

# ARMIES OF INDIA FROM THE ARYANS TO THE MARATHAS

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NO factor determines the growth and direction of an early culture so profoundly as geography, and India is no exception. India is a sub-continent both closed and open. Separated from the rest of the world on two sides by oceans, and along the northern borders by great mountain ranges, its relative isolation enabled it to develop in its own fashion and its own way throughout most of recorded history. Internally, however, the great sweeping plain of Northern India provides no natural boundaries if the mountain passes should be breeched. Thus the military history of India consists of successive invasions through the mountain passes of the Northwest, followed by gradual disintegration of the state established by the invaders, and then a new invasion. Each new invader had his own system of military organization, weaponry, and tactics. But the geography and the culture of Northern India soon influenced the new military system so that it gradually took on many of the characteristics of the old.

## THE ARYANS

Around three thousand years ago, the original civilization of India, that of the Indus Valley, entered a period of great decline. Whether this decline was caused by pressure on the Northwestern Frontier by the Aryans, or whether the Aryans moved in to fill a power vacuum is impossible to determine. Yet probably sometime in this period this great wave of invaders out of Central Asia entered India. Like generations of invaders to come, the Aryan invaders were horse nomads. They were tribal in culture and bronze age in technology. Semi-nomadic pastoralists living chiefly on the produce of their cattle, their military system depended on the domestication of the horse. It was the horse which they held in highest veneration, and the horse which enabled them to complete the subjugation of the remnants of the Indus Valley civilization.

Originally, their military system was based on their social structure, Stratification among tribal peoples is usually rudimentary, with the chief and his lieutenants far closer to the mass of the people than is common in more developed societies. In the early period, the Aryan chief and his lieutenants fought from chariots, while the majority of the tribal groups fought on foot in an unordered mass.<sup>1</sup>

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<sup>1</sup>A. Berriedale Keith, "The Age of the Rigveda", *The Cambridge History of India, Vol. I, Ancient India*, ed. by E.J. Rapson (Delhi : S. Chand and Company, 1968), p. 88.

Unlike the people of the West, whose fighting habits were determined by the heavy woods and rolling terrain of the European forests, the Aryans came out of Central Asia with its great flat plain posing no limitation to mobility and range. Thus the chariot was their arm of decision, and in the Vedic period the Aryan chariots were of simple construction based upon the necessity to break them down and carry them on a nomadic march. Their most honorable weapon was the bow which, unlike the bows of primitive tribes, was drawn to the ear, but they also employed swords, spears, and axes. Coats of mail were known, but no evidence exists to support the supposition that they fought from horseback. This indicates that they lacked the stirrup.

As the Aryans moved eastward from the Indus, a gradual distinction took place between those who fought from chariots and those who laboured and fought on foot. A class of warriors grew up, freed of the labour of agriculture, whose function was to surround the king and be ready for battle.<sup>2</sup> By the sixth century B.C. the Aryan army was responsible only to the king and all tribal controls upon it had lapsed.<sup>3</sup> As the Aryan state developed, war became an expensive and formal matter. A code of chivalry developed which governed conduct between Aryans.<sup>4</sup> The code, far advanced for its day, prevented the use of barbed and poisoned arrows, and protected prisoners and unarmed and wounded men.<sup>5</sup> Further, war took on a semi-religious tone, as Brahmans regarded it as an *Upa-Veda*, a supplementary part of divinely inspired knowledge.<sup>6</sup>

Tactically, the army changed very little. They used the cavalry primarily as mounted archers, but the basic weapons were still the chariot and the foot archer.<sup>7</sup> As the state developed, so did the bureaucracy. High level military administration was split off and distinguished from civil administration. Yet the close relationship of military and political action was recognized, for the army included a Department of Diplomacy.<sup>8</sup>

By the sixth century B.C. the synthesis of Aryan and Indus cultures had developed the Hindu civilization. The Hindu states did not yet possess a standing army, and when the army was called to battle it followed the Aryan pattern of foot and chariots. Elephants had not yet been domesticated for war.<sup>9</sup>

<sup>2</sup>Sir William Wilson Hunter, *The Indian Empire* (3rd ed.), (London: Smith, Elder and Company, 1892), p. 131.

