably large target. So, too, did cavalry – men and horses alike – when they charged en

85 Tallet, War and Society, p. 23.
87 A commentator remarked in 1642 on the soldiers of Galicia after their commander had commended them for ‘fighting like lions’ in a major engagement with the Portuguese that ‘they were now losing their fear of firearms’. Jesuit Letters xix, p. 342, letter 16 Sept. 1642.
89 Hall, Weapons and Warfare, p. 149, gives 1 out of every 6, rising to 1 in 4; Carlton, Going to the Wars, p. 100, gives figures of 12–18% (about 1 in 8 to 1 in 5), though on p. 134 he assumes a 33% misfire rate for each volley fired; Tallet, War and Society, p. 23, states it was as high as 50% in arquebuses; Lynn, Giant, p. 458, as high as 50% in muskets.
90 Hall, Weapons and Warfare, p. 148.
masse as a troop (ranging from three abreast to as many as 18, 20 or 30, and anything from two to three, six or even sixteen rows deep). Cavalry was equally vulnerable when it performed a caracole manoeuvre, with each file of a formation that was typically 15 or 16 ranks deep trotting at intervals, one after the other, to within a few yards of the infantry formation before firing their pistols and wheeling to one side.\textsuperscript{91} Though there are no reliable figures for the accuracy of small arms in the sixteenth and seventeenth centuries, one estimate for musket fire assumes a 10–15 per cent chance of a hit at 100 yards, and at that range envisages no more than one man in 15 being hit.\textsuperscript{92} Estimates for more modern weapons indicate that, under ideal conditions, muskets could expect to hit a given target with only 10–20 per cent of shots attempted. In practice, however, it was likely to be much lower – at best 5 per cent, or at worst, 0.2 to 0.5 per cent (i.e. one bullet in 200 to one in 500 striking home).\textsuperscript{93} Precise figures for the effectiveness of small arms in Spain are almost impossible to come by, but occasional insights can be gleaned. For example, in the afternoon of the first day of the Portuguese siege of Badajoz in September 1643, when the besieging forces fired volleys at the Spanish defenders on the walls, after several hours they had only killed six or seven men and wounded about twenty.\textsuperscript{94} It is important, however, to distinguish between the effectiveness of small arms in battles and in sieges. Small arms were clearly more effective when deployed against troops in massed formations on the battlefield. They were far less effective when used against defenders taking shelter behind fortifications.


\textsuperscript{92} Carlton, \textit{Going to the Wars}, p. 134, assuming an equal number of men on both sides, a 50:50 ratio of musketeers to pikemen, and a 33% misfire rate from each round of volley fire. With an equal number of men on both sides Carlton envisages the same number of men on each side being hit.

\textsuperscript{93} Hall, \textit{Weapons and Warfare}, p. 138; G. Raudzens, ‘Firepower Limitations in Modern Military History’, \textit{Journal of the Society for Army Historical Research} LXVII (1980), p. 132; Arcón Domínguez, ‘De la pica’, p. 358. Hall, \textit{Weapons and Warfare}, p. 139, summarizes tests on muskets conducted in the eighteenth century shooting at a target roughly equal in size to the frontal area presented by an enemy battalion (about 100 ft long by 7 ft high): only 60% of bullets penetrated the target from 82 yds, 40% from 164 yds, 25% from 246 yds, and only 20% from 328 yds. On pp. 140–1 he gives the results of the modern Austrian tests, though the target here approximated the frontal area of a standing human being: the average probability of muskets scoring any hit at 109 yds was a little more than 50% (all distances converted from metres). Lynn, \textit{Giant}, p. 458, n. 17, provides results of tests conducted during the Napoleonic era on weapons ballistically the same as earlier matchlocks: they could hit a ‘large target’ 75% of the time at 80 yds; at 120 yards they could hit a ‘small target’ 50% of the time, and at 160 yds accuracy fell to only 25%. Significantly, all of the tests were conducted in shooting ranges, not under battle conditions.

\textsuperscript{94} Jesuit \textit{Letters} xvii, pp. 249–51. As for the Portuguese besiegers, who numbered about 8000, their casualties were far higher: in the first 5 days some 150 were killed and 200 wounded, mainly by artillery shot fired from the town.
Finally, to the imprecision in firing small arms must be added an even greater hindrance that is often overlooked – the dense clouds of smoke that obscured the battlefield from the time the action got under way. In dry weather conditions, dust clouds could also cause problems. During an attack on the Portuguese settlement of Otero Seco in 1643, a Galician cavalry squadron was lucky not to suffer any casualties from friendly fire when cavalrymen discharged their firearms during a mêlée where the dust was so thick that they could not make out their own comrades.\(^{95}\)

Despite the apparent shortages of lead shot in the peninsula, there is evidence to suggest that Spanish soldiers employed the latest tactics of early modern warfare. In 1644, for example, when a Castilian raiding force of 250 cavalry and 250 musketeers found itself being closed in by 1000 Portuguese shock infantry troops and 100 cavalry, the musketeers fired off two or three volleys and brought down almost 100 Portuguese. This was sufficient to cause the rest of the Portuguese to flee, leaving the Castilians to escape with their booty.\(^{96}\) Moreover, a year earlier, in a night assault, the Portuguese used drums to coordinate the salvos of their musketeers, and were well aware of the fear and confusion such volleys caused among those who came under fire.\(^{97}\) The tactics of the Military Revolution – including a reduction in the size of infantry units to around 500 men, the thinning of formations in which soldiers stood just six ranks deep, the deployment of musketeers in lines eight ranks deep, and firing salvos – were clearly in evidence in peninsular Spain by the middle of the seventeenth century.\(^{98}\)

Nevertheless, soldiers were killed and wounded by firearms and by cannonballs, as well as by the more traditional hand-to-hand fighting of sword and pike. Some were killed or wounded by small arms through

\(^{97}\) Orders to employ these tactics were given by a Portuguese mestre de campo in 1643 to a troop of 50 musketeers who were ordered to fire on the rearguard of the Galician army making a night attack on the trenches guarding the recently conquered Galician castle of Salvatierra. The musketeers were directed to repeat their salvos. The attack was repulsed. Ericeira, Portugal Restaurado i, p. 449.

confusion, misadventure or mischief. During the battle between Spanish and French troops at Fraga in October 1642, one of the Spanish tercios fired on their own cavalry, killing at least 20 soldiers. A negligent comrade-in-arms might accidentally discharge his firearm. Other soldiers were fired upon deliberately. The careless handling of the glowing match used by soldiers to ignite the priming charges of gunpowder in their arquebuses and muskets was another danger, and particularly hazardous as they carried measured charges of powder in small flasks hanging from bandoliers across their chests. As one historian has noted, it almost made soldiers walking bombs. The soldiers themselves (and civilians too, it seems) were well aware of this danger. In 1643 Portuguese inhabitants near the border with Galicia set fire to the brush in surrounding hills in an effort to deter a Spanish raiding party. The soldiers, all carrying munitions, along with the reserve gunpowder supplies they transported with them, were in danger of being blown up as they carefully picked their way to safety through the fire. Even small arms that were charged with gunpowder but lacked shot could be lethal. What, then, were the soldiers’ chances of survival, and what medical assistance did they receive?

