out to confront the Mamluks included only 7 galleys (which had been hired from the Genoese), plus 4 large merchantmen and 6 other vessels, while in 1470 and 1472 the Order contributed just 2 galleys to Venetian and Veneto-Neapolitan fleets respectively.

Most Hospitaller ships were built in Genoa or Marseilles, but occasionally some were constructed, and others usually repaired, in the Order's own arsenal at Rhodes. The galleys usually carried one or 2 small guns in the bows, a practice probably copied from the Venetians in the late-14th century. We read of Hospitaller ships using their guns against the Mamluk fleet in 1440, and Doukas tells us that in 1455 an Ottoman fleet approaching Rhodes found the harbour 'filled with large ships all standing in battle formation' and 'saw that there was twice as much artillery' on them as there had been aboard the well-armed Genoese ships it had encountered at Chios. The Order also made full and efficient use of artillery on land, though there is some evidence that they considered its use unchivalrous. Sources for the Ottoman siege of the island in 1480 record the successes of the Hospitaller artillery on that occasion, and in one of Caoursin's manuscript illustrations of the Turkish attack a battery of some 6 light pieces mounted on the walls features prominently. The Order's artillerists were non-brethren, being technicians employed by contract (as was Johann Berger, their master-gunner in 1480). Of 2 surviving Hospitaller guns in Nuremberg and Paris dating to Pierre d'Aubusson's period as Grand Master, one is a culverine that could fire 55 lb shot, while the other is a bombard measuring 6 feet 3 inches in length and capable of firing stone shot weighing 574 lbs.

The total strength of the Hospitaller Convent of Rhodes, where the Order had built or restored some 30 fortresses by 1480, is recorded in many contemporary sources throughout this era. There were 200 knights by 1330 and reputedly 400 on Rhodes, plus mercenaries, local levies, and a small garrison on Kos, by 1345. Rudolf von Suchem in 1350 put the Convent at 350 knights, while an anonymous traveller of 1441 reckoned there were 500, a figure repeated by Arnold von Harff in 1497. However, the Order's official strength on Rhodes in 1466 was only 300 knights, 20 (2002) serving brethren and 30 chaplains, increased to 450 and then 550 only in the early years of the 16th century. The discrepancy, however, is fairly certainly explained by some of these figures to include the garrisons of the Dodecanese islands and the mainland fortresses, which were sizeable. The Preceptor of Kos, for instance, had to maintain 25 brethren, 10 mercenary men-at-arms and 100 Turchopes by 1394-95 (plus a doctor, an apothecary and a galley), while in 1403 Ruy Gonzalez de Clavijo described the island as being 'always garrisoned by 100 knights of the Order of St John, under a lieutenant, and they hold the castle and the town in force.' The fortress of St Peter at Halikarnassos had a garrison that included 50 brethren in 1460, while Smyrna at its fall to Tamerlane in 1402 had a garrison of 200 knights plus mercenaries. In addition to the Convent, the Order could draw on its European possessions for reinforcements. 100 brethren were summoned to Rhodes in 1358, for example, while in 1375 the pope authorised 500 brethren, each with an esquire, to be called up for operations in Greece, though the list given adds up to only 390, comprised of 125 brethren from the French priories, 101 Italian, 73 Spanish and Portuguese, 38 English and Irish, 32 German and Bohemian, 17 Hungarian, and 2 each from the preceptories of Achaea and the duchy of Athens.

When Rhodes finally fell to the Ottomans in 1522 its garrison was made up of 290 brother knights, 15 donati, about 300 serving brethren, 500 Genoese and 50 Venetian seamen, 400 Cretan crossbowmen, and several thousand Rhodian militiamen.

**CYPRUS**

The kingdom of Cyprus reached the height of its prestige and power early in this period under Hugh IV (1324-59) and Peter I (1359-69), even establishing a foothold on the mainland under the latter by the cession of Corycus by the Cilician Armenians in 1360 (lost 1448) and the capture of Adalia, modern Antalya, in 1361 (lost 1373). However, the murder of the crusading king Peter I by dissident barons led in 1373 to his widow supporting a Genoese invasion of the island that tore out its heart and crippled it financially. As a result of the treaty signed in 1374 the Cypriot exchequer ended up virtually footing the bill for the Genoese expedition and paying for the maintenance thereafter of Genoa's forces stationed on the island, in addition to which Famagusta had to be handed over to the republic. Abortive attempts to evict the Genoese, often in alliance with their traditional enemies the Venetians, resulted only in even more burdensome conditions being imposed, and the Genoese stranglehold on Cyprus was only finally ended with the recapture of Famagusta by James II (1460-73) in 1464. In the meantime the faction-ridden island had undergone an invasion by the Mamluks of Egypt in 1426, in retaliation for ill-advised Cypriot raids on the Syrian coast the previous year (and on many earlier occasions, right back to Peter I's raids on Alexandria in 1365 and on Tripoli and Tortosa in 1367). Receiving no aid from the Genoese, King Janus (1398-1432) was captured by the Mamluks in the Battle of Khirokitia, and was only released on payment of a huge ransom and acknowledgement of Mamluk suzerainty. It was therefore in Cypriot ports that the Mamluk fleet was
revictualled before its attacks on Rhodes in 1440 and 1443, and from 1460-64 Mamluk troops supported James II’s claim to the throne, fighting against the legitimate queen, Charlotte (1458-64). Under James II Venetian influence steadily increased to fill the power vacuum left by the displacement of the Genoese, and following his premature death the republic effectively ruled the kingdom through his Venetian widow, who in 1489 officially handed over to them the government of the island, which thereby became a Venetian colony.

Although the core of Cyprus’ military strength comprised the contingents of the feudal nobility as in Western Europe, other elements of the army reflected the island’s cosmopolitan population. The infantry were provided chiefly by the native Greek-speaking peasantry, both parici (serfs) and francomati (freemen), plus Cypriot and Western European Franks, particularly in the role of crossbowmen (who constituted the nucleus of Cypriot infantry). In addition Cilician Armenians were often hired, as by King Peter II (1369-82) in 1373, and after the fall of their own kingdom many more fled to Cyprus, so that at the Battle of Khriokitia many of the Cypriot infantry were Armenians and the dead there included at least two Armenian knights. The forces at this battle also included Karamani Turks (‘especially employed as mercenaries’ since 1415), while al-‘Aini records Catalans and Rhodians (i.e. Hospitaliers) being there. In the war of 1373-74 against the Genoese even Bulgarians are recorded; there were about 2,000 of them — all ex-slaves, and apparently including some Romanian Greeks and Tartars — gathered together to fight as mercenaries, initially for the Genoese but later for the king’s forces, apparently in the role of light cavalry skirmishers against the Genoese lines of communication, often being recorded fighting in, or guarding, mountain passes and defiles. Other mercenaries during the 14th-15th centuries included native turcopoles (see Armies and Enemies of the Crusades, figure 14) and Frankish knights, predominantly from France and to a lesser extent Italy and Germany. Under the Venetians stradiots were also introduced (see figure 68), 600 raised in Albania and the Greek islands being sent to Cyprus in 1474 along with 2,000 mercenary Italian infantry.

No records of Cyprus’ total military potential seem to have survived for this period prior to the Venetian takeover, but there were probably about 1,000 knights available to the crown, at least in the 14th century; these the king had to pay if he required their service. In addition an arrière-ban of all able-bodied men over 15 years of age could be called on in emergencies, as it was to defend Nicosia in 1373. It would seem that in all up to 10,000 men were available to the king under ordinary circumstances — Peter I led 7,000 men in his raid on Syria in 1367, while in 1373 we read of the Constable of Cyprus placing 1,000 men in Famagusta and appointing 300 more as coastguards, while the Prince of Antioch and Peter II led 1,000 and 2,000-2,500 respectively from Nicosia, in addition to which there were large garrison forces and the 2,000 Bulgarians mentioned above. The largest Cypriot army on record for the 15th century was that defeated at Khriokitia, which is recorded as 1,600 knights and 4,000 infantry by Leontios Makhairas (who was present); 2,000 cavalry and about 8,000 infantry by al-‘Aini; and 2,000 cavalry and a ‘large number’ of infantry by Sanudo. Khalil al-Dhahiri put the cavalry element at 2,300. Perhaps the lower figures do not include the vanguard detachment, which according to Monstrelet comprised 300 Hospitalier and Frankish cavalry and ‘many’ infantry. Two Moslem sources record the Cypriot losses in the battle as 6,000 or more men, though another (Taghribirdi) says 2,000 were killed in the battle and more in the ensuing rout. Makhairas gives one or two other interesting details of the Cypriot army on this occasion, recording that it was organised in units of 100 and 50 men*, the infantry being drawn up with ‘each man close up to the next so as to be like a wall. And they had prepared a hundred pavesia [pavises, apparently for the troops guarding the king] . . . and all the army like a wall.’

Military command was in the hands of the Constable of Cyprus and the Constable of Jerusalem (usually brothers of the king), and the Marshal and Seneschal, all of these, together with the Butler and Chamberlain, being ‘officers of the kingdom’, their posts generally being held for life; in addition there were the Admiral and the Turcopoler, who were among the so-called ‘officers of Cyprus’, which differed in being permanent posts that might be held for a short time only. After the island passed to Venice its forces became the responsibility of a Captain, often called ‘Captain of Cyprus’, who was commander-in-chief in peacetime but was often subordinated to a specially appointed Provveditore-General in wartime. A Venetian attempt in 1489 to change the feudal service of the nobility so that they served at their own expense met with such strong protest that from 1490 the old practice of paid service was restored. At the very end of this period, in 1500, Venetian troops on Cyprus comprised 800 (‘good and bad’) in Famagusta and 150 in Kyrenia (Kerynia), plus 340 stradiots and 150 turcopoles.

Gunpowder artillery made its first appearance on the island in the war of 1404-6, in the first year of which

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*This is how Dawkins translates the passage. Hill, however, says units of 150 men.
both the king and the Genoese purchased cannon from Venice, for the siege and defence respectively of Famagusta. Though references to artillery steadily increase thereafter it seems that its role remained limited to siegework and castle defence. It may even then have been in somewhat short supply, since we read that the Mamluks sent 2 guns to James II during his struggle against the Genoese in 1461 (though it was the latter who ended up getting them).

The Navy

The king of Cyprus maintained his own fleet from the very beginning of this period. During the 14th century it reached sizeable proportions, since under Peter I 120 ships took part in the capture of Adalia (Antalya) in 1361, 108 participated in the sack of Alexandria in 1365, and 150 — transporting 7,000 men — were involved in a major raid against the Syrian coast two years later. Admittedly most of these would have been impressed merchant vessels, but the king contributed 46 ships to the Adalia expedition and 16 or more galleys to the fleet for Alexandria. Probably the standing royal fleet included some 20 galleys at most at this date, the rest being provided by the nobility and merchants. After the Genoese war of 1373-74 financial ruin seriously reduced the kingdom’s ability to maintain a worthwhile navy, so that by 1426 only 2 royal galleys were available to confront the fleet of the Mamluk invaders, the rest of the small flotilla mustered on this occasion comprising another 5 galleys (2 of them Rhodian and 2 Catalan) plus a galeazz, 7 merchant ships and 2 pilgrim vessels. The lack of adequate funds to pay freemen was probably also responsible for the use of slaves and pressed individuals as oarsmen aboard Cypriot galleys in the 15th century, a custom which the Venetians based on the island were soon copying.