<sup>3</sup>Charles Drekmeier, *Kingship and Community in Early India*, (Stanford, California: Stanford University Press, 1962), p. 96.

<sup>4</sup>Drekmeier, p. 23.

<sup>5</sup>Mountstuart Elphinstone, *The History of India* (7th ed.), (London : John Murray, 1889), p. 26.

<sup>6</sup>Hunter, p. 152.

<sup>7</sup>J.W. McCrindle, *Ancient India as described by Megasthenes and Arrian*, (Calcutta: Chatterjee and Company, Ltd., 1960), pp. 225-6.

<sup>8</sup>Bimal Kanti Majumdar, *The Military System in Ancient India*, (Calcutta: Firma K.L. Mukhopadhyay, 1960), pp. 15-6.

<sup>9</sup>D.D. Kosambi, *The Culture and Civilization of Ancient India* (London : Routledge and Kegan Paul, 1965), pp. 123-37.

## THE DECCANNI KINGS

South of the great plain of North India, military development was also under way. The culture of the Deccan was, like the original Aryan culture, tribal in origin. The early Deccanni kings recognized that if they were to break up the tribal structure and establish a powerful central government, they would need a non-tribal army. One of the first recorded instances of economic development for a political end was when, in the sixth century B.C., the Deccanni kings began to clear heavy jungle and bring wasteland under the plough. The settlers on this new land now owed their property not to the tribe but to the king. It was from this new class that the king recruited his professional army.<sup>10</sup>

By the beginning of the fourth century B.C. better methods of organization and technological development had added cavalry and war elephants to the army. The foot soldier had declined in quality if not quantity. The chariot was still considered the arm of decision. Soldiers in these armies were trained systematically and were probably relatively regularly paid.<sup>11</sup>

The military equipment of this period showed no great improvement over that of the Aryans. Infantry wore cotton quilted armor and carried bows and spears, as did the cavalry. Chariots had grown larger and now carried six men. The cavalry, still without the stirrup, was inferior to the chariot. Elephants had been domesticated and became a weapon of war.<sup>12</sup> With their immense size elephants fascinated Indian military leaders who were never free from the theory that elephants could somehow be made decisive on the battlefield. Yet in terms of mobility and striking power they were little more effective than chariots, since they carried only four men, the mahout and three archers.<sup>13</sup> Some Indian rulers recognized the unreliability of elephants and did not use them directly as weapons but instead as observation platforms and to frighten the horses of enemy cavalry.<sup>14</sup>

By the third century B.C. the Hindu military system had become ritualized. Of the seven classes recognized by Megasthenes, the fighters were the second most numerous. They performed no work in their communities but that of fighting, and their community provided their weapons and kept their horses and elephants for them. They received regular pay in time of peace, so while not fighting they lived in ease and maintained numbers of dependents.<sup>15</sup> This military system received a great shock with the invasion of Alexander the Great.

<sup>10</sup>B.K. Majumdar, pp. 26-30.

<sup>11</sup>R.C. Majumdar, H.C. Raychaudhury and Kalikinkar Datta, *An Advance History of India*, (New York: St. Martin's Press, 1965), p. 73.

<sup>12</sup>Majumdar, Raychaudhuri and Datta, p. 73.

<sup>13</sup>Mc Crindle, p. 89.

<sup>14</sup>R.C. Majumdar, *The Classical Accounts of India*, (Calcutta: Firma K.L. Mukopadhyay, 1960), p. 38.

<sup>15</sup>E.R. Bevan, "India in Early Greek and Latin Literature," *The Cambridge History of India, Vol I, Ancient India*, ed. by E.J. Rapson, (Delhi: S. Chand and Company, 1968), hereafter cited as Cambridge Vol. I, pp. 368-9.

