

WAR IN THE IBERIAN PENINSULA, 700–1600

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Chapter 6

PORTUGAL

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PORTUGAL

I EARLY AND HIGH MIDDLE AGES, 1096–1249

José Varandas

Political and military outline

Portugal: from earldom to kingdom (1096–1239)

The Christian kingdom of Afonso VI was based on a defensive system in which the key strongholds were: Santarém, Coria, Toledo, Valencia and Aledo. Except for Toledo, all the other cities fell into the hands of the Almoravids. Clearly, Leon's war effort in the Iberian central zone could not hold back Islam. The military situation in the West of the Peninsula, an area controlled by count Raymond of Burgundy, was not favourable, either.

In the summer or autumn of 1096, Henrique of Burgundy (married to princess Teresa, illegitimate daughter of the king Afonso VI), owned the territory which included the old counties of Portucale and Coimbra. Between the rivers Minho and Mondego, a politically united territory, separated from Galicia, was thus created. The relationship between those counties was already very strong and this unification made it even more solid and coherent. In the mid-11th century, the clash between old *portucalese* county families and the less pre-eminent new noblemen (*infanções*) reached a crucial point. The deterioration of the most prestigious lineages was taken advantage of and exploited by the new noblemen of Portucale and Coimbra, enriched due to raids against the Moors, which paved the way for them to take over political control as well as to conduct the war against Islam. Count Henrique found the necessary support to protect the southern frontier among these noblemen (Barbosa 2008).

Henrique proved to be a fearless warrior and a good strategist, as demonstrated by the defence at Santarém. This city was constantly harassed by the Almoravids and was only lost in 1111. His military participation is documented in the Battle of Malagon in 1100 and in the Battle of Vatalandi in 1103. In parallel with his military activity, Henrique was a zealous administrator of the earldom. His action materialized in a set of measures ranging from the concession of municipal charters to direct intervention in ecclesiastical matters. Henrique also incremented the process leading to the propagation of the seigneurial regime resulting in the exercise of public activity by private entities, in territories taken away from the regal administration.

Henrique was a fierce supporter of the Gregorian Reforms which benefited the bishop and monasteries which were in favour of the Roman liturgy. He contributed to the development of the seigneurial regime in the old *portucalense* territory whereas in the southern lands he fostered municipal structures. All things considered, the war against Islam was a powerful cohesive factor for the county. Both the North and South committed to a common undertaking.

When Teresa of Portugal took over the county government in 1112, the situation was very chaotic all over the Christian north. Several parties were fighting each other with the purpose of placing their candidate in charge of the kingdom of Castile and Leon. At the same time, the Muslims were exerting pressure along the border lines. In this context, the aristocracy of Entre-Douro-e-Minho had developed a political conscience, eager to keep its autonomy and the privileges acquired during Henrique's government, and did not appreciate Teresa's link to the Trava Galician noble family. The county was heading towards being reintegrated into the Galician realm. During the autumn of 1127, the government north of Douro River was entrusted to the young prince Afonso Henriques, already an armed knight at this point. Several local barons stood by his side, and on 24 July 1128, at the Saint Mamede fields, the *Portucalense* forces fought and defeated Teresa's army.

Portuguese offensive: from the Mondego to the Tagus River (1131–1147)

The victory at Saint Mamede caused a change in the leadership of the *portucalense* land. The Minho aristocracy placed the rule of the county in the hands of the prince Afonso Henriques by force. The *Portucalense* barons wanted to restore the previous political situation. However, Afonso pursued an opposing objective. Long before receiving the title of king (1139–1140), he had already displayed strong regal authority. All available documents refer to him as an *Infante* or a prince, never as a count. He claimed a much higher level of nobility for himself when compared to the noblemen he commanded.

In November 1130, Afonso's mother Teresa died and with her the last legal hurdle to Afonso's sovereignty. The Galician Trava family's legitimacy to rule was reduced to dust and the Prince took advantage of the permanent conflicts between the Galician aristocracy. The Galician earls from Toronho and Límia recognized

his authority and the Celmes castle was built. This warrior stance challenged the king of Leon and the powerful archbishop of Compostela who fought back and destroyed the castle, restoring the power of Leon in the region. While Alfonso VII, king of Leon, arbitrated the conflict between Navarre and Aragon, Afonso of Portugal invaded Galicia and defeated the Trava forces in the Battle of Cerneja (Limia). This was an outrage to the emperor who decided to summon Afonso Henriques to a meeting on 4 July 1137, in the city of Tui, where they signed a peace agreement. Afonso recognized Leon's sovereignty but this treaty did not prevent the Prince from wishing to possess Galician territories. At the beginning of 1141, the Portuguese armies faced the forces of Leon at Valdevez. Everything ended in a new treaty in which all the lands previously taken from each side were thereby restored.

After the Galician border situation became peaceful, the Prince's eyes turned south. In 1131, he established his headquarters in Coimbra, a key decision which incremented the strength of Portugal's national independence. Freed from a space contaminated by a seigneurial system, in Coimbra he was able to exercise the public authority inherent to his regal prerogatives. The strengthening of military and political power was based on the warlike capacities of the municipal armies and the northern knights from Minho, second sons who could not inherit and therefore who searched for prestige and wealth in the southern territories.

In 1135, using Leiria castle as his base, he commanded the occupation of the lands between Soure and Penela. The main objective was the strengthening of the line of the River Mondego, in which the castle of Soure, donated to the Templars in 1129 or 1130, played a key role (Varandas 2010). The Prince himself led several missions against the Moors, such as the foray in 1136–1137. He consolidated the new territory with the creation of several new municipalities (Miranda do Corvo, 1136) and the construction of new castles: Germanelo, Alvorge and Ansião, in 1142 (Barroca 1991). To put an end to the Muslim raids on the region of Coimbra he had to take the cities of Santarém and Lisbon, from which the Moors departed for each incursion. These two cities were conquered in 1147. A few years previously, Afonso Henriques had already won a battle at the core of the enemy's heart, in a long military expedition (*fossado*), which is known as the victory of Ourique (Martins 2011).

At the same time as carrying out these conquests, Afonso of Portugal further developed his administration and the settlement over the new territory which was expanding. However, his great concern was still the war against the Muslims. Military actions were crucial for the Prince's political agenda. Nevertheless, these military dynamics had their consequences. The need to stabilize and consolidate borders and settlements fostered a strong re-populating activity. To consolidate the River Mondego border and to launch the Christian advance over the Tagus, the future Afonso I of Portugal granted a considerable number of municipal charters between 1127 and 1151. His intentions were to attract settlers to the dangerous border territories and, at the same time, engage those municipal communities in the military process (Mattoso 2006).

The conquest of Lisbon (1147)

In July 1147, Afonso's war host was approaching from the north of the Muslim city of Lisbon. At a distance, a fleet of Crusaders, arriving from northern Europe, entered the Tagus and anchored. The city was getting ready for a lengthy siege that would last until 21 October. This was the second time that Afonso of Portugal had tried to conquer Lisbon. In 1142, despite having 80 Christian ships, the military expedition failed. The conditions were different this time. The Crusader fleet was stronger; the Portuguese warriors were more determined and the Muslims were more weakened and divided. Lisbon was the Second Crusade's sole success (Barbosa 2004).

On 19 May, the first contingents of English, Scottish, Flemish, Breton, Norman and Cologne crusaders set sail from Dartmouth aboard approximately 164 ships. No king commanded them. Arnold III of Aershot, Christian of Ghistelles, Henry Glanville, Simon of Dover, Andrew of London and Saher of Archelles were the captains of the expedition.

On 16 June, the fleet anchored in Oporto and listened to the bishop, Pedro Pitões, who on behalf of Afonso Henriques requested their help for the military operation against Lisbon. The timing was appropriate, as the Portuguese had just taken over Santarém and could move forward south without any opposition.

The two forces (ground and naval) prepared the siege of the city. The Portuguese vanguard won the first skirmishes, in the western suburbs of Lisbon. Afonso set up his base camp on the Sant'Ana hill, overlooking what is now called the Martim Moniz square. The position was excellent. It had good natural defences, with two water lines and an open escape pathway to the north. From there, the Portuguese had an excellent overview of the enemy's movements. The Moorish defence was resilient, the fighting fierce, but the Christian siege imposed itself on the large city. Since Lisbon was part of the *taifa* of Badajoz, a warrior fleet was expected in its harbour. However, when the Crusaders arrived, no Muslim ship attacked and the coastal towers did not prevent the landing. The city had protected itself with strong walls, towers and suburban defences. The population was numerous and the garrison was strong, approximately 15,000 people, according to Christian sources, plus a militia recruited in the city. The Christian reports also refer to the presence of several *ballistae* in the city towers (Barbosa 2014).

During the first days of July, the Christian assault began. Stones and other projectiles were hurled at the walls, causing the initial destruction of structures and casualties amongst the defenders. Resistance weakened, food became scarce and reinforcements had not arrived. Christian attacks unfolded throughout the months of August and September.

On 16 October the final attack on the walls began on two fronts, to the west by the British and the Normans, and to the east by the Flemings and the troops from Cologne. Between 17 and 21 October, the eastern wall collapsed, next to the *Portas do Sol*. The door, later called Martim Moniz's door, was taken by Portuguese forces.

The Crusaders gathered for Mass before the final assault on 19 October. They moved a siege tower that tried to lean against the *Torre da Escrivaninha* (the Tower of the Desk). The enemy concentrated many troops there, so they moved it near to one of the doors that gave access to the Tagus (nowadays the *Arco Escuro* – the Dark Arch). From the top of the tower, English archers and crossbowmen threw their projectiles over the defenders, who withdrew. The Moors suddenly rushed forward to attack the siege tower. The tower resisted and the Moors were forced to retreat, after a counterattack by the Crusaders.

On 21 October, the Christian siege tower reached and leaned against the walls. Out of it came warriors who occupied the parapets and took control of the wall. Resistance collapsed. The Moors laid their arms down and asked for a truce, which was granted. Fernão Peres Cativo, Afonso Henriques's lieutenant (*alferes*) and Hervé de Glanville, representing the Crusaders, negotiated the truce for the Christian side.

On 24 October, the Christians seized Lisbon. On the following day, Afonso solemnly entered the city, going from Alfama to the Cathedral (the Mosque at the time) and moved forward to the Castle. Lisbon had become Portuguese.

The Christian thrust continued southwards, towards the River Sado. Almada had been taken in September, in a landing operation carried out by crusader ships. Palmela was taken in October. In 1151, Portuguese forces failed to capture Alcácer-do-Sal and it would only fall a few years later. In the region, the entire defensive system of Islam collapsed. Further to the west, in November, the garrison of the castle of Sintra surrendered to the Portuguese leader.

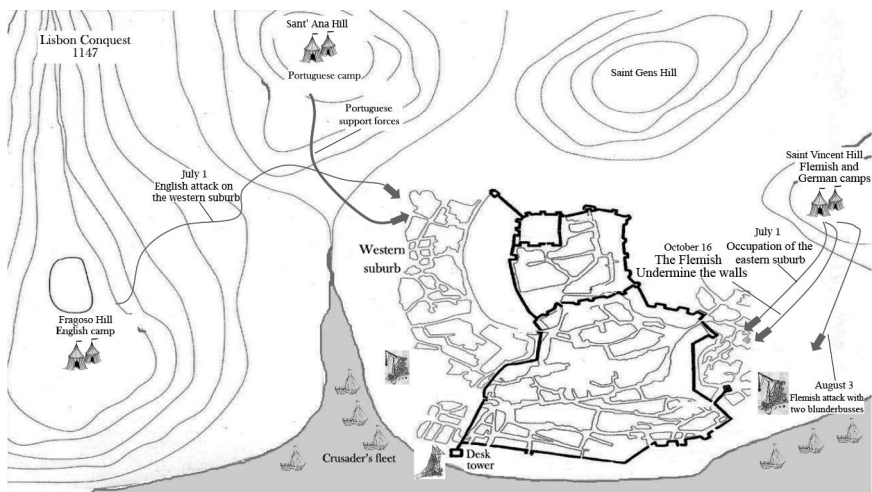


FIGURE 6.1 The conquest of Lisbon: the final assault on 25 October 1147. (Author's drawing adapted from Pedro Gomes Barbosa, *Conquista de Lisboa. 1147. A cidade reconquistada aos mouros*. Lisboa: Tribuna da História, 2004, pp. 70–71)

The conquest between the rivers Tagus and Guadiana (1147–1239)

The advance to the south was relentless. After Almada and Palmela, in 1158 Alcácer do Sal fell, opening access to the Lower Alentejo. With these incursions, the Portuguese king definitively transferred Portugal's border along the Tagus. These borders were further strengthened by means of important donations made to the Templars and the remaining Crusaders. These were important measures, but they did not prevent Almohad power from increasing. Under the command of the chieftain Geraldo Sem-Pavor (*fearless Gerald*), Évora, Moura, Serpa, Alconchel, Juromenha and Christian Leon lands such as Cáceres, Trujillo and Montánchez were taken.

Violent Christian incursions (*fossados*) devastated the lands of the Alentejo. Fortune changed in Badajoz, in 1169: Fernando II of Leon established an alliance with the Muslims preventing Geraldo from taking over the city. Badajoz was under the Leonese sphere of influence and the presence of Portuguese military could have limited his expansionist effort. For the Almohads, there was a very clear need to protect their strategic position on the banks of the River Guadiana at all costs. The Moroccan emir sent a substantial number of back-up troops. Afonso entered the city trying to help. The Portuguese were surrounded by Leonese troops. Afonso Henriques was seriously injured and accepted the conditions imposed by Leon, losing almost all the strongholds he had conquered in the region. As examples of military policy and re-population, we have the municipal charters granted to the horsemen of Sintra in 1154 and to the city of Évora in 1165. In the latter case, there was a clear intention to favour a castle that would quickly become an indispensable aid for Portuguese advancement in the Guadiana region.

Afonso's actions did not only involve the strengthening of the southern limits of the kingdom. The border with Leon deserved his special attention, particularly because of the increasing aggressiveness of Leon. The Portuguese prince established a closed line of fortifications along the border, preventing Leonese war incursions and preparing for expansion beyond the Côa River. On 23 May 1179, Pope Alexander III, through the bull *Manifestis probatum*, recognized the royal title to the prince and all his descendants. Afonso I of Portugal died on 6 December 1185.

The military leadership of the kingdom was transferred to the hands of Prince Sancho in 1170 (after the disaster of Badajoz) and, despite the increasing Almohad pressure, this Portuguese impetus remained. In 1178, Sancho I commanded an important incursion (*fossado*) over Moorish territory, which took him very close to Seville. He destroyed the outskirts of the city and retired, but he still had enough strength to attack Beja. This was an extremely important campaign, not only as a military action, but also due to the fact that Christians had reached the core of Almohad power (Branco 2006).

The war effort was kept up throughout the next century. From 1224 onwards, Leonese and Castilian forces restarted hostilities against Islam and took Cáceres and Mérida. Not long before this, the Portuguese forces of Sancho II had occupied Beja and Juromenha. They also took Moura and Serpa (1232), Aljustrel (1234), Mértola

(1238) and Ayamonte (1239). One of the fundamental objectives was to prevent the access of Muslim forces from the castles below the Guadiana to the fortresses that Islam held in the current Spanish Extremadura.

The Crown acquired the Lower Alentejo and penetrated the eastern Algarve (*Sotavento*), preventing the Moors of Andalusia from assisting the castles of the western Algarve (*Barlavento*) or having access to the plains of Beja and Évora. There was an almost complete paralysis of the military system of the Gharb al-Andalus leaving only some strongholds along the coast which were able to receive supplies and maintain some levels of resistance. However, the land routes that gave access to the north, east and west were patrolled by knights of the military order of Santiago, and in the areas surrounding the large cities already conquered there were well-equipped and well-motivated municipal militias. Sancho II undid the defences of the Alentejo and isolated the Algarve.

The civil war (1245–1248)

Despite the momentum of conquest that the Portuguese forces imposed on the lands of Islam, from 1245 onwards the kingdom underwent a process of internal chaos that culminated in a civil war between the king's followers and a considerable part of the clergy and some noblemen who supported Afonso, Count of Boulogne-Sur-Mer, brother of the monarch. The flags of this conflict unfurled with the landing of the count in the port of Lisbon. The kingdom had long been preparing for a civil war, and the papal bull deposition precipitated these events. The rebel landing took place in Lisbon at the end of 1245. The rebels had the support of the Lisbon population, which was displeased with both the king and the bishop. The city was a logistical, political and administrative centre which was crucial to the count's ambitions and it was the only place where he could land in the Portuguese kingdom (Varandas 2004).

Military operations were focused on the Atlantic region of Extremadura, mainly in the area between Leiria and Coimbra. Despite the initial advances from Lisbon, Count Afonso forces were blocked in Leiria. In 1246, Afonso took Santarém, Alenquer, Torres Novas, Tomar, Alcobaça and Leiria, and Sancho II's army strengthened its fortifications in Coimbra. From there, royal forces attacked the enemy's supply chains and his progress. There was news that on the Beira frontier the Castilian war hosts were gathering. Following the request of the king of Portugal the monarch of Castile and Leon sent his help. A military corps, commanded by prince Alfonso of Castile, entered Portugal at Ribacôa on 20 December 1246, soon after having taken part in the capture of Jaén. This military corps concentrated on the border and headed for Coimbra. On their way, they took the rebel strongholds of Covilhã and Guarda, where they left their own garrisons. On 13 January 1247, this army defeated the forces of the count of Boulogne after devastating the surroundings of Leiria. The military operations of the Castilian forces continued. The noblemen Fernando Eanes and Rodrigo Froile de Lima invaded the region of Braga and plundered several churches, incurring papal sanctions. The arguments presented by

the pontifical curia were significant and compelled Castile to withdraw its forces, taking Sancho II with them and thus avoiding the embarrassment of his capture.

The withdrawal of Castilian forces did not put an end to the civil war. The north of the kingdom remained faithful to the king. In the Beiras, many castles, strengthened with Castilian garrisons, were prepared to resist the advancement of Afonso the *Bolognese* forces. Nevertheless, the cause was lost for the king. Sancho II did not have the support of the high clergy and the nobility, nor of the commercial bourgeoisie and its important resources. The corrosion that the papal decree deposition provoked was tremendous, both in terms of the dynamics of the war as well as in the psychological impact it had on the Portuguese. Sancho II died in Toledo on 4 January 1248.

Recruitment and configuration of military service

The *Reconquista* society completely ignored the organized and permanent military system of the Ancient World. The Roman, Visigoth and Byzantine models adapted poorly to the characteristics of a different way of making war. The Asturian monarchy and the succeeding Christian kingdoms did not possess the economic means to sustain a professional military structure as costly and as complex as a Roman legion. The slow and heavy classic military columns were replaced by a lighter structure, similar to the armies of Islam, wherein the light Berber cavalry emerged as an example to follow. In its first stage, the Christian military system emphasized the use of this cavalry that afforded great mobility. The practice was to carry out fast and surprising raids which were then the basis for further tactical dynamics. These knights almost completely ignored the use of bodily protection, at least until the middle of the 11th century. Due to this reason, these squads whenever possible avoided pitched battles for which they were not properly equipped (Barroca 2003).

Moreover, this was not a permanent, professional structure, but an armed force that was gathered whenever needed. These units were made of two types of combatants: those who practised war professionally, the *bellatores*, and those who formed an awkward group of men obliged to appear whenever the king or lords summoned them. The nobility provided the elite force, making up a well-equipped military, owners of good mounts, well-trained and knowledgeable in tactical affairs. From the 12th century onwards, other professionals also from the nobility joined: the warriors of the military orders. Noblemen and military orders formed the offensive army, the one that together with the *cavalaria-vilã* (villain cavalry, or light horsemen) carried out the *fossado* operations and the conquest of enemy territories.

In addition to these elite units, there was a mass of men who had, depending on the circumstances, to take up arms. They had to possess their own weapons, according to their social status and their belongings. They were always poorly equipped and poorly trained and they were no good for offensive missions. They defended the fortified settlements and the castles, building the static part of the army, the peonage. The medieval municipal charters (*forais*) established a clear distinction

between the villain cavalry that had to participate in the offensive expeditions (*fossados*) and the peonage, who had to stay and defend the strongholds.

Military service was regarded as a duty of free men as well as a privilege. Medieval forces were thus made up of all free and fit men under 60. The monarch summoned the necessary men who lived in the area, or nearby, wherein military movements were to take place, but this calling was not general. This military service consisted of two very specific components: the defensive and the offensive. The defensive process was called *apelido*, derived from the Latin *appelo*, which means 'to call'. The *apelido* was released whenever there was an invasion of the territory by enemy forces, either Muslim or Christian. All capable men, without any exception, had to answer this call, which was made by the land officers in the name of the king. Failure to appear was severely punished and the offender was obliged to pay a severe fine. Some documents indicate the possibility of the offender not having heard the call, or being in the service of the king. Under these conditions, he was exempt from paying a fine. The *apelido* was answered by all: peons, villain cavalry, noble cavalry, members of military orders, and even members of the regular and secular clergy. The duration of this type of service was also peculiar. Many of the municipal charters of northern Portugal, territories far from Muslim incursions, ensured that the inhabitants would only have to respond to the *apelido* if they could return to their homes on the same day. Other municipal charters, after 1224, declared that the inhabitants only had the obligation to go in a *hoste* (a group of armed man) if the king was also participating and if the military action would take place only between the Minho and Douro rivers.