II

In early modern Spain, health care for the sick and wounded (civilians as well as soldiers) was undertaken by a variety of providers: an elite corps of university-trained physicians and surgeons, vocationally trained surgeons and barber-surgeons, certain orders of hospitalers (for example, St John of God), permanent hospitals (usually based in monasteries) or camp hospitals (which were set up in tents to serve a particular army and moved with it), quacks (curanderos) and camp

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99 Jesuit Letters xix, p. 351. The correspondent added that ‘it was not possible to excuse it’, and noted ‘it was a miracle they got out alive from there’.

100 Early in the war of 1640–68, the first commander of the Army of Extremadura, the Count of Monterrey, was shot by one of his own soldiers who accidentally discharged his arquebus. F. Cortés Cortés, Alojamiento de soldados en la Extremadura del siglo XVII (Mérida, 1996), p. 185. Though his source declares that the count was killed, he survived. Cortés Cortés also gives two examples of assassination, though not necessarily by fellow soldiers.

101 Lynn, Giant, p. 461. Carlton, Going to the Wars, p. 99, stated that the bandolier threatened to turn the soldier into a live Roman candle if burning match-cord or powder-flash from other weapons set it alight.


103 See Morales Padrón, Memorias de Sevilla, p. 42, for the case of a student killed by an arquebus that lacked munition as he walked past when it was fired by a soldier.


followers (generally women). Soldiers and sailors in the major ports used by the Spanish navy were treated in the local civil hospitals, often overwhelming their limited resources; permanent military hospitals were established in some ports only from the later sixteenth century. From about 1574, soldiers stationed in the Navarrese town of Pamplona were treated in what seems to have been the only permanent military hospital in the interior.\footnote{Goodman, *Power and Penury*, pp. 240–1, 242–3 and 249.} Field hospitals were also set up, for example, in the centre of action on the edge of the Alpujarras during the *morisco* uprising (1568–70), and in tents in Extremadura for the army that annexed Portugal in 1580.\footnote{Op. cit., pp. 245–6. The field hospital followed Alba’s army as it marched through Portugal, and after the capture of the port of Setubal in July 1580, part of the hospital staff was ordered to join the second embarkation and join the army which was to sail to Cascais to begin the capture of Lisbon. *CODOLIN* xxxii, p. 526, letter 27 July 1580.}

This seeming abundance of assistance, however, was not always available to the early modern Spanish soldier, or if forthcoming, it arrived rather late in the day – literally! The surprise is perhaps that the death rates were not higher. The injured were only attended to after the battle or military encounter had ended, so it is probable that only the strongest or less seriously wounded survived even to the end of the day of battle.\footnote{V. Velamazán Díaz, V. Velamazán Perdomo and M. Velamazán Perdomo, ‘La sanidad militar en los siglos XV y XVI’, in *Actas*, p. 69. Recent experience in trauma medicine suggests, however, that the delay in receiving medical attention is not necessarily detrimental, as the body triggers natural defence mechanisms designed to improve the chances of survival.} Nevertheless, it is likely that a significant number of those soldiers lucky enough to survive beyond the day of battle died in the days and weeks that followed as a result of shock, peritonitis, dehydration and loss of blood, though more from blood letting than from wounds.\footnote{Keegan, *Face of Battle*, p. 202. Though he was referring to the wounded at the battle of Waterloo, the early modern soldier was open to the same risks.}

Those unlucky enough to fall ill or be wounded in a besieged fort or stronghold probably fared even worse, for they were wholly reliant on whatever supplies, assistance and expertise, medical or otherwise, were available within the enclosure under siege. In the event that the defenders decided (sometimes after resisting for several months) to capitulate to the besiegers, it was usual for carts and beasts of burden to be provided to evacuate the sick and wounded.\footnote{For example, clause 3 of the capitulation of Monzón to the Army of Galicia in Feb. 1658 after a 4-month siege, contained in BNM, VC/56/144, ‘Diaria relacion de lo scevido’.} Their misery and suffering did not end there, however, for they were then subject to the ordeal of a tortuous journey along the notoriously poor roads of that period, and some at least must have deteriorated or expired along the way.\footnote{After the fall of Perpignan to the French in Sept. 1642, the terms of the capitulation were said to include the transport of the sick Spanish troops to Tarragona, a journey of about 12 km by land followed by some 290 by sea. The healthy were to go to Rosas. *Jesuit Letters* xix, p. 339.}
For the wounded who had access to medical treatment, a fifteenth-century manual makes the surgeon’s work in healing wounds sound straightforward. It divided his tasks into three stages: first, staunching the flow of blood, second, guarding the wound against infection, and finally, curing it with medicine and appropriate measures.\(^\text{112}\) Contemporary accounts show just how gruesome this was in practice.

For those injured in military actions or armed encounters, sixteenth-century doctors and surgeons had become reasonably competent in the treatment of sword wounds or, where necessary, in performing amputations or dealing with the loss of limb caused by cannon-fire. Up to the sixteenth century, the most common form of treatment after such amputations was to cauterize the wound by burning it with hot metal or boiling oil.\(^\text{113}\) In the absence of anaesthetic, this must frequently have sent the patient into shock. An equally effective though less traumatic form of treatment that came into use in the sixteenth century was the application of thick animal fat to seal the wound.\(^\text{114}\) Increasingly, however, ligatures were employed to secure arteries and cauterization was curtailed.\(^\text{115}\) In the case of simple open wounds like those caused by pikes or sword strokes, hemp fibres soaked in cold water and egg white were used to stop the flow of blood, and the edges of the wound were drawn together and sewn up with a needle and thread, leaving an opening at the lower end for any pus to escape.\(^\text{116}\)

The treatment of wounds caused by projectiles – initially arrows but increasingly, in the early modern period, shot from firearms – was, however, much more difficult and complicated. The projectile penetrated deeply, causing internal bleeding, and was coated with fragments of dirt, grit or gunpowder. It frequently shattered bones, usually remained in the body, and resulted in a much higher incidence of infection and, ultimately, of death.\(^\text{117}\) Until the middle of the sixteenth century surgeons generally poured boiling oil into the wound and employed various artifices and implements to clean the wound and extract the shot. This method (known as *pus laudable*) consisted of inserting a piece of pork fat or string and moving it around to encour-


\(^{113}\) *Op. cit.*, p. 82.