THE MAMLUKS

The Mamluk army of the 14th-15th centuries comprised three basic elements, these being: (a) the Royal Mamluks, or al-mamalik as-sultaniya, made up of the ruling sultan’s own mamluks (the mushtarawat, often called the ajlab or julban under the Circassians) and the mustakhdamun, i.e. mamluks who passed into the sultan’s service ‘from the service of other masters’; (b) the amirs’ mamluks (the mamalik al-umara or ajnad al-umara); and (c) the al-halqa or ajnad al-halqa, non-mamluk cavalry including the sons of amirs and mamluks (the awlad an-nas). All of these were cavalry, but there were in addition some infantry, plus artillery from the mid-14th century onwards. These various elements we shall now consider in greater detail.

The Royal Mamluks

These were stationed almost exclusively in Cairo itself, though for much of this period a few dozen were posted in Mecca, and occasionally small detachments were despatched to garrison particular trouble spots, especially during the sultanate’s last few years. A few were also posted to Cyprus following its conquest in 1426. They possessed a considerable esprit de corps, which eventually led to an over-indulgence in political power and self-aggrandisement at the expense of military training, this being apparent from the late-14th century and in particular from the reign of al-Ashraf Aynal (1453-60). From that time onwards they acted more like bully-boys and gangsters than soldiers, terrorising the civil authorities, and yet at the same time totally wanting in military expertise so that one authority (Ibn Taghibirdi) was confident that, but for their respect for the sultan, even the lowliest of Cairo’s black slaves could have put them to flight.

On the accession of each new sultan to the throne the previous sultan’s mushtarawat was thrown out of the Cairo barracks, its leaders often being exiled or imprisoned (or, under exceptional circumstances, even executed), while senior posts were stripped from its members and handed over to the new sultan’s own mamluks. Thenceforward it became part of the mustakhdamun, which comprised the mamluks not only of previous sultans (the mamalik as-salatin, al-mutaqaddima or qaranisa) but also those of dead or dismissed amirs (the sayfiya). Since they were never amalgamated, but continued to exist right up to the death of their last members, there could be a considerable number of qaranisa units in existence within the Royal Mamluks at any one time (al-Maqrizi records 7 in his own day), usually recorded in the sources by the surnames of their respective masters* — for example, under al-Ashraf Barsbay (1422-38) they included the Zahiriya of al-Zahir Barquq (1382-98), the Nasiriya of al-Nasir Faraj (1398-1412), the Mu‘ayyadiya of al-Mu‘ayyad Shaykh (1412-21), and others besides. They usually remained bitterly resentful both of each other (having been displaced and persecuted in turn by the mushtarawat of an incoming sultan), and of the reigning sultan’s mushtarawat too, so that the sultan could place little reliance on any of them. The sayfiya, on the other hand, owed no loyalty to any particular sultan and had no axe to grind, merely serving whoever

*If Ibn Iyas’ chronicle is to be relied on, units were occasionally known by their masters’ first names, e.g. the al-Khushqadamiya of al-Zahir Khushqadam and the al-Faqaqia of al-Zahir Jaqmaq.
happened to be on the throne at the time, and, being experienced soldiers, some of them were occasionally promoted in preference even to the sultan’s amirs or mushtarawat.

During the Bahri period (1250-1382) the Royal Mamluks often totalled more than 10,000 men, counting all the above categories — Sultan an-Nasir Mohammed (who reigned, with interruptions, 1293-1340) reputedly built a barracks capable of accommodating 12,000 men in the early part of the 14th century, other sources confirming that he bought mamluks on an unprecedented scale (though one nevertheless makes it clear that in 1315 he had only 2,000, organised in 40 units of 50 men). However, under the Burji, or Circassian, sultans who succeeded to the throne in 1382, the number of Royal Mamluks dropped dramatically, Ibn Taghribirdi explaining that this decline resulted from the purchase of state iqta’at (fiefs) by the amirs in their own mamluks’ names: ‘Not satisfied with this, they also entered them in the sultan’s household troops for a salary, so that an amir’s mamluk became a trooper in the standing army [i.e. the halqa], a sultan’s mamluk, and an amir’s mamluk all at the same time, so that the livelihood of 3 men went to one. So the income of some increased and that of others decreased, and thus Egypt’s army was weakened.’ Indeed, there can be no doubt that it was from this date on that the military effectiveness of the Mamluks began to wane, a process which accelerated after the mid-15th century. Under the first Circassian sultan, al-Zahir Barquq, there were 5,000 mushtarawat and mustakhir damun according to Ibn Taghribirdi, and 4,000 according to al-Maqrizi, though Ibn Iyas (whom Ayalon says tends to exaggerate) claims somewhat improbably that the mushtarawat alone numbered as many as 7,000. Sultan al-Mu’ayyad Shaykh probably had 5,500 Royal Mamluks of all types at the very most (there were only 4,000 at a pay parade of 1420 where most were present), and al-Asfraf Barsbay had a similar, but smaller, number — 5,000 at the most, even including the halqa, according to his contemporary al-Maqrizi, though Ibn Iyas records 5,000 mushtarawat alone; either way, the Ashrafiya are still recorded as a major element of the Mamluk army even as late as 1465. The next sultan but one, al-Zahir Jaqmaq, had 4,000 in the year of his accession, but in 1460 al-Asfraf Aynal had only 1,000, plus 200 bought from Jaqmaq. Longer reigns tended to facilitate the accumulation of larger numbers of mamluks, so it is no surprise to find that under al-Asfraf Qayrbay (1468-95) the Royal Mamluks almost reached a total of 8,000 men, and would have but for an outbreak of the plague; by contrast az-Zahir Qansuh, who reigned for only a year (1498-99), had less than 2,000 mushtarawat. The penultimate Mamluk sultan, Qansuh al-Ghawri (1501-16), probably had about 4-5,000 purchased mamluks.

Of all these totals, a considerable proportion could be qaranis: in 1513 there were well over 1,000, and in 1514 there were 1,900 in a field army that included just 500 mushtarawat. Probably there were usually about 2-3,000, as would seem to be proven by a list of mustakhir damun contingents in the reign of al-Zahir Khushqadam (1461-67), which gives the Ashrafiya Aynal some 1,600 men, the Zahiriya Jaqmaq over 600 (including 5 amirs of 100), and the Ashrafiya Barsbay an unspecified number comprised principally of Khassakiya (see below) and of amirs of 1,000, 40 or 10, plus small numbers of Mu’ayyadiya (30 men) and Nasiriya; these figures should be compared to the strength of Khushqadam’s musthtarawat, which numbered 3,000 of whom 400 were kuttabiya, i.e. mamluks who had not yet finished their training and received their freedom.

Elite of the corps of Royal Mamluks were the sultan’s Khassakiya or select bodyguard, who stayed close by him at all times. They were frequently sent on special diplomatic missions and most amirs were chosen from amongst them. At first they numbered no more than 24 or 40 men, later 80, and though they were increased to 400 or even (according to one source) 1,000 under al-Nasir Faraj at the beginning of the 15th century, they were subsequently reduced again to 80 men, then 40, under his successors. However, under al-Ghawri they were again increased, to 800 by 1503 and later to 1,200, at which strength they still stood when the sultanate was conquered by the Ottoman Turks in 1517.

The amirs’ mamluks

The number of mamluks or horsemen that each amir could own or have in his employ was fixed, theoretically depending on his rank. He paid them from two-thirds of the income of his iqta or fief, receiving only one-third himself, though probably this arrangement was less than strictly adhered to. On his death or dismissal, the amir’s mamluks entered the sultan’s service as sayfiya (see above) or the service of other amirs — sometimes both — or, very occasionally, they were attached to the halqa. In addition, if the amir should be transferred to another province his mamluks could not be transferred with him. However, it should be noted that even as late as the first half of the 15th century, many of the amirs’ horsemen were free, non-mamluk troops (often members of the halqa), but thereafter they became exclusively mamluks.

The lowest rank of amir nominally to be found was that of the amir khamsah or ‘amir of 5’, commander of 5 horsemen. These were very few in number and were mostly the sons of deceased amirs. (Even more
rare was the amir arba'a or 'amir of 4'. Next came the amir 'ashara or 'amir of 10'; until the first half of the 15th century this rank also included amirs with 20 or even more mamluks, but thereafter the latter were graded as umara 'ishrin ('amirs of 20'). Then came the rank amir tabikhanah or amir arba'in, the former meaning 'amir with drums', this title deriving from the fact that amirs of this grade and upwards were entitled to have a band, which accompanied their troops in warfare. Az-Zahirî reports that by his day (the mid-15th century) this comprised only 2 drums and 2 flutes, but earlier it had been considerably bigger, with more drums and also trumpets. The 'amir with drums' could have 40 mamluks (hence his other title of 'amir of 40'), and occasionally owned up to 70 or 80. The highest rank of all was that of the amir mi'a muqaddam alf or 'amir of 100 and commander of 1,000', who could have 100 mamluks or horsemen of his own and command 1,000 members of the halqa on campaign. However, the number of mamluks he owned frequently reached 110-120, and in some instances considerably greater numbers — for example, one amir of the late Bahri period had 1,500, or perhaps even 3,000, including 4 amirs of 100, while the atabak al-asakir ('commander-in-chief') often had 500-1,000. Other Bahri sources record amirs with anything from 200 to 800 mamluks in their employ, but in the Circassian period 2-400 was deemed exceptional, and only one amir — an atabak al-asakir — had as many as 1,000. Regardless of their numbers, however, the troops of each amir constituted a unit called a tulb, comparable to the constabulary of feudal Europe in that it thereby varied in size from amir to amir (we read of tulbs of 60, 150 and 300 men, for instance). When larger musters of troops took place decimal organisation appears to have been imposed — Arnold von Harff tells us that 4,000 Mamluks marching on Damascus in 1498 were organised into 4 divisions. Interestingly Ibn Iyas, writing at the very end of the Mamluk era, says that at that time the Royal Mamluks were only organised into units and sub-units when they actually set out on campaign, and this is probably true of the Mamluks in general.

