

WAR-HORSE AND ELEPHANT  
IN THE  
DEHLI SULTANATE  
A STUDY OF MILITARY SUPPLIES

SIMON DIGBY

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**For**

**PETER HARDY**

**who has kept Indo-Islamic studies alive in England**

**and**

**IQTIDAR ALAM KHAN**

**in memory of many arguments**



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## PREFACE

This study was originally presented as a paper at the Conference on War, Technology and Society in the Middle East held at the School of Oriental and African Studies, University of London on the 22nd, 23rd and 24th of September, 1970. The author remains deeply grateful to Mr. V. Parry and Dr M.E. Yapp, whose kind invitation to the conference provided him with the necessary stimulus to write: and to the distinguished gathering of Middle Eastern and European medieval historians, from whose deliberations he profited. The decision to publish the study as an independent monograph has been undertaken with the thought in mind that if it were published, and published in full, in a volume otherwise devoted to Middle-Eastern topics, it would yet be unlikely to reach its main class of interested readers in educated and academic circles in Pakistan and India.

The opportunity of printing this work under the author's supervision occurred during a visit to Pakistan, in circumstances which made extensive revision of the text and re-checking of references impossible. Apology is made for the paste-ups on pages 36 and 68, which correct a vexing misattribution: for other misprints or errors the reader is referred to the list of *errata* overleaf. Diacritical signs (with the exception of *asper* for 'ayn and *lenis* for *hamza*) have been omitted: they greatly increase the difficulties of printing, and probably few readers will regret their absence.

The arguments and information here presented presume a certain familiarity with medieval Indo-muslim history and its sources: but it is possible that the work may also attract the attention of some general readers, or of specialists in military or veterinary history. For their convenience many dates and some elementary explanations of technical terms and of the roles of personages referred to have been added to an extensive index.

The author cannot here acknowledge the multitude of his academic debts, but would like to remember the names of Dr Richard Gombrich, who has constantly encouraged a tottering scholar; and of Miss D.M. Johnson, experience of whose meticulous editing for publication has emboldened him to see his own work through the press. He wishes to express his thanks to Syed Hussamuddin Rashdi, Professor Riyazul Islam and Mirza Mahmud Baig, Librarian of the Department of Archaeology, Government of Pakistan, for enabling him to check references; to Dr A.D.H. Bivar for discussing the interpretation of passages regarding bows, arrows and swords; to Mr Alexander Morton for his most timely gift of the Teheran edition of the *Adab al-harb*; to Mr A. Richard C. Harris for help in transcribing and checking the index; and to Major Arif and the staff of the Inter-Services Press, who printed this exacting text in the holy month of Ramazan.

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*November 1971*

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## ERRATA

- p. 33, line 5: *for* around 1300 A.D. *read* in 1259 A.D.
- p. 40, line 6: *for* 550 *read* 600.
- p. 42 and p. 65, headings: *for* SOURCE *read* SOURCES.
- p. 46, n. 124, line 20: *for* A part *read* Apart.
- p. 51, n. 143: *for* pp. 24 *read* p. 24.
- p. 56, n. 166: *for* pp. 30-1 *read* pp. 65-6.
- p. 65, line 17: *for* connoisseur *read* a connoisseur.
- p. 66, line 19: *for* elephanst *read* elephants.
- p. 72, line 22: *for* simliar *read* similar.
- p. 9, line 20: *for* 36 *read* 32.
- p. 32, line 25: *after* Feroz *add* Shah Tughluq.
- p. 81, line 17: *after* plundered, *add* massacred.
- p. 82, n. 297, line 3: *omit* the *before* Cambaia.



# THE PROBLEM OF THE MILITARY ASCENDANCY OF THE DEHLI SULTANATE

The period of the greater Dehli Sultanate, with which we are concerned, begins in 1192 A.D., when the upper Gangetic plain with the site of Dehli itself was permanently wrested from Hindu Rajput control by Muslim forces: and is terminated in 1398 A.D. with the plunder of Dehli by the central Asian Muslim ruler Amir Timur and the division of Muslim power in northern India between the competing states of Dehli, Jawnpur, Mandu and Gujarat. The circumstances of the early years after the initial conquest gave the Dehli Sultanate not only independence but almost total self-dependence. Qutb al-din Aybak, slave general of the Ghorids, had become the first independent Sultan of Dehli in 1206 A.D.: less than two decades later Ghor, Ghazna and the Khurasani homelands had been overwhelmed and their indigenous rulers swept away by the Mongols of Chingiz Khan. For the following one hundred and eighty years the Sultanate of Dehli survived as the dominant military power of northern India. It repelled numerous and formidable Mongol invaders from the north-west and expanded by plundering and sometimes annexing the Hindu kingdoms to the south and east. This expansion was limited by the tendency, growing stronger with time, for the remoter areas of Muslim conquest to break away and form independent Sultanates: thus Bengal, the Deccan and Ma'bar (the Coromandel Coast) were lost long before the debacle of 1398.