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The healing of the wound, it was covered with a poultice. However, in the mid-sixteenth century the French surgeon, Paré, accidentally discovered a treatment that dispensed with the use of boiling oil. This was the ‘digestive’, ‘dry’ or aseptic method that used an astringent solution of turpentine, rosewater and other essences. Not surprisingly, its use spread rapidly throughout Europe.\(^\text{118}\)

Infection was an ever-present danger, so in an attempt to prevent it wounds were washed with a mixture of water and chamomile, and dusted with verdigris.\(^\text{119}\) A poultice or an astringent mixture of wine and pomegranate was sometimes applied later. Finally, ointments made from red or white lead were applied. After that, the patient was purged, then fed on a nutritious diet.\(^\text{120}\) If the patient survived and the wound continued to weep or suppurate, it was washed with an astringent mixture at least once a day. If fever set in, the doctor was summoned and once again the unfortunate soldier was subjected to purging.\(^\text{121}\)

A Toledan nobleman, Don Juan de Silva, has provided us with a graphic account of his treatment for and recovery from a firearms wound. As ambassador of Philip II to the Portuguese court, he accompanied the ill-fated Portuguese King Sebastian on his crusade to north Africa. At the battle of Alcaçer Quibir on 4 August 1578 he received ‘a considerable arquebus wound in the left arm’.\(^\text{122}\) He first reported on his health after returning to Spain at the end of 1578 (almost five months after being wounded):

Here in Gibraltar the state of my arm has now allowed me to get up for a short time during the day. I have seven wounds that the surgeons have had to make in my arm because each one festered as a result of the problems and bad treatment I had in the first 40 days. Four of these wounds have now been covered with cloth and balm and have almost healed over; three are in the very joint of my elbow and are so stubborn, and the two very small ones, so resistant to the medicine that for two months nothing has been able to heal


\(^{119}\) Green crystals formed on copper treated with acetic acid.

\(^{120}\) Moratinos Palomero and Pérez García, ‘Algunas connotaciones’, p. 83. Hospitals gave the sick ‘presents’ that were considered necessary to cure them. See e.g. AGS Contaduría Mayor de Cuentas, 3a época, leg. 601, which includes the amounts paid in 1645 to an apothecary, a citizen of Badajoz, who provided medicines and drugs to the hospitals of the Army of Extremadura.

\(^{121}\) Moratinos Palomero and Pérez García, ‘Algunas connotaciones’, p. 83


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them; another one is in the inner angle of my elbow and should be healed in about two weeks; but those two I mentioned are causing me so much trouble and are so sore and painful that I fear that they will not heal up for a very long time, and some sweat [a poultice?] or fire [cauterization] will be needed to heal them, because the surgeon has tried every method he knows, to no avail.123

One and a half months later (and six and a half months after being wounded) he wrote from Seville with further news and recounted how:

When I was about to leave at 8 o’clock . . . they found a bone that was sticking out of that small wound they had tried to close. There wasn’t room even for a lentil to fit, and the bone was so big that it looked as though it would not fit through anything but a big hole. When the surgeon tried the next day to widen the wound with sponges and other devices, it was so difficult, but he started to pull the bone out with his hand and made room for it till it came out. The bone is an inch thick, and the length of three fingers; it was God’s great favour to reveal it and remove it with so little damage – though with a lot of pain. That same day, from another wound that I have on the inside of my elbow, another bone came out without any pain, though it left a large wound in my elbow that has now closed up these last few days, and seems to be healing. I was doubtful and very unconcerned about finding the shot, and when one day I went to take my pulse, I found it in that very spot, on the inside of my arm between the muscles, about a finger’s length from where my hand joint is. It is amazing that it had travelled from alongside my shoulder to reach this spot, without me having felt it set off, move or stop.124

In spite of his wounds, Don Juan was lucky enough to survive – unlike the count of Losestein, a German colonel in the service of Philip IV who died two weeks after receiving a pistol shot, also in the arm, at the battle of Ameixial in 1663, or the unfortunate Marquis of Torralbo who died in Badajoz a few days after a bullet passed through his hand.125 Though Don Juan’s arm did not have to be amputated, five and half months after being wounded, he was still only able to get out of bed for a short time each day. Not surprisingly his arm was useless and, like his more famous contemporary, Cervantes, who was wounded in 1571 in the renowned naval battle of Lepanto, he was nicknamed ‘the one-armed man’ (el manco). Nevertheless, Don Juan’s was only an arm wound. Moreover, as a nobleman and ambassador in the service of Philip II, he could not only solicit special treatment because of his ability to pay in cash or in kind; he also presented his captors with the

125 BNM MS 2390, fo. 91; Cortés Cortés, Abojamientos de soldados, pp. 184–5. Torralbo was clearly a victim of infection.
potential reward of a lucrative ransom. It is probable, therefore, that he received prompt medical attention immediately after the battle—despite his complaints that it was ‘bad’. On his return to Spain his wealth and status secured regular access to the services of a doctor and surgeon. Perhaps like one of the captains under whom the biographer-soldier Miguel de Castro served, he was even attended by several doctors and surgeons.126

Another notable survivor of a firearm wound, this time in the head, was the commander of the Army of Extremadura in 1659, but again it can be assumed that he received the best medical attention available.127 The more usual fate of soldiers with firearms wounds was revealed by Don Luis de Requesens, captain general of the Spanish Army of Flanders. In 1575 he wrote that many of his soldiers had been wounded and that ‘most of the wounds come from pikes or blows, and they will soon heal, although there are also many with gunshot wounds [arcabuzazos], and they will die’.128

Army hospitals dealt as much with those who fell ill—those who succumbed to endemic illnesses and epidemics such as typhus, syphilis or plague—as with those who were wounded in battle. As English historian John Hale declared, if half of Europe’s soldiers died, the majority were killed by bacteria rather than bullets.129 In early 1641, even before fighting broke out in the war for Portuguese independence, a request was sent to the council of war in Madrid to form a hospital to care for the soldiers arriving in Extremadura, who were already falling ill.130 Three months later, central government ordered the establishment of a hospital by the brothers of the order of St John of God in the town of Mérida, the first base of the Army of Extremadura. The projected level of care for an army that was expected to number 24 000 was hardly encouraging, for the hospital was to have just one doctor and an apothecary. For each sick person treated the hospital was to receive two and a half times a soldier’s daily pay (two and a half reales).131 Significantly, the soldiers themselves were obliged to contribute to the running costs of the hospitals through a monthly deduction from their pay of one and a half reales.132 In effect, they were funding a military health insurance scheme.