Alexander was one of the few leaders of antiquity who was able to effectively use cavalry prior to the invention of the stirrup. He armed them with a bow, and the superior mobility of the cavalry and the long range of their weapons easily defeated the chariots of the Indian army. The chariots, no longer the light, easily drawn models of the early Aryans, had become heavy, slow, and prone to bog down.<sup>16</sup> Nevertheless, the organizational ability of even the local Indian states could oppose Alexander with large military forces. Porus, only a local monarch, opposed the army of Alexander with 30,000 efficient infantry, 4000 cavalry, 3000 chariots, and 200 elephants.<sup>17</sup>

### CHANDRAGUPTA

Sometime after the withdrawal of Alexander's armies from India, the first great empire of India developed. Like all the empires to follow, it was based on a strong military system and a large standing army. The Empire established by Chandragupta maintained a vast standing army numbering hundreds of thousands of troops.<sup>18</sup> Military bureaucracy to support such a force was highly developed, and by the turn of the fourth century B.C. the military had been organized into six divisions: liaison, logistics, infantry, cavalry, war chariots, and elephants.<sup>19</sup> According to Pliny the army was immense, having a strength of 600,000 foot, 30,000 cavalry, and 9000 elephants, as well as a chariot corps.<sup>20</sup> The class structure of the army as a basis of recruiting had been dispensed with, both practically and theoretically. The troops included hereditary troops, feudatory troops, mercenaries, guild levies, and tribal troops. The hereditary troops and the majority of the mercenaries were Kshatriyas, as they were considered to be the most reliable. Guild troops were city militias who were probably available only when their city was threatened. Tribesmen were employed as auxiliaries.<sup>21</sup> The central government provided all equipment for the army.<sup>22</sup> The art of fortification was well developed. The great cities of the Empire had ditches, ramparts, earthen walls, or walls of wood or brick, having battlements, towers, water gates, portcullises, and a wide street running around the interior face of the wall. To insure the loyalty of the city, the Emperor scattered guardhouses throughout.<sup>23</sup>

Military theory was well advanced. The *Arthashastra* discussed types of battles, categories of battles, methods and time of march, advice for training exercises, maintenance, and discipline.<sup>24</sup> By the first century A.D. India's war theory had advanced even further. The state was to avoid war if possible

<sup>16</sup>R.C. Majumdar, p. 36.

<sup>17</sup>Hunter, p. 211.

<sup>18</sup>Drekmeier, p. 171.

<sup>19</sup>Mc Crindle, p. 88.

<sup>20</sup>Majumdar, Raychaudhuri, and Datta, p. 120.

<sup>21</sup>F.W. Thomas, "Political and Social Organization of the Maurya Empire," in Cambridge Vol. I, pp. 441-2.

<sup>22</sup>Mc Crindle, p. 88.

<sup>23</sup>Thomas, p. 429.

<sup>24</sup>B. K. Majumdar, p. 66.

and only to engage in war when attempts at peaceful settlement had failed. A formal code governing hostilities was in wide use. It governed the use of weapons against non-combatants, those fleeing, the wounded, the unarmed. In addition a chivalric code was in use. A warrior could fight only those armed as well as himself. Ambushes were prohibited.<sup>25</sup>

### THE GUPTA EMPIRE

The Gupta Empire, 300 to 700 A.D., could field large armies. As before, the army consisted primarily of foot soldiers, but also included cavalry, elephant troops and charioteers. Theoretically, a single division of the army consisted of 109,000 infantry, 65,000 cavalry, 21,000 elephants, and 21,000 chariots.<sup>26</sup> These figures seem somewhat exaggerated.

The tactics of the Guptas, however, had been influenced by the reduction in jungle terrain and the mobile Sythian cavalry. Pre-Mauryan and Mauryan strategy had centered around the use of huge elephant forces which were useful in jungle and in positional warfare. However, mobile cavalry had defeated these. The Guptas remodeled the army on the Sythian pattern, with armored horsemen armed with lance and bow. Cavalry fought in well-ordered lines and close formation, and the chariot fell into disuse.<sup>27</sup>

Increasing use of the cavalry by the Guptas led to the problem of horse supply. Neither then nor ever was India suitable ground for the breeding and raising of horses. Yet cavalry was such an obviously superior force that Indian rulers felt they needed large quantities of horses. The expense of providing horses to its cavalry would become the major military expenditure of the state.