The theories hitherto put forward to explain the initial military success or the endurance of the Dehli Sultanate have seldom attained more than a modest degree of plausibility. A favourite view among nationalist Indian historians of the first half of the twentieth century was that the success of Muslim arms was the result of the lack of a sense of national unity amid the population of India (such as they themselves possessed) which would

have led them to combine effectively to drive the invader out.<sup>1</sup> Some but not all of the advocates of this view attributed this lack of nationalist feeling to the pernicious effects of the caste system. Modernist Indian Muslim historians put forward an attractive variant of this explanation. "This was not a conquest so-called. This was a turnover of public opinion, a sudden one no doubt, but one which was long overdue."<sup>2</sup> In other words the conquest was the result of the welcome given by the lower castes of Indian society to the Muslim invaders, their deliverers from upper-caste Hindu tyranny. Such views make more than the briefest notice of military organization superfluous.<sup>3</sup>

Another view of the practical military superiority of the Muslim invaders has been current since the mid-nineteenth century.<sup>4</sup> The Turk was *asvapati*, the Lord of Horses. The idea still lingers that mounted warfare was part of the ethos and experience of the original Muslim invaders which their opponents lacked. On this we may observe that there are indeed some grounds for supposing that the invaders had easier access to good war-horses than their opponents: but the view that mounted combat was unfamiliar to their Hindu opponents cannot be maintained.<sup>5</sup>

<sup>1</sup> R. C. Majumdar and A. D. Pusalker, ed., *The history and culture of the Indian people*, Vol. V, *The struggle for empire*, Bombay 1957, pp. xiii-xiv: K. S. Lal, "Factors underlying the loss of Indian independence in the twelfth-thirteenth centuries" in his *Studies in medieval Indian history*, Dehli 1966, pp. 113-23: A. L. Srivastava, *The Sultanate of Dehli*, 2nd ed., Agra 1953, which presents 'the causes of our defeat' (pp. 83-6). "Our political disunity must be held primarily responsible": but also "our military leaders did not keep themselves in touch with the development of tactics."

<sup>2</sup> M. Habib in ED ('revised edition' by M. Habib, S. A. Rashid and K.A. Nizami, Aligarh 1952), Vol. II, 52: the theme developed in K. A. Nizami, *Some aspects of religion and politics in India during the thirteenth century*, Bombay 1961, pp. 79-81, 85-6 & c.

<sup>3</sup> See S. Digby reviewing Nizami, op. cit., in *Islamic Culture*, XXXVII, October 1963, 296.

<sup>4</sup> E. Thomas, *The chronicles of the Pathan kings of Dehli*, London 1871, p. 71. Cf. Nizami, op. cit., p. 82, who assumes that the tactics of the post-Ghaznavid Muslim army of the north Indian conquest must have been identical with those of the Turkish tribal host in Anatolia, as described in R. C. Smail, *Crusading warfare*, Cambridge 1956.

<sup>5</sup> If the horseman *tankas* of Aybak and Iltutmish reflect 'Turkish ideals

The time is now ripe for a technological interpretation of medieval Indian history, and the challenge has been laid down by Professor Irfan Habib in a notable paper of December 1969.<sup>6</sup> He suggests that the tenor of life in India was greatly changed during the period of the Dehli Sultanate, by the introduction there of several important mechanical devices. The evidence is scanty and ill-preserved, but Irfan Habib has been applying to it lines of research suggested by Joseph Needham's massive history of science in China and Lynn White's briefer essays on medieval European technology. Habib has made out a fairly strong case for the introduction into India during this period of the spinning wheel and of the bowstring device for carding cotton, both of which had previously been considered Indian inventions of almost immemorial antiquity. Clearly their introduction would have resulted in a great expansion of the basic industry of the sub-continent, the weaving of cotton fabrics. Inevitably the stirrup is brought up later in Habib's inquiry and, perhaps more interestingly, the horseshoe. There is clear contemporary evidence that the Muslim conquerors of the Dehli Sultanate possessed the horseshoe at the time of the conquest: while the Persians and central Asian Turks, whose cultural heirs they were, had already used stirrups for some centuries. Habib admits that the true stirrup is shown on late 13th century Indian sculptures, but suggests that it may only have been introduced into India in the late 12th century by the Muslim conquerors.<sup>7</sup> Such a late adoption of the stirrup would be surprising from several points