126 The day after he was shot in the back the injured captain was disembarked at Mesina, where 2 surgeons and 4 doctors attended him, but he died 9 days later. Castro, Vida del soldado, pp. 56–61.
127 BNM MS 2387, fos. 5–15, at p. 10v. He was said to be been wounded by a musket shot, but it is unlikely to have been a very serious wound, as he continued to serve as commander of the army.
128 Cited in Parker, Army of Flanders, p. 168.
129 Hale, War and Society, p. 120. Corvisier, Armies and Societies, pp. 173–4, also states that battles were not the main cause of death.
131 AGS GA leg. 1375, n.f., consulta, 5 Apr. 1641.
132 In the sixteenth century the deduction was one real a month. Parrilla Hermida, ‘La anexión de Portugal’, p. 276; Parker, Army of Flanders, p. 167; Goodman, Power and Penury, p. 243.
Though it has been claimed that Spain did far more than any other European state in the provision of health care for its forces,\textsuperscript{133} it is unlikely that many Spanish soldiers were treated by an expert surgeon, or that they went to a hospital. The experience of English sailors who fought in the English Mediterranean fleet during the war of 1702–13 was similar.\textsuperscript{134} The reason was that the number of doctors and surgeons attached to Spanish armies was generally quite low. The army being sent to Algeria (North Africa) in 1572 that was to comprise 30000 infantry and 600 cavalry was to be accompanied by just four doctors, four apothecaries and 25 surgeons\textsuperscript{135} – an average of one surgeon for every 1200 men and one doctor for 7650. Alba’s army of 17100 in 1580 was far less well provided for, for it had just one surgeon (increased to two after four months), one barber-surgeon and one doctor – an average of one surgeon for every 8550 men, or 5700 if the barber-surgeon is included, and only one doctor for the entire army.\textsuperscript{136}

In the middle of the campaigning season of 1643, the commander of the Army of Extremadura complained that the army had no doctors or surgeons at all.\textsuperscript{137} In 1660, for an anticipated force of 26000 men, the same army was allocated one master surgeon, four ordinary surgeons, one surgeon general (protomedico), one doctor, four barber-surgeons, eight nurses and one apothecary – approximately one surgeon for every 2900 men and only one doctor for every 13000. The following year, for an army of 15000 men, there was a marked improvement in the provision of healthcare: five doctors, a protomedico, a master doctor (mestre médico), a licensed surgeon for the army and another for the hospitals, and nine surgeons – approximately one surgeon for every 1360 soldiers and one doctor for every 2140 – in addition to 12 practitioners and bloodletters.\textsuperscript{138} As for the army hospitals, in 1580 Alba’s 17100-strong army in Extremadura was given 100 beds: one bed for every 171 men. In the same province in 1660, the anticipated force of 26000 men was to be allocated only 50 beds: one for every 520 men. The following year the number of beds provided had risen markedly to 2000 – one for every 7 soldiers.\textsuperscript{139} This was an unusually large number. Sick and wounded soldiers were frequently placed two to a bed and others were merely accommodated on the floor. When the army

\textsuperscript{133} Op. cit., p. 242. Parker, Army of Flanders, p. 167, also states that ‘the Army of Flanders managed to provide admirable free medical care for a large number of its troops’.


\textsuperscript{135} E. Roldán González, ‘De la farmacia medieval a la castrense del XV y XVI’, in Actas, pp. 87–8.

\textsuperscript{136} Figures extracted from Parrilla Hermida, ‘La anexión de Portugal’, pp. 275–6.

\textsuperscript{137} AGSGA leg. 1463, n.f., consulta, Junta de Guerra de España, 15 July 1643. The commander was instructed to make use of the practitioners in the province until a doctor and surgeon could be sent to the army.

\textsuperscript{138} According to Meneses, Historia de Portugal Restaurado ii, p. 329, the Army of Extremadura comprised 10000 infantry and 5000 cavalry. In addition to the medical staff mentioned, there was also an apothecary; RAH, SyC, K-20, fo. 181.

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hospitals were overwhelmed, the sick and wounded were sent to civil- 

ian hospitals, or were cared for in the houses of obliging civilians.  

Because of this shortage of qualified medical practitioners, each of 

the companies in the Spanish royal armies (which generally had a 

complement of 250 men in the sixteenth century, and 100 in the 

seventeenth) possessed a barber-surgeon, and each cavalry squadron 

had its own master surgeon. Though the barber-surgeons were less 

qualified than the surgeons and, it seems clear, did not possess the 

same array of surgical instruments or medications, they were at least 

closer at hand for the sick and wounded soldiers in their companies. 

Nevertheless, given the low overall proportion of qualified doctors and 
surgeons to soldiers, it seem certain that the initial (and maybe the 

only) medical assistance given to soldiers was that offered by their com-

rades in arms or by women camp-followers, supplemented, perhaps, 

by the attendance of the barber-surgeons from their own companies. 

Perhaps the overall lack of surgeons was not such a bad thing for, if 

English military surgeon William Clowes was correct, bad surgeons 
had killed more men than the enemy.

III

No study of welfare would be complete without examining provisions 

for the physical comfort and spiritual wellbeing of Spain’s peninsular 
soldiers. Obtaining adequate supplies of food and drink was essential 

for their physical comfort. While munition bread was their staple 

food – one and a half pounds of wheat bread daily – it was 

accompanied by oil and vinegar, and either dried cod, cheese, bacon 

(tocino), salt pork or fresh meat (beef or lamb). Bread, meat or 

cheese and sardines were commonly supplied to soldiers on the 

march. They washed their food down with generous quantities of 

wine, though not as much as some manual workers received. While an 

average Extremaduran household in the mid-seventeenth century may

\[140\] AyC 8, Acuerdos, n.f., 19 Aug. 1667; Cortés Corte’s, A alojamiento de soldados, p. 183, 

for 2 examples from wills drawn up in 1648 and 1649, one of a sick, one of a 
wounded soldier, who were cared for in the homes of local inhabitants in 

Extremadura.

\[141\] For evidence of peninsular soldiers caring for their comrades and removing them 

from the battlefield at the end of the day, see Estébanez Calderón, Obras completas, p. 

89. On the role of women in bandaging the wounded on the battlefield and in the 
siege lines and carrying them to the rear, and evidence from Robert Monro of 

Swedish soldiers hazarding their own lives to rescue wounded comrades, see Tallet, 

War and Society, pp. 133 and 135.


\[143\] Daily quantities issued to each soldier on the Extremaduran front in the mid-

seventeenth century were: 3 oz dried cod or cheese, 3–4 oz of bacon, a quarter 
pound of salt pork or half a pound of fresh meat, 1 oz of oil and a quarter of a pint 
of vinegar. The cost of a soldier’s rations was deducted from his pay. White, ‘War 


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have consumed about two pints of wine a day, soldiers in the province were supplied with two to four pints of wine daily; day labourers got six. \(^{145}\) The wine, though, may have been watered down (as it was for Spanish sailors), so that it animated the soldiers without clouding their judgement. \(^{146}\)

Rarely, however, did soldiers receive adequate supplies of food and drink on a regular basis from the army purveyors. Supplies were continually disrupted, whether by natural disasters such as harvest failure (caused by floods, drought or locusts) or, more often, by the lack of money to pay the contractors and victuallers. \(^{147}\) Hungry soldiers either deserted or stole. When the French sent troops to Catalonia in October 1640 to support the revolt there, the Duke of Modena’s tercio defected to the French, saying they were dying of hunger: in the previous two days they had eaten only grapes. \(^{148}\) Those holed up in sieges had neither of these options. The daily food ration of the 2500 Spanish soldiers under siege in 1642 by the French in Perpignan was reduced to three ounces of cow or horse hide each, soaked in liquid. Not surprisingly, about 2000 of the men died and only 500 survived, though they ‘looked like the picture of death’ when the siege ended. \(^{149}\) However, soldiers robbed and stole even when they were not hungry, and revealed their preference for a more varied diet. Four companies of dragoons who spent a night in transit in an Extremaduran village in early 1638 were offered fish (as it was Friday), but took chickens (and other items) from the villagers. \(^{150}\) When soldiers raided enemy territory, however, their main preoccupation was in seizing livestock and other goods to sell rather than to consume themselves.