Military expeditions that entered enemy territory were called *fossados* (see Glossary and Chapter 3: *fossado*). This is a genuinely medieval designation that goes back to the 10th century and seems to have originated in the earldom of Castile. The origin of this designation is still a mystery. In Portuguese territory, the earliest reference to this type of operation appears in a diploma from the city of Braga dated from 1025. The *fossado* was an expedition organized by or on behalf of the king, although there are indications that other leaders could organize their own expeditions. They were generally land expeditions, but there are references to sea *fossados*, thereby indicating the existence of offensive maritime expeditions. The memory of the constant presence of Muslim and Nordic piracy on the Portuguese coast helps to understand this scenario quite well.

The *fossado* was a military expedition which was normally organized in the spring or summer. It sought to benefit from the climatic conditions and the availability of fodder in the fields, situations that greatly facilitated the movement of troops and the feeding of the horses. This type of expedition mainly involved cavalry forces, particularly the villain cavalry. The use of this type of force was justified since it was intended to attack Muslim forces by surprise, and for that purpose very swift movement was essential. The Portuguese municipal charters were very clear about the type of forces that were expected for a *fossado*. In many instances the peonage was exempt from going on the *fossados*, assuming only a defensive role. But not all the members of the villain cavalry were in the *fossado*. In general,

in the north and centre of the kingdom only a third of that kind of cavalry participated. The other two-thirds stayed in the villages to secure their defence. In the more southern areas the process was reversed, where two-thirds of the horsemen were offensive, leaving a third in defensive process. The necessity of protecting the border with the kingdom of Leon and having to secure large numbers of cavalry in the manoeuvres against Islam justified these procedures. Many municipal charters stipulated the number of knights to be called to arms, such as the charter of Santarém (1179) which required 60 horsemen. This tradition seems to go back to 1147, when 60 knights of Santarém accompanied Afonso Henriques in an attack on Alcácer do Sal. The Portuguese kings were condescending towards the knights who did not want to go to the *fossado* and accepted various reasons to justify their absence. The knights only had to prove that either they had been married for less than a year, or their wife was ill, or if they were a widower, or otherwise that their horse was sick. Others were exempted from this service because their localities were near to the Leon border.

The summoned knights who did not participate in the expeditions had to pay the monarch the *fossadeira*, a monetary contribution that penalized those who did not appear for the offensive military service. The fact that the villages of the north were distant from the borders with Muslim territories meant that the payment of the fine fell on property, whereas in the southern lands the *fossadeira* was regularly applied to those who, without any justification, ran away from military duties.

The participation in offensive expeditions was rewarded with the right to plunder which was divided according to well-defined rules. The plunder was divided into five equal parts, four of them for the military and the fifth part for the king. The profits of the *fossado* were regularly mentioned in the municipal charters of the kingdom. In Coimbra's charter (1111), the king also had the right to one fifth of the plunder; the *azaga*, or rearguard, was awarded two-fifths and the inhabitants of the city that participated in the *fossado* shared the other two parts between them. Such a division of the captured booty encouraged the populations to participate in these aggressive but very dangerous expeditions.

Offensive military expeditions have had other names besides the term *fossado*. The terms *algara*, *azaria*, *cavalgada* and *almofala* defined nuances of this process of rapid and mobile military action on the enemy. *Azaria* defined a peculiar kind of action: it was applied to raids made by local groups, spontaneously, and without any coordination from the monarch. The *cavalgada* (cavalcade) consisted of a predatory incursion that only made use of cavalry (villain and noble). This reality may lead us to assume that in the *fossados* there could be some support from infantry forces.

There were other mandatory activities of a military nature for those who did not participate in war expeditions. All those who were not noble but were fit for military service had to assist in the tasks of building and maintaining the military structures of their land. This was the so-called *anúduva*. This contribution, which formerly designated military service on horseback in the border areas, was characterized in Portugal by this other activity of repairing and building fortifications and the term was defined during the reign of Sancho II (1223–1248).

Another very important need of the *Reconquista* system was the constant surveillance of the vast regions that were exposed to the enemy's action, and this took on a decisive strategic importance. A very large set of documents indicates the care and attention given to the observation system. Expressions such as *ronda*, *vela* and *vigia*, or military-type place names such as *atalaia* (watchtower), *faro* (lighthouse), *facho*, *esculcas*, *almenaras*, clearly reveal the importance given to surveillance.

The host of war

The forces called upon by the kings of Portugal until 1248 could gather military contingents of various sources and with highly differentiated dimensions and equipment. The smallest group was, however, the most professional, namely the monarch's personal guard, an authentic *schola*. This group was joined by the forces of noblemen (*mesnadas*). The great lords brought their war groups, composed of family members and vassals of lower-status lineages, often referred to as 'knights of a shield and a spear'. Little is known about the size of these groups of knights or about the processes of their creation, training and combat. They are very scarce in the existing documentation, but there are some studies that attest to their importance and which also refer to the presence of foot soldiers in these entourages (Barroca 2003).

The fighting noblemen were paid by the Crown for the military services rendered. The king paid mostly in the form of lands (*préstamos*), but also in stipends (*soldadas*), or both. From that amount or from the revenues of those *préstamos*, each noble leader had to support his war group, formed by individuals tied to him by bonds of fidelity.

Beyond the nobility other social groups were distinguished by the way they performed military service. The richest men served on horseback and formed the villain cavalry. The less wealthy, who did not have the resources for a horse and specific military equipment, served in the infantry. This division clearly demonstrates the importance given to war as a definer of society in this period. Municipal knights were free men who, though they did not belong to the blood nobility, possessed a horse and suitable weapons for mounted warfare. They had to present minimum armaments: hauberk, iron cap, shield, lance/spear, javelin as well as a sword. In the definition of his military and social condition, having a horse was fundamental. In the charters of many municipalities, a knight who would lose his horse in combat had about one year to present himself with a new mount, without losing the right to his status. All services due to the king, all the equipment and the maintenance of a horse was paid with their own resources. The king paid no fixed stipend to this type of knight but they enjoyed some fiscal and social privileges, such as exemption of payment of tolls and the *jugada* (see Glossary), the excuse from manual labour in the *anúduva*, and the right to exercise as a public officer. The villain cavalry always fought in the vanguard of the host, which was very risky but highly prestigious. In the municipal charters, the widows and the children of the knights killed in combat maintained all the privileges of their social status, as long as they lived in the lands of the county.

The village cavalry was the elite of the municipal forces. They played a prominent role in municipal life, dominating the oligarchy that governed the community, developing group solidarity to protect their social and economic prerogatives vis-à-vis other municipal groups and even against the nobility and the seigneurial structures. The municipal cavalry constituted a real barrier to seigneurial expansion in the central regions of Portugal.

The foot soldiers came immediately below those horsemen in the social and military hierarchy. These were an amalgam of free men, with scarce resources and who, because they had no horse, could only perform military service on foot. They were very rudimentarily armed with a spear, a javelin and not much else. Since they moved on their own feet they were, in Portuguese lands, exempt from going into the *fossado*. But they were obliged to provide service under the *apelido*.

The last quarter of the 11th century gave rise amongst the peonage to a group that would eventually become very important, namely the crossbowmen. This group assumed a status that was equivalent to that of the municipal cavalry. The crossbowmen played a significant role not only in the defence of castles and cities, but also in offensive expeditions and field battles throughout the 12th and 13th centuries.

II THE LATE MIDDLE AGES 1249–1367

1249–1367 A time of reforms and royal consolidation

*Miguel Gomes Martins and João Gouveia Monteiro*¹

Given the new geo-strategic context that emerged after the end of the *Reconquista* ('reconquest'), the Portuguese Crown became fully aware of the inadequacy of the military structure on which that massive political and military enterprise was based. Between 1249 and 1367, this 'society organized for war' had no choice but to rearrange itself. This resulted in profound military reforms, combined with a reinforcement of royal authority. Episodes of war – internal and external – were not entirely absent from this period, eminently peaceful though it was. This state of things permitted the quick enactment of those reforms, while it was possible to measure their effectiveness (Martins 2014; Barroca 2003; J. G. Monteiro 2003).

Afonso III and Dinis: mobilizing the nobility

In the early days of March 1249, Afonso III (1249–1279) laid siege to Faro. This operation was vital for the king, for reasons both military – Faro being the last town yet to be taken from the Muslims in the Algarve – and political – since defeat might threaten his authority, which was still somewhat unsteady, as he had ascended to the throne as a result of civil war. To ensure success, Afonso III gathered a large army and secured massive logistics, resorting to siege engines and significant naval support. Despite all these precautions, the siege would be lifted in less than a month,

when the besieged accepted the generous surrender conditions offered by the king. Complete dominion over the Algarve brought the Portuguese *Reconquista* to an end. It also established the current borders of mainland Portugal, barring minor, subsequent adjustments (Martins 2011: 169–193).

Still, borders were far from being safe, especially to the north and east, where Portuguese territory was contiguous to Castile and Leon. These kingdoms maintained strong expansionist agendas which included the Algarve, leading to an armed conflict between 1250 and 1253. The contention was initially resolved by the marriage of Afonso III to a daughter of Alfonso X, in 1253, and later, by the 1267 treaty, by which Portugal regained full sovereignty over those southern territories.

Though successful in their outcome, all of Afonso III's early campaigns were hindered by difficulties in mobilizing the royal army, mostly resulting from the failure of the model traditionally applied to the recruitment of noblemen, still largely based on the feudal relationship between lords and vassals. The monarch attempted to solve this problem with two novel approaches, namely the payment of *soldadas* (wages) to a larger number of noblemen and the conversion of his private guard into an actual small army, called the king's *mesnada* (retinue), which could be assembled swiftly, much like a rapid reaction force. It soon became the backbone of the royal army. These were important resolutions, but their temporary nature rendered them quite insufficient for the needs of Afonso III's heir, Dinis (1279–1325), regarding the episodes of strife with his brother, *Infante* D. Afonso.

Afonso owned a vast estate, located next to the border with Castile, which included the strongholds of Portalegre, Marvão, Arronches and Castelo de Vide. In 1281, he engaged in direct confrontation with the king by promoting an extensive renovation project in the Castelo de Vide castle without permission. In response, Dinis laid siege to the fortress, leading a force essentially composed of urban militias, because of an almost complete absence of noble *mesnadas*. The besieged fortress surrendered after just one month. A new conflict between the two brothers would arise in 1287, when Afonso lent his support to a Castilian rebel, Álvaro Nuñez de Lara. Since this originated a predicament not only for Dinis, but also for Fernando IV of Castile, both kings gathered their armies and attacked the castle of Arronches, besieging it during the months of November and December, until the defenders eventually surrendered. As a consequence of the 1281 Castelo de Vide episode, Dinis punished his brother by making him his vassal and forcing him to undo all the unauthorized renovations to the fortress. This time around, however, the punishment was a lot harsher, and Afonso was deprived of the village and castle of Marvão. In 1299, a new spell of rivalry between the two brothers broke out, once again because of the *Infante's* meddling in Castilian affairs. The king laid siege to Portalegre, relying on a force of approximately 5,000 warriors, including noble *mesnadas*, local militias and military orders. The siege was raised only six months later, upon Afonso's surrender. Consequently, he lost the castles of Portalegre and Arronches and was sent into exile (Barroca 2003: 63).

Judging by the size of the army gathered under the king in 1299, it would appear that mobilizing the nobility was no longer a problem. As a matter of fact,

soon after the 1287 campaign – for which the value of the *soldadas* had been raised, in order to ensure that some of the seigniorial retinues would join him – the king enacted a number of policies which successfully persuaded noblemen to fulfil their military duties. He required virtually all sections of the nobility to render vassalage, offering payment in return (either in specie or as rents and lands). The agreement determined that vassals responded when summoned by mustering a *mesnada* that should incorporate a number of knights proportional to the amount of the payment (now called *quantia* or *contia*) they had received. Later, during the 1330s, Afonso IV (1325–1357) would improve upon this formula, establishing a minimum value for his vassals' horses and stipulating the defensive and offensive weapons for each vassal and knight in his retinue.

Weapons, local militias and the fleet

At this time, there was significant improvement in weaponry all across Europe. Portugal was no exception, actually following that progress very closely. Advancements were especially remarkable in defensive weapons, such as with the widespread use of padded armour, including the pourpoint, the gambeson and the brigandine. Another innovation consisted of the use of iron plate for the limbs and upper body. All these enhancements were intended as a reinforcement of the protection already afforded by mail armour hauberk. Improvements to head protection items were also adopted swiftly. Both the barbute and the bascinet were in use in Portugal as early as the 1340s, gradually replacing the less refined conic or closed helmets, commonplace in Portuguese warfare during the 13th century.

As far as offensive weapons were concerned, improvements were rare and not as relevant. The introduction of the thrusting sword in the mid-14th century appears to have been the greatest innovation. This weapon, though similar in structure to earlier swords, was intended for piercing instead of cutting. The blade was thinner and pointier for that reason. Records also describe the use of enhanced maces, now capable of rending metal because of thick, robust blades mounted radially at the head. These upgraded maces emerged as a response to improvements in defensive weapons. The main innovations in neuroballistic weaponry consisted of the addition of the stirrup to the crossbow and the hook carried around hanging from the crossbowman's belt. From the early 14th century onwards, these two pieces of technology rendered the weapon more powerful and faster to arm.

Even if Dinis chose not to impose regulations on the weapons employed by his vassals' retinues, he did control those of the local militias. These forces had proved crucial for both territorial expansion and defence operations in the context of the Portuguese *Reconquista*.

However, as Portugal's southern border kept advancing, and particularly after the conquest of Algarve, these militias lost much of their previous military capability. In a royal attempt to counter this, a complete reformation of the militias' conditions of service was carried out between 1315 and 1317, in the form of a revision of the criteria of wealth that determined whether an individual should join as a

knight or foot soldier. However, the most significant novelty was the introduction of subdivisions within those two categories, namely light and heavy cavalry, lancers and crossbowmen. Personal wealth dictated which segment a fighter belonged to. The new legislation was also very specific in determining the type of armament to be worn in each of these categories. In order to verify that the regulations were applied, Dinis restored the somewhat disused local inspections on the quality and good condition of weapons and horses. They were carried out at regular intervals.

Dinis created yet another type of local militia, the *besteiros do conto* (literally, a number of crossbowmen), so as to improve the military sufficiency of municipalities. This was an independently regulated group of warriors with its own chain of command. Kept in a high state of readiness, it consisted of a fixed number of men submitting to regular training and equipped with potent weaponry. These forces were mustered in recruitment units spread around the kingdom, which were required to provide a predefined number (*conto*) of crossbowmen. This reached 300 soldiers, in Lisbon alone.

Dinis was also responsible for other advances in the kingdom's military structure, particularly the navy. In 1317, he hired the Genoese admiral Emanuele Pezagno, who brought about 20 experts in naval matters with him to Portugal to command the royal ships and train new captains and crews. The establishment of shipyards in Lisbon, with room for 13 galleys, also bears testament to a developing war navy. This increased naval capacity did not mean, however, that merchant and transport ships ceased to be utilized. In fact, these made up more than half of the vessels used for sea operations and could be especially fitted with rams, castles on the aft and fore and shielded rails. Nevertheless, even before the arrival of the Genoese experts, the Portuguese navy was already a force to be reckoned with, proving very capable for land-based and maritime operations. Examples include, respectively, the naval support to the siege against Faro in 1249, and the naval battle of 1296, part of the Portuguese intervention in Castile (Duarte 2003: 298–303).

From the 1296 intervention in Castile to the 1319–1324 civil war

Supporting Alfonso de la Cerda's claims to the Castilian throne, Dinis and his brother-in-law, Jaime II of Aragon, contrived an ambitious plan to divide Castile into two autonomous polities. According to the plan, de la Cerda and his uncle Juan would become kings of Castile and Leon, respectively. Once the Aragonese armies had entered Castilian territory, one from the north and the other through Murcia, the Portuguese army advanced into Valladolid in September 1296. The city, defended by Fernando IV, was then besieged with the aid of a Castilian rebel contingent. The reaction to the attack was timid, consisting mainly of small-scale raids into Portuguese territory. These were carried out by land, in the province of the Alentejo, and by sea, through a fleet which reached Lisbon but was eventually defeated off the coast of Sines as it returned home. Jaime II of Aragon was mostly committed to overpowering Murcia, and his lack of interest in Valladolid prompted

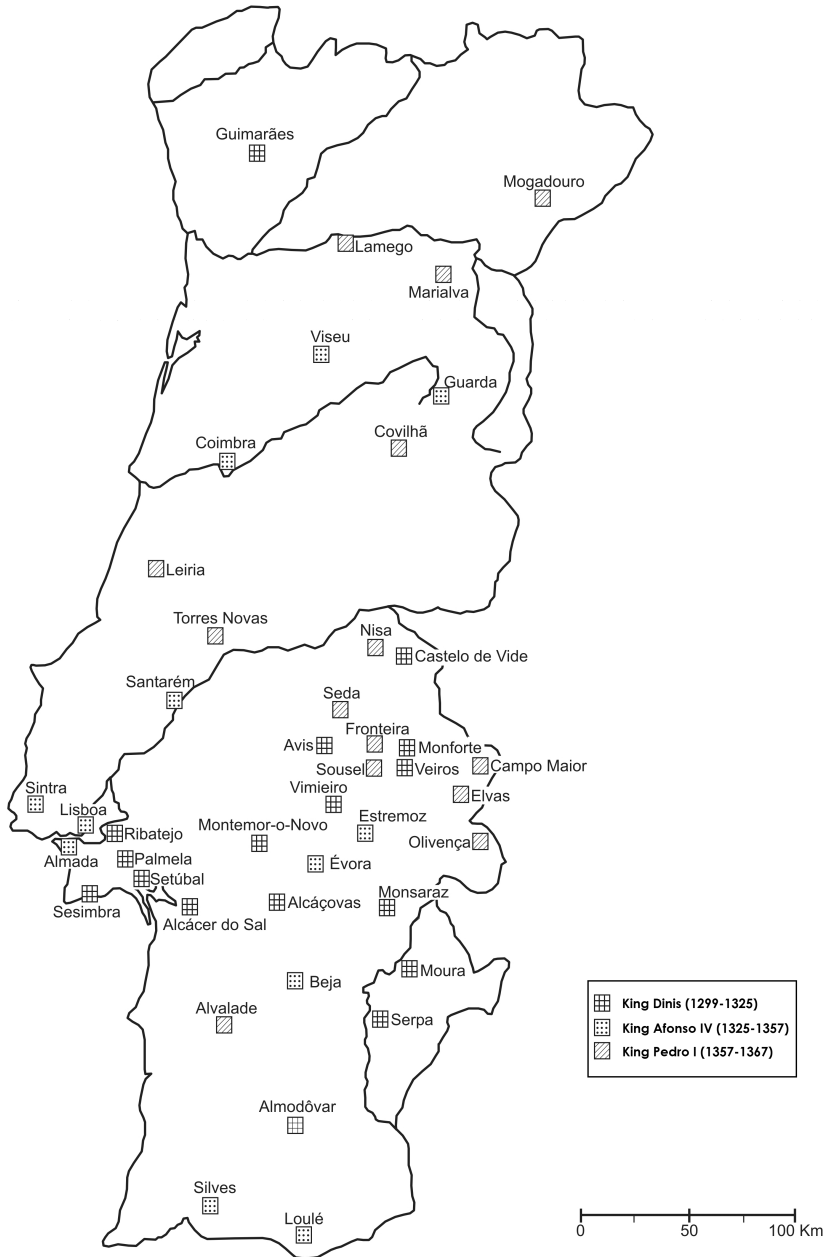


FIGURE 6.2 *Besteiros do conto* (crossbowmen) in Portugal (1299–1367). (Authors’ map)

the Portuguese army to retreat. While crossing the border on their way back, Dinis’ army occupied the castles and villages on the right bank of the River C^oa. The territory would be formally included in Portugal in the 1297 Treaty of Alcañices (Barroca 2003: 64–65). The Castle of Sabugal was one such fortress, later equipped

with active defences. These had begun to appear in France earlier in the century, and were then applied gradually to Portuguese fortifications.