in warfare' (E. Thomas, loc. cit.), the standard bull and horseman coinage of preceding north Indian Hindu rulers must reflect similar equestrian ideals. North Indian farriery also enjoyed a considerable reputation among Muslims and works known by the generic name of the sage Salihotra (often ascribed to the eleventh century A.D. e.g., in Majumdar and Pusalker, op. cit., V, 328) were adapted into Persian at several Indian Muslim courts in the fifteenth, sixteenth and seventeenth centuries. For the complex textual history of these adaptations, see M. Z. Huda, "Faras-namah-i-Hashimi and Shalihotra" in *Journal of the Asiatic Society of Pakistan*, XIV, 2, 1969, 144-65.

<sup>6</sup>I. Habib, *Technological changes and society: 13th and 14th centuries*, Presidential address, Medieval India section, 31st Indian History Congress, December 1969: separatum, Aligarh 1970.

<sup>7</sup>Op. cit., p. 23.

of view. The earliest attestation of the use of the surcingle or toe-stirrup had been in northern India, which also bordered upon lands where the true stirrup came early into use, from which a flourishing trade in horses imported into India had existed for centuries. Lynn White in fact, amid his thickly packed footnotes, refers to depictions of the stirrup at Pagan in Burma in sculptures assigned to the 10th century and at Konarak in Orissa in sculptures which may be firmly dated to the 12th century.<sup>8</sup> This however does not quite decide the matter, as the stirrup could have been diffused from the interior of China (where Marco Polo comments on the Hunnan stirrups)<sup>9</sup> or from Tibet into Burma and eastern India. However the stirrup is also depicted at Khajuraho in central India, on a frieze of the Laksmana temple which can firmly be assigned to c. 950 A.D.<sup>10</sup> and on friezes of the Chenna-keshava temple at Belur in the southern Deccan, erected by a Hoysala ruler in the first half of the 12th century.<sup>11</sup> It is thus probable that the stirrup was in use throughout India, including the extreme south, before the Muslim conquests. The evidence regarding the shoeing of war-

<sup>8</sup> Lynn White Jr., *Medieval technology and social change*, O.U.P. 1963, p. 140, n. 7. This note refers to the development of the toe-stirrup, surcingle and hook-stirrup in India at a very ancient date, see op. cit., pp. 14-5. If Lynn White is correct in assuming that the 'foot-stirrup' is a Chinese invention and was known in Hunan 'in the first decades of the 5th century at latest', it may have been diffused through the Indian sub-continent from the north-east as well as the north-west.

<sup>9</sup> The stirrups are implied but not mentioned in the French Ms used by Yule and Cordier, II, 78, which remarks, "They ride long like Frenchmen." They are however mentioned in other Polo Ms traditions (Z) and in Ramusio: Latham, p. 151: Marsden, p. 242.

<sup>10</sup> E. Zannas, *Khajuraho*, 's-Gravenhage 1960, Pl. CXVIII: Vidya Prakash, *Khajuraho*, Bombay n.d.c. 1968, Pls. 46, 47 and 49. No less than three varieties of stirrup appear to be depicted on the frieze of the Laksmana temple: (i) with a broad, flexible leather or cloth attachment like a surcingle, but with a hard footplate beneath the rider's shoe: (ii) with a broad, inflexible arch of metal or wood rising from the footplate: and (iii) with a narrow arch. For the date of the Laksmana temple, see Zannas, op. cit., p. 117.

<sup>11</sup> The stirrups depicted on the Chenna-Keshava temple at Belur have a solid thick arch, resembling the second variety at Khajuraho: see L. Frederic, *Indian temples and sculpture*, London 1959, Pl. 325. For the date of the temple, see J. D. M. Derrett, *The Hoysalas*, O.U.P. 1957, p. 43.

horses and the military advantage or disadvantage of this in Indian conditions of the period yet remains to be collected.