A comfort or perk traditionally associated with military life was the soldier’s association with prostitutes and concubines. \(^{151}\) A Spanish discourse on military discipline of the later sixteenth century advocated that ‘in order to avoid disorders, as well-ordered republics permitted such people [prostitutes], in no other republic was it more necessary to allow them than among free and tough men who would mistreat

\(^{145}\) Op. cit.; and White, ‘War and Government’, pp. 285–6, and table 1.5 for number of households in Mérida in 1646. Calculation for Mérida’s wine consumption derived from figures given in AHN Cons 7158, decree 12 June 1645. The daily drink ration for French soldiers was set at a pint of wine, though it could reach as much as 3. Lynn, Giant, p. 114.

\(^{146}\) This was advisable when sailors were given their ration before a storm. Pérez-Mallaina, Men of the Sea, p. 183.


\(^{148}\) Jesuit Letters XVI, p. 26, letter 16 Oct. 1640. This was a tercio of Italian soldiers.


\(^{150}\) AGS GA leg. 1223, informacion, 21 Jan. 1638. The young recruit Miguel de Castro and some comrades stole food and wine from their ship when they landed in Sicily, but sold it, not consumed it. Castro, Vida del soldado, p. 13.

\(^{151}\) See Tallet, War and Society, pp. 131–3; Lynn, Giant, pp. 342–3; Parker, Army of Flanders, pp. 175–6. For Spain’s early modern sailors, see Pérez-Mallaina, Spain’s Men of the Sea, pp. 164–6.
inhabitants, molesting their wives, daughters and sisters. Moreover, it continued, ‘it would be dangerous not to have them, but they must be shared’ Army commanders and even official military orders therefore recommended and sanctioned the presence in each company of anything from three to eight whores – a ratio of between two and eight per 100 men. In practice, the number may sometimes have been higher, though contemporary records make no distinction between prostitutes and soldiers’ wives. The four companies of dragoons (probably comprising no more than 200 men) who passed through the Extremaduran village of Las Brozas in 1638 were accompanied by ‘twenty women of ill repute’. A group of 16 Irish soldiers who spent a night in transit in Zurita, another Extremaduran village, were accompanied by a woman with a small child. In an apparent effort to impose a modicum of decency on the soldiers, the woman was lodged separately in the house of the local priest.

Garrison towns in the peninsula naturally attracted large numbers of prostitutes to serve the needs of the soldiers. Nevertheless, evidence suggests that they were still nominally attached to individual companies. In 1662, for example, when Philip IV issued one of his regular orders to punish and stamp out ‘public sins’ and swearing, a colonel (maestre de campo) billeted in Badajoz, headquarters of the Army of Extremadura, was ordered to expel and exile the prostitutes in his tercio.

Nevertheless, soldiers clearly found comfort from women other than professional prostitutes. While some women willingly entered into liaisons, soldiers frequently took their pleasure by force. In one case reported in 1646 in the municipal council of Badajoz, two soldiers billeted in the town beat one woman so badly when she refused to sleep with them that she was left close to death and had been given the last sacraments. Soldiers often left their companions with an unwanted legacy, and garrison towns can be distinguished from other communities by the increased numbers of illegitimate births and of foundlings

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152 S. de Lodoño, El discurso sobre la forma de reducir la disciplina militar a mejor y antiguo estado... (Brussels, 1596), p. 91, cited in Quatrefages, Los tercios, p. 272.
153 Parker, Army of Flanders, pp. 175–6, citing actual figures of 5, 6 and 8. The recommendations were for 4–8 whores in companies of 100 or 200 men.
154 AGS GA leg. 1223, información, 21 Jan. 1638. By the mid-seventeenth century, cavalry or dragoon companies in the peninsula generally comprised between 25 and 50 men. On this basis the ratio is 1 per 10 men.
155 AHN Cons 7123, no. 25, letter 6 June 1655.
156 RAH, SyC, K-20, fos. 104-v. He was also ordered to get rid of any kind of concubinage. On concubinage, see below. Royal decrees dating from at least 1635 ordering the punishment and stamping out of public sins and swearing can be found in a number of legajos in AHN Consejos.
157 Miguel de Castro recounts a number of amorous encounters he had with women who were not prostitutes. Castro, Vida del soldado.
158 Op. cit., for several examples during the soldier-autobiographer’s military service.
159 Cortés Cortés, Alojamientos de soldados, p. 146.
left to the care of the church and municipal authorities. Before the war of 1640–68, the cathedral of Badajoz cared for 10–12 foundlings a year. In 1659 the number had increased to 30 a year. Officers, on the other hand, with their higher pay and privileged status, were in a position to maintain concubines in rented or even abandoned houses in the settlements where they were garrisoned. In 1647 Philip IV singled out for criticism soldiers receiving a salary of 4 escudos and above who not only founded entails on their war benefits but used their pay to keep mistresses in their houses.

High-ranking officers were often notorious offenders. It was said of the first commander of the Army of Extremadura, the Count of Monterrey, who held office for only nine months in 1641, that in Mérida, where he resided, ‘no woman was safe from his lechery’. Worse still, he took a shopkeeper as his mistress, and made her two sisters concubines to other senior officers, one a maestre de campo and the other the administrative chief (comisario general) of cavalry. One of Monterrey’s unsuccessful quarries became the mistress of another senior officer in the Army of Extremadura, maestre de campo general Don Juan de Garay, and had a daughter by him. Normally it was left to the local justices to deal with matters that offended public morals. Where high-ranking officers such as colonels of regiments were involved, the council of Castile at court attempted to intervene and order the removal of the women living in their houses.

As for spiritual care, it is no coincidence that the head of army hospitals, generally an ecclesiastic, was given the title ‘vicar general’. As the constitution of a royal hospital for workers building the great monastery of the Escorial reveals, preaching and praying warranted much attention ‘because it matters more to cure the soul than the body’. The obligation of Christians in the sixteenth and seventeenth centuries was to make every effort to save their souls and to prepare for the hour of their death. Before dying everyone had to summon a priest who would administer the three sacraments necessary for their final jour-

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160 On the increase in illegitimate births in Badajoz, headquarters of the Army of Extremadura, between 1640 and 1668, and among these the significant number in the category of ‘unknown mother–military father’ see Cortés Cortés, Militares y guerra, p. 12. For further details, see his Una ciudad de frontera: Badajoz en los siglos XVI y XVII (Badajoz, 1990) and ‘Guerra en Extremadura’.