The Gupta military system, unlike the Mauryan, was decentralized, showing both the inability of the government to enforce its will, and the increasing rise of the jati system which made strong central government less necessary for the maintenance of social order.<sup>28</sup> The Guptas relied upon the land tax to support the army, and the villages often paid their taxes directly to the army when it was nearby. Conscription seems to have existed, although whether it extended beyond the Kshatriya class is unknown.<sup>29</sup>

### THE HARSHA EMPIRE

The next major empire in India after the Guptas was the Harsha Empire which, like its predecessors, depended on a strong standing army.<sup>30</sup>

<sup>25</sup>Drekmeier, pp. 139-40.

<sup>26</sup>N.K. Sidhanta, *The Heroic Age of India*, (London : Kegan Paul, Trubner and Company, Ltd., 1929), pp. 139-40.

<sup>27</sup>B. Majumdar, p. 90.

<sup>28</sup>B. Majumdar, p. 81.

<sup>29</sup>Drekmeier, p. 175.

<sup>30</sup>William Harrison Moreland and Atul Chandra Chatterjee, *A Short History of India*, (London: Longmans, Green and Company, 1957), p. 106.

<sup>31</sup>K.A. Kilakanta Sastri "The Chalukyas of Kalyani," in G. Yazdani, *The Early History of the Deccan* hereafter cited as Yazdani, (London: Oxford University Press, 1960), pp. 417-8.

The army, also like its predecessors, maintained the tradition of recruiting from all classes, not just Kshatriyas.<sup>31</sup> But some changes had taken place. By the seventh century A.D. chariots were clearly obsolete, their place being taken by elephants.<sup>32</sup> By this time the stirrup had been introduced and more use was made of cavalry, although it had not yet become the arm of decision. The Harshas used it for reconnaissance, surprize, pursuit, and rear attacks. They did not yet understand the use of the horse-bowman. Thus they armed the cavalry with lance or sword, only occasionally issuing a bow.<sup>33</sup> Logistically, the army was well organized. On the march it was followed by a long train of supply wagons carrying rations, medicine, forage, spare parts, and weapons. Further logistical support was provided by civilians including artisans, engineers, carpenters, smiths, surgeons, and merchants.<sup>34</sup> All of this indicates a highly efficient, well organized bureaucracy.

In the tenth century no single empire controlled the Northern Indian states. The various Hindu kings, however, recognized the need for military force and usually maintained standing armies trained and paid in times of peace. In war they supplemented these forces by contingents recruited from tribes and possibly from general levies of the kings subjects. In the Rajput kingdoms, the basis of the army was tribal, but in other kingdoms mercenary troops were employed.<sup>35</sup> The Hindu kings resorted to drafts in time of war because of financial restraints on the size of the standing army.

### THE TURKS

In the eleventh century, under the impact of the invading Turks, the Hindu military system collapsed. The primary cause of the collapse was the climate of India and the impossibility of breeding large numbers of horses under such conditions. Being unable to breed horses, Hindu kings were always short of cavalry, and being short of it, never relied upon it. Since they could never rely upon it, they never learned how to use it well or how to defend against it. They had no knowledge of how to use it in the charge as shock action, or of how to harass enemy troops with it. Their elephant corps was an attempt to make up for their lack of mobility, but it was of doubtful value. Further, their rules of war prohibited flank or rear attacks, and the very size and resultant immobility of the foot mobile army restricted them to what was essentially positional warfare in which smaller and more mobile enemy cavalry forces could defeat them. Finally, the political structure of many separate states did not support one army or a unified command, but only a collection of levies and allies impossible to control. Perhaps all of this would not have prevented the Hindu states from defending against a mediocre force of invaders, but they were fighting the Turks.<sup>36</sup>

<sup>31</sup> Jeannine Auboyer, *Daily Life in Ancient India*, trans., by Simon Watson Taylor, (New York: The Macmillan Company, 1965), pp. 28-32.