Afonso III had already introduced a number of changes to the structure of castles, and he had had first-hand contact with such innovations during a period living in France. These innovations, however, became more prominent during Dinis' reign. Walls were erected taller and thicker, with *torres de menagem* (keeps) also becoming higher, such as that in the Beja castle with a height of nearly 40 metres. The base of these towers began to veer towards a pentagonal (in Sabugal) or hexagonal (Freixo de Espada à Cinta) shape, replacing the traditional square form. Such towers were more resistant and provided warriors with wider shooting angles. They were also moved from the centre closer to the gates, adjacent to the walls (sometimes even outside them) and usually placed at the corners. Fortified towers built along the walls, at intervals of 8 to 15 metres, became increasingly common. This not only provided reinforcement to the walls, it also enabled more efficient flanking. The introduction of balconies with *mata-cães* (machicolations) ensured the defence of vulnerable, strategic spots, such as the gates. These, in turn, were also reinforced with fortified towers at each side, transformed into curved entrances, or supplemented with drawbridges, which involved the excavation of either dry or water-filled moats. These contraptions were designed to hinder the approach of enemies with their heavy weaponry. Documents dating from the 13th century further mention the use of barbicans as a defensive device.



FIGURE 6.3 Sabugal castle. (Photo by Nuno Tavares)

Existing records register an impressive number of 143 building interventions during the period between 1249 and 1367 alone. These included constructions, reconstructions, upgrades and reparations. Of these, 32 were executed during Afonso III's reign and 76 during the rule of Dinis (Barroca 2000). Both monarchs thus prioritized improvement – qualitative as well as quantitative – of the kingdom's fortification network. They also acknowledged the role of these castles in safeguarding the kingdom's territory, particularly the (presumably more vulnerable) land borders. The walled villages and castles dotting these borders would develop according to a structure of two, sometimes three, parallel lines of defence, which became increasingly noticeable (J. G. Monteiro 1999: 51–95).

However, the neighbouring kingdom of Castile was not the only menace that the Portuguese Crown had to deal with. The civil war between Dinis and his son, prince Afonso, was clear proof of that. Dinis' close relationship with his illegitimate son, Afonso Sanches, fuelled Afonso's jealousy to a point where he feared being left behind in the succession to the throne. Soon, this family quarrel grew out of proportion, as the prince gathered enormous support from the nobility, since a large part were disgruntled at the royal policy of seigneurial control. The escalation of violence was triggered by the prince's army, which had incorporated many outlaws and *homiziados* (see Glossary), which was common for private armies of the time. Between 1319 and 1321, Afonso carried out armed actions throughout the kingdom and, on two occasions, a direct confrontation with the royal army was impending. The conflict reached new heights when the rebels occupied Leiria. They then conquered Coimbra and, in 1322, Montemor-o-Velho, Feira, Gaia and Oporto, giving Afonso control over the greater part of the central and northern regions of the country. The king reacted by retaking Leiria and attacking Coimbra, which forced Afonso to lift his siege on Guimarães, as the town failed to surrender. The two armies met at the gates of Coimbra, and the resulting skirmishes eventually gave way to the signing of a peace treaty. As early as the following October, Afonso broke the terms of the treaty, arguing that his demands to shun his half-brother had not been met. Thus, by the end of the year, both armies marched to Lisbon, ready for a pitched battle. With the tactical units already positioned on the battlefield, the confrontation was averted *in extremis* by the Holy Queen Isabel of Aragon, who also supported the signing of a new peace treaty, which remained in force for the rest of 1323. Still, the matter took an unexpected turn in February 1324, when Afonso's army prevented the king from entering Santarém. The ensuing confrontation culminated with father and son becoming reconciled within a matter of days as Dinis finally agreed to dismiss Afonso Sanches. The king would live only for one more year, putting an end to a 46-year reign.

Unsurprisingly, as soon as he was crowned in 1325, Afonso IV confiscated all of Afonso Sanches' assets in Portugal. Sanches' reaction came swiftly, with numerous raids on Trás-os-Montes and the upper Alentejo. Hence, in August, King Afonso laid siege to La Codosera, a fortification located within the

Castilian domains of Afonso Sanches, who was visiting Alfonso XI's court at the time. The fortress was besieged for two months until it surrendered. Afonso IV had it demolished immediately afterwards (Barroca 2003: 66–68; J. G. Monteiro 2003: 245).

Portugal and Castile between the 1336–1338 war and the 1340 alliance

It has become clear that, like the earlier period, much of the military activity carried out between the mid-13th and mid-14th centuries was focused on the taking of strongholds. Thus, sieges were an essential component of warfare in Portugal. Sieges were also frequent because the besieged were aware of their advantages over the besiegers. This encouraged military commanders to take shelter in castles. These were not the only reasons for recurring siege warfare. Portuguese warfare still relied on a taxation system that largely neglected the funding of armies and military campaigns. Besides, armies were heterogeneous and assembled only for short periods of time, while artillery did not develop enough to outdo permanent defensive structures. Moreover, commanders were generally risk-averse, preferring to take refuge behind battlements and to launch *chevauchées* and other offensive operations geared towards the destruction of the enemy's resources, thus avoiding open battle. Such was the typical Portuguese strategy between the mid-13th and mid-14th centuries. Historian João Gouveia Monteiro (1998: 245) described them as: 'a "tear and wear" approach, with operations mostly being limited to specific places at given intervals. The assailed party would defend itself tenaciously, considerably slowing the assailant's progress.' The goal was to defeat the enemy through attrition, hunger, disease, guerrilla action and exhaustion. In other words, this was 'evasive warfare', as Afonso IV himself suggested in 1336 – according to the *Crónica de Portugal de 1419* (ch. 153, p. 250) – as he prepared for a military intervention in Castile.

The signing of the Escalona Treaty and the marriage of Afonso IV's daughter to Alfonso XI of Castile, at the beginning of the 1330s, created the promise of peace. However, everything changed during the spring of 1336. In the midst of a nobility uprising against Alfonso XI, the heir to the Portuguese throne, prince Pedro, was married by proxy to Constança, the daughter of Juan Manuel, one of the leaders of the rebellion. The Castilian monarch was very displeased at the union, and immediately forbade Constança from leaving the kingdom. This provided Afonso IV with a perfect motive to cross the border at the head of an army to force Alfonso XI to abandon the siege of Lerma, a city defended by Juan Nuñez de Lara, another of the rebellion's ringleaders.

Thanks to the reforms by Dinis, the Portuguese Crown now counted on a force that was ready to be mustered in the form of the king's guard, the noble *mesnadas*, the local militias and the military orders. This army must have comprised around 1,000 to 1,500 knights and 2,000 to 4,500 foot soldiers. Such were the forces mobilized for the military conflicts of 1296 and 1299, and again in 1336. Even though the army was not particularly numerous, it was still crucial to organize these

men under an efficient chain of command. Naturally, leadership belonged with the king or a replacement appointed for a given campaign. The king or his substitute would lead the rearguard in march and on the battlefield. The *alferes* acted as his lieutenant. It was he who carried the royal banner and who led the vanguard. If necessary, the *alferes* could be replaced by a *sub-alferes*. As captains of tactical units – like those heading the wings and the main host – they had under their control officers responsible for the various contingents within each unit, often headed by an *alferes*. The chain of command also included the *adaís*, in charge of exploratory missions, and the *almocadéns*, responsible for leading small infantry detachments (Martins 2014: 366–376).

The 1336 campaign began in the spring as usual, with the siege of Badajoz and several attacks on that region. Meanwhile, a fleet commanded by Gonçalo Nunes Camelo ransacked several villages along the coast of Andalusia. At the same time, the king's half-brother, Count Pedro, raided Galicia, the coast of which was also attacked by a different fleet led by Admiral Pessanha. Since none of these actions succeeded in forcing Alfonso XI to lift his siege on Lerma, Afonso IV's army retreated to Portuguese territory. In the meantime, Alfonso XI managed to defeat his domestic opposition, with Juan Nuñez surrendering in December and an agreement was signed with Juan Manuel. Hence, in June 1337, Alfonso XI launched an attack on Elvas and the surrounding area. A few weeks later, he returned to Portuguese territory, this time targeting the eastern Algarve. In the same year, the Portuguese fleet was defeated off the coast of Faro in one of the very few sea battles fought between the mid-13th and the mid-14th centuries. In November, Afonso IV retaliated by attacking Galicia, at a time when contacts aimed at a peace treaty were already underway. Thanks to these contacts, a one-year truce was signed in December, only to be interrupted in the summer of 1338, when the Portuguese northern border was breached. However, the negotiation rounds starting in September (promoted by the Holy See) and the danger posed by the Marinids to both kingdoms eventually led to a definitive agreement, signed in July 1339.

The Marinids were already in control of Gibraltar and Algeciras, and were next expected to conquer Tarifa, for control over both banks of the Strait of Gibraltar. This was essential to stage a new Muslim invasion of the Iberian Peninsula. A pressured Alfonso XI then initiated negotiations with Portugal, upon which Afonso IV decided to mobilize some ships to the Strait, in April 1340. This was intended as a military alliance to halt the progress of a common enemy, who meanwhile had enlisted the support of Yusuf I of Granada. The alliance attempted to prevent the Marinid conquest of Tarifa, under siege since the end of September. Circumstances were ideal for rekindling the Crusade ideals and to fuel the (in the end, unfulfilled) plans by Afonso IV to organize a crusade on northern Africa. Thus, the famous Battle of Salado was fought on 30 October. Alfonso XI defeated the Marinids, while Afonso IV's army – reinforced with Castilian contingents – vanquished the Granadine forces. This completely shattered any Muslim hopes of retaking the Iberian Peninsula (J.G. Monteiro 2003: 245–249; Martins 2011: 217–268).

The Crown and the military orders

One of the most interesting accounts of the Battle of Salado is found in the *Livro de Linhagens do Conde D. Pedro* (Vol. 1, pp. 242–257), based on the testimony of the master of the Portuguese Hospitallers, Álvaro Gonçalves Pereira. Like the masters of the orders of Christ, Avis and Santiago, Pereira led the forces of his own order in response to Afonso IV's appeal. To fight the Muslims meant returning to the mission for which the military orders had originally been created.

These orders were made up of a relatively small number of friar-knights. To the 69–71 friar knights of the Order of Christ (created in 1319 by King Dinis, from the ashes of the then extinct Order of the Temple) were added 6 sergeants and 58 aides during the 1320s. As for the Order of Santiago, it comprised 61 friar-knights, 4 to 6 sergeants and approximately 30 aides. The Order of Avis also added 4 sergeants and 11 aides to its 51 friar-knights. The Hospitallers (with very few Portuguese sources) probably included about 50 friar-knights and about 25 sergeants and aides. Given this, the military orders had no choice but to use additional recruitment sources by associating with noble retinues, mobilizing the vassals of their most powerful members, utilizing *homiziados*, *almogávar* (see Glossary) bands, and especially the local militias from the domains of the orders. In all, each military order might have mustered from two to three hundred horsemen, which would explain both their celebrated role in the *Reconquista* and their subsequent permanence in the armies mobilized by the Crown. It should, however, be noted that their main mission was chiefly concerned with defending the territory. They held custody over nearly 50 fortresses and wide estates located in the centre and southern regions of Portugal, most of them close to the eastern border.



FIGURE 6.4 Almourol castle, built by the Templars in the middle of River Tagus. (Photo by Orilaf Fotografia)

The Crown was aware of their military importance as well as of the political and economic power in their hands. From Dinis' reign onwards, kings tightened the leash on those institutions. Not only was the Order of Christ created, but the Portuguese branch of the Order of Santiago also became autonomous from Castile. Members were also made to render vassalage to the king. Above all, kings influenced the choice of masters. For instance, Pedro I's son, João (the future king João I), was appointed master of Avis at the tender age of seven (if not a little bit younger). All these examples show the profound changes taking place within the sphere of the military orders during this period. As a consequence of such changes in the orders' relationship with the Crown it should come as no surprise that many of these individuals were assigned with very critical missions. The master of Avis led the 600 lances (corresponding to 600 knights) sent by Pedro I to help the Castilian king in 1361, and the master of the Hospitallers, Álvaro Gonçalves Pereira, was charged by Afonso IV with coordinating the defence of Oporto during the 1355–1356 confrontation between the king and the *Infante* D. Pedro.

The romantic relationship between prince Pedro, a widower since 1345, and the Castilian lady, Inês de Castro – who had already borne three of his children – had already started to drag the prince into the internal conflicts of Castile, in which the powerful Castro dynasty played an important role. The execution of Inês in 1355 – probably ordered by Afonso IV himself – was intended to avert more serious damage, namely a possible marriage and the legitimization of her children with Pedro. This episode prompted the *Infante* to attack northern Portugal, including an unsuccessful attempt to take the city of Oporto, with an army which included numerous outlaws. This failure resulted in a settlement (signed in August and ratified the following January) to reflect mutual compromises. This paved the way for a period of peace that lasted throughout the whole of Pedro I's reign (1357–1367), bringing a cycle of profound changes in the military organization of Portugal to an end (J. G. Monteiro 2003: 250).

1367–1495: A time of transition

João Gouveia Monteiro

Political outline²

The 16 years of the reign of King Fernando I (1367–1383) were marked by wars against Castile. This was also due to the influence of certain Castilian and Galician families who had sought exile in Portugal and to whom Fernando gave lands and titles. When Pedro I of Castile was assassinated (1369), Fernando, who was the great-grandson of Sancho IV, tried to expand his territory to the east. He entered into alliances with Aragon and with Granada and invaded Galicia, while a Portuguese fleet blockaded Seville. Enrique II of Castile responded, with French help from Du Guesclin. He besieged Braga and Guimarães and removed the blockade at Guadalquivir. In March 1371, a peace treaty was signed at Alcoutim: the Portuguese

king was forced to leave the places occupied and promised to marry the *Infanta* Leonor of Castile. However, Fernando quickly disowned this fiancée to marry Leonor Teles de Meneses and entered into an alliance with the Duke of Lancaster, John of Gaunt (1372). Enrique II did not like this and besieged Lisbon in February 1373. Fernando surrendered and had to sign a humiliating agreement, the Treaty of Santarém (March 1373).

Nevertheless, Fernando pressed for the renewal of the alliance, resorting to João Fernandes Andeiro, a Galician exiled in England. An army led by the Earl of Cambridge came to Portugal in July 1381, at a time when King Juan I was on the throne in Castile. When battle seemed inevitable, Portuguese-Spanish negotiations led to an agreement that ended the war (August 1382). Shortly afterwards, Fernando fell ill and João Andeiro, having been made the Count of Ourém, assumed control of Portuguese politics. He gradually distanced himself from the English alliance. Furthermore, when the Castilian Queen passed away in 1382, an arrangement was made with Juan I for him to marry Beatriz, the only daughter of Fernando and Leonor! In April 1383, an agreement was signed where, if Fernando passed away without a male heir, Leonor Teles would take on the Regency until a son of Juan and Beatriz reached the age of 14 and was able to govern Portugal. The House of Trastámaras wanted to establish its presence in all the Iberian royal houses.

Fernando passed away in October 1383 and Leonor Teles took on the Regency, but a part of the nobility, made up of second sons and bastards led by the Master of Avis (João, bastard son of Pedro I of Portugal), who were tired of the Castilian influence in Lisbon, revolted. On 6 December, João Andeiro was assassinated and the revolution spread. Leonor Teles asked for the help of her son-in-law, who invaded Portugal and forced his mother-in-law to give up the regency. Following this, he laid siege to Lisbon (May 1384).

In the meantime, the Battle of Atouros had taken place on 6 April 1384. Here, the young Nuno Álvares Pereira, whom the Master of Avis had appointed *fronteiro* (military governor) of the Alentejo, defeated a Castilian troop advancing on Lisbon. Excited, the Master of Avis subdued several fortresses still on the side of Beatriz and Juan I. He then convened a meeting of the *Cortes* in Coimbra which, on 6 April 1385, proclaimed him as King João I of Portugal. The king of Castile reacted and organized a tripartite attack: his fleet blocked Lisbon, the king besieged the border fortress of Elvas and a *hoste* (group of armed men) headed by Rodríguez de Castañeda invaded Beira. Only the first operation went well because Elvas resisted and the incursion through Beira was fought near Trancoso, where an army of Portuguese noblemen slaughtered the Castilian troops (29 May).

Juan I had to change his plans and in July, amassed his forces in Ciudad Rodrigo and entered Portugal, claiming his rights to the crown on behalf of Beatriz. The goal was to lay siege to Lisbon again. However, on 14 August 1385, João I and Nuno Álvares (now *condestável*) crushed the Castilian column at Aljubarrota, with English support. In October, Nun'Álvares defeated the Castilians at Valverde (Mérida). The Portuguese king neutralized the last vestiges of resistance and on 9 May 1386, signed the Luso-British alliance at Windsor. Portugal wanted to keep

The Revolution of 1383–1385

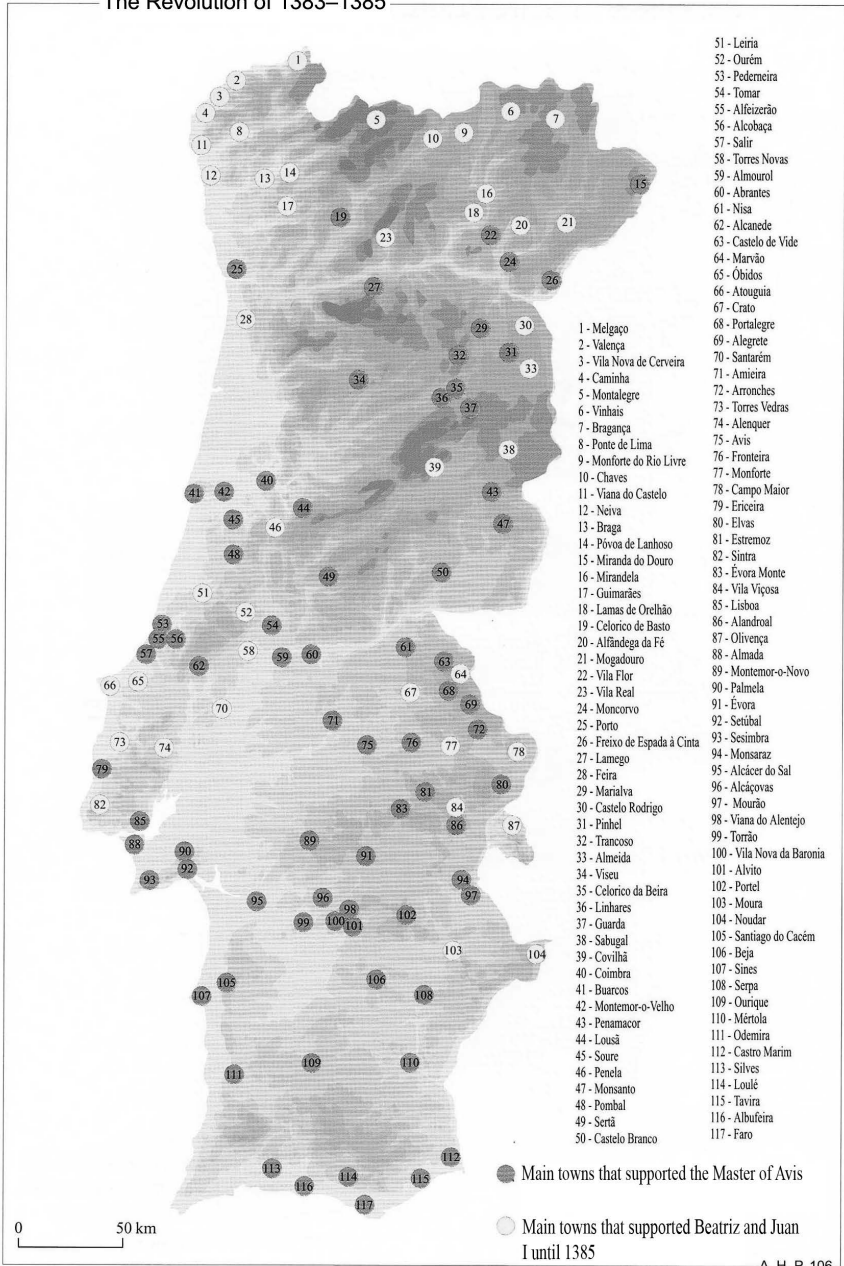


FIGURE 6.5 The Revolution of 1383–1385 (A. H. de Oliveira Marques and João José Alves Dias, *Atlas Histórico de Portugal e do Ultramar Português*. Lisbon, Centro de Estudos Históricos, 2003, p. 127)

their adversary under pressure to avoid a new invasion. For England, it was an opportunity for the Duke of Lancaster, with Portuguese help (a daughter of the Duke, Philippa, married João I) to claim the throne of Castile, since he was married to a daughter of Pedro I (Russel 1955). In July 1386, John of Gaunt landed in Corunna with a fleet of over 100 ships; in March 1387, an Anglo-Portuguese army invaded the lands of Castile and Leon, in a fruitless campaign that lasted until 4 June. John of Gaunt failed in his attempts and ended up signing the treaty of Trancoso-Bayonne with Juan I. However, João I had obtained what he wanted most: to preserve Portuguese independence. Juan I was no longer able to attack Portugal. He died in October 1390, leaving the throne to a child who was a minor, Enrique III. He married Catherine of Lancaster (the Duke's daughter) and this favoured diplomacy with Lisbon. Enrique III died in 1406 and Catherine took over the co-regency. On 31 October 1411, a peace agreement between Portugal and Castile was finally signed in Ayllón (Segovia), which ended decades of disputes and allowed João I to consider new projects.