161 AHN Cons 7169, no. 91, consulta 13 Oct. 1659.

162 See Cortés Cortés, Alojamientos de soldados, p. 147, for the example of a captain who in 1646, shortly after arriving in Badajoz, moved from his allocated billet into an abandoned house with a woman.

163 AGS GA leg. 1616, decree 9 July 1647.

164 From a report by the chaplain major of artillery, cited in Cortés Cortés, Alojamientos de soldados, p. 134.


166 For two examples involving colonels in Badajoz, the first also serving as governor (corregidor) of the town, AHN Cons 7162, 1652 no. 2, consulta 26 Jan. 1652 and ibid., 7123, no. 38, consulta 21 Apr. 1670. In the latter case, the Council ordered the maestre de campo to place the woman in a convent.

167 Goodman, Power and Penury, p. 213.
The experience of Spain’s early modern soldiers

In addition, in order to organize the funerary rites and to be able to say mass for the salvation of the soul, the church required that all adults draw up a testament before dying.

Although death could surprise anyone at any moment because of sudden illness or the outbreak of an epidemic, or an accident or violent incident, those who were most evidently exposed to death were soldiers, especially in times of continuous warfare. Soldiers who were treated in the field and fixed military hospitals were attended by the hospital chaplains, who also cared for the sick and wounded. Two chaplains were attached to Alba’s field hospital that functioned from March to July 1580. However, when isolated on the battlefield or engaged in the siege of a town, soldiers could rarely expect to receive the last sacraments. Only rarely – as in 1642, when four Jesuit priests were present at a battle between a Galician force and the Portuguese army, and heard the confessions of almost all of the Galician soldiers – did the soldiers have the opportunity to fulfill at least some of their religious obligations before they engaged in military action. The morale of armies would therefore have been at risk had it not been for the decision to appoint a chaplain to each of the companies of the regular armies, both infantry and cavalry.

With a priest attached to each company, military authorities thus hoped to ensure that soldiers were exposed to regular spiritual and religious observance that would help sustain their morale. It was the chaplain’s duty to say mass before each battle and, at the end of the fighting, to administer the sacraments to those dying on the battlefield or in the siege lines. However,


169 Eire, Madrid to Purgatory, pp. 19–24. I. Testón Núñez, ‘El hombre cacereno ante la muerte: testamentos y formas de piedad en el siglo XVII’, Norba IV (1983), p. 374. A more cynical reason could have been the need to avoid rivalry between the different parish churches, monasteries and convents to be named as the beneficiaries of testaments (and to receive monetary payments) for the masses and burials: for the rich, these masses were costly, and they provided the religious order that conducted them with a substantial income. For evidence of this, see A. Rodríguez Sánchez, ‘Morir en Extremadura: una primera aproximación’, Norba I (1980), pp. 279–97. Numerous testaments for this period can be found in Spain’s notarial archives; the parish registers of deaths generally specify when an individual had made a testament.

170 Unfortunately, the most recent monographs on death – those cited in n. 168 above by Martínez Gil and Eire – omit the death of soldiers. This is perhaps because their sources (the archives of Toledo and Madrid) were too far removed from the battlefields of the peninsula. See F. Cortés Cortés, La población de Zafra en los siglos XVI y XVII (Badajoz, 1983), and Cortés Cortés, Una ciudad de frontera, for records of soldiers’ deaths from the burial registers of Zafra and Badajoz.


172 The Jesuits also gave heart to the soldiers as they carried a crucifix with them. One was wounded by a kick from a horse, and had a lucky escape when a shot passed through his hat. Jesuit Letters xix, p. 326. The Portuguese army in question was the one based in the province of Entre Douro e Minho.

until the creation of the post of army depository general at the end of the sixteenth century, unscrupulous chaplains were in a position to persuade dying soldiers to name them as sole heirs to their estate.174 Others seized the opportunity to steal items of value from the wounded and dead soldiers they attended. Nevertheless, these lucrative if illegal and rather erratic fringe benefits were insufficient to offset the shortage of priests, and many companies were unable to find a chaplain.175

In an effort to ensure that they fulfilled their religious obligations and did not die before making a testament, officers of the regular armies and of the militias frequently drew up their wills with their local notary before going off to war.176 Others, like Captain Juan de Estrada, got the notaries of the towns in which they were billeted to add a codicil to their testaments. Estrada had drawn up his testament with a notary of Seville; he added a codicil in Mérida on the day that the 1645 campaign of the Army of Extremadura began.177 Alternatively, other officers may have reacted like Don Pedro de Mendoza y Guevara, a maestro de campo (commander of a tercio) of the Army of Extremadura and native and alderman of Badajoz. He only made his testament when he fell seriously ill in Mérida where he was serving.178

How, though, did common soldiers prepare themselves for death? Those who had no money or belongings – the vast majority – did not make a testament.179 It is likely that those who possessed some belongings only asked to make a testament when they felt close to death. This was the case in 1659 with a young soldier who had come to Extremadura from the southern province of Murcia to fight with his company against the Portuguese. He fell ill in Mérida and entered the hospital of the Convent of Our Lady of Mercy, where he made his testament. He asked to be buried in the church of the hospital and dutifully declared that the proceeds from the sale of two houses he owned should be used by the hospital to cure the sick.180

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174 Depositors general took possession of the goods of dead soldiers. For evidence of clerical corruption in Flanders, where a chaplain refused to hear the confession of a soldier or to copy down his testament unless he was granted a considerable legacy, see Parker, *Army of Flanders*, p. 172.


176 A(rchivo) H(istórico) P(rovincial de) B(adajoz), (Escribano) Juan Romo (Mérida) 1640, n.f., testament of Don Fernando de Toledo, captain of a militia company of Mérida, 30 July 1640: ‘as I am about to leave on His Majesty’s service with the said company on Friday 31st . . . if God sees fit that he dies on this present occasion and so that his virtue and good behaviour are known . . .’.

177 His parents were from Oviedo in Asturias. AHPB, Juan Romo Trujillo (Mérida), 1662, n.f., testament dated 22 Nov. 1662. He was to march on campaign later that day.

178 Op. cit., testament dated 22 Nov. 1662. One of the witnesses was an apothecary, perhaps the same one who had prepared his medication.

179 Cortés Cortés, ‘Guerra en Extremadura’, states on p. 51 that of 403 common soldiers who were buried in Badajoz between 1640 and 1668, only 17 made a testament; 107 (more than a quarter) were declared to be ‘poor’.