From the beginning of this era there were 24 amirs of 100 in Egypt, reduced to 18-20 by the early-15th century, further reduced to 11 by 1424 but again reaching 24 by 1502, and 26-27 in the sultanate's last few years. The sultan's highest-ranking military officers were drawn from among these amirs, comprising the atabak al-asakir (comparable to the European office of Constable); the amir silah (grand master of the armour, responsible for the Royal Mamluks' armoury); the hâjib al-hujjâb (grand chamberlain, responsible for justice among the mamluks, with at first 2 and later 4 assistants); the ra's nazâbat an-nawâb (chief of the corps of Mamluks, responsible with 3 assistants for the Royal Mamluks and their conduct); the khasindar kabîr (grand treasurer); and the amir akhur (grand master of the stable). Additional officers, drawn from the ranks of the amirs of 40, included the ustadar (grand major domo, the paymaster and, to a certain extent, quarter-master for the Royal Mamluks); the amir janâdar (responsible for the zardkhana, i.e., the arsenal and prison); the naqîb al-jaysh (chief of military police); and the naqîb al-mamalik (responsible for the policing of the Royal Mamluks).

The following table gives some idea of the numbers of amirs' mamluks as recorded at various times during this period:

<table>
<thead>
<tr>
<th></th>
<th>1315</th>
<th>az-Zahirî</th>
<th>1486</th>
<th>1512</th>
<th>1516/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amirs of 100</td>
<td>24</td>
<td>24</td>
<td>15</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>Amirs of 40</td>
<td>214</td>
<td>40</td>
<td>10</td>
<td>75</td>
<td>more</td>
</tr>
<tr>
<td>Amirs of 20</td>
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<td>20</td>
<td>?</td>
<td>?</td>
<td>than</td>
</tr>
<tr>
<td>Amirs of 10</td>
<td>207</td>
<td>50</td>
<td>60</td>
<td>185</td>
<td>300</td>
</tr>
<tr>
<td>Amirs of 5</td>
<td>?</td>
<td>30</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Official total</td>
<td>13,030</td>
<td>5,050</td>
<td>2,500</td>
<td>7,250</td>
<td>8,500</td>
</tr>
</tbody>
</table>

Az-Zahirî's list, allegedly drawn up in response to a Mongol threat and probably dating to the early-14th century, actually gives an overall total of 8,000 amirs' mamluks for Egypt (i.e., probably including those in excess of official requirements) plus 2,000 for Aleppo, 1,000 for Tripoli and 1,000 for Safed.

The halqa

At the beginning of this period the halqa included native Egyptians, sons of mamluks, mamluks and even amirs, particularly amongst its officers. These latter technically comprised amirs of 100; hâsh and muğaba (singular naquîb, commanders of 100); and muqaddamun halqa (singular muqaddam, commanders of 40, whose rank lasted only for the duration of a campaign). Ayalon, however, notes that throughout most of the

*Amirs of 100 seem to have had bands comprised of 80 loads of drums, 2 timbals, 2 flutes and 4 trumpets, while the commander-in-chief had a band twice as big.
Circassian period ‘this chain of command had but a paper existence’. Although at first strong in numbers and military importance, the redistribution of fiefs in 1297, 1312 and 1315 marked the beginning of their decline by reducing the lands they held to only a fraction of their 13th century levels, which action, so contemporaries believed, ‘was the cause of the weakness of the Egyptian army, especially of the halqa’. In the century after 1315 the halqa in Egypt declined from over 9,000 (in fact 204 officers and 8,932 men) to a mere 1,000 men, and after the mid-14th century many of these were artisans rather than soldiers, having purchased the fiefs of the latter. By the end of the century, though some still accompanied the army on campaign, the principal duties of the halqa had become simply to guard the citadel, gates and old city of Cairo during the army’s absence in the field. Of the few who served alongside the mamluks, many had been reduced to the role of infantry by their inability to afford horses, and even the combining of groups of 2 or 4 fiefs in 1418 to finance a horseman each seemingly provided less than 400 men. One halqa detachment which did retain its importance was the ajnad al-Mi‘atayn, posted in Alexandria after the Cypriot attack of 1365. At first 200-strong, by the mid-15th century it comprised 360 men under 12 muqaddamun, each commanding 30 men rather than the official 40.

Within the halqa, the elite were provided by the awlad an-nas, literally ‘children of the people’, who were the sons of amirs and mamluks. Many of these themselves became amirs, though usually achieving ranks no higher than amir of 40. Their importance, however, declined alongside that of the halqa.

Az-Zahiri’s list gives improbable totals of halqa troops for the sultanate’s Syrian provinces as follows: Damascus 12,000; Aleppo 6,000; Tripoli 4,000; and Safed 1,000. If these figures are to be believed at all they must represent the total number of provincial non-mamluk troops of all categories.

Infantry

These were clearly not counted as part of the Mamluk army proper — the al-asfar as-sultani or al-asahir as-sultaniya, as it was called — which is defined by Moslem sources as comprising only the above-mentioned elements, i.e., the mushtarakat, mustakhdamun, mamalik al-umara and al-halqa. Instead they seem to have been hired on an ad hoc basis as, when and where required, usually from amongst the Arab, Turcoman and al-Ashir (Druze)* population of Egypt and Syria (Gilbert de Lannoy, for instance, mentions the ‘common foot-soldiers along the coast of Syria ... armed with a bow and arrows, and a great many of them have swords’). Their principal roles were doubtless those of providing garrison troops and besieging fortresses, but occasionally they served in naval campaigns (as, for example, in the invasion of Cyprus) and alongside field-armies, since Mamluk military manuals often include detailed advice on how infantry should be used in battle (see page 77). However, their numbers appear not to have been great during this period, judging from Moslem sources usually comprising only a few thousand at the very most, even under exceptional circumstances (such as revolts by dissident amirs, who tended to field them in the largest numbers). But Western observers now, as in the Crusade period, nevertheless continued to claim that the Mamluks could field large numbers of admittedly poorly-equipped infantry, principially bow-armed.

Firearm-equipped infantry

The handgun is generally accepted as having been introduced into the Mamluk armed forces under Sultan Qaytbay some time before 1490 (see note to figure 19). His son and successor an-Nasir (1495-98) established a unit of black slave arquebusiers called ‘Abid Nafriya or ‘Abid Barudiya, which was about 500-strong by 1498 when his amirs, resentful of the favouritism he showed these slaves, forced him to disband them. Arquebusiers nevertheless continued to be employed by the Mamluk sultans in small numbers, but apparently only in the south-east against the Portuguese — for example, an expeditionary force sent to the Hijaz in 1503 included 500 black arquebusiers, and another force serving in the Indian Ocean in 1505 included handgun-equipped Maghribis and blacks. More advanced handguns were introduced from Spain or Venice by a Maghrabi c. 1506 but were not fully adopted until 1510, when Qansuh al-Ghawri was making strenuous efforts to drag the Mamluk military system out of the Middle Ages. That year another regular handgun unit was formed to fight the Portuguese, this being officially called the At-tabaga al-Khamisah, though it was frequently referred to as the al-Askar al-Mulaffaq (the ‘Patched-up’ or ‘Mottley’ army), the latter name deriving from the unit’s heterogenous nature, it being comprised of Turcomans, Persians and even non-military artisans as well as Egyptians and probably blacks, even having awlad an-nas and, at one

*Cavalry were also occasionally employed from these same sources, though the al-Ashir, who were more rapacious brigands even than the Bedouins, were somewhat of a liability. The Turcomans, on the other hand, are described by one contemporary as ‘incomparably better and more brave in the field than either the Arabs or Saracens of the country, or even the slaves [i.e., mamluks], and they are more dreaded.’
point, some Royal Mamluks drafted into it (1515). This unit was probably over 1,000-strong. Once again, however, the hostility of the amirs effectively led to it being utilised only against the Portuguese, so that when the Ottomans attacked in 1516-17 the Mamluks were way behind in firepower.

Artillery

The Mamluks had their first cannons (called *midfa*) by 1365-66 at the latest, and possibly by 1340 or 1342. Though references remain rare until the wars of succession of 1389-90, the sources thereafter attest a steady increase in the use of artillery until, by the reign of Qansuh al-Ghawri (who established a foundry in Cairo a few years after his accession) they were being produced at a prolific rate, quantities of 15, 70, 74 and 75 newly-manufactured cannon being recorded by a contemporary source (Ibn Iyas), including 4 some 25 feet in length. Although some were intended for shipboard use, most Mamluk artillery was used for siege-work and to defend the citadel and walls of Cairo, though in the sultanate’s last years a great amount was also sent to defend the coastal cities (about 200 guns being assigned for this purpose in 1516, for example), and in addition Alexandria and Damascus at least had a fair quantity even in the 14th century, possibly as early as 1352 in the case of Damascus. By the very end of this period some amirs, like the nobility of Western Europe, even had artillery of their own, for the Ottoman sultan Selim I observed in 1517 that some of the guns he captured that year at the Battle of al-Raydaniya had been collected from ‘the houses of the amirs’. (Others had been supplied by the Hospitallers of Rhodes.)

The *manjaniq* or trebuchet remained in use alongside gunpowder artillery throughout the Mamluk era, proving more effective than the latter in siege-work and therefore retaining pride of place until about the mid-15th century, despite probably being present in smaller numbers on most occasions. Thereafter, however, they seem to have virtually disappeared, though they were still to be found in Alexandria, and were still being made in Cairo, even as late as 1514.

The Navy

The Mamluks did not have a permanent navy, but built their fleets as and when required: being thus built somewhat hastily, they were not made to last and as a result soon became unserviceable — therefore none lasted long enough to be permanently maintained. Nevertheless, they had at least 4 or 6 galleys operating in 1424, and their 150-180 ships used in the invasion of Cyprus in 1426 undoubtedly included an even greater number, despite Pilotti’s statement that only flat-bottomed Nile barges were used. In 1440 Sultan Jaqmaq despatched as many as 15 or 18 galleys against Rhodes. Fleets were based principally in Alexandria and Bulaq plus Quseir on the Red Sea.

Artillery was being carried on Mamluk ships as early as 1366, when according to al-Maqrizi warships on the Nile bombarded Cairo’s citadel during one of Egypt’s interminable civil wars.

THE WHITE SHEEP TURKS

The Aq-Qoyunlu, to use their proper name, were a confederation of some 50 Turkish and Kurdish clans centred on Azerbaijan that had come into existence by the mid-14th century, the principal of which were the Bayandur, Purnak and Mowsilli. Despite the death in 1435 of their first great leader, Qara Yoluk, in battle against the rival Black Sheep Turks (the Qara-Qoyunlu), their power continued to grow throughout the 15th century until they controlled much of Persia, reaching its apogee under Qara Yoluk’s grandson Uzun Hasan, commonly called the ‘Little Turk’ in western sources (to distinguish him from the ‘Grand Turk’, i.e. the Ottoman sultan), who reigned 1466-78. In this time they fought victoriously against both the Mamluks and the Ottomans, being decisively defeated by the latter only at Oltuk Beli in 1473. Following the death of Uzun Hasan’s son and successor Yaqub in 1490 dynastic struggles resulted in the collapse of Aq-Qoyunlu power, and the eventual overthrow of their sultanate by the Safavids in 1503.