In 1415, the king commanded the first Portuguese overseas expedition, conquering Ceuta on 21 August. Through this, João I eased his finances (Ceuta was a rich city), strengthened his international position and began to intervene in the military and commercial control of the Strait of Gibraltar. In addition, he hindered

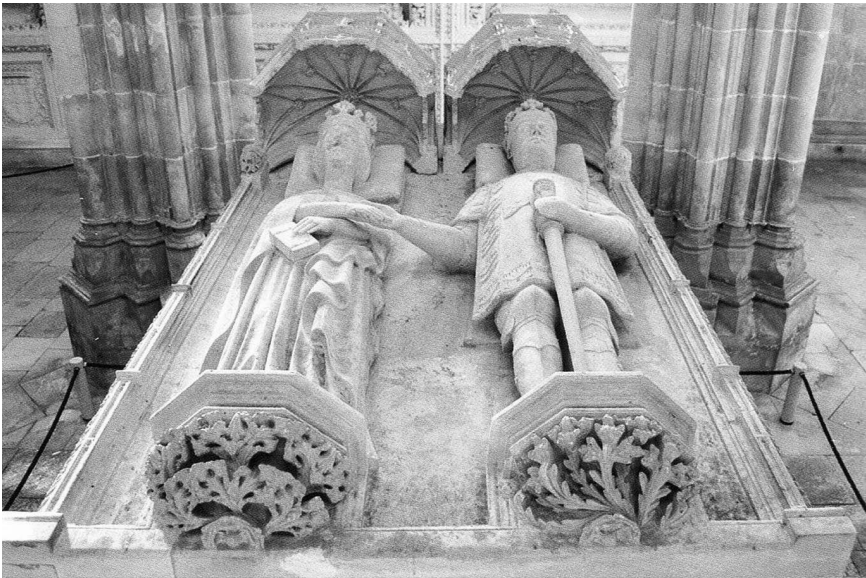


FIGURE 6.6 Double tomb of King João I and Queen Philippa of Lancaster at Batalha Monastery. (João Gouveia Monteiro and António Martins Costa, 1415. *A conquista de Ceuta*. Lisbon: Manuscrito, 2015. Photography by Telmo Mendes Leal.)

Muslim piracy along the Algarve and, without antagonizing Castile, supplied the young nobility with their wishes to shine in war. Following this, João I preferred to rest. He continued to reign until 1433, but his heir Duarte governed from 1418. Duarte was a conscientious king who introduced several reforms. It was during his reign (1433 to 1438) that Gil Eanes rounded Cape Bojador (1434). However, Duarte's rule was marred by a disaster in Morocco in the summer of 1437. The Portuguese, led by Henrique, attacked Tangiers with badly prepared troops, who did not ensure the link between the camp and the sea. Therefore, when a Muslim relief army reached Tangier, they had to surrender under taxing conditions.

Duarte passed away the following year and left his throne to a child who was a minor (Afonso V). A regency was organized, shared between the widow queen, Leonor of Aragon (sister of the 'Infantes of Aragão') and the *Infante* Pedro (brother of Duarte and Henrique). The arrangement went badly and the queen had to flee to Castile, where she was poisoned. Pedro was thus able to govern (1439–1448) and during this period boosted navigation. It was during this phase that Henrique was able to achieve better results, with war and piracy proceeding hand in hand with trade. The political strategy followed by Pedro, who was close to the maritime councils did, however, create some opponents. In 1448, Afonso V took away his uncle's regency and Pedro took refuge in the duchy of Coimbra. Advised by Pedro's rivals (especially his half-brother, Afonso, bastard son of João I), the young monarch waged civil war. This ended on 20 May 1449, in Alfarrobeira, near Lisbon. Pedro was killed in battle and Afonso V was then able to rule as he wished. He strengthened royal power and allowed the expansion of the noble houses, particularly that of Viseu (Henrique) and Bragança (the bastard Afonso). The discoveries slowed and Afonso V resumed war in North Africa, relying on the support of the old nobility. In 1458, he took Alcácer Ceguer; in 1463, he attacked Tangiers, but failed; and, in 1471, he conquered Asilah and seized Tangier. Portugal then occupied an area of territory in Africa, supported by four strategically placed fortresses.

During the 1470s, Afonso V took advantage of the war of succession that occurred in Castile upon the death of Enrique IV. As he was the brother of the widowed Castilian Queen (Joana), he decided to intervene. He thus took up the dream of eastward expansion once more. Relying on some Castilian support, Afonso V married his niece Juana (to have a better claim over the royal title) and attacked Zamora and other fortresses. However, he was defeated in the decisive battle, fought in Toro in March 1476. Disillusioned, he handed over governance to his son João, the 'Perfect Prince'. In 1479, a Portuguese–Spanish peace treaty was signed (at Alcáçovas–Toledo), which helped tidy up peninsular political entities and which opened a new period in Iberian history.

Upon the death of his father in August 1481, João II took on *de jure* governance of the country. He contained the great noble houses and reinforced royal power. Expansion was now planned out in detail (exploration of the African coast, setting up of trading posts and royal monopolies, progress in the art of navigation) and the royal family and the nobility began to take on a more active role. The military aspect of the enterprise was not removed, but the viewpoint became a broader and

more commercial one. Shortly afterwards, in 1488, Bartolomeu Dias rounded the Cape of Good Hope and Portugal started to operate on a pluricontinental scale, involving Europe, Africa, Asia and America. In 1493, the voyage of Columbus took place and in June 1494 the Treaty of Tordesillas was signed, which divided the world into two halves. In October 1495, João II died. Soon the remarkable Portuguese 16th century would begin!

The evolution of the army³

Between 1367 and 1495, Portuguese military art underwent major changes. As far as recruitment was concerned, Fernando I systematized the *contias* (the fixed annual incomes) of noblemen and many documents refer to the granting of lands or leases as payment of these *contias*. In return, the nobles had to take part in the war: for every 100 pounds, they had to supply the Crown with a ‘lancer’ (a well-equipped man-at-arms), with the contingents of vassals ranging between 2 and 50 lancers. Besides these *contias*, the King also paid a stipend during the campaigns. With the 1383–1385 revolution, the system broke down: the Master of Avis multiplied the rewards to entice supporters, the number of vassals rose and the stipend increased. Having won the war, João I reserved for the Crown the right to own vassals and stabilized the *contias*’ incomes. At the start of the 15th century, the royal council set a number of 3,200 lancers who were always ready to serve the king. Of these, 500 were provided by the major vassals, 2,360 by squires of the lower nobility and 340 by the military orders (Christ, Hospitaller, Avis and Santiago). In this way, progress was made towards the ideal of a standing army. With the campaigns of Africa, the tendency was to establish mercenary forms of contracting to stimulate nobles to serve in Morocco.

Earlier tendencies were confirmed in municipal recruitment. In 1418, a ‘Regiment of *Coudéis*’ (Cavalry Officers) specified the *aquantados* system: people with their own home who, depending on the assessment of their fortune by royal officials called *coudéis*, were obliged to possess certain weapons and, for the richest, a horse. In border regions, the values established for having good weapons and a horse were lower than in other regions. Military inspections (*alardos*) were also regulated, and set at a frequency of three per year by João I. With this, the Crown estimated it could count on five to ten thousand *aquantados* armed with good weapons and, in some cases, horses. The king also paid a stipend to these men during the campaign.

The *besteiros do conto* (crossbowmen) system was improved, particularly following a regulation in 1421. At that time, there were approximately 5,000 crossbowmen in Portugal, organized in nearly 300 recruitment units – the *anadelarias*, each controlled by a local official (the *anadel*), answering to the *anadel-mor* (commander) of the kingdom. It should be noted, however, that there was a tendency to reduce privileges, which decreased the desire to be a crossbowman and multiplied the requests for exemption. Just like the *coudéis* (cavalry officers), the *anadéis* (captains) served for three to five years. In 1392, João I created a new militia: the *besteiros de cavalo* (horse crossbowmen), recruited from among the artisans of the municipalities

who were promoted to vassals; this was an elite of 500 archers with a crossbow, with reinforced privileges and the ability to acquire and maintain a horse. This militia was organized into a national network, especially in the centre and the south. They were also paid a stipend during a campaign.

A new feature in the 15th century were the *espingardeiros* (musketeers), who were especially useful in African campaigns and who would become an actual infantry force. João II focused on recruiting these specialists and promoted their presence in various locations. The aim was to establish a fixed number (*conto*) of *espingardeiros*.

As for the Navy, until 1495 there was no permanent fleet, so that it was mobilized for each campaign, through a system of *vintenas* (scores) – groups of 20 neighbours, which served as the basis for the recruitment of the rowers (*galeotes* – galiot sailors). Those responsible (the *vintaneiros*) had *livros de armação* (organized books) where they entered their records. They recruited men from coastal regions who were used to the sea or river tasks. Mobilization was total and for life. The minimum age to serve was 12 years of age and all those who could escape this service did so. Some localities contracted with the king a fixed contribution of sailors and rowers (who were sometimes armed, equipped and supplied for six weeks, with meat, fish, wheat and flour for biscuits), in exchange for certain privileges. In the Portuguese galleys, almost all the rowers were free men who could use weapons until their landing.

The groupings of troops mentioned could ensure the Crown a *hoste* (a group of armed soldiers) of 20,000 men (including the king's guard and the groups of mercenaries). These were, however, ideal figures, because in practice this value was rarely achieved. In Aljubarrota (1385), less than 10,000 men fought alongside João I (part of them English); to Tangier (1437), the *Infante* Henrique could only take approximately 6,000 soldiers; in Alfarrobeira (1449), 16,000 men fought alongside king Afonso V and some 3,500 alongside the former regent Pedro; and, in Toro (1476), Afonso V had no more than 8,500 standing troops. The establishment of garrisons in African fortresses should also be remembered: the 2,500 men who stayed in Ceuta, in 1415, formed a fixed army embryo; in 1464, there were 3,000 men engaged in war against the infidels, on land and at sea; and, from 1471, with Asilah and Tangier, this number increased to approximately 5,000 soldiers.

As for command positions, the king's guard was strengthened. After Aljubarrota, the monarch ordered that 100 crossbowmen would form part of his company. In 1450, Alfonso V named Gonçalo Rodrigues de Sousa as Captain General of the *ginetes* (light cavalry) of the king, giving him an annual income of 10,000 white *reais*; this was a royal horseback guard, which took part in the battles of Alfarrobeira and Toro. Later, João II spurred the royal guard, promulgating an ordinance and a regiment which foresaw a permanent force of 200 lancers.

The post of *alferes-mor* (royal standard bearer), continued until 1382 when it was replaced by the post of *condestável* and that of marshal, due to English influence. Their duties were related to justice, security and accommodation. The *adaís* (officers who explored the terrain and the enemy) continued to be important, especially in Africa. The same was true for the 'captains', leading the contingents of nobles and municipalities or commanding the Moroccan garrisons. In addition, the castle

alcaides-mores (fortress commanders) were essential in controlling the fortresses. As for the *fronteiros* (military governors), they were actual governors of border provinces and were very important in the 15th century. They had special powers granted by the monarch in times of crisis which were greater than normal jurisdictions. They were recruited from the high nobility and could be assigned a region or a strategic city, and they had military contingents of 100 to 250 lancers.

The Crown had controlled the military orders since the mid-14th century and in 1364, João (the future João I), when only seven years of age (at most), was appointed Master of Avis, while the order of Santiago was handed over to the *Infante* João (the son of João I) in 1418. The order of Christ was placed in the hands of the *Infante* Henrique in 1420, while in 1434 the order of Avis was given over to the *Infante* Fernando. The military orders continued to be important for the defence of the realm, commanding castles (which stored war arsenals) and ensuring hundreds of military personnel, which were recruited from their lands.

In the navy, of note was the decay of the post of admiral. The post stopped being hereditary from Afonso V onwards, losing its duties and becoming an honorary function. This was partly due to the creation of the post of captain general by Fernando I. The reasons for this are not well known and it seems that the functions varied according to the holders. In principle, the captain general was only in charge during wartime, but there were many conflicts of jurisdiction because of maritime posts.

Finally, of equal note was the creation of the post of *vedor-mor* (chief inspector) of the artillery, in the regency of the *Infante* Pedro. His function was to identify lost property of the Crown, order resources for land or water transportation, mobilize officers to serve in the artillery, control the delivery of pieces to warehouses, pay the artillerymen, the carpenters, the blacksmiths and stonemasons and ensure supplies to castles and arsenals.

Arms and armour

As for military equipment, this was the period of bascinets and visors, as well as the triumph of highly polished plate metal harnesses covering the trunk and limbs. Tomb sculptures from the 1450–1500 period provide good evidence of the general use of complete harnesses. With Fernando I, the spread of the *jaque* was encouraged, a piece close to cuirasses or brigandines, that is, with metallic elements applied over a stiff leather base. The king ordered the conical *capeline* to give way to the more advanced ‘bearded’ types (a predecessor of the bascinet) attached to a *camail* – the neck aventail, made of iron mesh and which was attached to the part protecting the head. The Moroccan campaigns enhanced the claim of ‘armoured hats’, which were an open defence, with wide or curved flaps, good for protection from the sun and rain. They emerged in the Peninsula at the end of the 13th century, but it was the war in Africa and firearms which popularized them.

The main new developments concerned firearms. In Portugal, primitive cannons emerged in the reign of King Fernando, perhaps with the arrival of the fleet

of the Earl of Cambridge. The first artillery pieces are well known. They were made of wrought iron and the tubes were thick. Gunpowder was used and the balls were mainly made of stone. During the 15th century, more evolved pieces with lighter tubes and wooden supports appeared, which made them easier to transport and enabled the height of the shot to be regulated. The early Iberian artillery pieces (the *trons* and *bombardas*) could be muzzle or breech loading. One of these pieces can be seen in the Military Museum in Lisbon, which was muzzle loaded. This corresponds to a Portuguese model which was widely used in 15th-century siege operations. It measured 97 x 40 cm and weighed 590 kg with a 14.5 cm calibre size. It shot granite stone balls weighing 3 kg, due to a gunpowder load of about 1 kg. It had an initial velocity of 220 m per second and an atmospheric range between 714 and 1098 metres. This was a piece adapted to siege operations on castles and strategically placed fortresses (Rubim 2000: 234–239). By the end of the 15th century, heavy gunpowder arms production proved to be insufficient, and so these had to be imported. The *Infante* Pedro bought large quantities of artillery in northern Europe.

From João II onwards, new key reforms were made, with a policy focused on expansion towards the Orient, emphasizing nautical aspects and new types of vessels suitable for ocean voyages. Granulated gunpowder started to be used. Workshops for implements of war were established, as well as the start of the manufacture of bronze materials, along with new types of artillery pieces, such as the *falcões* and



FIGURE 6.7 Bombard. (Lisbon Military Museum, Inv: MML, A.1. Published in Mário Jorge Barroca, João Gouveia Monteiro and Isabel Cristina F. Fernandes, *Pera Guerrejar. Armamento medieval no espaço português*. Exhibition catalogue, Palmela Municipality, 2000, p. 418, no. 171)

the *berços*, which were very useful on-board ships. The ‘Perfect Prince’ made investments to standardize implements of war, and a document from 1489 even mentions the existence of a fixed number of 35 ‘sea artillerymen’, who were paid a stipend (Rubim 2000: 236–242)! As for portable firearms, these were called *colobretas* and began being imported from Flanders near the middle of the 15th century. In the Pastrana Tapestries (Guadalajara), which show the taking of Asilah by Afonso V (1471), it is possible to observe both seven heavy artillery pieces and some perfect illustrations of *colobretas*.

The Crown also sought to stimulate the activity of gunsmiths. The names of many of them are known and we are certain that João II engendered a plan to set up gunsmiths and gun houses, especially in the larger cities of the kingdom, granting them leases and privileges so that they would want to settle there. Many were of foreign origin – Italian, Castilian, German, French – and others were Jews or Moors. Several were linked to the Royal House or senior figures at court. It was also desired that the craft would remain within the same family and the versatility of gunsmiths was to be encouraged. In the early 15th century, the royal council established the existence of 1,500 harnesses ready for war, 500 of which were provided by King and the others by senior lay and ecclesiastical lords. Around 1450, at the Lisbon arsenal, there was a permanent working group of gunsmiths, which could be reinforced whenever needed.

Fortifications

The firearms forced changes in military architecture: walls become thicker (to support metal balls) and lower (to form a reduced target); priority was given to round towers, which were tougher and had no blind spots; embrasures were opened up; ‘casemates’ were torn up (gaps within the walls, to fit the new weapons); and the barbicans were strengthened, with angular shapes to vary the angles of fire (e.g. Almeida, Palmela and Elvas). This led to the star fort characteristic of the Modern Age which Portuguese architects would spread throughout the world.

There was also an increase in the construction of urban walls (e.g. Beja, Viana, Braga, Santarém, Coimbra, Lisbon and Viseu) and many fortresses lost their military character and became palaces. Keeps were widened, reaching 100 m² in their surface area (Bragança and Beja), openings were made for windows and wooden ceilings, fireplaces, kitchens, chapels, false ceilings and arcades open to the outside were introduced (Estremoz, Óbidos and Leiria). King João II concentrated on improving the castles in Africa and building new fortresses (in Essaouira, in Safi and in Mina). This also led to pioneering innovations in terms of coastal defences, such as the plan to defend the River Tagus, with a linked system enabling cross-fire between towers.

The conduct of war

Finally, let us consider the type of warfare that was being practised. Just as in the rest of Europe, there was: i) major investment in siege operations – e.g. the numerous



FIGURE 6.8 Fortress of Elvas.

sieges carried out by João I, such as those at Chaves (1386), at Coria (1386), at Alcântara (1400) or at Melgaço (1388); in the latter case, an army of 1,500 lancers and many foot soldiers fought a garrison of 300 men-at-arms and many infantry soldiers for 53 days, winning the day thanks to the use of a siege tower; ii) predilection of the nobility for riding and raids on enemy territory; iii) moderate availability to fight on the battlefield, provided there were good possibilities of success (e.g. Atoleiros, Trancoso, Aljubarrota, Valverde, Alfarrobeira and Toro). In the case of Nuno Álvares Pereira, the influence of the English tactical model can be seen, which was disseminated throughout the Peninsula after the Battle of Nájera (1367) and spread in Portugal by mercenaries of the Earl of Cambridge and the archers at Aljubarrota.

The troops moved into columns with two knights (or three infantry soldiers) in front and several kilometres in depth; speed varied between 4 kilometres (infantry soldiers) and 7 kilometres (knights) per hour. During the summer, mixed columns covered distances of 20 to 35 kilometres each day. The main dangers included crossing rivers, night-time travel and narrow passages, prone to ambushes – hence the importance of reconnoitring of the routes, the use of guides and maps, and maintaining secrecy, silence and rhythmical progress. Supplying marching columns was undertaken in several ways: i) foodstuffs wholesale bought by the Crown and then resold to the combatants through merchants; ii) forced requisition from the people who lived along the march

routes; iii) pillaging enemy territories. The financing of operations was achieved through new taxes authorized at meetings of the *Cortes*, but also by contributions from the Church, private individuals and communities of Jews and Moors. Use was also made of currency devaluations.

There was very little military training (only the tournaments and jousting, for the nobility, and trainings on Sundays, in the castles, for the crossbowmen), with the experience accumulated in previous campaigns being of greatest value. As for theoretical training, only those who were part of royal or manorial courts, or within the circles of military orders, could aspire to study works with propaedeutic content: the adventures of the heroes of Antiquity (such as Alexander or Caesar); the Arthurian legends; the *De Re Militari* by Vegetius (directly or through Gil de Roma or Christine de Pizan); some military law treaties (such as the *Arbre des Batailles* by Honoré Bouvet); and the writings of Castilian authors, such as King Alfonso X or the *Infante* Don Juan Manuel.

Naval warfare

Progress was also made in naval combat, mainly from Fernando I onwards, who continued the reforms introduced since 1317 by Admiral Pessanha (from Genoa) who encouraged the navy to purchase and construct boats, creating the position of captain general and various measures of support for the sailors. The shipyards (*tercenas*) were also improved, and all the settlements that had significant maritime or river activity were equipped with similar facilities – Oporto, for example, had three *tercenas*.

The Portuguese war fleets had significant numbers: 32 galleys and 30 ships in the First Fernandine war; 17 galleys and many other ships in the raising of the Lisbon siege (1384); more than 200 vessels in the conquest of Ceuta, Alcácer Ceguer and, if one believes the chronicler Rui de Pina (CLXIII, 820), 477 boats at Asilah (1471). They used naval boarding, followed by close combat fighting on the ships. When approaching, the vessels used closed shot with short-range projectiles (arrows, short-arrows, incendiary materials) and tried to use its spurs to ram ships, or throw hooks to allow boarding. An attempt was made to blind enemies with lime, destroy them with mechanically projected shot or burn them with Greek fire or with buckets of tar, sulphur, oil and resin released from the deck; the sails of enemy ships could be cut or the rudders sabotaged. With the arrival of naval artillery, there was now another solution, which was initially more used in open combat, with the big guns alongside arms of smaller calibre and range.