180 AHPB, Cristóbal Fernández Sirgado (Mérida), 1659, n.f. testament dated 26 Feb. 1659. He was a part-owner of the second house.
IV

The early modern soldier was both pitied and reviled by his contemporaries. In 1572 the Frenchman Pierre Boaistuau wrote that those who chose fighting as a career led ‘a tragic and servile life . . . which is so austere and rigorous that the brute beasts hold it in horror’. 181 Others, however, saw the soldier not just as a physical threat to society but also as an immoral miscreant who invariably gave in to the temptation to gamble, drink, fornicate, blaspheme and forget God who awaited him in battle. 182 It was evident, too, that a culture of violence permeated military society both on and off the battlefield. At times the violence shown by a soldier to the enemy was directed with equal vehemence towards his companions in arms and, above all, to civilians. It mattered little whether the civilians were neighbours, compatriots or enemies.

Military encounters of the early modern period were of many types. For the French military commander and theorist, Blaise de Monluc, war was nothing more than a series of ‘fights, assaults, escalades, captures and surprises of towns’. 183 War in peninsular Spain was similar. Even in the seventeenth century, with its lengthy wars, sieges and large-scale battles in particular were far less common than small-scale raids and encounters between a few dozen or a few hundred soldiers. ‘Small’ wars as opposed to ‘big’ wars predominated. As we have seen, the type of weapon used in these encounters ranged from the latest firearms, field artillery and grenades to crude weapons such as stones, catapults and slings. Encounters were often stubborn and bloody and occasionally lasted a whole day. 184

Although the successful conclusion of a military action should have ended the soldier’s licence to engage in violence, the victors frequently showed no consideration for the vanquished. During the Luso-Spanish war of 1640 to 1668, and above all in the initial ‘small war’ phase, the victors of skirmishes – whether they were Castilian or Portuguese – regularly killed the defeated soldiers, both officers and men, who failed to escape. 185 Some went so far as to torture and mutilate their captives. In 1641, for example, after an ambush had been set up to capture a band of Portuguese livestock robbers – they were guards of the hills

183 Cited in Parker, Military Revolution, p. 41.
184 See e.g. the account of the siege of San Martin in 1641 in Estébanez Calderón, Obras Completas, p. 30.
185 In Nov. 1645, for example, of the 800 Portuguese infantry who confronted a Castilian force, 17 escaped, 143 were taken prisoner and 640 were killed. Jesuit Letters xvii, pp. 190–93. For atrocities committed during the English Civil War, see C. Carlton, ‘The Impact of Fighting’, in J. Morrill, ed., The Impact of the English Civil War (London, 1991), p. 19, and Carlton, Going to the Wars, pp. 256–9. In the Ottoman armies, by contrast, indiscriminate or vengeful killing was frowned upon as an uncivilized aberration. Murphey, Ottoman Warfare, p. 131.
and customs – the entire group of 50 was killed. The so-called captain was decapitated and his head carried back to the acting commander of the Army of Extremadura. A particularly brutal incident was reported in Extremadura in 1650. The survivors related how the troop of Portuguese soldiers
cut off Don Francisco de Amezquita’s instrument of nature whilst he was still almost alive, they cut off lieutenant Don Juan Cid’s ears after killing him, another soldier . . . arrived at Ceclavin with his ears cut off, they killed an aide of the maestro de campo and afterwards they spiked him with pikes and spreadeagled him on a rack, and did the same to another cavalry soldier, and two cavalry ensigns and up to fourteen soldiers who were otherwise unhurt, leaving them for dead [ . . . ] and to a cavalry soldier who they wounded badly they threw some gunpowder on the ground and blew him up . . . .

In Catalonia, too, between 1640 and 1652, some of the prisoners taken in battle were killed. At times it served as an example of what would happen to others – even civilians – if they did not capitulate, particularly to those who refused to negotiate terms during a siege.

Civilians in enemy territory were often treated little differently from enemy soldiers. An attack in 1636 on the French border town of San Juan de Luz which involved 4500 soldiers from Navarre and 3000 men from the Basque province of Guipúzcoa provides an example of such violence and, what is even more remarkable, involved the wives of some of the soldiers. While the Spanish soldiers concentrated their attack on the French defenders in the trenches around the town, the wives of the Guipuzcoan troops who had marched with their husbands stormed through the main gate, shouting ‘Victory for Spain’. Then, as the women proceeded in organized bands to sack the houses, the Spanish troops attacked the French soldiers who had withdrawn behind barricades in several streets. After the Spanish had broken through one of the barricades, they set fire to houses in that district and ‘put everyone to the sword that they came across’. Moreover, in spite of the political imperative to persuade rebel subjects to return to obedience, civilians in territories that had revolted were frequently treated just as violently as enemy soldiers. During a raid on the northern Portuguese village of Moimenta in 1641, besides engaging in their usual practice of pillaging the settlement, the Spanish soldiers killed everyone they came across and set fire to the houses to which the defenders had

188 See J. Senabre, La acción de Francia en Cataluña en la pugna por la hegemonía de Europa (1640–1659) (Barcelona, 1956): p. 115, the death of 600 prisoners who capitulated in Cambrils pp. 118–19, the death from handgun fire of all the Catalans who capitulated; p. 114, the hanging of most of the civilian prisoners as an example to those who resisted.
retreated. They ended up burning all the houses and, as the commentator noted, ‘in them many innocent people’. 190

Violence amongst the soldiers themselves was widespread. The most likely place for duels to take place and the greatest risk of danger was inside armies. 191 Violence was present in all the ranks and confrontations were universal, especially when the soldiers were idle. In his short period of command at the beginning of the war against Portugal in 1640, the Count of Monterrey suffered more than one attempt on his life by soldiers, whilst one of his senior officers, the Marquis of Toral, was killed by a veteran soldier when he tried to calm a brawl between his own troops. 192 In an earlier war, that of 1568–70 in the Alpujarras, the son of the captain-general of the Kingdom of Murcia was shot in the arm by one of his own men when he tried, unsuccessfully, to stop 400 arquebusiers from deserting. 193 The armies of Portugal which fought against Spain in 1640–68 were also plagued by internal violence. 194 Many encounters took place between entire units. One such incident occurred in 1641 when a contingent of soldiers from the town of Trujillo who were on their way to serve in a coastal garrison clashed violently with an infantry company billeted in the town of El Escorial. 195 Above all, however, there were confrontations between Spanish soldiers and foreign soldiers – the naciones – serving in Spain’s armies, many of whom were subjects of the King of Spain. 196

Confrontations even took place during combat, usually over the question of precedence in the battle lines.