We have one important contemporary testimony concerning another possible area of technological superiority, that in the weapons of battle. The manual of war called *Adab al-harb wa'l-shaja'a*<sup>12</sup> by Fakhr-i Mudabbir is in many ways an unsatisfactory guide to the actual conduct of war at the time of the establishment of the Dehli Sultanate; it omits much of what we should like to know and is tainted with an antiquarianism which vitiates its evidence. Nevertheless, if there were some overwhelming superiority of Muslim over north Indian Hindu weapons of war, we should expect indications of this to appear in the section of the *Adab al-harb* upon weapons, where the regional varieties with which the author was familiar, including those from north India, are described.<sup>13</sup>

The most important element of the armies of the Dehli Sultanate (apart possibly from war-elephants, which are considered later) was heavy cavalry, armed with the bow for engaging in combat at a distance and with one or more weapons for hand to hand fighting. Of these other weapons training or aptitude might dictate the use of the lance, the short spear, the mace or the lasso.<sup>14</sup> Fakhr-i Mudabbir gives anecdotes of Sultans and of individual champions who preferred to fight with one or other of these, but there does not seem to be substantial evidence either in his treatise or in the other literature of the Dehli Sultanate for contingents especially armed with these individual weapons. The most commonly employed weapon of close combat was the sword.

Fakhr-i-Mudabbir gives clear primacy to the bow, the most effective of the weapons of the horseman and the only one which could be employed from a distance; and next he emphasizes the superiority of the sword among weapons of close combat. He relates legends which are the expression of the preeminence of the two weapons. The bow was given by Jibra'il to Adam in

<sup>12</sup> AH: edition, see bibliography.

<sup>13</sup> AH, pp. 240-73: *Bab 11, andar fazilat u khassiyat-i-har silahe.*

<sup>14</sup> AH, p. 256: on the behaviour of the ideal *mubariz* or champion.

paradise.<sup>15</sup> It will never be superseded in this world or the next, and in paradise the blessed will practise archery.<sup>16</sup> The sword was invented by Jamshed, first of monarchs. Its terror and its majesty are greater than those of other weapons and therefore, when a kingdom has been taken by force of arms, it is said to have been won by the sword.<sup>17</sup>

Of the regional varieties of the bow in use Fakhr-i Mudabbir first mentions the Chachi (named after Chach or Shash—the modern Tashkend) and the Khwarazmi, in use among the people of Transoxiana. The arrows which these bows fired had thick shafts and small heads: they would not wound effectively or travel straight. The author then commends to archers the bows of Ghazna and Lahore (Lohavur) and of two proximate geographical areas.<sup>18</sup> He mentions next the 'mountain bow' found in certain foothills: the transcription of the geographical names situated in these foothills does not yield readily recognizable names,<sup>19</sup> but it is possible that Fakhr-i Mudabbir is referring to the Salt Range and the foothills of the Panjab Himalaya, beyond which lay the unsubdued northern Hindu kingdom of Kashmir. These mountain bows were made wholly of horn, with no wood in their construction, and they were true in their aim. The last

<sup>15</sup> AH, pp. 241-2.

<sup>16</sup> AH, p. 256.

<sup>17</sup> AH, p. 258.

<sup>18</sup> AH, p. 242: the two related varieties were called *parvanchi* and KRWRV. The former is probably named after a district in Afghanistan: the latter name I have been unable to identify. Parvan is marked upon some maps as a settlement just north of the junction of the Panjshir (Panjhir) and Ghorband rivers, and in this position would lie directly on the route between Kabul and the Bajgah Pass of the Hindukush, as the emperor Babur described it in the early 16th century, see Babur, *Memoirs*, tr. Mrs. A. S. Beveridge, London 1921, I, 205. The name is also applied to the area of the Ghorband valley, stretching westwards from the junction with the Panjshir.