In Africa, the Portuguese armies had to get used to another type of war. It was a return to the tactics of the *Reconquista*: a lot of garrison work, surveillance, intelligence, investment in controlling high points and communication at a distance, creating buffer zones around the conquered fortresses, considerable looting and, of course, lots of prisoner exchanges.

Main campaigns

Siege of Lisbon (1384)

In late May 1384, Lisbon was blocked by land and sea, as Juan I wanted to take the capital, which was the ‘military key’ to the kingdom. The Master of Avis started preparing the defences of the city early on, which at that time consisted of 35,000 inhabitants. Since February, they had gathered up men and supplies inside the old castle and the wall (5 kilometres long) built by King Fernando. This was reinforced by a barbican wall built in view of the enemy, 300 to 400 m long. Barricades were erected in the riverside area. The city was stocked with bread, meat and fish seized from Castilian galleys. All the crops were destroyed in the surrounding areas. Thanks to loans from the Church and individuals, an army of 1,600 men was put together to save the capital (Martins 2006).

The Castilian camp consisted of between fifteen and twenty thousand men. According to Fernão Lopes (*Crónica de D. João I CXIV*, 193–194), Juan I located himself near the Santos Monastery, while his men were positioned in the areas of Alcântara, Campolide and the surrounding areas. The camp included large well-ordered streets with flags, medical posts and almost all types of trade, from weapons to fabrics and clothing, sold by Christian and Jewish merchants. Well-guarded and

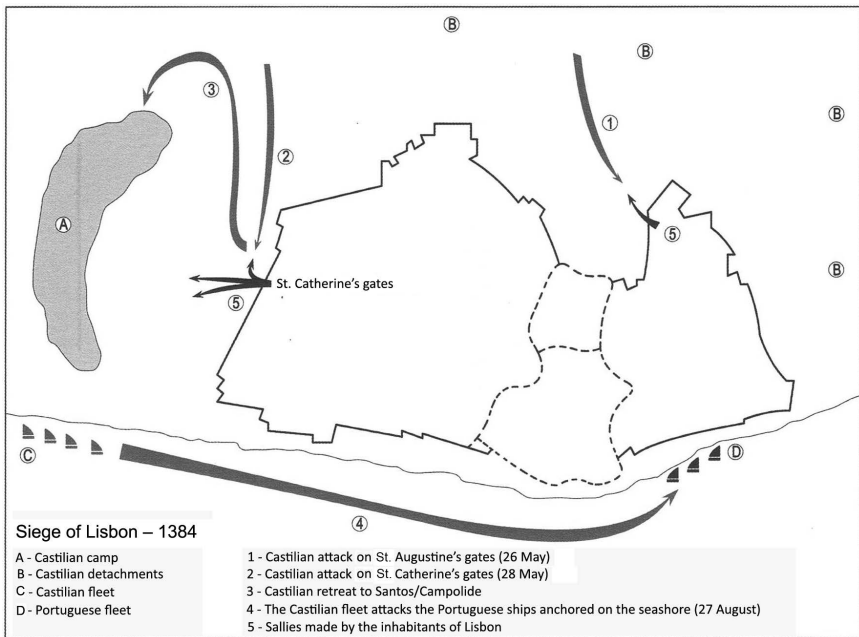


FIGURE 6.9 Siege of Lisbon, 1384. (Miguel Gomes Martins, *De Ourique a Aljubarrota. A guerra na Idade Média*. Lisbon: Esfera dos Livros, 2011, p. 296)

fortified, with a palisade on the eastern side, it was stocked with groceries which were brought from Santarém and other places supporting Dona Beatriz. Many boats also arrived from Seville with supplies and weapons.

The Master of Avis reinforced the 76 towers with wooden pergolas. Fernão Lopes (*Crónica de D. João I CXV*, 196) explained that they were provided with shields, lances, darts, crossbows, short-arrows, bacinetes and armour; some had *trons* and stone balls. Noblemen and citizens divided the guarding of the wall and were equipped with alarm bells. At night, they were organized into watches, with the Master of Avis overseeing everything. The 38 city gates were guarded by men-at-arms who slept beside them.

On 18 July, a fleet organized in Oporto managed to break through the naval blockade and restock Lisbon with men and supplies. This gave encouragement to the defenders, but the number of mouths inside the wall also increased (S. Monteiro 1989: I, 37–41). Indeed, the situation remained very delicate. In addition to constant skirmishes, it was necessary to remove all those who, due to their age, sex or physical condition, were not useful for defence. However, the hot and humid summer of 1384 led to the worsening of an outbreak of plague that had begun in the region in late March. Approximately 5,000 Castilians died and the queen might have been affected; the epidemic was not present in the city. Not being able to bear the daily loss of so many soldiers, including 2,000 of his best men-at-arms, Juan I was forced to lift the siege on 4 September and return to Castile. The Castilian fleet would then set sail on 8 October.

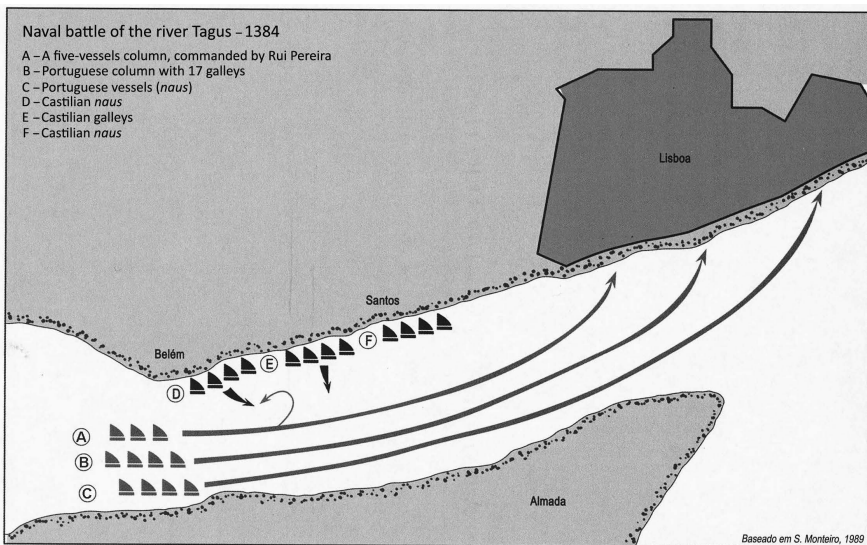


FIGURE 6.10 Naval battle on the Tagus, 1384. (Miguel Gomes Martins, *De Ourique a Aljubarrota. A guerra na Idade Média*. Lisbon: Esfera dos Livros, 2011, p. 340. Adapted from Saturnino Monteiro, 1989.)

Ajubarrota (1385)

The Battle of Ajubarrota was fought on 14 August. The troops of João I and Nuno Álvares Pereira, with about 10,000 soldiers (including c.800 Englishmen, mostly archers), intercepted the Castilian army which, under the command of Juan I, was marching from Ciudad Rodrigo towards Lisbon. The battle was fought at São Jorge, to the south of Leiria. On the morning of the 14th, the Anglo-Portuguese troops left Porto de Mós and marched north, having arranged their army at the northern end of a narrow plateau. The position had been chosen the day before by the *condestável* and his English supporters. This was a high, almost impregnable point. When they arrived there late in the morning, coming from Leiria, with the sun to their front, the Castilians avoided the fight and skirted the Portuguese position. In this way, they carried out a cross-country detour, but by the end of the afternoon they had rejoined the road running south, close to Chão da Feira. While the rest of the army was arriving (which would be about 20,000 men, including many Portuguese nobles and 800 to 1,200 French knights), they analysed the situation.

Meanwhile, the Anglo-Portuguese army had turned around, marched 2 kilometres to the south and was now offering battle in a second, also interesting, position – it was where the plateau narrowed with a front which was only 300 m wide. The east and the west contained two creeks coinciding with depressions in the ground. The troops also carried out fortification works: hundreds of *trous de loup* and a ditch 180 m in length were made; they also stacked branches of trees with their sharp edges facing out (*abatisses*), with the goal being to funnel Castilian access to the Portuguese position and hinder the enemy attack. It was an all or nothing situation for João I, a recently crowned king who wanted to avoid a new siege of Lisbon!

The Castilian war council, with the king very sick, accepted the fight. They thought they had a positional and military advantage, and did not want to march south with the enemy at their back. They may also not have recognized the terrain and the obstacles. They therefore precipitated themselves. In the late afternoon, the Franco-Spanish army, still incomplete, attacked (J. G. Monteiro 2009: 75–103).⁴ The first assault was by the French knights, who were surprised by the *trous de loup* and the ditches and were captured by the enemy. They had arranged their men in two lines and everyone was dismounted: a vanguard of 600 men-at-arms spread over two or three rows under the command of the *condestável*; and, some 200 or 300 metres behind, João I's rearguard. The wings were placed on the flanks, in a somewhat advanced position, with crossbowmen and English archers.

When the royal Castilian battalion realized the French disaster, it advanced on horseback. However, the narrowness of the battlefield and the obstacles caused confusion. They began to cluster in the centre of the plateau and were only able to move very slowly, which made them a good target. Many dismounted and cut their lances, but this did not help them very much. The wings could not intervene on the flanks in the fighting, because of the gullies and creeks. Only a part of the soldiers managed to reach the men of the *condestável*, being received at the ends of the infantry lancers. A contingent broke through the vanguard, but the wings of

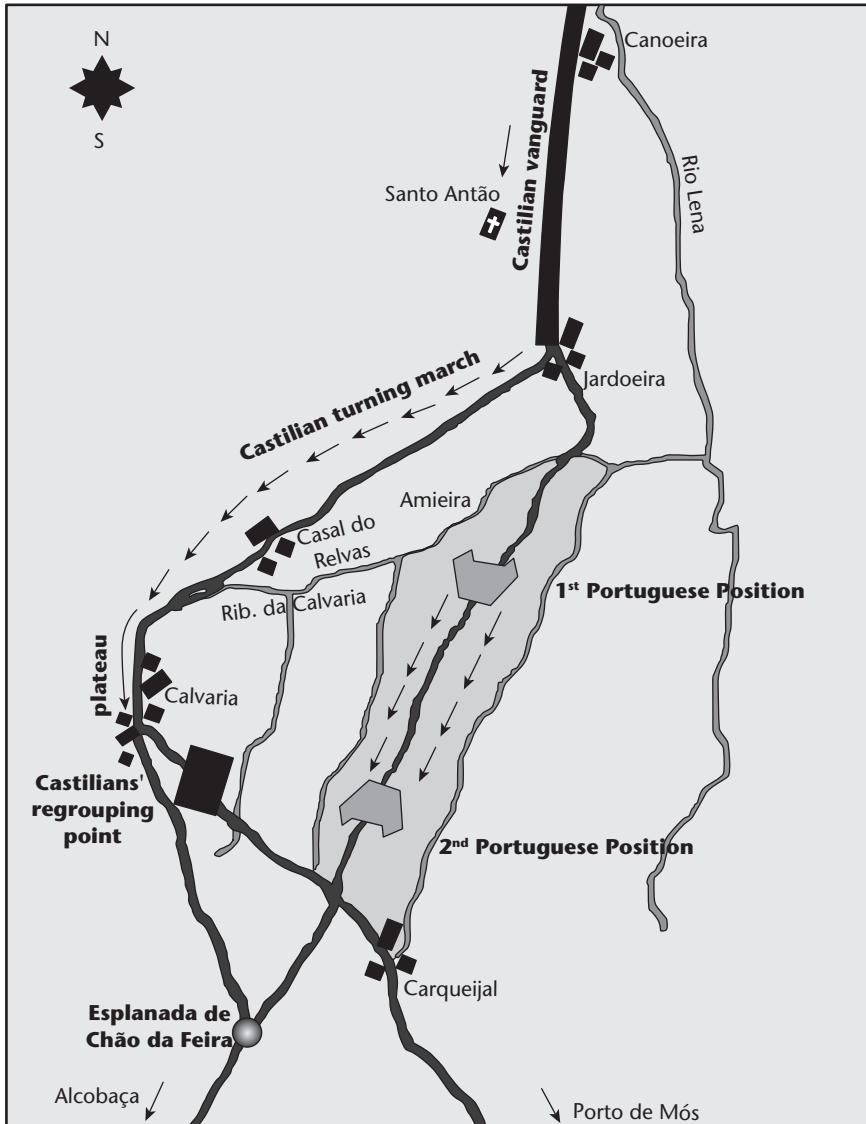


FIGURE 6.11 Preparatory manoeuvres on the Battlefield of Aljubarrota, 1385. (João Gouveia Monteiro, *Aljubarrota, 1385. A Batalha Real*. Lisbon: Tribuna da História, 2003, p. 83. Adapted from Costa Veiga, 1930)

Nuno Álvares, with no direct opponents, rotated and fixed the front, while the rear advanced and completed the manoeuvre. The Castilians, without the aid of the French (who were executed on the battlefield), were surrounded and were soon slaughtered. The royal standard fell and this led to panic. Juan I fled to Santarém and from there to Seville.

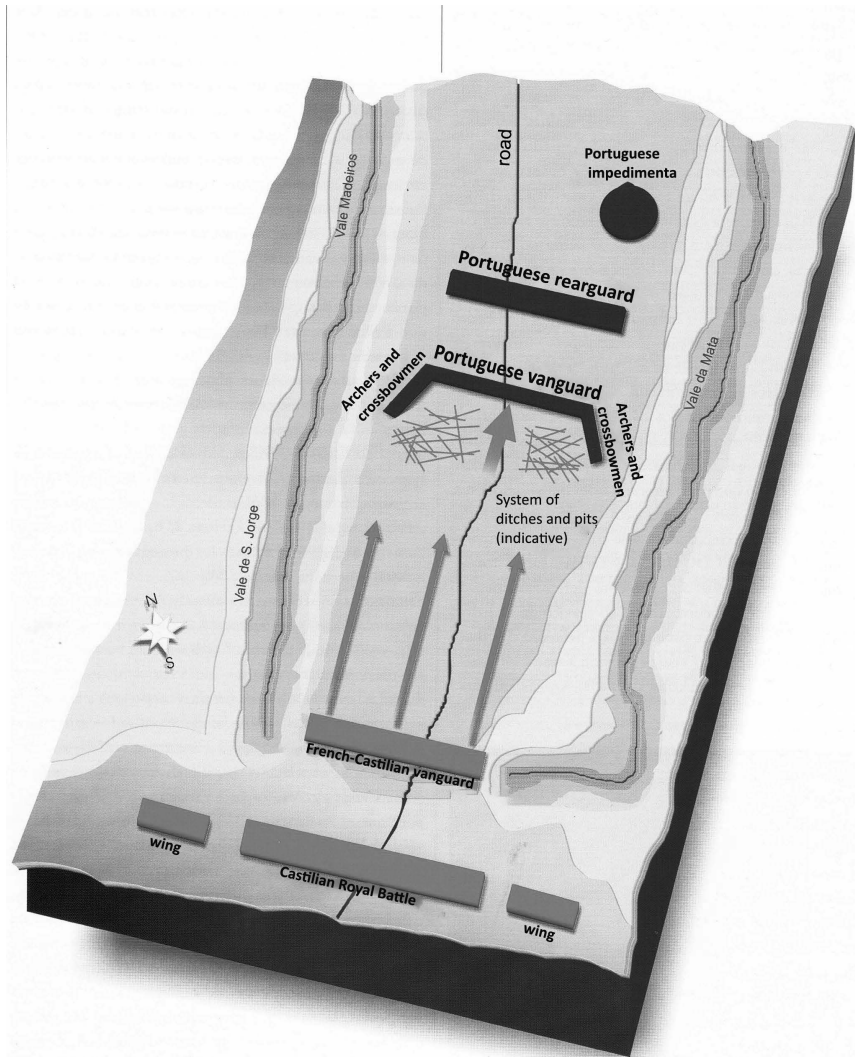


FIGURE 6.12 Battle of Aljubarrota, 1385 (1st phase). (João Gouveia Monteiro, *Aljubarrota, 1385. A Batalha Real*. Lisbon: Tribuna da História, 2003, p.102)

On the battlefield, three to four thousand French and Castilians fell, but a similar number was killed during the escape. On the winning side, around 300 to 500 men perished. A mass grave was found on the battlefield, containing the bones of at least 414 individuals, mostly men between 18 and 65 years of age. An analysis proved the extreme violence of the fight: there were traces of lesions on the bones with strong muscular coverings, suggesting an atmosphere of surprise and confusion, where many would have been wounded from behind or when they were on the ground.

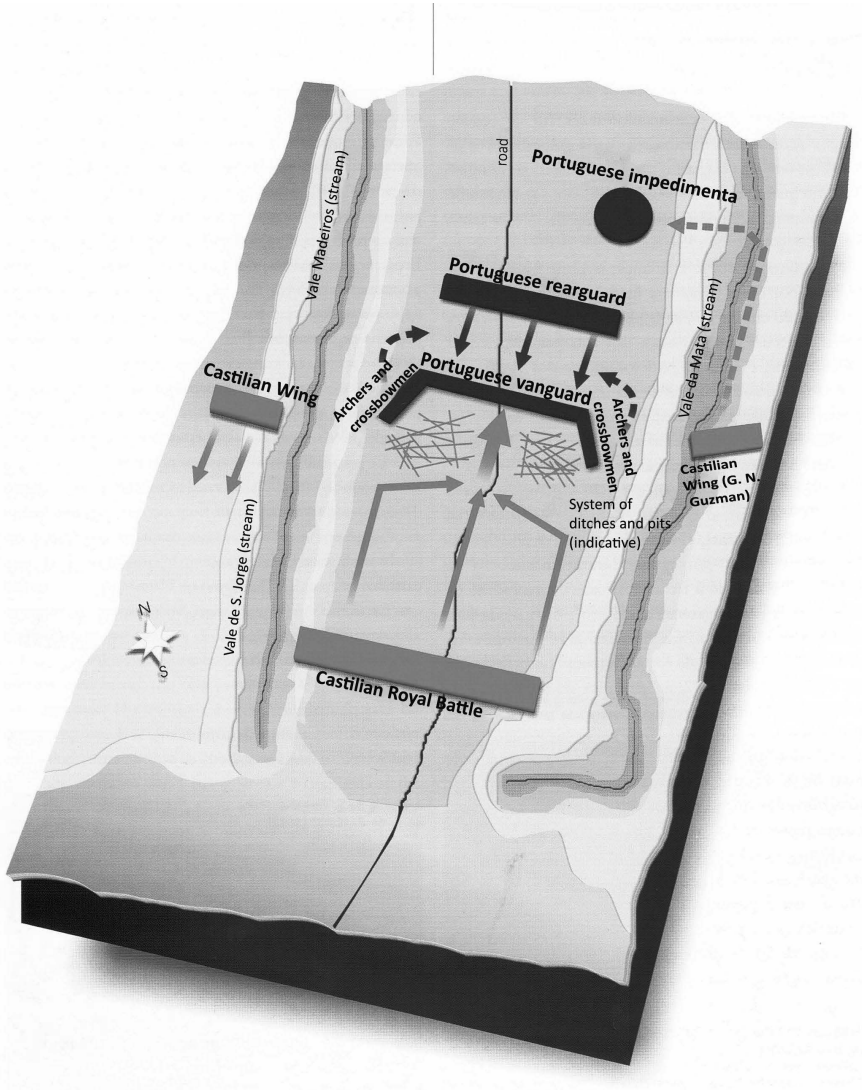


FIGURE 6.13 Battle of Aljubarrota, 1385 (2nd phase). (João Gouveia Monteiro, *Aljubarrota, 1385. A Batalha Real*. Lisbon: Tribuna da História, 2003, p.110)

There were also about 30 reset fractures, which indicated the presence of war veterans (J.G. Monteiro 2009: 101–102).

Ceuta (1415)

According to the 15th-century chronicler Gomes Eanes de Zurara, the conquest of Ceuta began to be conceived long before 1415 and involved 20,000 men and

more than 200 ships. The campaign was prepared in secret, involved advance spying on Ceuta, and was led by João I. The Portuguese fleet – with chartered vessels from Galicia, Biscay, England and Germany – set sail from Lisbon, on 25 July 1415, with almost all the royal court on board (including the king and the *Infantes* Duarte, Pedro and Henrique) and anchored at Lagos (in the Algarve) one or two days later. On 7 August, the fleet departed from Faro and crossed the Strait during the night. On the 10th, it anchored in the bay of Algeciras, ready to carry out the attack (Duarte 2015). This took place on the 12th, but did not go well, because many ships were swept away in the direction of Malaga. João I and the rest of the fleet dropped anchor north of Ceuta, but the weather conditions and the reaction of the Moors led the monarch to take the fleet south (to the bay of ‘Barbaçote’). However, the sea did not offer the conditions for a massed attack on the city and, on the 15th or 16th, the fleet returned to Algeciras. On 20 August, a royal council scheduled an attack on Ceuta for the next day.