Above all, though, the soldier was considered to be a threat to society, for he was armed, lived by and was habituated to violence, and his prime function was to kill. Virtually all the wars in the peninsula produced violent acts by soldiers against civilians and the civil authorities, as the abundant evidence shows. In the war of 1568–70 the troops of both sides, Christian and morisco, committed violent acts against civilians. The moriscos specifically targeted the clergy, crucifying

191 Articles of war formulated by states and generals continually prohibited the duel, and the confrontations that led to them, and provided alternative methods to resolve them. G. N. Clark, War and Society (Cambridge, 1958), pp. 38–9.
192 Estébanez Calderón, Obras completas, p. 25. See too Cortés Cortés, Militares y guerra, p. 11.
193 Cabrera de Córdoba ii, p. 530. The son (who survived) was Don Diego Fajardo.
194 E.g. F. Cortés Cortés, Guerra e pressão militar nas terras de fronteira 1640–1668 (Lisbon, 1990), p. 78, where an infantry captain was killed by a pistol shot by his second lieutenant or a sergeant.
196 On a confrontation between two tercios of the Army of Extremadura – one from Granada, the other Irish – see Cortés Cortés, Militares y guerra, p. 10. On a confrontation between native and foreign troops in Portugal, see Rodríguez Sánchez, ‘Guerra, miseria y corrupción’, p. 610; and on an incident between 3 tercios of Milanese soldiers and three cavalry companies that led to several killings in Mérida where they were all billeted, see AMM Acuerdos, fo. 82.
them upside down. On at least two occasions, in 1645 and again in 1647, commanders of the Army of Extremadura had to resort to instructing their troops to kill only soldiers, but clearly such orders were widely ignored. Pedro Calderón de la Barca’s play El Alcalde de Zalamea (The Mayor of Zalamea), set in Extremadura during the march of the Duke of Alba’s troops through the province to Portugal in 1580, highlights two of the commonest outrages committed by soldiers billeted in civilian homes – rape and confrontations with peasants. The need to obtain food and lodging from an unarmed civilian population led soldiers to treat civilians in the same violent manner as they dealt with foreign or enemy civilian populations. Similarly, to meet their need for food and money, some military units raided municipal grain stores, seized the taxes collected in regional treasuries, and threatened the civil authorities. In June 1639, the tercios that were transferred from Navarre to Catalonia were accused of committing all manner of atrocities against the inhabitants of the countryside through which they marched: forcing them to give money to the soldiers and officers, and battering, wounding, raping and cutting their ears off with such fury and cruelty that many of them died. Confrontations between civilians and soldiers billeted in their localities were commonplace. Usually one or two deaths resulted. A notable case occurred in 1626 in the Andalusian town of Carmona, when 10 inhabitants and 15 of the Neapolitan soldiers billeted there were killed during a brawl.

Not surprisingly, civilians were keen to seek revenge and showed no mercy towards soldiers when they had the upper hand. Three wounded Portuguese soldiers left behind after an attack on the Extremaduran town of Encinasola in May 1643 were killed as soon as they were found. That same month inhabitants of the Aragonese capital, Zaragoza, riotied after a civilian was wounded by Walloon soldiers billeted

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197 Hurtado de Mendoza, Comentarios de la Guerra, pp. 39 and 70–1. The moriscos were the descendants of Muslims living in Granada who had nominally converted to Christianity at the beginning of the sixteenth century. As a war both against rebels and against followers of a different religion, the brutality was perhaps even worse.


199 Calderón wrote this play after participating for 2 years in the war in Catalonia. For an actual incident committed by troops in billets, see AMT 1–3-107, fo. 65v, and see above for the assault by 2 soldiers on a woman in 1646.


202 The soldiers – Italians and Irish as well as Castilians – were also accused in the petition submitted to Philip IV by the city of Zaragoza of sacking villages, breaking into granaries and stealing their contents, spilling wine from vats and burning what they could not take with them, and stabbing transporters and their loads. Jesuit Letters xvi, p. 9, note 1.

203 Morales Padrón, Memorias de Sevilla, pp. 57–8. See p. 30 for another example in 1616 when soldiers from the Mediterranean galleys spent the winter billeted in Seville and ‘every day on both sides there were deaths’. Jesuit Letters xvii, pp. 84–5.
there, and killed any Walloons they encountered in the streets. Before
the riot was quelled 60 men had been killed and many wounded.\textsuperscript{205}

It was inevitable that the close intermingling of soldiers and civilians
in the peninsula would generate tension and violence. The progressive
professionalization and slow separation and isolation of the military
from civil society would be left to a later period.\textsuperscript{206} Until then, the king
and his council of war hoped that the military ethic of loyalty, disci-
pline and sacrifice would prevail. In reality, however, the behaviour
of soldiers was largely determined by the conditions of daily life, the
perceived opportunities and threats in their immediate environment,
and the culture of violence.

While it is inappropriate to speak in blanket terms of the experience
of warfare of Spain’s soldiers, especially when covering much of the
peninsula over an extended period, it seems certain that the conditions
of military service in the peninsula during the sixteenth and seven-
teenth centuries were generally hard and unpleasant. It is unsurprising
that few people envied or were eager to share the experiences of
Spain’s peninsular soldiers: the hardships and dangers of battle and
commonplace violence in which they risked death or serious injury,
the uncertain pay and provisions, the limited spiritual and health care,
hardly compensated for by a few unpredictable ‘perks’. Writing in
1596, a secretary of Spain’s council of war revealed how knowledge of
the soldier’s experiences negatively affected recruitment. The
recruiting captains only succeeded in enlisting a few men because of
‘the little one can prosper nowadays in this profession, the many
maimed who turn up from all over, the destitution that they and those
who are not soldiers recount about where they have come from, seeing
many honourable soldiers suffer and not be rewarded, and that gener-
ally they are hated and viewed and treated badly.’\textsuperscript{207} The experiences
of Spanish soldiers were little different from those of their contemporda-
ries throughout western Europe. Expressing what many, perhaps all,
who experienced military service thought, in 1631 an English soldier


\textsuperscript{206} Corvisier, \textit{Armies and Societies}, pp. 171–2. On the Bourbon army of the eighteenth
century, see C. Borreguero Beltrán, \textit{El reclutamiento militar por quintas en la España del
siglo XVIII} (Valladolid, 1989), and her ‘Carlos III y el reemplazo anual del ejército’,
\textit{Actas del Congreso Internacional sobre Carlos III} (Madrid, 1989) i, pp. 487–94; F. Andújar
Castillo, ‘Aproximación al origen social de los militares en el siglo XVIII (1700–
1724)’, \textit{Crónica Nova X} (1979), pp. 5–31; J. Marchena Fernández, \textit{Oficiales y soldados
en el Ejército de América} (Sevilla, 1983), and his ‘El Ejército de América: el
componente humano’, \textit{Revista de Historia Militar} XXV (1981), pp. 119–54; on the
militias, J. Contreras Gay, \textit{Las milicias provinciales en el siglo XVIII: estudio sobre los
regimientos de Andalucía} (Almería, 1993).

\textsuperscript{207} Explaining the difficulties encountered in recruiting soldiers, almost certainly for
overseas service, he also declared ‘the worst thing is that most say that these people
are contemptible and that no honourable man wants to to become a soldier’. Cited
of the Thirty Years War wrote: ‘it is a great deal of misery that a soldier doth endure, besides danger, every minute of his life.’

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208 Carlton, Going to the Wars, 89. The lament was contained in a letter to the soldier’s uncle.