<sup>19</sup> According to the text in its present state SHYRHY, ANBARAN, BHRWJ and PNJHGYR (variant PNJHGRH): Khvansari would identify the last as Panjhir (see note 18) and the third as Bharoch (Broach) in Gujarat: but according to the author all these places are in the foothills (*kohpaya*), Indian proper names and terms appear to be much corrupted in all extant Mss of AH.

variety of bow which is mentioned is the Indian bow (*kaman-i hindavi*), which may be presumed to be that with which the Rajput armies which faced the Muslim invaders were mainly equipped. It was made from cane (*nay neza*—male bamboo?) and its bowstring was also made from the bark of the cane. Its arrows did not travel very far, but at a shorter distance it inflicted a very bad wound (or, possibly, had a great velocity). The head of the arrows used with it was usually barbed and if it lodged inside the flesh, the shaft was liable to break off, leaving the head embedded in the flesh, which then became difficult to extract. Most of such arrowheads were poisoned. The author then refers to the bone arrowheads used with the 'mountain bow' in the foothills, which were excessively poisonous.<sup>20</sup> The conclusion to be drawn from this information is that the bows generally in use in the late Ghaznavid and Ghorid army, in addition to being considered superior to those in use in central Asia, had a longer range than the bows mainly used by the Rajput opponents in Northern India, but were not a decisively superior weapon to these.

Fakhr-i Mudabbir's information about the accessories of archery also fails to establish any decisive inferiority of Indian craftsmanship or materials. For arrowshafts, in Transoxiana, Khurasan and 'Iraq poplar was used: although a famous material it did not travel far on account of its weight. Arrows with shafts of willow travelled straight. However no arrow travels as far as, or is as light and as effective as that with a shaft of reed: but this must be carefully prepared.<sup>21</sup> The advantage in fact would seem to lie with armies in down-country India, where the poplar and willow are not native woods, but the reed is commonly available.

Three types of archer's thumb-ring are mentioned by Fakhr-i Mudabbir, all with clearly Muslim names.<sup>22</sup> It is therefore possible that the thumb-ring may not at this time have been in use among the Rajputs.

<sup>20</sup> AH, p. 243.

<sup>21</sup> AH, p. 244.

<sup>22</sup> AH, p. 245.

The bowstring of cane fibre or bark employed in 'the Indian bow' has been mentioned above. The string of the central Asian bows (Chachi and Khwarazmi) is said to have been of horse hide.<sup>23</sup> A curious piece of archers' lore makes it clear that bowstrings made of the hide of various kinds of animals were employed in the north Indian environment, though whether solely among the Muslim population of Lahore and Multan or by the Rajputs also we do not know. If an arrow is launched from a bowstring of rhinoceros hide, Fakhr-i Mudabbir relates, it will snap asunder the bowstrings of all other bows to which the sound reaches, whether these are made from the hide of the wild ox (? *gawazn*), the nilgai (*nilagav*) or the horse.<sup>24</sup> The hide of the rhinoceros or of the nilgai is unlikely, even at this period, to have been normally available outside India. The *gawazn* was also found in Northern India. The fourteenth century Dehli Sultan Muhammad bin Feroz Tughluq hunted it together with the rhinoceros in the eastern Panjab hills.<sup>24a</sup>

If Fakhr-i Mudabbir's evidence regarding the bow is indecisive, he is quite clear that the Indians had superior techniques or materials for the manufacture of the sword. Swords are of various kinds, he writes, Chini, Rusi, Khazari, Rumi, Firangi, Yamani, Bilamani (*read* Saylamani?),<sup>25</sup> Shahi, 'Ala'i, Hindi and Kashmiri. If actual examples of all these varieties of sword were known to him, it implies a trade in arms extending through the medieval Islamic world from Europe to China: three centuries later a great variety of swords including Firangi blades were on sale in the bazars of Dehli, at a time when patterns of trade were not yet altered by the discovery of the Cape route.<sup>26</sup> All the varieties which he has enumerated—Fakhr-i Mudabbir states—are famous swords, but among them all the Hindi sword is best and

<sup>23</sup> AH, p. 242.

<sup>24</sup> AH, p. 245.

<sup>24a</sup> TMB, p. 138: read *karg* (supported by the variant *kargadan*) for the editor's *gurg*, 'wolf'.

<sup>25</sup> For a reference to Saylamani (Sinhalese) elephants in Northern India in Ghaznavid times, see below, Chapter III, section B.