The monarch decided to concentrate the attack on the eastern part, in the area of Almina, so as not to be forced to simultaneously confront the Moors of Ceuta and those who could arrive rapidly from the outside. Thus, the *Infante* Henrique, with a part of the fleet, approached Almina, anchoring on the beach of Santo Amaro. Meanwhile, the monarch, with the rest of the fleet, headed in the direction of the South Bay, to divide the Muslim forces. At a certain point, the king would give a signal and Henrique and his men would land on the beach of Santo Amaro; the rest of the fleet would then join them. In this way, the Portuguese attack would focus on the port of Almina to the north-east, and then would try to go to the

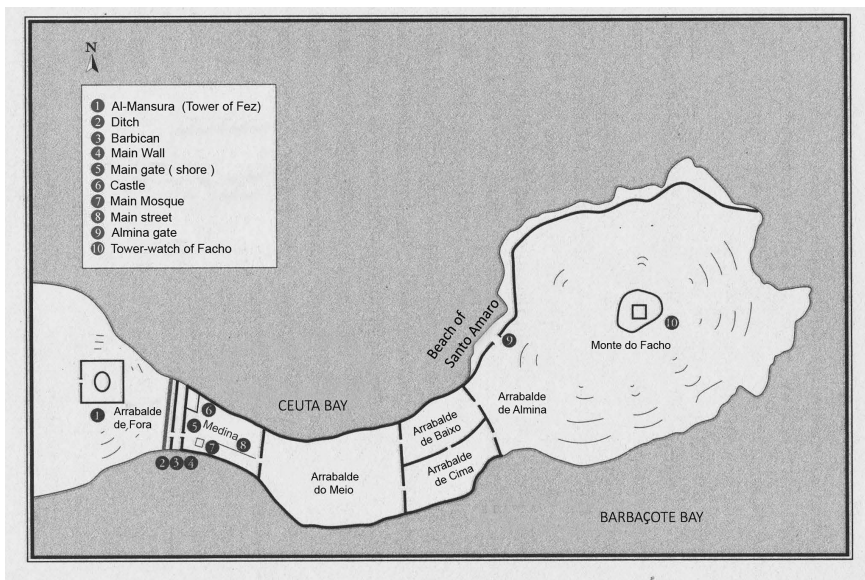


FIGURE 6.14 The Ceuta merínida, 1415. (João Gouveia Monteiro and António Martins Costa, 1415. *A conquista de Ceuta*. Lisboa, Manuscrito, 2015, p. 49. Authors' diagram)

west, up to the castle, through the interior streets of the city. On the other side, the Moors' plan was to fight the Portuguese on the beach.

On 21 August, the fleet advanced towards Ceuta. Early in the morning, the galleys of the *Infante* Henrique advanced towards Almina. However, the men could not bear to wait for the king's signal and headed to the beach before time. When he realized this, *Infante* Duarte left his father and joined his brother. Suddenly, there were 150 Christians on the beach of Santo Amaro fighting with the Moors. The latter were unable to contain them and retreated to the Gate of Almina, but they could not shut the gates: along with the *Infantes*, close to 500 fighters entered the suburbs of Almina. On hearing this, the *alcaide* Salah ibn Salah fled. The attack then developed from the east to the west, seeking to reach the castle and the tower of Fez. The king's fleet also gradually reached the beach of Santo Amaro. By early afternoon, the Christian forces advanced, divided into three columns, and tried to take the high points of the city. The Moors reacted by hurling projectiles from the top of the walls and the houses.

Halfway through the afternoon, the *Infants* were near the medina – close to the castle – waging fierce hand-to-hand fighting with the Moors. By late afternoon, the Christian victory was ensured and the king commanded that they met in a mosque. This was where they learned that the castle had been abandoned, so it was immediately occupied. All that was left was the attack on the great tower of Fez, which led to violent clashes. Once this had been conquered, they took care of guarding the city, which had been abandoned by the final combatants. It was half past seven in the afternoon and the conquest had been consummated. It remained to celebrate the triumph and pillage the city.

III THE 16TH CENTURY (1495–1600)

A THE WAR ON LAND

Luís Costa e Sousa

Political outline

The 16th century was remarkably peaceful within Portugal's European borders, as successive marriages between the Iberian princes tightened the ties between Portugal and Spain. Portugal was able to concentrate its limited military resources on carving out an 'overseas empire', but old rivalries did not vanish. Iberian overseas expansion developed in close competition between the two kingdoms. The Tordesillas Treaty (1494) resolved claims over the 'New World' after the Columbus voyage, and the Sintra Treaty (1509) drew areas of influence in western Morocco. There was one other serious conflict over the possession of the Moluccas Islands, and the issue was clearly resolved in favour of Spain – even though the Zaragoza Treaty (1529) recognized the Portuguese claims over the *ilhas das especiarias*, it also determined that Portugal had to pay a considerable amount of money to the Spanish crown to keep them.

This showed the true importance of the rise of Spain as the European superpower and, in time, would lead to the absorption of Portuguese territory. Family links would favour the union of both crowns, as almost happened after the death of all nine potential successors to the late King João III, but a new heir was born in 1554. However, the young prince could not occupy the throne, so Spanish influence had a chance to flourish during the regency of Catarina, widow of the late João III (1521–1557). When Sebastião took the throne, he wasted no time and imposed his own authority. It was impossible to afford the cost of maintaining a global empire that ranged from the Atlantic to the Pacific, and the *Cortes* of 1562–1563 favoured a return to North African expansion, a decision enthusiastically supported by the Portuguese king. He would take advantage of the civil war that had started in 1574 to take down the Saadi dynasty, but, on the opposite side, King Felipe II of Spain was undertaking secret negotiations with the Ottomans.

The ‘Iberian Union’ finally came after the death of King Sebastião in battle, at Alcácer Quibir (1578). As he had no heir, the elder cardinal António briefly followed. King Felipe II of Spain was in an advantageous position, but the late king’s cousin, António, also claimed the throne. Taking advantage of a widespread demoralization and, perhaps more importantly, benefiting from a network of sympathizers, Spain invaded Portugal. The kingdom fell in a swift two-month campaign led by the most renowned Spanish commanders, the Marquis de Santa Cruz and the Duke of Alba, which ended in the Battle of Alcântara, at the gates of Lisbon (25 August 1580). António fled to France and organized the resistance in the Azores. As a result, it took three more years, and as many expeditions, for Felipe II to subdue the final resistance at *Ilha Terceira* (1583). António still managed to avoid being captured and maintained his influence over the later years of the century, landing with Drake/Norris’s expedition of 1589. After his death in 1595, his son Manuel would take part in the Earl of Essex’s expedition that attacked Cadiz and pillaged the Portuguese city of Faro (1596).

Fortifications and siege operations

The conquest of Ceuta (1415), the first successful and permanent deployment outside Portugal’s European borders, is seen as the starting point for Portuguese overseas expansion. Turning attention to the sea meant a true departure from the European battlefield, allowing Portugal to concentrate on developing a naval and amphibious kind of warfare. The projection of military force across the oceans would benefit from two main aspects, a strong naval capacity and major strategic coastal settlements (Rodrigues 1999: 198–223). Military architecture would, thus, play a crucial role in the overseas operations.

As key places had to be tightly secured, new architectural designs would make a welcomed appearance in Portugal. Low-profile round bastions were built in the Moroccan city of Safim, as the architect, Diogo de Arruda, had probably worked with Sangallo in Naples, c.1485–1486 (Moreira 1989: 91–142). These strongholds would be widely used for two or three decades and implemented within the North

African frontier and in the most important places in the East. Francisco de Holanda's drawings (c.1538–1540) were the first depictions of the new angular bastions and, from the 1540s onwards, this design would progressively emerge in most new works. By the second half of the century, angular fortifications were fully established both in practice and in the few Portuguese theoretical texts on the subject.

Most of the Portuguese military activity took place around fortresses, being either amphibious assaults or defensive operations. One of the most emblematic sieges took place at Mazagão, in 1562 (from 2 February to 7 May). The city was considered impregnable, being completely enclosed within a modern angular squared circuit. However, one of the bastions still lacked its defensive moat, the *baluarte do Espírito Santo*, so the moors focused their efforts there, building an earth bastion with two heavy gun batteries. Two defensive operations are particularly well documented, counter-mining and counter-battery fire, led by the architect/military engineer Isidoro de Almeida. On the Muslim side, the siege works were probably carried out by a Spanish renegade, Antonio de Longronho.

Counter-battery fire took place after one month of continuous bombardment that demolished a significant part of the *baluarte* (see Glossary): part of the curtain on 10 April, shortly followed by the upper work (the *cavaleiro*) on the 13th. On the next day,

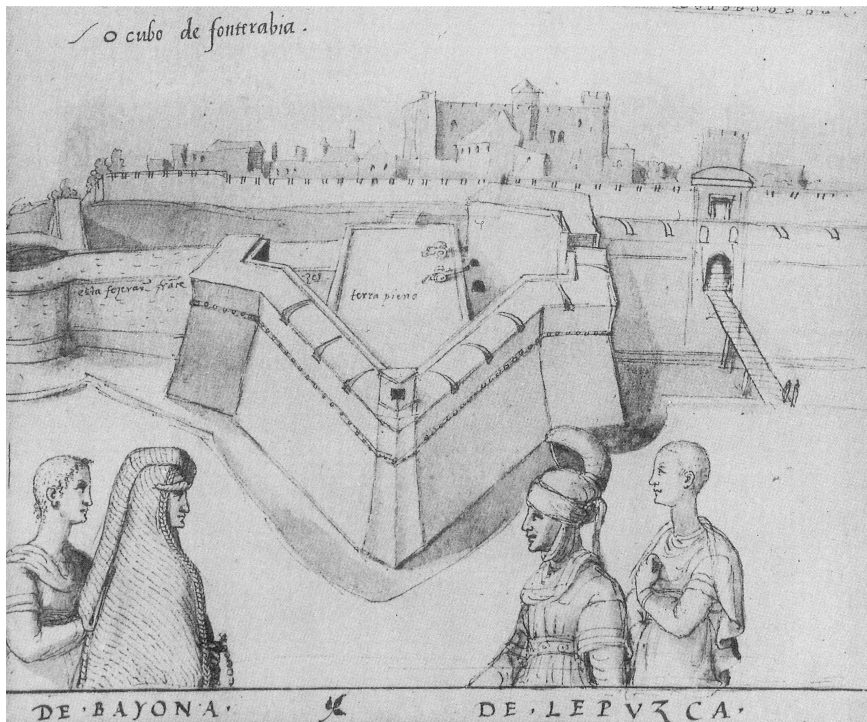


FIGURE 6.15 Francisco de Holanda (c.1538–1540), *Álbum dos Desenhos das Antiguallas*. (Livros Horizonte, 1989, p.42r.)

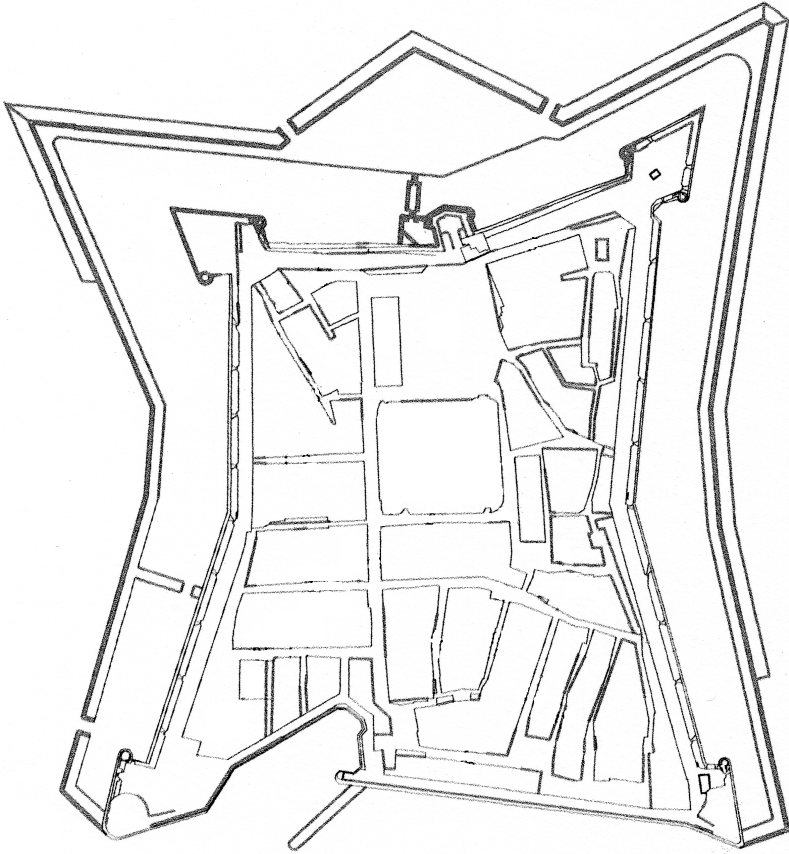


FIGURE 6.16 Mazagão Fortress, Benedetto de Ravenna/Miguel de Arruda (1541–1542). (Authors' diagram after plan by Jorge Correia)

Isidoro de Almeida put four heavy guns into position – *meios-camelos* – like the *trabuços* (see Glossary), with a high firing angle, which successfully dismantled the enemy pieces.

Enemy mining was heard approaching the heavily damaged *baluarte* on the 12th, which triggered the counter-mining operations. After determining the position of the mines, Almeida redirected the counter-mining. On the night of the 15th and during the next day, two underground battles took place amongst the flooded vaults, in which the enemy was driven away.

Assaults were met by the soldiers positioned along the main curtains, supported by offensive use of mining. On 17 April, a heavy bombardment pounded the battered *baluarte* until about 11.00, followed by a furious assault. An accidental explosion put the defenders in peril, but Almeida ordered that the powder in the mine be ignited. As the ground fell under the blast, huge flames erupted, burning many of the attackers. The fighting lasted another four hours but with decreasing intensity.

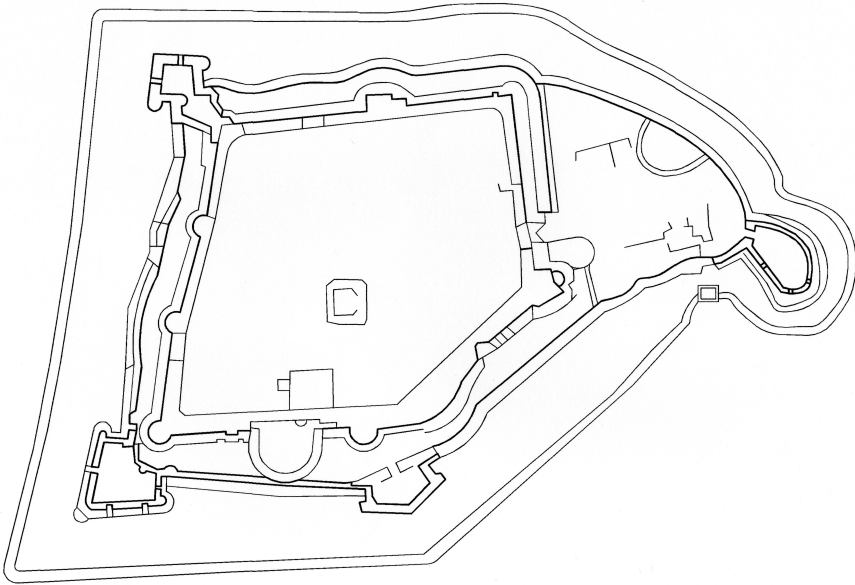


FIGURE 6.17 Bahrain Fortress, Onofre de Carvalho (c.1586). (Authors' diagram)

On the 30th, after some reconnaissance sorties and extensive siege work, another general assault was launched, but again it failed due to the same defensive stratagem. Finally, on 7 May, the Muslim army abandoned the siege.

Other operations played a crucial role during sieges, such as ground sorties. Some of these would have a greater magnitude than mere skirmishes with specific objectives. During the second siege of Diu (1546), a major sortie took place with troops arranged in regular formations, like an ordinary field of battle.

Logistics and recruitment

The problem of deploying soldiers to India was met each year by organizing fleets. However, the ships' limited space to carry soldiers and the heavy toll that these long voyages took on human lives, would limit the manpower available for operations. Nevertheless, some operations could have a greater magnitude, particularly in Morocco. Some 20,000 men were assembled for the conquest of Azamor (1514), including more than 3,000 cavalry. This huge army disembarked at Mazagão and marched 20 kilometres in full battle order, protected by the fleet, thus solving the logistical problems associated with an amphibious operation involving so many soldiers.

In Ethiopia, the logistical challenge was greater, as the army conducted a distant two-year campaign (1541–1543). The military contingent was relatively small, 600 men, and all supplies and weapons – including some artillery pieces – were carried on specially made carts that could also be used in combat armed with guns. For the



FIGURE 6.18 Artillery piece positioned for indirect fire. (Nicolo Tartaglia, *Quesiti et Inventioni Diverse* (1554), p. 6v. Courtesy of ETH-Bibliothek, Zurich)

Moroccan expedition of 1578, the lack of standardized equipment was overcome by acquiring all weapons and ammunition in Flanders, including all the body armour necessary to equip the Portuguese soldiers. Five hundred carts were built especially for carrying all the baggage (*carriagem*). Field encampments were also not neglected, and three military engineers supervised their arrangement, using some 'portable trenches' to reinforce defences.

The ties between the Iberian monarchies favoured the introduction of Spanish military influences in the organization of Portuguese land forces. Pedro de Navarro (c.1460 to 28 August 1528) joined the besieged garrison of Asilah in 1508 and his Swiss mercenaries were the first soldiers in Morocco to fight in the European fashion. With no Portuguese-Spanish conflict, mobility of military personnel would

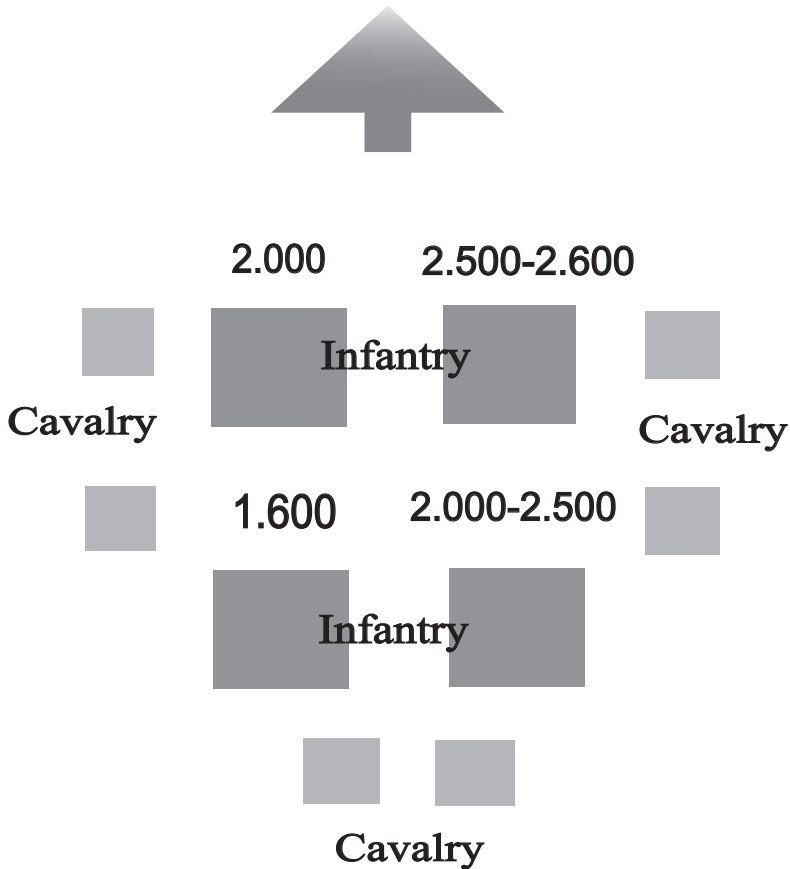


FIGURE 6.19 Order of battle for the conquest of Azamor (1513). (Authors' diagram)

be the norm during the whole century. However, the recruitment of soldiers presented a more complex problem, especially when it came to the establishment of permanent organizational structures. The Spanish military machine had begun with its European commitments. Portugal did not have such manpower needs, but the first cycle of aggressive expansion would favour the creation of similar military structures, even if they would have a short longevity. During the early expansion in North Africa (1508–1514) and with Afonso de Albuquerque's government in the East (1509–1515), permanent companies with an officer cadre attached (*ordenança* companies) were organized similarly to Spanish models, both with the king's militia as well as with the levies of the nobility. There was an anticlimax in 1513–1514. The defeat in Mamora (1514) stopped further expansion in North Africa and led to the interruption of military reforms, just as Albuquerque's successor had disbanded all the companies already created. Later, governors were ordered to re-establish the system, but were met with the resistance of men and the scattered nature of the Portuguese overseas settlements. Nevertheless, records point to the existence

of companies amongst the garrisons of Ceuta and Mazagão – the latter being created by the king's brother, the *Infante* Luís. The southernmost Portuguese villages of Alcantarilha, Pêras, Canelas and Lagoa had their own companies to repulse corsair attacks, such as that of 1559 (directed to Algarve). The northern town of Valença do Minho had two such companies, armed by the local working communities (*mecânicos*) which held regular training exercises.