From the Aq-Qoyunlu sultanate’s early days its military forces were provided by the contingents of its confederate clans, with the clan chieftains generally maintaining their own nuclei of trained and paid soldiers, such as the sultan too maintained on a much grander scale. Caterino Zeno, one of several Venetian visitors to Persia in the 1470s, describes Uzun Hasan’s royal standing army in 1472 as his *porta*, which Minorsky suggests is probably in this instance a translation of the Persian *dar-i khanan* or Turkish *gapu* (see page 8), or even the Mongol *qahulqha*. By most accounts this central army appears to have comprised some 20–25,000 cavalry plus infantry: Contarini, another Venetian, was told that in 1475 Uzun Hasan campaigned with ‘upwards of 20,000 [cavalry], or taking the good and the bad together, upwards of 25,000’, plus infantry who ‘might have amounted to 10,000’ (though he was told in addition that ‘great numbers’ of infantry also remained behind). Josafa Barbaro, one of his informants, himself reported in 1475 that Uzun Hasan ‘had
in all, as far as I could estimate, between 20,000 and 24,000 good horsemen; and the rest that came for the
furniture of the camp were about 6,000 men'. Against the Georgians in 1477 he is again reported to have
led 20-24,000 cavalry, plus ‘about 11,000’ infantry, and the usual Turcoman entourage of women, children
and livestock, which elements Barbaro enumerated in a muster of 1474 as comprising 15,000 women, 11,000
children, 6,000 tents, 30,000 camels, 9,000 mules and asses, 25,000 draught-horses and pack-horses, 31,000
cattle, and a menagerie of hunting dogs, falcons, hawks and leopards. The military element on this latter
occasion consisted of 15,000 ‘soldiers of the sword’, who were seemingly slaves (probably the boy-nokars
referred to below), 2,000 armed herdsmen and the like, 1,000 archers (probably the sultan’s own tip, or
bodyguard, since Barbaro records that at least 10,000 of the rest were also archers), plus other unspecified
troop-types ‘so that in all there might be about 25,000 good horsemen’. In addition there were 3,000 bow-
armed infantry, and a support echelon that included cobbler’s, smiths, saddlers, fletchers, victuallers and
apothecaries.

In addition to the royal army, under Uzun Hasan at least there were also provincial armies of similiar propor-
tions based in Fars, Baghdad and Diyarbekr, plus smaller forces in Kerman, Isfahan, Qazrin and elsewhere.
The full details of the organisation of one of these provincial armies (that of Uzun Hasan’s second son Khalil,
governor of Fars), as recorded by Jalal al-Din Davani in 1476, provide us in addition with a good idea of
the composition of the central army itself. He enumerates the officers as amir-i a’zam (supreme amirs), amir-i
kabir (great amirs), and ordinary amirs, plus officers with the rank of sujas, a title that probably meant
‘public crier’, whose duty was to shout orders to the troops, in addition to which they had a general respon-
sibility for the men and their equipment. Other ranks were comprised of three different categories of
soldier, these being: the pushan-dar or pushan-push, meaning ‘clad in armour’ or ‘men in armour’ (what we
would call men-at-arms); the tirkash-band, meaning ‘those wearing quivers’ (i.e. archers, by inference lighter-
armed than the pushan-push), who provided the largest part of the army; and the qullughchi, who were armed
servants or attendants like the Ottoman oglan or kul. The Encyclopedia of Islam says that the last category
might have been slave-soldiers, i.e. mamluks; Davani does not himself clarify whether they were foot or
horse, but Zeno in 1472 refers to mounted attendants who are doubtless qullughchi. The first two categories
were certainly cavalry and were both called by the generic term nokar, derived from the Mongol nokor
meaning ‘friend’ or ‘companion’, so as to distinguish them from the qullughchi. Organisation followed the
Timurid/Tartar tradition, the basic unit being the qoshun (Mongol khoshun), officially of 100 men but
sometimes seemingly numbering as few as 50.

The army itself was organised characteristically into centre (Mongol Qul, or Qalb), right wing (Turkish Saga) and
left wing (Turkish Sol). Davani gives the strength of these individual divisions as follows:

<table>
<thead>
<tr>
<th></th>
<th>Centre</th>
<th>Right wing</th>
<th>Left wing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pushan-push</td>
<td></td>
<td>2,392</td>
<td>1,931</td>
</tr>
<tr>
<td>Tirkash-band</td>
<td></td>
<td>3,014</td>
<td>3,721</td>
</tr>
<tr>
<td>Qullughchi</td>
<td></td>
<td>1,716</td>
<td>1,718</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5,662</td>
<td>10,444</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7,370</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>23,076</td>
</tr>
</tbody>
</table>

Davani himself mistakenly gives the right wing total as 9,154 men. He also says that 3,944 of the centre
and 5,802 of the left wing were nokars, when the actual totals are 3,946 and 5,652.

In addition to the above, which constituted the standing army, there were two additional elements which
were reviewed separately, these being the inaq, who were Khalil’s own noble companions, and the boy-
nokars. The latter were apparently mamluks belonging to Khalil’s, therefore Uzun Hasan’s, own clan, the
Bayandur, their name deriving from the Turkish word for sept, or family; they constituted the prince’s
bodyguard. The strengths of these two divisions are recorded by Davani as follows:

<table>
<thead>
<tr>
<th></th>
<th>Inaq</th>
<th>Boy-nokars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pushan-push</td>
<td></td>
<td>810</td>
</tr>
<tr>
<td>Tirkash-band</td>
<td>2,928</td>
<td>2,420</td>
</tr>
<tr>
<td>Qullughchi</td>
<td>3,098</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6,609</td>
<td>3,230</td>
</tr>
</tbody>
</table>

Besides all these there were in addition various small units of guards appointed for the province’s assorted
civil dignitaries, these totalling a further 68 pushan-push, 563 tirkash-band and 521 qullughchi, or 1,152
men in all. These individual units are listed as follows:
| Pushan-push | 30 | — | — | — | — | — | 38 | — |
| Tirkash-band | 50 | 100 | 725 | 140 | 44 | 68 | 50 | 20 | 40 | 26 |
| Qullughchi | 40 | 100 | 725 | 40 | 58 | 22 | 18 | 40 | 156 | 22 |
| — | 120 | 200 | 725 | 180 | 102 | 90 | 68 | 60 | 234 | 48 |

Finally, 340 Kurdish amirs and 350 Shul chiefains were included in the particular review Davani recorded, who presumably provided irregular troops when called upon to do so. Even without these, the number of troops available to the province totalled an impressive 34,067 men.

When in the field the royal army was often joined by elements of one or more of the provincial armies as needs dictated. This was how an army Zeno saw in 1472 could number as many as 100,000 cavalry, 'some of them and their horses armed after the manner of Italy (i.e. heavily armoured), and some covered with strong, thick hides, able to save the wearer from any heavy blow. Others were clothed in fine silk with doublets quilted so thickly that they could not be pierced by arrows. Others had gilt cuirasses and mail corselets with so many weapons of offence and defence that it was a marvel to behold how well and skillfully they bore themselves in arms. Their servants (i.e. the qullughchi) likewise were excellently mounted with cuirasses of polished iron and in place of the shields which our people use, they have round shields, with which they cover themselves, and make use of the keenest scimitars in battle; the masters (i.e. the nokars) made a total of 40,000 men, all brave soldiers, and their servants 60,000, and a finer cavalry were never seen in any army.' (From what we have seen above, Zeno appears to have got his proportions of nokars and qullughchi the wrong way round.) The army Uzun Hasan led to defeat at Otluk Beli in 1473 included elements of at least two provincial armies as well as the royal army, one source recording of it that '40,000 mighty mounted lancers were counted, and he had 30,000 other soldiers as well'. Contarini records just 40,000 cavalry, while Zeno says the army was organised in 4 divisions, doubtless turnans of 10,000 men. This army included Kurdish, Tartar and Georgian contingents.

Artillery

Though artillery was probably first adopted in Persia under the Timurids (see below) it seems that Uzun Hasan was responsible for its introduction on a large scale during the 1470s. A 16th century source records that Uzun Hasan sent a request to Venice for '100 artillimen of experience and capacity, who were immediately sent on to Persia, for in the matter of their artillery the Persian armies suffered greatly from a paucity of cannon, while on the other hand the [Ottoman] Turkish armies of Asia were very well equipped in this arm, and they could effect much damage in their attack.' Caterino Zeno reports that Venice actually sent '6 immense siege-guns, arquebuses and field-pieces in great number, powder and other munitions of war, 6 gunners, 100 arquebusiers, and other men skilled in artillery', while Barbaro, who actually accompanied these munitions in 1471, records that they comprised 'certain bombards, espingards and schioppetti [handguns], with powder, shot, wagons, and other irons of divers sorts to the value of 4,000 ducats', plus a company of 200 crossbowmen and handguncars. Either way, it proved impossible for these supplies to be landed on the Ottoman-held coast and they ended up in Cyprus.

Uzun Hasan nevertheless obtained some artillery during the next year, capturing 'numerous' pieces abandoned in flight by a routed Ottoman army, though the year after that he was decisively beaten at Otluk Beli by the artillery and handgun fire of another Ottoman army, against whom he does not appear to have fielded any of his own. Clearly the Ag-Qoyunlu must have started to take their artillery into battle with them soon after, since in the year of Uzun Hasan's death (1478), in a battle for the succession between his sons Khalil and Yaqub, it is recorded how Yaqub's skirmishers reached the position of Khalil's artillery (tup, cf. Ottoman top), 'but, as Khalil had reinforced the centre with guns and handguncars [tup-u-tufang], the tupchis scattered the skirmishers with their handguns.'

Although at first much of their artillery was captured either from the Ottomans (whose terminology they also adopted) or the Mamluks (as in 1481), before long they were also casting their own, often on site as the Ottomans did, as for the siege of Tiflis in Georgia in 1489, where they cast one large and 12 small cannons. The Ag-Qoyunlu later even attempted to copy the Ottoman practice of setting up their artillery within a wagenburg, but unsuccessfully, as at the Battle of Alme-Qulaq in 1503.

THE TIMURID EMPIRE

Tamerlane (a corruption of the Persian Timur-Lenk, i.e. Timur the Lame) was in origin a minor chieftain of the Barlas, a Turkicised Mongol clan, who managed to create an extensive empire based on Transoxiana and its capital of Samarkand, of which he became ruler in 1370. At its greatest extent this empire included
Transoxiana, Khwarizmia, Persia, Azerbaijan, Afghanistan, Turkestan and parts of Iraq and Anatolia, in addition to which his armies smashed the Golden Horde and the sultanate of Delhi, humbled the Mamluks in Syria, and inflicted such a crushing defeat on the Ottomans at the Battle of Ankara in 1402 that their own empire was briefly in danger of collapsing entirely. However, Tamerlane’s death in 1405 resulted in the fragmentation of the unstable power bloc he had created, with mutually hostile Timurid dynasties establishing themselves in Herat, Khorasan, Transoxiana and several smaller principalities. Of these the most important was that of Herat, ruled by his youngest son Shah Rukh (1405-47); after the death of Shah Rukh’s son Mirza Ulugh-beg in 1449 it was conquered by the Aq-Qoyunlu, who went on to seize most of Khorasan in 1469, defeating and killing Ulugh-beg’s grandson Abu Said. The decline continued thereafter, and Timurid rule in Persia finally came to an end in 1507, little more than a century after it had begun.