<sup>32</sup> Auboyer, p. 284.

<sup>33</sup> Auboyer, pp. 283-6.

<sup>34</sup> Moreland, pp. 120.

<sup>35</sup> B. Majumdar, pp. 148-50.

The Turkish Emperors of the Delhi Sultanate knew that their power rested primarily upon the sword. Thus their administration paid great attention to the army. The Sultanate had a Ministry of War whose chief was the administrator of the army. He was not a tactical leader of troops, but his responsibilities did include recruiting, promotion, assignment, pay, and logistics. He was assisted by a large clerical staff both at Delhi and in the provinces. He kept a muster role of each soldier, and supervised the branding of horses to prevent fraud by subordinate officials.<sup>37</sup> Up to the fourteenth century troops were paid on the assignment system, many of the troops living in the villages from which they collected their pay. This meant significant delays in mobilization, so that by the fourteenth century the Sultanate kept a large standing army in the capital and paid it in cash.<sup>38</sup> The difficulties of transporting an army over such broad distances of the North Indian plain led to the distribution of the remaining troops throughout the country. These troops, commanded by the provincial governor, were responsible for coping with local disorders. Reinforcements could be brought in from neighboring areas or from Delhi if the situation warranted.<sup>39</sup>

The mounted horse archer was the most important force in this army. Each archer wore light armour and armed himself with a bow and sword. At times, they armoured their horses. However, the Sultans succumbed to the siren's call of the elephant and considered a single elephant to be as effective in battle as 500 horses. As many as 1400 elephants were taken on campaign, and many of the Shahs kept 3000 in the stables. Elephants were considered so important that they became a status symbol. No one might possess an elephant without royal permission.

For their infantry the Sultanate recruited mostly Hindus and people who could not afford horses. Since they were slower than cavalry, the Sultanate did not use them in campaigns which required swift movement.<sup>40</sup>

Like the army of the Guptas, the army was decentralized. Unlike the Guptas, the regular soldiers received direct grants of land whose revenue supported them. Granting of land gradually reduced the effectiveness of the army since land grants became hereditary rather than based on individual efficiency and competance.<sup>41</sup> On the other hand, the Sultanate had a well organized engineering department which could construct fortifications, fortify encampments, and throw pontoon bridges across rivers. On one campaign, 100,000 woodcutters accompanied the army.<sup>42</sup> The entire army itself reached great size. Ala-ud-din Khilji commanded 475,000 horse, and Muhammad bin Thuglak was said to command almost 900,000.<sup>43</sup> Support-

<sup>37</sup>Tshtiaq Husain Qureshi, *The Administration of the Sultanate of Delhi* (5th rev. ed.) (New Delhi: Oriental Books Reprint Corporation, 1971), pp. 37-8.

<sup>38</sup>Moreland, p. 152.

<sup>39</sup>Qureshi, p. 139.

<sup>40</sup>Qureshi, pp. 140-4.

<sup>41</sup>Majumdar, Raychaudhuri, and Datta, p. 333.

<sup>42</sup>Qureshi, p. 145.

<sup>43</sup>Qureshi, pp. 155-6.

ing an army of such large size required great logistical foresight. The Sultanate established supply depots throughout the state so that an army on the march would not have to plunder to maintain itself. Unfortunately if the army left the state, it depended either on tributary chiefs to supply it, or on plunder. The army resorted to plunder only as a last resort because plundering a district quickly depleted all its resources and the army, unsupported, had to move on.<sup>44</sup>

The theoreticians of the period paid due regard to weather and terrain. They discussed ambushes and attacks, but their recommendations for the disposition of the forces on the battlefield were rigid. The army always ordered for battle with a centre, two wings, a vanguard, and a rear guard. They placed elephants to the front, and preceded them by armed slaves.<sup>45</sup>