A major reorganization of the militia took place during the controversial reign of Sebastião (1568–1578). Those reforms were a necessity, as pressure dramatically increased throughout the colonial territory, but they were also means to establish royal authority and its most significant function, namely the ability to wage war at the king's discretion. These were amongst his priorities, and in 1568, the new governor of India, Luís de Ataíde, received instructions to re-establish permanent companies in India. A few months later, a royal decree confirmed their establishment in the city of Oporto, followed by Lisbon in 1569. A general law extending compulsory recruitment to the whole country, the *Regimento dos capitães-mores* (1570), was modelled on the Spanish and Savoy systems, with the same organic arrangements and imposing similar regular training and periodic musters (*alardos*). There are scattered records of these musters in Oporto and Lisbon, and a detailed account for every major town of the South, providing a general picture for this region (Cascão 1984). After the 'Iberian Union', the whole of Portugal would become a frontier region, just like its southernmost part, following numerous alarms in which military conscription was imposed as a part of everyday life. To face the English invasion of 1589, some 12,000 men were put to arms, with the next major mobilization occurring in 1596. Those numbered far more than the 9,000 soldiers recruited from all over the country in 1578.

Theory and practice of war

The systematic emergence of Portuguese military literature was another important element which occurred during the last quarter of the 16th century. Half-a-dozen texts were published in less than a decade, mainly written by experienced men such as Martim Afonso de Melo (c.1567–1576), João da Fonseca (1573), Isidoro de Almeida (1573) and by the king himself (c.1574). During the 'Dual Monarchy', Portuguese military writers kept pace with their Spanish counterparts in terms of quality, even if they remained clearly behind in quantity. Despite being absorbed by the mighty Spanish war machine, they claimed a military expertise of their own. One particular operational aspect was the command structure, something that was missing at both the tactical and strategic levels. The *Regimento* of 1570 determined the staff officer for each company, and three years later a *sargento-mor* was appointed to assist the military commander (*capitão-mor*) for the Algarve. This would prove to have a true impact on the organization of military assets in one of the most important sources of recruitment, and it was surely not a coincidence that the Alentejo and Algarve musters reviewed in 1573 fielded 120 companies with some 20,000 men.

Portuguese military literature distinguished between two types of warfare (Melo 1948: 318–382). The first type was fought against ‘men with guns and well-armed people’, following European standards. During the combat around Benasterim, eight companies of *ordenança* (see Glossary) soldiers fought organized into *esquadrões* (see Glossary). One of these had a unique galley-like configuration that would later be represented in the well-known Italian military treatise of Giovan Mattheo Cicogna (1567). The Portuguese manuals also described regular formations both in the text like those of Isidoro de Almeida (1573) and Luís Álvaro Seco (1597), and the images (Diogo Álvares Correia c.1560–1570). The visual appearance of soldiers and horsemen is also detailed in contemporary iconography, showing the use of armour, pikes and firearms, just as elsewhere in Europe.

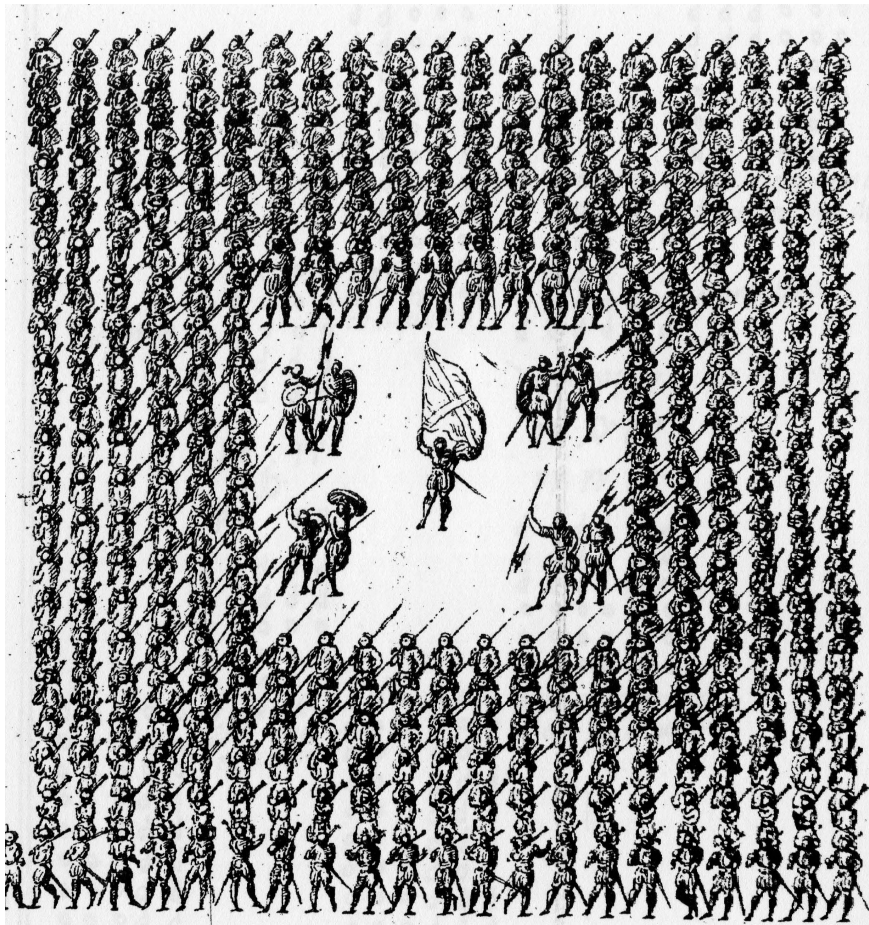


FIGURE 6.20 Battle formation – the *esquadrão* – Diogo Álvares Correia (c.1576). (Cod. 2107, p. 65, courtesy of BNP—Biblioteca Nacional de Portugal)



FIGURE 6.21 'Portuguese pikemen, *arquebusiers* and horseman', Miguel Leitão de Andrada, 'Miscellanea', engraving 1629, detail. (Courtesy of Biblioteca Nacional de Portugal)

The other kind of war was described as ‘against unarmed people’, and would take place in North Africa and the Orient, with the Atlantic region added at a later stage. As the enemy usually fielded large armies, many firearms would be required to engage it from a longer distance, so a short reinforcement of pikes would be sufficient for protecting the soldiers equipped with firearms. The contingent was made of arquebusiers, who were deployed at the vanguard in three lines: the first kneeling, the second standing and the third occupying the intervals between the other two. The discharge was given simultaneously as a massive volley to break the enemy’s momentum, followed by a furious charge that would – hopefully – make the enemy disperse; the use of the crossbow was also advocated for the soldiers in the rear of the *esquadrão* to support the hand-to-hand fighting within the first ranks. In advocating such operational use of firearms, Portuguese manuals were unique amongst contemporary European military writings, and inevitable variations are also evident in some Portuguese sources. In the Battle of Salga in the Azores (1581), the equipment of the Portuguese soldiers – firearms, swords and shields – was different from that of the specialized pike/arquebus-armed Spaniards. This double-weapons style was already described at Surrate (1530) – after delivering a massive volley, the soldiers handed the firearms to their ‘slaves’ (*escravos*) and attacked with spears (Correia 1975: 347) – one of these slaves was depicted on the iconography known as ‘João de Castro’s tapestries’.

The two sides of the Atlantic

The ‘Dual Monarchy’ presented an occasion for the Portuguese to develop an already original military approach, which is paradoxical, as one could expect that the Spanish influence would prevail over any of those particularities. Local warriors with specific fighting traditions were employed in every operational theatre, not only to overcome limited resources, but also because tactics had to be adapted to different military environments. The Portuguese only had a residual presence in North Africa, and, with the East already steadily decaying, the two sides of the Atlantic were going to play a decisive role in shaping the officer cadre that would ensure the next batch of military reforms.

Angola had been a territory almost ignored for colonization until the appointment of Paulo Dias de Novais as *capitão donatário* (1575–1589). Novais had been held in captivity by the N’gola leader some 14 years earlier, and the collaboration with the indigenous warriors reflected his profound knowledge of the region around Luanda. Adapting tactics would be the norm, as in the Battle of Casicola (25 August 1585). The triple battle order of N’dongo warriors faced 130 Europeans and some 8,000 African archers in a similar formation, who won a major victory.

The veteran Luís Serrão (1589–1591) assembled a considerable army of 120 Europeans and some 1,000 Africans. An unsuccessful combat followed in N’goleme a-Kitambo, but the withdrawal was surprisingly orderly. The Portuguese organized a defensive array where the African allies sheltered, and marched for 15 days,



FIGURE 6.22 Portuguese *slave*, Flemish tapestries of João de Castro. (c.1558–1560, canvas 10: ‘Triumphal Entry into Goa’—detail) (KHM—Kunsthistorisches Museum, Vienna)

covering more than 300 kilometres in strict formation. The battle order was reminiscent of Afonso de Melo's recommendations, with a substantial contingent of shooters at the vanguard to keep the enemy at bay.

The first governor of Brazil, Tomé de Sousa (1549–1553), established a pattern of alliances with the Brazilian Indians. They were organized into companies of local warriors commanded by a captain, usually the village chieftain (Puntoni 1992). The main military engagements were fought against the French colony founded in 1555 at Rio de Janeiro by Nicholas Villegaignon, baptized as *France Antartique*, with native Brazilian allies on both sides. São Paulo was besieged by the French and their Tupi allies in 1564. In 1567, an army of Portuguese and native Brazilian troops, including an ethnically mixed unit commanded by the Jesuit priest José de Anchieta, delivered the final onslaught. In fact, the Jesuits played a vital role as negotiators and in leading troops in the field.

Ethiopia, 1541–1543

On 9 June 1541, some 400 men led by Cristóvão da Gama, son of Vasco da Gama, began a two-year-long campaign in Ethiopia, to assist the Christians against the forces of the Sultanate of Adal. In mid-December 1541, after careful preparation

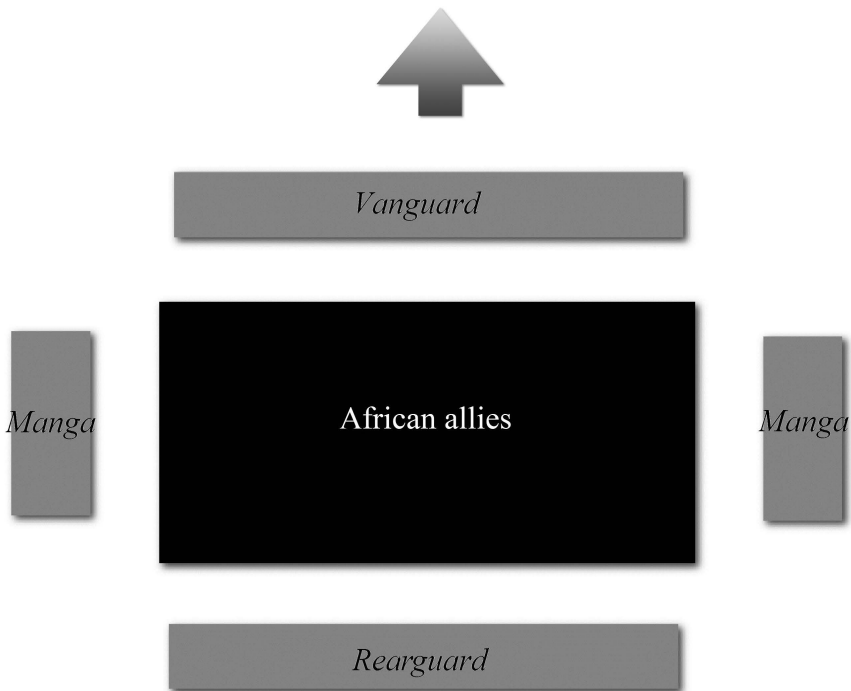


FIGURE 6.23 Battle array for marching, Angola (29 December 1589 to 15 January 1590). (Authors' diagram)

that included the construction of some 50 carts to carry all the baggage and munitions, the troops reached their first objective, the plateau of Amba Sanayt. Three columns of men armed with arquebuses and lances carried out the assault in three different directions, each supported by a quick-firing field artillery battery.

About a month later, Portuguese and Muslims clashed in the vicinity of Antalo (Hintalo). Gama deployed his forces in a mobile battle formation, with carts equipped with artillery pieces in the front and five *esquadrões* in an inverted crescent formation in the rear. The soldiers were kept in their positions through strict discipline of fire, engaging the enemy at a distance. The Muslims under Ahmad Gran were defeated twice (4 and 9 April 1542) with the same tactics, as they had no opposing firepower.

After these humiliating defeats, the Muslims requested reinforcements from the pasha of Yemen, and the new army encamped in Ofla, near Lake Ashangi. As the Portuguese arrived, they tried to contact the forces of King Claudius (Galawdewos) of Ethiopia. Meanwhile, another strategic point was taken (26–27 August), located in the Simien Mountains, and converted to a place for equipment storage, including for some 100 firearms. The Battle of Ofla followed (28 August), fought with the Portuguese on the defensive. Despite establishing a strong fortified position, the enemy now possessed field artillery, including some heavy guns, and 1,000 Turkish hand gunners. The trenches were demolished by cannon fire, and while the Christians launched successful limited counterattacks, casualties mounted and soldiers disbanded. Cristóvão da Gama was eventually captured and executed, and the army scattered.

The fugitives gathered the weapons stored at Simien Mountains and manufactured gunpowder with saltpetre and sulphur discovered on the site. A few months later, a new Portuguese/Abyssinian army soundly defeated the Muslim troops at Waine Dega (21 February 1543). Ahmad Gran was shot by a Portuguese soldier.

Alcácer Quibir (4 August 1578)

The Battle of Alcácer Quibir was the last episode of the war of succession to the Saadi throne, disputed between Muhammad al-Mutawakkil and his uncle Abd al-Malik (1574–1578). After the Spanish refusal to provide any help to al-Mutawakkil – Felipe II was secretly negotiating a truce with Turkey – the Portuguese took the opportunity to carry out a military intervention. The mobilization started in 1577, but the preparations dragged on for a year and a half, meeting with Spain's somewhat veiled opposition. The fleet finally set sail on 25 June 1578 and, after delays resulting from the lack of sufficient transport ships, arrived at Asilah on 11 July after a brief stop at Tangier. As the promised 50 Spanish galleys did not materialize, the main objective – the corsair port of Larache – had to be reached by land. Another delay followed until the arrival of the baggage carts, and the army began a 50-kilometre-long arduous march only on 28 July. On 3 August, some 5,000 cavalry trying to ambush the rearguard after the fording of the River Makhazem were repulsed by artillery and musket fire, and an hour later the two armies met for the

first time. The Christians spent the night in relative calm, as they were encamped in an entrenched position on the top of a hill. Finally, in the early hours of 4 August 1578, the troops assembled. After two or three hours, the Portuguese took the field following a small dry riverbed that protected their right flank.

Ahead were the 50,000 men of Abd al-Malik deployed in Ottoman fashion: 16,000 infantry in front equipped with firearms, mostly arquebuses, flanked with some 1,000 selected cavalry. The 24 artillery pieces were hidden and covered with vegetation – an early example of the use of camouflage – on top of a hill. From behind its cover, approximately 20,000 riders would emerge from both sides to envelop the enemy. The Portuguese army was divided into three lines, maintaining much of its marching order: in the vanguard there were 1,400 *aventureiros* (see Glossary) and two *mangas* (see Glossary) (each with 500 arquebusiers), with 11 Spanish companies (2,100 men) on the left, and the German mercenaries (12 companies, 2,800 men) on the right; on the second line were two Portuguese *terços* (see Glossary) deployed in one *esquadrão* (20 companies, some 5,000 men); and the two remaining *terços de ordenança* and some 500 musketeers defended the rearguard. The cavalry battalions occupied each flank, 600 heavy horse on the left – the most exposed position – commanded by the king (Sousa 2016).

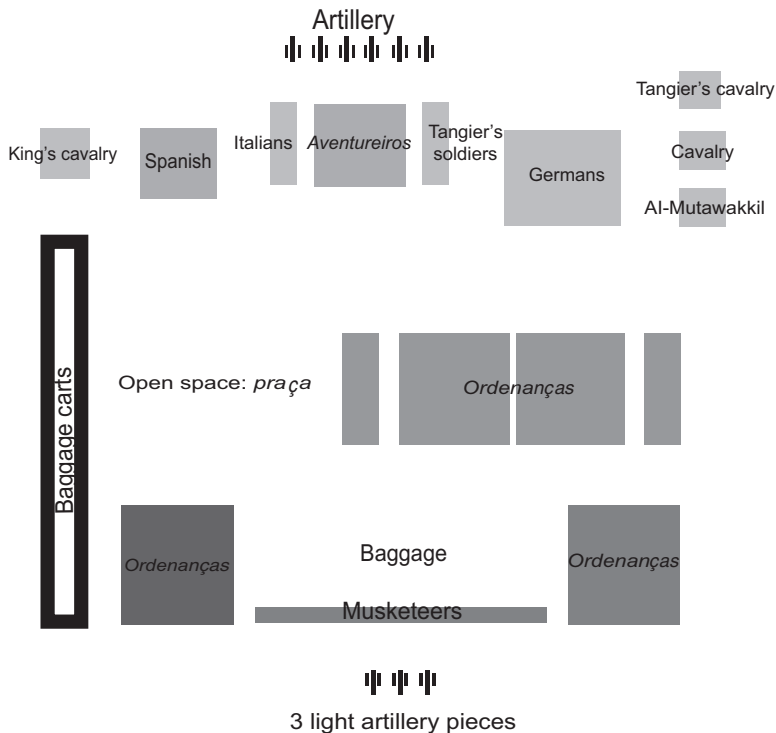


FIGURE 6.24 Portuguese order of battle at Alcácer Quibir, 4 August 1578. (Authors' diagram)

Within half a mile of the enemy, the Portuguese stopped and moved to arrange the definitive battle order. Spirits were uneasy, fearing a sudden attack before troops could deploy as planned, so it was decided that the rearguard would keep its positions. The vanguard had restarted moving when the unspotted artillery fired; this signalled the attack and the cavalry charged the rear. The surprised Portuguese brought their guns to the front, while the first arquebus discharges took place. Sebastião went to the rear to encourage his men, and after returning decided it was time to take the initiative. Two messengers sent to the opposite flank (calling for the advance) failed to return. However, the *aventureiros* lowered their pikes to advance, and the king attacked in their support. The first line advanced, pushing back the enemy, and as its centre/left gave way, the command post was exposed; Abd al-Malik died while trying to rally the retreating troops.

As victory seemed within the grasp of the Portuguese, the Moroccan levies started to pillage the baggage. However, the colonel of the *aventureiros* was badly injured by a cannon shot. Despite his orders to carry on with the attack, his sergeant, Pero Lopes, stopped the advancing men. The *sharif's* personal bodyguard launched a counterattack that pushed the enemy into disorderly retreat, right into their second line. Two counterattacks led by Sebastião restored the situation, but a false alarm in the rear ranks divided the already depleted cavalry forces, leading to their destruction. The king was wounded but continued to fight, despite being urged to abandon the field. As the battle came to its end (c.4:00–5:00 am), he led a last cavalry charge, broke through the enemy ranks, and tried to escape, but was eventually caught and killed by his captors. The death toll reached some 15,000, with more than two-thirds of them Christians.

B NAVAL WAR

Vítor Luís Gaspar Rodrigues

Political outline

The turn of the 15th century into the 16th marks the beginning of the Portuguese expansion process in the East, with the transfer of a very significant part of Portuguese naval military power to the Indian Ocean, turning it into the main stage of naval battles fought by the Portuguese throughout the 16th century. The Portuguese naval superiority in the Indian Ocean was founded on a long period of apprenticeship in the Atlantic. For approximately one century, the Portuguese had undertaken successive technical transformations of their sailing ships – *caravelas* (see Glossary) and *naus* (see Glossary), which, after being armed with heavy deck guns, became powerful warships. At the same time, as a result of the naval war against North European and North African plundering as well as piracy both in the Strait of Gibraltar and on the coasts of Portugal, the Portuguese developed and perfected new naval and amphibious warfare practices, which proved to be fundamental to their military supremacy in the Indian Ocean.