As with the Tartars of the Golden Horde (see page 72), organisation under Tamerlane remained exactly as it had been under Genghis Khan. Units therefore comprised the onlik or arban of 10 men, commanded by an onbashi; the yuzlik or khoshun of 100 men commanded by a yuzbashi; the binlik or minghan of 1,000 men commanded by a binbashi (also called a ginbashi or mingbashi); and the ruman of 10,000 men commanded by an amir. Units called alai also occur in the sources, probably binlinks since their officers are often called alai-beguys (cf. the Ottoman ala-bey); similarly, the unit called a feudj that is sometimes encountered, usually translated as ‘squadron’, was probably the same as the khoshun. On the battlefield all these units were grouped into left wing (ichouseanghar), right wing (burounghar), centre (qul) and advance guard (manghla), the centre being comprised of the khans’ guards and elite troops. Tamerlane’s personal guard at the Battle of Kondurcha River in 1391 was selected from the bravest soldiers in the army and comprised 20 khoshuns, i.e. 2,000 men.

Few reliable figures are available for the total strength of Timurid field-armies, but 72,000 men were apparently involved in the 1398 campaign into Persia, and the army that marched against Delhi in 1398 allegedly comprised 92 binlinks. Less credible figures are the 200,000 claimed for both the 1391 campaign against the Golden Horde and the proposed campaign against China in 1405, and the army of 240,000 that reputedly participated in the invasion of Syria in 1400-1. Any truth that there may be in such enormous figures can only be explained by the majority being non-combatants — the source that mentions the army of 240,000 in Syria actually says that it ‘included’ 30,000 soldiers, which seems to be independently confirmed by another source that says Tamerlane on this occasion ‘led almost 30,000 men with him’. Ruy Gonzalez de Clavijo, who visited Tamerlane’s court in 1404, actually wrote of the Timurid army setting out on campaign that ‘when Tamerlane calls his people to war all assemble and march with him, surrounded by their flocks and herds, thus carrying along their possessions with them, along with their wives and children. These last follow the host, and in the lands which they invade their flocks — namely and particularly the sheep, camels and horses — serve to ration the horde... You must understand further that none of these Chagatais, when on the march with the host, ever separate from their women and children or from their herds and flocks.’ He even refers to the soldiers’ wives being employed in a tactical role on one campaign: ‘Tamerlane issued orders that all the women who marched with his soldiers should don helmets along with men’s war-harness to play the part of soldiers... Thus the camp was left in charge of the women disguised as warriors’. (Bertrandron de la Broquière similarly refers to the readiness of Turkish women to bear arms, recording both that the Ottoman amir of Kayseri had ‘under his command 30,000 Turcoman soldiers, and about 100,000 women as brave and as fit for combat as men’, and that in Albistan, on the frontier with Timurid Persia, the Dhu-Kadiroghlu Turcoman confederation had ‘30,000 women who thus bear the tarquais’, as well as 30,000 men.)

All Timurid soldiers were paid 6-monthly, troopers receiving a sum equal to the market value of their best horse, or 2-4 times as much in the case of elite troops. Of their officers, the onbashi received 10 times the pay of a trooper, the yuzbashi 3 times as much as the onbashi, and the binbashi 3 times as much as the yuzbashi plus a grant of land, whilst the amirs received large estates akin to the Moslem iqta. Inevitably, the Timurids themselves, being Central Asian nomads (in fact mostly Turks, though they are often referred to as Mongols or Tartars for convenience), were all cavalry, with whatever small numbers of infantry they fielded being provided by sedentary subject peoples.

One interesting difference between Tamerlane’s army and that of Genghis Khan was that whereas the latter, when he captured elephants in Khwarizmia made no attempt to use them in war but turned them out to die in the desert, Tamerlane seems to have been fascinated by those he captured in India. As many as 90, 100 or 120 were taken following the Battle of Delhi, and despite the poor showing they had made in the engagement most of them were subsequently taken into the Timurid army. Monstrelet’s chronicle claims that Tamerlane’s forces at the Battle of Ankara actually included 26 elephants which ‘had small castles on
their backs, in which were many men-at-arms who grievously annoyed the enemy', while Schilberger, who fought on the Ottoman side in the battle, puts the number at 32 'trained elephants', which were sent into action after midday. Mirkhwand and Sherefdin-Din likewise confirm the presence of elephants. Even after Tamerlane's death in 1405 Timurid armies continued to occasionally field elephants, as in the case of his successor Shah Rukh's army at the Battle of Alashkert (against the Qara-Qoyunlu) in 1421.

Gunpowder artillery may also have been introduced under Tamerlane — certainly the terms ra'd (‘thunder’) and garabughah (‘black camel’), both thought to denote gunpowder artillery, make their first appearance in 1379, when whatever weapons they denote are recorded by Mu'in al-Din Natanzi being used at the siege of Urganch. The same terms are also used by Nizam al-Din Dhami, who drew an unfavourable comparison between the Delhi sultanate's fireworks and rockets, as used at the Battle of Delhi, and Tamerlane's 'loud-throwing guns'. In Shah Rukh's reign a gun-founder named Farrukh is recorded to have made a kaman-i ra'd that could fire stones weighing 400 maund.

THE SULTANATE OF DELHI

During the early part of the period under review, and despite a renewed wave of determined Tartar assaults from 1297-1327, sultans Alaeddin Khalji (1296-1316) and Mohammed ibn Tughluq (1325-51) succeeded in subduing and annexing virtually the whole of the Indian sub-continent, welding it into a single, albeit shortlived, Moslem empire. Indeed, Mohammed ibn Tughluq was called 'the Second Alexander' by some of his contemporaries, pushing the frontiers of the sultanate as far as the Deccan, an achievement that was unequalled thereafter until the rise of the Moghul dynasty in the 16th century. However, even before his death the sultanate had started to disintegrate into a plethora of lesser kingdoms (Bengal regained its independence following a revolt in 1337-38, and the Bahmani kingdom seceded in 1347), disintegrating entirely under his cousin and successor Firuz Shah (1351-88), with Khandesh, Malwa, Jaunpur and Gujarat all seceding between 1382-96. Of the sultanate's successor states the Bahmani kingdom, by far the most important, itself broke up c. 1490 into the 'Five Deccan Sultanates' of Ahmadnagar, Berar, Bidar, Golkonda and Bijapur.

The Tughluqids established a military system which persisted even after the demise of their dynasty, and we are lucky enough to have left with fairly comprehensive details of its organisation in a 14th century work by Shihab al-Din Al-'Umari (d. 1348). This tells us that under Mohammed ibn Tughluq the army comprised an improbable 900,000 horsemen, 'some of whom are stationed near the prince, while the rest are distributed in the various provinces of the empire.' He adds that 'they consist of Turks, Khitans, Persians and Indians, and people from certain other countries', which tallies closely with a description of the army of his predecessor Ghiyath-ud-Din Tughluq (1320-25) as comprising Ghuzz, Turks, Tartars, Persians, Tajiks, Hindus, Russians and Greeks (the last two doubtless in the capacity of mamluks). Those posted in Delhi itself, paid from the royal exchequer, were called the hashim-i-qaub, comprised of the khasah-khail or household troops, including the royal mamluks (Mohammed had 20,000 Turkish mamluks) and guards like the Silahdars and Sar-i-jahanadar (the sultan's bodyguard, 2,000-strong at this date) and the afoaj-i-qaub. The provincial troops, posted in garrisons throughout the empire, were called the hashim-i-iatraf. Administration was in the hands of a minister called the 'arid-i-mamalik (called the sahib-i-'ard or 'arid-i-jaysh by the Bahmanis), who kept a descriptive roll (fuliya) of the men and was responsible for pay, the commissariat, and the division of booty (in the army commander's presence). In addition he inspected the troops at least once a year, and selected those who were to participate in a particular campaign, though the sultan himself selected the commander. Under the Bahmanis the army commander was called the amir-ul-umara and customarily had a troop of 1,500 cavalry at his disposal.

The provincial troops were maintained in traditional Moslem fashion by the distribution of large quta'at (usually called jagirs) amongst the nobility, who were thereby obliged, when called upon, to provide specific numbers of men at their own expense according to their rank. The highest in rank was the khan, who was to maintain 10,000 or more sawars, i.e. cavalry soldiers with one horse (al-'Umari says that Mohammed had 80 khas in his service); next came the malik, commanding 1,000 sawars; then the amir with 100 sawars; the isfahla or sipah-salar (a title that had once denoted the commander-in-chief) with less than 100; and finally the sepoj. A somewhat different list is provided for the late-13th century by Bughra Khan, second son of Sultan Balban (1265-87), who makes the lowest rank that of sar-i-khail, commanding 10 cavalrymen; he then makes the sipah-salar commander of 10 sar-i-khails, the amir commander of 10 sipah-salars, the malik commander of 10 amirs, and the khan commander of 10 maliks (therefore by inference 100,000 men). In practice, however, amirs tended to command 50-1,000 men, and maliks at least 1,000, while the Mongol term tuman was frequently used for a khan's unit in the 14th century (hardly surprising when one realises that many noblemen under the Tughluqids were of Mongol origin). Bahmani armies were similarly
organised, though they had units of 500 too, subdivided into 5 units of 100, and according to the 16th century chronicler Ferishta their highest rank was that of a commander of 2,000, reserved for the kingdom’s provincial governors (who, we are told elsewhere, were nevertheless each expected to field 10,000 men). Much later, in the mid-16th century, Islamshah Sur reorganised the army into units of 50, 150, 200 and 500.

As has already been mentioned, al-‘Umari claims that Mohammed ibn Tughluq’s army consisted of 900,000 (9 lac) sawars. This is fairly certainly an exaggeration for 90,000, since his successor Firuz Shah is recorded leading precisely that number of cavalry in his first expedition against Bengal in 1354 (where he was confronted by 10,000 cavalry, 200,000 infantry and 50 elephants), and against Sind in 1362. The contemporary chronicler Barani similarly records that ‘in the reign of Firuz Shah there was an army of 80,000 and sometimes 90,000 horse, exclusive of slaves’. In his second expedition to Bengal in 1359-60 Firuz Shah’s army comprised 70,000 cavalry, ‘innumerable’ infantry, 470 elephants, 180 (or 980) standards, and ‘84 ass-loads of drums and trumpets’. These campaigns, however, were launched during the apogee of the sultanate’s military power, before Firuz Shah’s weak government had brought about a decline in the army’s effectiveness. He discontinued the traditional annual inspections and abandoned the huliyaa, allowing substitutes to appear at musters. Barani records how ‘horses of little value were often brought to the diwan and were passed as serviceable. Such stories often reached the sultan’s ears, but he acted as if he had never heard them.’ As a result bribery and corruption became rife; many soldiers indulged in commercial enterprises and failed to even appear at musters when they were still held. It is no surprise, therefore, that the sultanate could muster only 10-12,000 cavalry and 20-40,000 infantry to confront Tamerlane before Delhi in 1398.