While the major military states were in North India, some attention should be paid to the contrasting military organization of the Deccan. The terrain in the Deccan was mountainous and hilly affording little room for the sweeping charges and huge armies of the Northern Plain. The Deccani armies depended mostly on foot soldiers selected from village militias. These kingdoms directly recruited their standing armies and supplemented them by local levies commanded by provincial officials.<sup>46</sup> The Deccani states were organized on a military basis and territory was apportioned among military chiefs. The states distributed land in lieu of salary and those who held land had to maintain a stipulated body of military force and also pay taxes. Their tactics depended on a combination of foot armies and strong points consisting of forts built on dominant terrain features.<sup>47</sup>

### THE MOGHULS

The Delhi Sultanate disintegrated into a number of Hindu and Muslim states, none of which was strong enough to resist an invasion of a new wave of Turks, under the leadership of Babur. Babur had spent most of his life fighting, and what he had learnt showed in the organization of his army. It was not divided into regiments, but among the great followers of Babur, all of whom had had much service in the field. The fighting men consisted of ethnic turks, although after entering and establishing himself on the Indian plain, Babur recruited local levies and formed bands of mercenaries.<sup>48</sup>

By the sixteenth century and the emperor Akbar, the Moghuls had established their military system. At the centre stood a relatively small standing army commanded, paid and equipped by the Emperor. Under Akbar it did not exceed 45,000 cavalry, 5000 elephants, and a mass of little esteemed

<sup>44</sup>Qureshi, pp. 147-8.

<sup>45</sup>Qureshi, p. 149.

<sup>46</sup>A. L. Altekar, "The Yadavs of Seunadesa," in Yazdani, pp. 513-63.

<sup>47</sup>N. Venkataramanayya and M. Somasekhara Sarma, "The Kakatiyas of Warangal", in Yazdani, pp. 666-70.

<sup>48</sup>William Erskine, *A History of India under the Two First Sovereigns of the House of Taimur, Baber and Humayun*, (2 vols.), (London : Longman, Brown, Green and Longmans, 1854), pp. 540-1.

foot. For this army the Moghuls provided no standing logistical support.<sup>49</sup> Most of Akbar's strength consisted of contingents raised and commanded by chieftains or high imperial officers. The troops so recruited were mostly cavalry who were formed into regiments, but regulations did not require them to drill or to observe uniformity in dress or arms.<sup>50</sup> Thus the army was not an imperial army and the soldiers did not owe direct allegiance to the Emperor.<sup>51</sup> Until 1575 Akbar paid officers by assigning them land reserves, but during that year he reformed the military system so that officers were paid in cash. He also reintroduced the system of branding horses as a check upon fraud.<sup>52</sup>

Akbar's policy was to recruit officers on the basis of talent, and he required that any who desired to be an officer in the Moghul administration should start at the lowest level and rise by virtue of service to state. The only exception to this rule was that very high rank was, with few exceptions, reserved for princes of royal blood.<sup>53</sup> Nonetheless, the long range trend of Moghul administrative direction in military affairs, notwithstanding Akbar's reforms, was quantity over quality. Theoretically, Akbar could call into the field a force of almost four and a half million cavalrymen.<sup>54</sup> Practically, of course, no one even remotely approached this figure.

The bureaucracy into which such enormous amounts of money flowed to support this non-existent force was both corrupt and inefficient. The army it supported became increasingly huge, unwieldy, and unmarshala. With the death of Akbar, the decline of the Moghul army began.

The decline first became apparent in the inability of the Moghul officers to order their army in battle, indicating an ill-disciplined force led by an untrained officer corps. According to Mandelslo, a native of Germany who travelled to India and reported in 1638, the army fought in a disordered manner, knowing nothing of the distinction of vanguard, main body, and rear guard. Yet technologically they kept abreast of the West. They adopted an artillery arm divided into light and heavy artillery. They also experimented with camel-mounted swivel guns. However, all the heavy artillery was under the direction of Christian gunners, indicating a lack of real dedication by the Moghul commanders to the new arm.<sup>55</sup> Further, they were unable to cast cannons that matched those of the West and their cannons often exploded, making them unreliable in battle.<sup>56</sup>

<sup>49</sup> Vincent A. Smith, *Akbar, The Great Mogul*, (Oxford: The Clarendon Press, 1917), p. 361.