Although the first reference to *trons* and *bombardas* in small Portuguese ships operating in the Strait of Gibraltar dates from 1416, and it is known that since 1445 there were *caravelas* equipped with some weaponry, these were of small calibre and limited range. As of 1471, by assignment of Prince João, the *caravelas* were deployed with larger cannons and thus turned into fearsome warships. In fact, although the *caravelas* were strong, very fast and very weatherly, they were rather vulnerable in the event of ship boarding, because of their low freeboards. Only their heavy guns aboard – with 16-cm calibre and two-metre chamberless barrels – mounted amidships, allowed them to attack the enemy vessels while preventing them from approaching. These heavy guns, widely known as *camelos* and *cameletes*, fired stone projectiles. In their larger versions (18 to 23-cm calibre and approximately three-metre-long barrels) they would eventually equip the *naus* that would also be decisive in the first phase of military control in the Indian Ocean. João II also created the first bronze weaponry foundries and promoted the manufacture of wrought-iron weaponry and, in 1489, he created the first body of naval artillerymen. The first firing exercises practised with large *bombardas* placed in ‘*caravelas* and small ships’ and firing ‘at the waterline’ date from that time. These transformations led to a true revolution in naval combat methods, resulting in important technical and tactical innovations, which undermined the generally accepted principles for war at sea, and marked the beginning of a preponderance of ships armed with artillery (Rubim 1990: 27–41; Santos 1999: 48–65; Guilmartin Jr. 2002: 86–87).

The supremacy of Portuguese sea power in the Indian Ocean: a technological and tactical revolution

The inability of the agents of King Manuel I to interfere in the maritime trade circuits of the Indian Ocean controlled by Muslim merchants forced the Portuguese to take on a belligerent attitude. In 1500, the sending of a powerful fleet to the Indian Ocean commanded by Pedro Álvares Cabral, who bombarded Kozhikode (Calicut), marked the moment when the Portuguese implemented a revolutionary naval combat tactic. Instead of the traditional frontal-attack boarding, the outcome of the naval battles became dependent on the relationship between the manoeuvrability of their ships, especially the *caravelas*, and the firepower of their weaponry.

The king expressly instructed Cabral ‘neither to attack any ships of the Moors from Mecca by frontal attack nor to board them, unless absolutely necessary, but to force them to surrender through his artillery fire instead, because this way would make it possible to conduct the war with greater safety for and less damage to his ships’ crews’. This directive established Portuguese naval combat strategy in the Indian Ocean during the first decade of the 16th century. Aware of the superiority of the Asian fleets in terms of numbers of ships and crew, the Portuguese conducted naval combat at a distance, by combining the firepower of their cannons with the manoeuvring of their sailing ships, especially their *caravelas*. Equipped with a crew which was experienced and seaworthy through being accustomed to the difficult conditions in the Atlantic, and with an artillery clearly superior to that used by the

Eastern fleets, the Portuguese *armadas* kept the enemy at a distance, thus avoiding being approached. It was only after destroying a large part of the military capacity of these fleets, with the use of artillery and breaking the heart and courage of the opposing fighters, that the Portuguese made their approach and boarded ships.

In most naval battles, the Portuguese sought to remain in the open sea, positioning themselves on the windward side of the enemy ships to avoid being approached, given their small ship crews and the impossibility of replacing them. When the battle was fought in a more restricted space, as occurred in 1501 at the Bay of Kannur with João da Nova's four ships, the captain ordered his skippers 'to resist with artillery so that the Muslim fleet did not reach them' (Castanheda 1979: I, 96). The ships were positioned in such a way that the heavy guns on deck could simultaneously shoot over a hundred enemy sails which, with no weaponry, sought to approach them in closed ranks, thus becoming an easy target for the experienced Portuguese artillerymen. With a significant part of the Malabar fleet destroyed, the remaining ships retreated.

Because of their higher-quality naval ordnance, soon the Portuguese used a new naval combat tactic in the Indian Ocean, attack in a squadron-column, which eventually proved equally important for the rapid assertion of their naval supremacy. Actually, the first use of the ships in combat, 'one after the other lined astern', launching successive volleys of artillery fire against the opposing ships, either larboard or starboard, dates back to February 1502. In that year, the squadron of *caravelas* commanded by Vicente Sodré and the *naus* of the 'Carreira' commanded by Vasco da Gama, when attacked by a large fleet from Kozhikode, immediately adopted the column formation aiming to fight at a distance with artillery. This resulted in the destruction of a large number of *paraus* and Malabarian ships, which were very fragile, since their planks were sewn and not nailed together, and thus vulnerable to the shells of the Portuguese artillery.

Along with the implementation of these revolutionary naval combat tactics, the Portuguese, to minimize casualties among their soldiers, maintained on the upper deck only the sailors necessary to manoeuvre the ship and artillerymen to operate the weaponry, thus keeping the soldiers protected on the lower decks. These intervened only in the final stages of the fighting to seize and loot the immobilized ships. In addition, unlike the Malabari warriors, the Portuguese benefited from fighting with defensive military equipment – helmets, cuirasses and shields. The support provided by the allied kingdoms of Malabar, especially Kochi, was likewise decisive, not only through the incorporation of men and small ships into the Portuguese fleets, but also through the transfer of knowledge on Indian warfare tactics, which eventually proved to be essential to stop the attacks launched in the first years by Samudri Raja's armies in the rivers and lagoon areas around Kochi.

Diu: control of the Indian Ocean

The naval battles of Chaul (1508) and Diu (1509) marked the first moment when the Portuguese *Armada* in India fought a fleet composed of galleys and heavily

armed seaworthy sailing ships, since they were built by Venetians at the order of the Mamelukes. The much-feared reply of the Mameluke Sultan took the form of a strong *armada* composed of 12 ships sent to the Arabian Sea.

The first battle took place on the Chaul River, and came to an end with the death of Captain Lourenço de Almeida and the defeat of his fleet. This naval battle was marked by the tactical inability of the two leaders in charge: the Egyptian admiral because, after a first attempt to approach the Portuguese ships, he ordered his ships, galleys included, to fight statically, chained to each other and with their pieces concentrated in the bow so as to try to stop the attack by the Portuguese navy; Lourenço because, instead of following the advice of Constable Michael Arnau, who argued for a short-range bombardment of the enemy *armada*, he chose to board the enemy ships out of prejudice (since a victory determined by cannon shots was neither honourable nor profitable). Both the larger size of the Egyptian ships and the fact that the river current made the approach manoeuvre enormously difficult, were decisive for the failure of the operation.

In Diu, Hussain's fleet consisted of 116 ships (10 sailing ships, six galleys, 30 Gujarati *fustas* (see Glossary) and 70 *paraus* from Kozhikode) equipped with 450 Mameluke soldiers and mercenaries and several thousand Gujaratis and Malabaris. The fleet led by Viceroy Francisco de Almeida consisted of 15 sailing ships (nine *naus*, four *caravelas*, two *caravelões*) and three rowing boats (two galleys and one *bergantim*) with 1,200 men, both soldiers and crew members. The superiority of his squadron of high-level ships was shown by its much larger number of artillery pieces, as well as gunpowder and projectiles. Hussain's rowing fleet, though much larger in number – 106 ships – was completely ineffective, not only because he had decided to fight with enchained galleys, but also because the Gujarati fleet virtually did not interfere in the battle, due to Malik Ayaz's betrayal.

Emir Hussain, with many of his ships shattered, especially the galleys, had chosen a static defence. He aligned them in pairs, in chains, with their sterns facing the land and the flagship in the middle, thus placing them under the protection of the fortress and the sea fort artillery. His strategy was to endure the frontal attack of the Portuguese ships and to counterattack their flanks and rear with the *fustas* and the *paraus*. The viceroy, however, ordered the galleys to take the frontline, with the sailing ships in their wake formed in line. After a first swerve, the larger ships launched an artillery attack on each of the predefined targets at the shortest possible distance, with the Portuguese galleys and *caravelas* bombarding the Mameluke galleys on the right flank so as to avoid their artillery fire. Only then did the approach take place (Pissarra 2002: 33–62, 75–93; S. Monteiro 1989: 177–192). The action of the Portuguese artillerymen was also decisive, who sank two large sailing ships and caused great damage to the remaining ships of the fleet and numerous casualties among the crews, forcing Hussain to flee to solid ground. For a long time, the Portuguese stood out as the main naval power in the Indian Ocean.

Expansion and strengthening of the empire: repercussions on its naval structure

In order to exercise their naval power efficiently, the Portuguese needed naval bases located at strategic points in the Indian Ocean, where they could support their fleets logistically and technically, as in Kochi. Its conquest had been carried out by Afonso de Albuquerque, who, in 1510, had only 34 sailing ships and five paddle ships in the Indian Ocean. He managed, through difficult and complex amphibious operations, to seize Goa twice in that year, followed by the conquest of Malacca in 1511 and that of Ormuz in 1515, transforming the '*Estado da Índia*' into a coherently established and politically structured network, throughout the Indian Ocean.

As a result of the enlargement of the '*Estado da Índia*' to the Persian Gulf, the Red Sea and South-East Asia, Portuguese leaders, with Albuquerque at their head, soon became aware of the need to equip their fleets with *galés* and *galiotas*, as well as with small rowing boats – *bergantins*, *fustas*, *paraus* and *catures*, usually referred to as *fustalha*. The problem of a lack of rowers having been solved with the use of slaves, prisoners of war and, after the seizure of Goa, many local outcasts, the number of oar ships within the fleets increased significantly and therefore the first mixed fleets appeared, better fitted for combat near the coast.

The need to match local warfare methods and have ships that could combine the strength and fire power of the *naus* with the manoeuvrability and speed of the *caravelas*, led to the introduction of the *galeão* in the '*Armada da Índia*'. It came also as a result of the need to have sailing ships in the Indian Ocean capable of successfully confronting the emerging power of the Turks. The first information about this warship in the East dates back to 1518, with its number increasing rapidly, from five units in 1520 (three of them built in India) to 11 in 1525, and some more being built in the eastern dockyards. Throughout the 16th century, galleons were the main sailing warships used by the Portuguese.

The typological change of the Portuguese fleets in the East resulted, on the one hand, from the enlargement of the dominated area, which required a much larger number of ships and, on the other hand, from the change of naval strategy of the eastern powers, which, in view of the superiority of the Portuguese fleets and their weaponry, began to avoid naval combat on the high seas, bringing them nearer the coast or to river estuaries. In 1522, as a result of this adjustment, the 42 rowing vessels of the *Armada da Índia* already made up 48.8 per cent of its total, eventually rising to 60 units in 1525 (60 per cent of the *Armada*). As of that date, mainly due to the action of the governors Henrique de Menezes and Lopo Vaz de Sampaio, the number of *fustas* in the *Armada da Índia*, and small local vessels (e.g. *paraus*, *calaluzes*, *lancharas*, or *balões*) increased extraordinarily, many of them captured from the eastern fleets and later reinforced so as to accommodate small and medium-sized weaponry. They were intended for so-called 'estuary warfare', fought along the coast, within the rivers or in the lagoon areas around Kochi, for example. As they were quicker and easier to build, and with much lower maintenance costs, these small

ships fitted better into the social organization of the Portuguese in India, because they allowed a greater number of noblemen to be awarded captainships.

With the growth of the empire as a result of the increasing number of strongholds, the number of ships that made up the *Armada da Índia* had also increased exponentially. In the late 1530s, while the Portuguese Empire was achieving its greatest splendour, the *fustalha* represented more than three-quarters of the nearly 300 Portuguese ships operating in the Indian and the Pacific Oceans. As for the sailing ships, their number tended to remain the same until the mid-1550s, due to the need to prevent a possible Ottoman attack on the *Estado da Índia*.

The decline of the *Armada de Alto-bordo* in the East: its consequences

In August 1554, in the Gulf of Oman, a Portuguese mixed fleet fought the Ottoman galleys of Seydi Ali Reis. That naval battle confirmed the superiority of the Portuguese *galeões* and *caravelas* over the Turkish galleys (which were routed and obliged to take refuge in the Surat), and marked the moment when the decrease of the number of sailing ships in the *Armada da Índia* was accentuated. Indeed, the end of the Ottoman threat in the Arabian Sea and the worsening financial problems of the Portuguese Empire led it to make a sharp disinvestment in its sailing vessels in terms of both crew and number of ships. The result of this disinvestment was that, by the end of 1560, there were only 20 sailing ships in the East (Pissarra 2001: 260).

As a result of these transformations, the regular fleets organized annually in Goa, such as the extraordinary *armadas*, experienced a substantial decrease in the number of *galeões*. At the same time, the major shipyards of the '*Estado da Índia*' were now almost exclusively engaged in the building of small ships and occasionally a few *galés*. Between 1591 and 1596, of the 660 vessels fitted for the different Portuguese fleets in the Indian Ocean, only 18 were *galeões*, i.e. on average three *galeões* per year. On the other hand, for the same period, 60 galleys (10 per year) and 582 small rowing and sailing ships (97 per year) were fitted (Rodrigues 2011: 237–242).

The '*Estado da Índia*' was also deeply in need of *naus* for the logistical support of its fleets, making use of private *naus* for military missions. Throughout the 1580s and 1590s, sailing vessels of higher tonnage began to be used mainly as support ships instead of warships, which also contributed to the lack of a search for new technical solutions that would make them faster, more seaworthy and weatherly, and equipped with longer-range artillery. On the contrary, they became increasingly larger and heavier, with higher forecastles, which made them particularly slow and hard to manoeuvre.

This typological transformation of the *Armada da Índia* caused profound changes in combat tactics, the Portuguese having ceased to engage in combat with their fleets overseas deployed in line ahead formation and using long-range naval battery. The use of artillery in naval combat, especially higher-calibre weapons, had considerably declined (in 45 of the largest naval clashes between 1535 and 1565, only four were decided by artillery), and the practice of attack-boarding had returned.

This tactic of combat, more suitable to the mind-set of the noblemen, was responsible for the degradation of the artillerymen with consequences not only in the level of their effectiveness, but also in their number. This reduction was also due to the lack of artillerymen, gunners and smelters in the Portuguese kingdom and in Europe, thus forcing the employment of eastern combatants, who were technically less gifted. Simultaneously, there was a significant transformation in the artillery of the *Estado da Índia*. Between 1553 and 1581, the arsenals of Goa, which armed a significant part of the Portuguese fleets, saw an extraordinary reduction in their ordnance, from 1,012 cannons to 264. This inevitably had serious repercussions on the military potential of the '*Armada da Índia*', now consisting almost exclusively of small rowing and sailing ships, which were unable to withstand the attacks from the Dutch and the English fleets in the first decades of the 17th century.

Naval organization in the Atlantic

In the first two decades of the 16th century, the main strategic goal of the Portuguese navy in the Atlantic was defending its commercial routes, especially those to North Africa, the Gulf of Guinea and the Atlantic archipelagos, and the surveillance of its coastline, especially that of Algarve, which was exposed to attacks of Moroccan pirates from Tétouan and Larache. With its area of activity very much centred around the Strait of Gibraltar and on the North African coast, small military fleets were sent there annually to protect Portuguese navigation. Relief fleets were also sent there to provide aid to the strongholds, whenever necessary, as well as great armadas, as happened in 1513, for the conquest of Azemmour (approximately 400 ships). Thus, until 1520, no regular fleets were stationed in the Strait, as was also the case along the Portuguese coast. The armadas annually sent to the Strait were mostly composed of light ships, many of them chartered from national merchants, and some round *caravelas* and lateen-rigged *caravelas* armed with small *bombardas* and *berços*. Given the defensive strategy adopted, it was a very different typology from that of the Portuguese fleets in the East, where sailing ships prevailed at the time.

The increasing Muslim naval power in the Strait of Gibraltar that resulted from the growing Ottoman influence, combined with the increasing French corsair activities, forced King Manuel to restructure the Portuguese navy in 1520. Three *armadas* were created in the Atlantic: the coast guard *armada*, the *armada* of the islands (Azores Islands) and the *armada* of the Strait. With regard to Brazil, several *armadas* were organized throughout the century to guard the Brazilian coast and prevent the French and Spanish from establishing themselves.

The *armada* of the Strait, with a variable number of ships, was formed mainly by *caravelas* permanently stationed in this region, supported by extraordinary fleets organized in the Portuguese kingdom. Due to the growing military pressure of Moroccan and Turkish corsairs and the military-political power of the Sharifs of Sus, King João III, in line with his policy of territorial abandonment in Morocco, begun in 1541, negotiated an agreement with Emperor Carlos V to transfer the responsibility for policing the Strait of Gibraltar to the Spanish fleets. The year

1552, therefore, marked the end of the *armada* of the Strait with the subsequent strategic retreat of the Portuguese naval forces to Portugal's coast.

The agreement also provided for the restructuring of the coast guard *armada*, consisting of 20 lateen-rigged ships, which were spread over several ports and which sailed all year round in conjunction with a fleet of four *naus* or *galeões*. On the Algarve coast, there was a fleet composed of four rowing boats and one sailing ship, or composed of *caravelas*. The navigation to the African coast, the Gulf of Guinea and Brazil, was also regulated, and it was determined that the ships were to leave in January, March (together with the 'Carreira' ships) and in September, convoyed and escorted by ships armed by the Crown.

The armada of the islands was made up of three *naus* or *galeões* and seven *caravelas*, a number that varied greatly over the years. Having to depart from the kingdom in April to support the ships of the *Carreira da Índia* on their return, and the Spanish *galeões* with the silver from America, the *armadas* were, therefore, to remain in the Azores until August. On their return, they would include in their convoy not only the *naus* of the 'Carreira da Índia', but also all the other ships on their way to the kingdom.

The collapse of the Portuguese navy

This entire complex defensive system, the main goal of which was to ensure the circulation of its ships instead of the naval control of these areas, began to show signs of exhaustion in the 1570s, and worsening in the following decades. As in the East, the lack of crews, sailing ships (due to the exhaustion of wood in the Portuguese forests and the high cost of shipbuilding) and weaponry for fitting the fleets was aggravated, and, in regard to artillery, the situation particularly worsened, in 1580, when the warehouses of the Ribeira das Naus were looted by the partisans of António, Prior do Crato.

This shortage of sailing ships had been accentuated not only because Portugal was pushed into the conflict with the Protestant nations of northern Europe, of which the 'Invincible Armada' is a good example, but also, and above all, due to the exponential increase in losses of sailing vessels registered in the *Carreira da Índia* – 37 between 1581 and 1600. From 1592 onwards, as a result of the huge lack of ships for the *Carreira* and the need to have it equipped with warships, its fleets began to include *galeões* which were shifted from the Atlantic fleets. All this, combined with the incapacity of the Portuguese dockyards and foundries to respond to the needs of a continuously growing empire, forced the Portuguese to borrow sailing ships and artillery from the Crown of Castile for their Atlantic fleets (Salgado 2009: 44–58 and 241–242).

The structural weaknesses of the Portuguese navy, seen both in the Indian and the Atlantic Oceans in the late 16th century, were aggravated by their captains' inability to fight with ships in line ahead formation so as to engage their enemies using the technique of long-range naval battery, which had proved to be successful in the East earlier that century (Parker 2000: 125). The naval disaster of the Invincible

Armada was a perfect illustration of this inability, and the Iberian leadership, composed of high-ranked noblemen, continued to use the 'half-moon' formation as their method of battle, always seeking to fight by approach-boarding. The English, on the other hand, with a fleet of only 34 warships and aware of the technical superiority of their ships (faster and more seaworthy) and their weaponry, chose to subject the *Armada* to a constant artillery barrage, in the various battles. With a firing rate five times greater than that of the Iberian vessels, the English artillery, although it did not sink a large number of ships, given the heftiness of their hulls, was enough to put them out of combat, which was a decisive contribution to the victory.

The same situation occurred in the Indian Ocean with the arrival of the Dutch, who, equipped with more seaworthy and weatherly ships and with an artillery with greater rates of fire and longer effective ranges than that of the Portuguese, quickly imposed themselves on the fragile Portuguese fleets, as evidenced by the naval blockade of Goa by the Dutch fleet in 1604. In a first attempt, the leaders of the *Estado da Índia* responded to the Dutch offensive by organizing a strong fleet with a large number of sailing ships. However, in 1606, it was defeated off the coast of Malacca as a result of its commanders' decision to fight with their ships at anchor. Henceforth, their strategy was based on the concentration of their sailing vessels in the Indian Ocean and, above all, on the use of their light rowing and sailing fleets which, by sailing near the coast to avoid the Dutch fleets, were extremely useful in the support of navigation and the fortresses of the *Estado da Índia*. As members of the Senate of Goa said, 'it was time to resist, not to attack' (Letter from the Senate of Goa to the King of Portugal, Goa, 1607, in *Arquivo Portuguez Oriental*, I, II, 233).

Notes

- 1 This work has been financially supported by the Institute for Medieval Studies of the Nova University of Lisbon as part of the strategic project UID/HIS/00749/2013.
- 2 (Sousa 2009: 128–196; N. G. Monteiro 2009: 199–206).
- 3 (J. G. Monteiro 2003: 163–287; Duarte 2003: 289–441).
- 4 The best sources are the chronicles of Fernão Lopes and López de Ayala, and also Jean Froissart, *Chroniques*, S.H.F., ed. Léon Mirot, Tome XII (1356–1388), Livre III, Paris, 1931.

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