Elephants

Although cavalry constituted the backbone of the army, and while infantry, mainly Hindus (see figures 34 and 35), were raised in sometimes enormous numbers, both on a regular basis and for specific campaigns, it was the elephants that were the pride of all Indian armies, and they were used in large numbers. In 1299 Alauddin Khalji is recorded to have had 1,500 war-elephants in his fil-khana (‘elephant stables’), while al-‘Umari wrote that Mohammed ibn Tughluq had 3,000 elephants ‘of different kinds and sizes’, of which probably only about a sixth to a quarter, therefore 500-750, would have been war-elephants, which tallies closely with the 470 and 480 elephants which Firuz Shah took on campaign against Bengal and Sind respectively in 1359 and 1362. The number of war-elephants that the sultanate could field declined dramatically along with the rest of the army in the late-14th century, there being only 120-125 in the army that confronted Tamerlane.

Delhi’s various successor states are also recorded to have fielded large numbers of elephants in their armies — Barbosa records how the sultan of Gujarat ‘always keeps 400 or 500 great and fine elephants’, while according to an unreliable 17th century source Sultan Mahmud Sharqi of Jaunpur marched against Delhi with 1,400 war-elephants in 1452. The army which Mohammed Shah Bahmani (1358-73) led against Vijayanagar in 1366 included allegedly 3,000 elephants (as well as 30,000 cavalry and 100,000 infantry), a figure repeated by Ferishta for Mohammed Shah III (1463-82); this figure doubtless would have included both male and female elephants, exactly as did the 3,000 recorded for Mohammed ibn Tughluq.

These large numbers of elephants were obtained by an assortment of means. Some were obtained as booty, forming part of the sultan’s traditional one-fifth share (512 were captured by Alauddin Khalji in Bengal in 1312, for example, and Mohammed Shah Bahmani captured allegedly 2,000 from the raya or king of Vijayanagar in 1366). Others were supplied in the form of annual tribute — 100 per annum from the raya of Arangal after 1318 and 40 from the sultan of Bengal after 1359 to quote but two instances, Orissa and Bengal sending annual tributes of elephants to Delhi right up until 1394; Bengal in fact remained the sultanate’s principal source of elephants throughout this entire era, usually in exchange for horses. Yet others were purchased from Ceylon (Sinhalese elephants, though smaller, being deemed braver and wiser in battle than those of mainland India), or were captured in the wild. However they were obtained, for most of this period they belonged exclusively to the sultan, high-ranking noblemen, especially regional governors, only ever being granted permission to own very small numbers of them (usually at the most about 10) as a mark of special favour; only the Lodi sultans (1451-1526) and the Bahmanis allowed their nobles the freedom to possess as many elephants as they wished.

The sultan’s elephants were commanded on the battlefield by officers called shahnah-i-fils. Usually there were two, one commanding the left wing and one the right, but sometimes both offices were held by the same man.
The 15th century Bahmani army

Athanasius Nikitin of Tver, who visited the Bahmani sultanate in 1470-74, has left us with an interesting overview of the state of its armed forces as they existed less than 2 decades before the sultanate’s disintegration into the 5 independent Deccan kingdoms. Already the seeds of its collapse were evident, for Nikitin observes that the Bahmani sultan was in the power of his ‘Khorasanian’ nobles, who could field considerable armies. He specifically mentions Melik-ul-Tujjar, with an army of 200,000 men and 100 elephants, Melik Khan with 100,000 men, Kharat Khan with 20,000, and ‘many’ khans each with 10,000 armed men. The sultan himself (Mohammed Shah III) allegedly had in all 100,000 cavalry, 200,000 infantry and 300 elephants ‘with citadels and clad in armour’, to which his brother could add 100,000 each of horse and foot and another 100 elephants. In addition there were 20 Moslem viziers each with 10-15,000 cavalry, 20-30,000 infantry and perhaps 10 elephants, plus 6 Hindu viziers each with 40,000 cavalry, 100,000 infantry and ‘40 elephants in full armour, each carrying 4 men with long arquebuses.’ With the exception of the elephants, probably most of these figures should be divided by 10 to arrive at the true numbers of the forces available.

Artillery

If the 16th century Persian historian Mohammed Kasim Ferishta is to be believed, gunpowder artillery appeared in India at a relatively early date. He says that in 1365/6 Sultan Mohammed Shah Bahmani ‘despatched orders asking for cannon and darb-zan [light guns, firing shot of about 40 lbs in the 16th century] from all his territories. He collected a train of artillery, which had not been employed by the Moslems of the Deccan before then. He established a separate department for it under Muqarrab Khan, son of Saifd Khan of Seistan, who was a trusted nobleman, attaching to him Rumis and Farangis [i.e., Turks and Europeans] acquainted with the art of gunnery.’ Other gunners were apparently provided by Persians, Abyssinians and Arabs. In his next battle against the army of Vijayanagar some months later Muqarrab’s new artillery corps proved its worth, disorganising the Hindus so that a decisive cavalry charge was able to sweep them from the field.

It is debatable whether or not Ferishta’s account, based on the ‘Tuhfat-ul-Muslimin’, is trustworthy, but many modern authorities tend to accept that in the Deccan at least artillery was in limited use by the end of the 14th century. From other sources we know that it was introduced into Kashmir in 1423, and into Bengal by the late-15th century. The sultan of Gujarat certainly fielded artillery against Malwa in 1422, attaining military supremacy over all his neighbours through his use of ‘organised artillery’; by 1482 Gujarat was employing cannon and handguns shipboard too, as against the pirates of Balsar. As we have seen, handguns also occur in Nikitin’s survey of the Bahmani forces in the 1470s, where it seems from several passages that he considered them to be the principal weapon of the elephant crews.

Other firearms often found in use in India comprised grenades, fireworks and rockets, the last two doubtless having been introduced at some stage from China. Several sources record the sultan’s elephants at Delhi to have been crewed or accompanied by ra’-andaz (grenadiers), atash-bas (throwers of fireworks) and takkhs-andaz (firing of rockets), though none refer to what effect, if any, these had on Tamerlane’s army. The fireworks at least, and possibly the rockets, were intended principally to scare the enemy’s horses.

Older forms of artillery, i.e. the manjaniq (trebuchet) and arrada (ballista) are also often referred to in contemporary sources, sometimes used on the battlefield as well as in attacks on and the defence of fortresses, as by Mohammed Shah Bahmani at the Battle of Telingana in 1361.

THE KINGDOM OF VIJAYANAGAR

This South Indian state was founded in 1336 by two Hindu officers of Mohammed ibn Tughluq of Delhi, these becoming its first two kings (Harihara 1336-56, and Bukka I 1356-77) with the city of Vijayanagar as their capital. Throughout its existence this Hindu kingdom was almost continuously at war with its northern neighbours, the Bahmani sultanate and its Deccan successor states.

Details of the country’s military organisation are not overwhelmingly abundant, and most of what information we have belongs to the 16th century rather than the 14th-15th. However, all the sources seem to agree on two fundamental points, which are (a) that a standing army was maintained, and (b) that it allegedly numbered in the region of one million men. (Incredible though this seems, it has to be borne in mind that by the end of this period the population of India was about 25% greater than the entire population of Europe.) Domingos Paes, for instance, writing of c. 1520-22, reckoned Vijayanagar’s army as ‘continually a million fighting men, in which are included 35,000 armoured cavalry; all these are in his pay, and he has
these troops always together and ready to be despatched to any quarter whenever it may be necessary.' Ferishta, writing of 1366, gives figures of 30,000 cavalry and 900,000 infantry, while Abd-er-Razzak, visiting the country in 1442, records that its troops amounted to 11 lac, or 1.1 million men. However, Duarte Barbosa, who visited India c. 1500-16, wrote in his chronicle only that 'between both horse and foot the king of Vijayanagar has more than 100,000 soldiers continually in his pay', while Fernão Nuniz, another early-16th century traveller, says that 'the king has continually 50,000 paid soldiers', amongst whom were 6,000 cavalry (the palace guard), 20,000 spearmen, 3,000 elephant-keepers (doubtless including their crews) and 1,600 groomsmen; these certainly seem more probable figures for the strength of the standing army, even though a million men may certainly have been available in all. Paes in fact states that 2 million men were actually available, the nobility being obliged to supply contingents according to the revenues of their domains. Fernão Nuniz says that the king's nobles were obliged to maintain 60,000 infantry and 24,000 cavalry, and that there were 200 of these nobles who are 'obliged always to be present with the king, and must always maintain the full number of soldiers according to their obligations'. Most Hindu armies would have included in addition many kaijitaegandru, i.e. 'drawers of weekly (or daily) wages', in other words men hired only for the duration of a campaign rather than on a full-time basis.

For a campaign of 1522 Nuniz recorded the following individual contingents:

<table>
<thead>
<tr>
<th></th>
<th>Infantry</th>
<th>Cavalry</th>
<th>Elephants</th>
</tr>
</thead>
<tbody>
<tr>
<td>The chief of the guard</td>
<td>30,000</td>
<td>1,000</td>
<td>6 (or 16)</td>
</tr>
<tr>
<td>6 provincial governors</td>
<td>50,000</td>
<td>2,000</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>60,000</td>
<td>3,500</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>100,000</td>
<td>5,000</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>120,000</td>
<td>6,000</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>80,000</td>
<td>2,500</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>30,000</td>
<td>1,000</td>
<td>10</td>
</tr>
<tr>
<td>3 eunuchs (favourites of the king)</td>
<td>40,000</td>
<td>1,000</td>
<td>15</td>
</tr>
<tr>
<td>The page of the betel</td>
<td>15,000</td>
<td>200</td>
<td>—</td>
</tr>
<tr>
<td>Kumara Virayya of Mysore</td>
<td>8,000</td>
<td>400</td>
<td>20</td>
</tr>
<tr>
<td>The king (Krishna Devaraya)</td>
<td>40,000</td>
<td>6,000</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>551 (or 561)</td>
</tr>
<tr>
<td></td>
<td>573,000</td>
<td>28,600</td>
<td></td>
</tr>
</tbody>
</table>

The proportions of these figures are particularly revealing, confirming the overwhelming predominance of infantry in Hindu armies alluded to by innumerable contemporary chronicles. The proportion of infantry to cavalry is in fact something like 20 to 1, or even as high as 30 or 40 to 1 in a few instances, though there is — fairly inevitably — a far higher proportion of cavalry in the king's own contingent (these being the palace guard referred to elsewhere, of whom 200, or 500 according to Paes, constituted the royal bodyguard); the king's contingent also has far more elephants than any of the others — 1 per 20 cavalry, as opposed to the average of 1 per 100 cavalry (or 2-3,000 infantry) apparent in the other contingents. The kingdom could muster about 1,000 elephants in all (Barbosa says 'more than 900', Nuniz mentions 800, and Abd-er-Razzak says 'more than 1,000', though in one passage Ferishta mentions as many as 3,000). Overall, the ratio of infantry to cavalry and elephants for the entire army is on the lines of 1,000:50:1.