<sup>50</sup> Smith, p. 360.

<sup>51</sup> Majumdar, Raychaudhuri, and Datta, p. 563.

<sup>52</sup> R.P. Tripathi, *Rise and Fall of the Moghal Empire* (3rd ed.), (Allahabad: Central Book Depot, 1963), p. 230.

<sup>53</sup> Tripathi, p. 231.

<sup>54</sup> Frederick Augustus, *The Emperor Akbar* (trans. and rev. by Annette S. Beveridge), (Calcutta: Thacker, Spink, and Company, 1890), p. 286.

<sup>55</sup> Stanley Lane-Poole, *Medieval India under Mohammedan Rule (A.D. 712-1964)*, (Delhi: The University Book and Stationery Company, 1963), p. 236.

<sup>56</sup> Surendra Nath Sen (ed.), *Indian Travels of Thevenot and Careri*, (New Delhi: National Archives of Delhi, 1949), p. 243.

<sup>57</sup> Sen, p. 157.

Under Shah Jehan the process of increasing bureaucratization and expense and decreasing military efficiency became more apparent. By far the largest portion of the revenues of the state was absorbed by the army and its bureaucracy, both of which he maintained on lavish scale. While the army never came up to its nominal strength, it was always larger than necessary and poorly trained.<sup>58</sup> Shah Jehan could bring no fewer than 450,000 men to the field, of which 200,000 were cavalry, 8000 officers, 7000 household troops, and 40,000 musketeers and artillerymen, plus an additional 185,000 cavalrymen commanded by princes and noblemen.<sup>59</sup> Yet only the nobility officered this huge force and, serving as members of family units, had clan and tribal loyalties greater than their loyalty to the Emperor. This was partly offset by the fact that the troops did not necessarily belong to the same jati as that of the noble since no system of proportional enlistment based on jati existed.<sup>60</sup>

By Aurangzeb's time the Moghul army had declined even further. The cavalry went into the field loaded down with heavy armour, saddles, and trappings. They were no longer the light horse archers of the steppes of Asia but were similar to the European knight, more concerned with survival and loot than with military efficiency.<sup>61</sup> The army was purely a mercenary force. There was no conscription and no fines for those who did not serve. Every soldier served voluntarily, and every soldier of equal rank, Muslim or Hindu, drew equal pay.<sup>62</sup> The army was no longer a force loyal to the Empire, but rather loyal to their own individual leader so long as he could supply them with pay and booty.

### THE MARATHAS

The decline of the Moghul army would not have been noticed, and indeed might not have been serious, had not the Moghul Empire been challenged by one of the great regional powers of India, the Marathas. The Marathas, though fierce fighters prior to this period, had not posed a threat to the Moghul Empire because they had served as mercenaries for the Moghul emperors.<sup>63</sup> All this changed, however, with the succession of Shivaji to the throne of the Marathas. Shivaji introduced a regular standing army whose men served a full twelve months instead of the old system in which they served six months followed by six months of working the land. Further, he introduced a military organization which bypassed the simplistic decimal

<sup>58</sup>S.M. Edwardes and H.L. O. Garrett, *Moghal Rule in India*, (Delhi : S. Chand and Company, 1962), p. 135.

<sup>59</sup>Edwardes, p. 123.

<sup>60</sup>Rafi Ahmad Alavi, "New Light on Mughal Cavalry" *"Medieval India, A. Miscellany* (2 vols.), (New York: Asia Publishing House, cl 1972), vol. 2, p. 70.

<sup>61</sup>Elphinstone, pp. 659-660.

<sup>62</sup>Jadunath Sarkar, "Aurangzib (1658-1681)" in *The Cambridge History of India, Vol. IV, The Mughul Period*, ed. by Wolseley Haig and Richard Burn, (Delhi: S. Chand and Company, 1963, hereafter cited as Cambridge Vol. IV), p. 241.