The disproportionately small number of cavalry resulted from a scarcity of horses in South India as is explained in the note to figure 160 (page 180). Barbosa and other authorities explain how the king regularly imported considerable numbers of horses at great expense and distributed them among his principal ministers and the nobility, who were subsequently expected to maintain them 'and continually give him accounts of them. In the same way he gives them to other noblemen. To the cavalry soldiers [i.e. of the standing army] he gives one horse each for his own riding; a groom and a slave-girl as servants; and a monthly allowance of 4 or 5 paraos as the case may be [paid every 4 months according to Abd-er-Razzak]; and daily rations as well for the horse and groom'. Domingos Paes adds that 'some who are of higher rank have 2 horses or 3, though others have only one.' All in all it is clear that only about 30,000 cavalry were normally available to the kingdom, this figure frequently occurring in the sources, and from Nuniz's description it is clear that four-fifths of these were provided by the nobility. Surprisingly, some of them were Moslem mercenaries; Moslem mercenary cavalry had been employed in the kingdom since Devaraya I's reign (1406-22), and by the time of Devaraya II's accession in 1430 there were as many as 10,000. The only larger number of Moslems to be found in Hindu employ in this period is that of 20,000 recorded by Ibn Battuta in the army of Vira Ballala III, raja of Hoysala (d. 1342, upon which the kingdom was annexed by Vijayanagar).

Organisation was fairly certainly on a decimal basis, and multiples of 50, 100 and 200 are often encountered.
Nuniz in one passage records 2,000 men under 40 or 50 captains. The smallest recorded unit now, as in Alexander the Great’s time, was called a padi or patti, commanded by an officer variously called a padinayaka, padiraya, padalu or padavalu. In ancient times this had theoretically comprised a chariot, an elephant, 3 horsemen and 5 infantry, and though its size in the mediaeval period is unknown it was clearly larger, but nevertheless remained a self-contained unit of infantry, cavalry and elephants (chariots having fallen out of use by the 7th century); the Bahmanis seem to have copied this type of all-arm unit from the Hindus, calling it a laskkar. Next unit in size was called a dala, meaning a ‘part’ or ‘fragment’ of the army (i.e. a division), and its commander was called a dalavayi. An army commander was called a dannanayaka or dannayaka, the word nayaka indicating a military chieftain.

Catapults are often mentioned being used in the defence of cities, and gunpowder artillery, largely crewed by Moslem renegades, was certainly in use by the end of the 15th century. Indeed it may have been in use even in the 14th century, several authorities rendering an unclear passage in Ferishta’s history as a reference to the king of Vijayanagar fielding ‘3,000 cannon and darb-zen’ (or ‘300 gun-carriages’ in Briggs’ translation) in 1365/6; however, the reference is in fact probably to grenades or fireworks rather than artillery, since elephant crews were frequently, if not usually, equipped with such devices (and interestingly Ferishta records 3,000 elephants in the army on this occasion – 3,000 being his favourite figure). Varthema, writing of 1506(?), records that ‘this race of people are great masters in the art of making fireworks’, which were used with considerable effect against elephants.

**SERBIA**

Serbia became, briefly, a military superpower during the middle part of the 14th century under the dynamic Stephen (Stefan) Urosh IV Dushan (1331-55), who succeeded in conquering an empire — largely at the expense of the Byzantines — that included Macedonia, Albania, Epiros and Thessaly, reaching from the Drina and Danube rivers as far south and east as the Gulf of Patras and the Rhodope Mountains by 1350. He set his sights on Constantinople itself, dividing his lands into ‘Serbia’ and ‘Romania’ and, after 1345, calling himself Emperor (Tsar) of the Greek Lands of Romania; he even modelled his court on that of Constantinople, calling his officials by Byzantine titles such as caesar, despot, sebastokrator and logothete (logei, however, following his death this empire disintegrated under his successor Stephen Urosh V (1355-71). One Byzantine chronicler noted with evident satisfaction that the Serbian nobility were soon divided into ‘10,000 factions’, while John VI Cantacuzene wrote that Dushan’s empire fell ‘into a thousand pieces’. The principal individual despots, as they were called, that resulted from this disintegration were based on Serbia, Prilep, Skoplje, Trikkala, Ioannina, Epiros, Kossovo and Kustendil (Velbuzhd, held by a Bulgarian dynasty). Prilep took pre-eminence in the south, until the defeat and death in 1371 of its despot Vukashin (made king and co-ruler of Serbia by Urosh V c. 1365) at the hands of the Turks enabled Stephen Lazarev to take control — to a greater or lesser degree — of most of the country, especially after the defeat in 1373 of his most powerful rival, Zupan Nikola Altomanovic. It was Lazarev who led the Serbs in one of their major victories over the Ottomans, in 1387, though he was spectacularly less successful at Kosovo Pole in 1389, which engagement he lost along with his life. His son Stephen Lazarevic succeeded him, but as an Ottoman vassal acknowledged the suzerainty of the sultan. He reigned until 1427, to be succeeded in turn by his cousin George (Djuradi) Brankovic, whom the sultan distrusted to the extent that several punitive expeditions were launched against the despotate, including that which all but liquidated it in 1439. The final conquest of Serbia dates to June 1459, when its last capital, Smederevo, fell to the Turks, upon which its despot went into exile in to Hungary.

The Serbian army was feudal in nature, though its system of military landholding was inherited from the Byzantine pronoia rather than the Western European fief. The pronoia itself — hereditary by some accounts, non-hereditary by others — is only first recorded in Serbia under that name in 1299 (the Serbs spelt it pronija, or pronya, and called its holder a pronijar), but even from as early as Stephen Nemania’s reign (1186-96) every able-bodied man possessing a bashtina (a grant of hereditary freehold land, the holder being called a bashtinik or voynic)* had been obliged to attend the army whenever required, only monastic tenants being exempted in exchange for performing part-time garrison duties in local fortresses and fortified monasteries. The building and maintenance (gradobadanje) of such fortresses, and equally the maintenance of their permanent garrisons (gradobljudentje) was an additional aspect of the feudal responsibilities of the population of each zupa (district), who were also responsible for guarding their own frontier. The holders of both bashtinas and pronijas constituted the nobility (though many of the former were only upper-class peasants), and these were the principal native element of every Serbian army, serving as heavy cavalry (the pronijar) and infantry (the voynici). In fact most armies included only the nobility (the vlastelini, or ‘holders of power’)

*Or voynuk. See page 6.
and their retinues, maintained at their own expense, but in times of emergency the arrière-ban, called the Zamanitchka Vojyska (‘All Together’), would be summoned. As elsewhere, this comprised all the nobility and every able-bodied freeman. For further details of Serbian feudal organisation see Armies of Feudal Europe (2nd Edition).

In border regions all land-grants appear to have been called krayina and their holders vlastele krayishnik (‘border lords’), whose duty it was to guard the frontier. The ‘Code Dushan’ of 1349 (the Zakonik, extended and completed in 1354) actually states that any damage inflicted by an invading army had to be compensated for by the border-lord through whose lands the enemy had entered, another article stating that similar pillaging committed by brigands had to be repaid seven-fold. The Byzantine chronicler Gregorias, as ambassador for Andronikos III to Dushan, encountered some krayishnici (men of a border-lord) on crossing the frontier. He wrote: ‘When we passed the Struma River . . . and came into thick woods, we were suddenly surrounded by men clad in black woolen garments, who darted forth from behind trees and rocks like devils out of the earth. They wore no heavy armour, being armed only with spears, battle-axes, and bows and arrows.’

From the 11th century on the commander-in-chief of the army was the king (kral), a veliki sojevoda or ‘high military chief’, equivalent to the Byzantine Grand Domestic, being appointed in his absence. However, since any call to arms had to be approved by the Sabor (the National Assembly) the king actually had limited military power, in effect being no more than a glorified Grand Zupan, or elected tribal leader. Although Dushan stripped the Sabor of much of its power, the crown’s dependence on a permanent nucleus of mercenaries that was not subject to the assembly’s whims had by then already evolved, constituting the core of all Serbian armies throughout this period. Under Stephen Uroš II Milutin (1282-1321) these mercenaries included such diverse elements as Cumans; Anatolian Turks (some 1,500 were employed in 1311 from amongst those who had been allied to the Catalans in Thrace and Macedonia); Tartars from South Russia; and Christian Ossetians (fasi in Serbian and Russian sources) from the Caucasus. However, it was Western European heavy cavalry which soon came to predominate. As early as 1304 a certain Franciscus de Salomone is mentioned in an inscription in Trévice as having distinguished himself in the service of ‘Orosius, rex Rascie’ (i.e. Uroš, king of Serbia). Mercenaries in Stephen Uroš III’s army that defeated the Bulgarians at Velbuzhd in 1330 were comprised of 1,500 Aragonese, Spaniards and Germans, and it was the latter who seem to have dominated during Dushan’s reign. The papal legate to his court reported seeing 300 German mercenaries there under the knight Palmann Bracht, who held the rank of capitaneus. In addition we know that the Serbian troops supplied to the Byzantine Emperor, John VI Cantacuzene, in 1342-43 were Germans, and that the troops garrisoning Berroia in Macedonia in 1341-50 were German mercenaries too. Even at the Battle of Kossovo in 1389 it is significant that many of Lazar’s men were German and Hungarian mercenaries according to a Florentine account, while a mid-15th century Ottoman source reports that his army included Wallachians, Hungarians, Bohemians, Albanians, Bulgarians and Franks, doubtless chiefly mercenaries. Another says he employed many mercenaries from among the Serbians themselves as well as the Hungarians, Bosnians and Albanians. Serbian documents indicate that as well as Germans the other predominant European mercenary elements comprised Spaniards (possibly as many as 1,300-strong at one point) plus Hungarians, Frenchmen, Italians and Swiss. One prominent name to appear in their ranks was that of Philippe de Mézières, in later life Chancellor of Cyprus and one of the last protagonists of the Crusade. Inevitably, in the 15th century Ottoman auxiliaries were also used, for example by Vuk Lazarevic against Stephen, 1409-13. In addition to the king or despot, the larger cities also employed some mercenaries of their own to back up their militia.

When the Ottoman hold on Serbia weakened after the Battle of Ankara, Stephen Lazarevic took advantage of the situation to establish his independence from the Turks. Recognising the king of Hungary as his overlord he built up a small regular army, on the basis of a newly imposed levy known as the vojstatik, which was stationed in the country’s 11 major fortresses as well as several of its small walled towns. This army included many Hungarians and was well-equipped with cannon and handguns; for example, there were 2 cannons in the fort guarding the large silver mine at Srebrenica in 1425, and in Belgrade, Lazarevic’s capital, there was a large bombard (called Humka, meaning ‘Knoll’) captured from the Bosnians the same year. In 1455 there were as many as 3 large cannon, 5 other guns and 55 handguns in the fort guarding the great silver mine at Novo Brdo.

Serbia had adopted gunpowder artillery from Dubrovnik (Ragusa), where a centre for the manufacture of wrought-iron cannon existed by 1363. (The first gun foundry in the Balkans, casting bronze cannons, was also established at Dubrovnik, in 1410.) Neighbouring Bosnia had cannon by 1380, and they were in use in Serbia by 1382-86 at the very latest, probably served and certainly made by Ragusan engineers. In fact M. Orbini claims that Despot Lazar used guns against Nikola Altomanovic even as early as 1373. Guns were apparently employed in the field by the Serbians as early as 1389 at the Battle of Kossovo, being clearly
mentioned in one later Ottoman chronicle (Neshri) and alluded to in a contemporary Serbian source which says that ‘fiery explosions thundered, the earth roared greatly, and the air echoed and blew around like dark smoke’; we know too that King Tvrtko of Bosnia (1353-91) brought one gun, a gift of the Italians, with him to the battle. The Serbian contingent in the Ottoman army defeated at Ankara in 1402 also had artillery, but as at Kosovo it failed to affect the outcome, probably for the same reasons on both occasions — i.e. the guns were too small to be effective in order that they might be manouevrable on the battlefield. In siege-work trebuchets and ballistae remained in service alongside gunpowder artillery for a long time.

In addition to her land forces, Serbia occasionally also had a very small fleet, provided by the communes of Dulcigno (modern Ulcinj), Budva (Budva) and Cattaro (Kotor), sometimes by Ragusa (in exchange for a year’s tax-exemption), and briefly by Venice (which provided 4 new galleys, the galee domini imperatoris, in 1350, the subsequent fate of which is unknown). King Tvrtko of Bosnia too later constructed his own small fleet, with a Venetian as its admiral, and was similarly given a galley by Venice, this time fitted with a cannon.*

Field-armies

Serbian armies were comprised of lance-armed light and heavy cavalry, plus infantry (armed with spears, axes, and above all bows and, later, crossbows) and a baggage-train (komora) manned by shepherds and cattlemen referred to as Vlachs, probably indicating that they were Pindus Vlachs and Albanians, and perhaps Wallachians too. Most of their armies tended to be small because of the difficulties involved in supplying them in the field, and on the whole they could probably raise only about 12,000 men in the late-14th century, the army at Kosovo probably numbering at most 20-25,000 men even including allied contingents. The majority were cavalry. The largest Serbian army on record in this period was that raised by Dushan in 1355 for his proposed attack on Constantinople, which numbered 80,000 men according to later Ragusan chronicles. Modern authorities, however, give this figure little credence.

Serbian contingents in Ottoman armies

Serbia became an Ottoman tributary after the decisive defeat of Vukashin at Cernomen in 1371, and a vassal state, with her nobility individually swearing loyalty to the sultan as his vassals, as a result of Stephen Lazar’s catastrophic defeat at Kosovo. According to most authorities it was from 1390 on, as a result of this latter humiliation, that the despot of Serbia was obliged to pay an annual tribute of 1,000 lbs of gold and to provide the sultan with a contingent of 1,000 cavalry when called upon. Finlay and Creasy, however, maintained that it was ‘the treaty of 1376’ that first imposed this obligation, while Gibbons says 1386; certainly there were Serbs as well as Bulgarians and Byzantines in the Ottoman army that fought against the Karamanli Turks in Anatolia in 1387 (the Serbs being promised booty in return for their services), and there were even Serbs, and Greeks too, in Murad’s army during the Kosovo campaign, under Konstantin Dejanovic of Kjustendil and Konstantin Dragash of Serres (though they were not actually involved in the battle — probably Murad did not trust them). Finlay says in one of his books that Sultan Bayezid actually demanded the service of the same number of Serbs as the Byzantines had called for after Manuel’s subjugation of Serbia in 1150, i.e. 2,000 to armies serving in Europe and 500 to armies serving in Asia; but in another book he says that the figure was only ‘subsequently increased to 2,000 men’ when Bayezid was gathering his forces to confront Tamerlane in 1402. Bertrand de la Broquière, in his ‘Travels’ of 1432-33, recorded of the despot of Serbia that ‘every time the sultan sends him his orders, he is obliged to furnish him with 800 or 1,000 horse, under the command of his second son.’ Elsewhere he adds how he had heard that ‘in the most recent army [supplied to the sultan] from Greece, there were 3,000 Serbian horse, which the despot of the province had sent under the command of one of his sons. It was with great regret that these people came to serve him, but they dared not refuse.’ (This army was probably that which campaigned against Albania in 1430-31, in which Serbs are known to have been present.) Konstantin Mihailovic reports that when the treaty with Serbia was renewed under Mehmed II the obligatory tribute was set at 1,500 lbs of gold and a contingent of 1,500 cavalry.

Amongst the battles in which Serbs fought for their Ottoman masters were Rovine, against the Wallachians and Bulgarians, in 1395; Nicopolis in 1396, where apparently their contingent comprised 5,000 cavalry; and

*Technically an Hungarian tributary state, Bosnia became a kingdom in 1377 when its ban, Tvrtko, proclaimed himself king of Serbia, Bosnia and the coastal regions after occupying a ‘large and important part of Serbia’. The kingdom managed to last only until 1463 (when the Ottomans occupied it), chiefly by playing Turks and Hungarians off against one another. Its armed forces comprised the feudal retinues of its zupans, each based on a nucleus of kinsmen, often backed up in the 15th century by Ottoman auxiliaries only too willing to assist disaffected Bosnians to kill other disaffected Bosnians.
Ankara in 1402, where Doukas says there were 5,000 ‘encased in black armour’ and Chalkokondyles that there were an unlikely 10,000 (though the Ottoman chronicler al-Anwari says that there were 10,000 Serbs and Wallachians altogether). George Brankovic even supplied an unwilling contingent (of 1,500 horse under the voivode Jaksa Brezicic according to Mihailovic) for the final siege of Constantinople in 1453, plus some silver-miners from Novo Brdo whom Sultan Mehmed employed as sappers. In 1473 the army that marched against Uzun Hasan included ‘many Christians — Greeks, Albanians and Serbians — in their number.’

ALBANIA

The Albanians were descendants of the ancient Illyrians. Ptolemy mentions a city of Albanopolis and a tribe called the Albanians as early as the 2nd century, and by the 11th century the name had been extended to cover all of the Illyrian tribes. Part of the Byzantine Empire until the late-13th century, during the early part of the period covered by this volume much of Albania was held by the Angevins of Naples, who deemed it a kingdom (1271-1368), and the Serbs under Dushan (1343-55), though the Byzantine despots of Epiros and then the Morea also retained parts until well into the second half of the 14th century. After the death of Dushan the northern part of the country, modern Montenegro, became independent under George Balsha, who with his sons set up his capital at Scutari (Shkoder), and in 1368 he and his erstwhile enemy Charles Thopia, who had adopted the title Prince of Albania, in addition seized the Angevin possessions; of these, the Navarrese Company (see page 28) succeeded only in recapturing Durazzo (Durres) in its campaign of 1376. George Balsha died in 1385 fighting against the Ottomans at the Battle of Savra, where he allegedly confronted an army of 40,000 with just 1,000 men. From the 1380s on Ottoman pressure mounted, and the Balshas were obliged to have recourse to Venetian aid, in exchange for which between 1392-95 they had to hand over Durazzo, Alessio (Lesh) and Drivasti. Hostilities with the Venetians subsequently became almost as commonplace as those with the Turks, and although the Albanians, utilising the mountainous nature of their countryside to best advantage, usually prevailed in the field (especially under their talented commander Stephen Crnoicvic, ‘the Black Prince’, who in addition fought and defeated the Ottomans in 63 battles and skirmishes in the period 1424-36), Venice nevertheless managed to expand her Albanian possessions by purchase and conquest so that by 1444 she held Alessio, Drivasti, Dagno, Satti, Scutari, Durazzo, Dulcigno and Antivari.

The Ottomans had in the meantime proceeded to consume the divided country piecemeal, often being invited in by rival chieftains wanting their help against one another. They were exercising direct control over some areas as early as the 1380s, and over most of central and southern Albania by the early 1430s (Kroya was captured in 1415, Valona, Kanina and Berat in 1417, Girokastera in 1419, Ioannina in 1431, and Serres in 1433). Sizeable Albanian auxiliary contingents had therefore started to appear in Ottoman armies in the late-14th century. The country became a sancak of the Ottoman Empire in 1430, and in 1440 a certain Iskender Bey was appointed sancak bey of the province. This was the celebrated Scanderbeg (a corruption of his Turkish name), an Albanian whose real name was George Castrioti, who had been reared as a hostage at the Ottoman court in Adrianople. In 1443 he rebelled against the Turks and, with just 300 horsemen, seized the city of Kroya and began a resistance movement that freed much of the country, as a result of which an Albanian League (the League of Lezha) was formed, with Scanderbeg as commander-in-chief of its armed forces. He did not receive universal support, however, and he often had to overcome stiff, even martial, opposition from many of the highland chieftains, who were so opposed to his undisguised attempts to unite the country under his sole leadership that some of them actually welcomed Ottoman armies as their liberators. Nevertheless, despite the frequent setbacks that were to result from the treachery and desertion of various chieftains over the years, Scanderbeg was able to resist and repel repeated Ottoman counter-attacks right up to his death in 1468, winning over 25 battles against them, including several massive sieges of Kroya. Thereafter Albanian resistance faltered, though Turkish attacks were more or less successfully weathered until 1477 under the country’s new leader Lek Dukagjin, one of Scanderbeg’s old lieutenants, in alliance with the Venetians, who following Scanderbeg’s death had been permitted to instal garrisons in Kroya and other fortresses in addition to those they already held. However, Ghin Musachi, a contemporary, recorded of the annual Ottoman inroads that ‘the forces of the Turks always increased while ours decreased; almost all the young men of Albania were killed; there were only a few old men left, and their forces were exhausted, and their states dwindled.’ Subsequent campaigns therefore saw the gradual reduction of the Venetian and Albanian garrisons, until the signing of a treaty in 1479 left Venice with just 3 coastal strongholds, those of Durazzo, Dulcigno and Antivari. The rest of the country (except for inhospitable Montenegro) now belonged to the Ottomans.

Burchard, who travelled c.1308, reckoned that at that time the Albanians were capable of fielding 15,000 cavalry, an estimate that is doubtless a little on the low side; in 1378, for instance, George Balsha and Charles Thopia invaded Bosnia with 10,000 men, and Stephen Crnoicvic alone fielded 7,000 against the Ottomans.