<sup>63</sup>Surendra Nath Sen, *The Military System of the Marathas*, (Calcutta: Orient Longman's Private, Ltd., 1958), pp. 4-6.

organization of the Moghuls. The basic unit was a squadron of twenty-five cavalrymen, five squadrons making a troop, and ten troops, a regiment. To each squadron he attached a farrier and a water boy. The infantry as well was organized into squads, with five squads to a platoon and three platoons to a company.<sup>64</sup> This breakdown of Shivaji's shows that he had an intuitive understanding of the span of control of an individual on the battlefield. These are approximately the same numbers used in modern military structures.

While Shivaji was consolidating his rule within the Maratha territory, he maintained more infantry than cavalry. However, when his followers began to expand and raid, they reduced their proportion of infantry from between forty to sixty per cent down to ten per cent, all the remainder being cavalry.<sup>65</sup> Shivaji also increased the number of regular cavalry directly hired by him, and concurrently reduced the proportion of cavalry responsible to native chieftains. He selected his officers, both infantry and cavalry, for their competence, and provided allowances for the disabled and pensions for widows.<sup>66</sup> By the time the Marathas came up against major Moghul forces, they had become what the Moghuls had originally been—light cavalry. They armed themselves with sword, matchlock, and bamboo lance. They were swift, strong, and mobile. They could not stand against a heavy charge, but could disperse and harass main bodies of enemy troops.<sup>67</sup> Moving with little baggage or equipment, they could cover upto fifty miles in a single march.<sup>68</sup> The Moghul armies were no match for them. Yet they never fully developed the tactical use of the cavalry. It was adequate for raiding, but never became the overwhelming instrument of war it had been under the Turks and other Central Asian peoples.

Both the army of the Moghul Empire and the army of the Marathas show great similarities in their decline. In both cases the decentralization of the army was one of the principal factors in the disintegration of the political body. Both states resorted to what was essentially a feudal system in the raising of troops, in which land was given in return for military service. Leaders of both states advocated policies of religious intolerance, the Marathas advocating militant Hinduism, and Aurangzeb and his successors advocating a militant Islam. Personal agrandizement of the officers led to divisions within the army and, particularly in the Moghul Empire, jealousy among the commanders reached such proportions that they would throw away a victory rather than aid a rival. Finally, both armies became deficient in military efficiency. The Moghuls were so undisciplined that the army eventually became nothing more than an untrained mob.<sup>69</sup> The Marathas were unable to keep pace with military methods brought in by the British and were defeated by them.<sup>70</sup>

<sup>64</sup>Edwardes, p. 99.

<sup>65</sup>Surendra Nath Sen, pp. 64-5.

<sup>66</sup>Surendra Nath Sen, pp. 9-18.

<sup>67</sup>Elphinstone, p. 660.

<sup>68</sup>Surendra Nath Sen, p. 15.

<sup>69</sup>Wolseley Haig, "Muhammad Shah," in Cambridge Vol. IV, pp. 374-6.

<sup>70</sup>Surendra Nath Sen, pp. xvii-xviii.

This three thousand year survey of Indian military development shows recurring patterns. The ideal army for conquering the great flat plain of Northern India was composed of light mobile horse archers and, until the advent of the British by sea, all conquering forces into India met this pattern. Yet once they conquered India and established an empire, the factors which had prevented an effective defence by the occupying power went to work on the structure of the invading force. The few geographic boundaries meant that there were constant internal power struggles between regional groups. A chronic shortage of horses, and poor communication, led eventually to the downfall of the central government because of its inability to control outlying provinces. Once the central state disintegrated, a new grouping of smaller states arose, unified only by the success of a new invader who established mastery over the entire North Indian plain. The military organizations of the early states were superior to those of the later states. Asoka's system was more centralized and controllable than was that of the Gupta's. Those of the Guptas and the Delhi Sultanate were better at their height than that of the Moghuls. Asoka could bypass the jati system and establish a strong central government. His successors were increasingly unable to do so.

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