<sup>26</sup> Mushtaqi, *Vaqi'at*, Ms: B. M. Oriental 1929, f. 69: S. A. A. Rizvi, *Uttar Taimur kalin Bharat*, Aligarh 1958, I, 177.



most lustrous (*gawhardartar*). (His preference for Indian swords is not surprising, because many references show the esteem in which they were held throughout the medieval Islamic world, and their export to such distant areas as Umayyad Spain<sup>27</sup> and Seljuq Anatolia<sup>28</sup> is attested.) Fakhr-i Mudabbir then mentions several varieties of the Hindi sword, whose names like other Indian words which appear in his treatise are not readily identified. The most costly and choice of all was called *mawj-i darya* ('waves of the sea', probably on account of the watering of the blade). In the army, treasury or armoury of a king there was not likely to be more than one of these. Of the other varieties which he has named none are made anywhere but in India and they have the hardest blades of all swords. But if the blades of other swords are made thicker they also can wound well. The swords known as Bakhari (?), in use in Khurasan and 'Iraq, are soft and not of well tempered steel: but in inflicting wounds they break less (than the Indian swords?) Another type of sword exists in Hindostan (of which the name is once more unrecognizable). This is made from soft iron to which silver and copper have been added. On account of the silver it is more pliable (?), and if a man is wounded with such a sword the wound does not heal easily.

Swords of the Indian varieties enumerated are suitable for the waists of kings and the sheaths beneath the saddles of their mounts. The Afghans have swords called Surman and Turman. In Hindostan there is a city on the banks of the Sind (the river Indus or possibly the Indian Ocean), called KWRJ close to KDWR,<sup>29</sup> where the ironsmiths are masters of their craft and produce by their process of forging a blade watered like a date-palm leaf.

<sup>27</sup> Information contributed by Dr. J. Zozaya Stabel-Hansen, Museo Provincial de Soria, Spain: S. M. Imamuddin, "Commercial relation of Spain with Iraq, Persia, Khurasan, China and India in the 10th century A.C." in *Islamic Culture*, XXXV, 1961, 182 and note 56. Ibn Khurdadbih (*Kitab al-masalik*, Leyden 1889, p. 153) mentions the *export* of Spanish swords to the Indies.

<sup>28</sup> Rumi, *Fihri ma fihri*, tr. A. J. Arberry ("*Discourses of Rumi*"), London 1961, p. 122. On the reputation of Indian steel in the Islamic world and the rumours of it in Europe see Polo, ed. Yule and Cordier, I, 93-4, note on *ondanique*.

<sup>29</sup> Unidentified: cf. above, note 19.

These blades are cherished by all the Ranas, Thakkurs and men of the tribes (*mardum-i qaba'il*),<sup>30</sup> and they are very sharp for wounding.<sup>31</sup>

By this last piece of information Fakhr-i Mudabbir makes clear that the best of Indian swords were also in the hands of the North Indian Rajput opponents of the Muslim advance. His evidence appears decisive in concluding that the Muslim conquest and ascendancy was not based on a technological superiority in weapons of close combat.

The sequence of events in the establishment of the Dehli Sultanate also suggests that the invading Muslim forces had no revolutionary technological superiority over those whom they overcame. The battle of 'Tara'in' of 1192 A.D. was won by the Muslims upon the same battlefield where only two years earlier they had sustained a severe defeat. It seems unlikely that the fortunes of war should thus be in the balance between two armies one of which possessed outstanding advantages.

In default of an obvious technological explanation for the Muslim conquest and ascendancy we may seek an explanation in military supplies. The endurance of the Dehli Sultanate, based on the superiority of its armies to those of any Hindu power as well as their ability to withstand Mongol onslaughts from central Asia, lay in their access to and efficient control of such supplies. The military supplies of which we have evidence are of war animals, the elephant and the horse. Of these, the utility or rather the indispensability of the horse in medieval warfare is universally accepted: but possibly the tactical implications of this fact in a comparatively highly developed and prosperous area of the medieval world where the horse does not breed well have not yet been considered in detail. On the other hand modern military historians may doubt the value and utility of the war-elephant, employed in the medieval period almost exclusively in India. No such doubt is visible in the literature of the Dehli Sultanate, and the efforts of the Sultans to procure war-horses and deprive their opponents of them were matched by equally strenuous efforts with regard to elephants.

<sup>30</sup> The reference to *Ranas* and *Thakkurs* indicates that Fakhr-i Mudabbir is here writing about 'Rajput' clans.

<sup>31</sup> AH, pp. 258-9.

The explanation of the military ascendancy of the Dehli Sultanate in terms of the control of the supply of elephants and war-horses is not a modern one, but is adumbrated by the principal fourteenth century chronicler of the Dehli Sultanate, Ziya al-din Barani in remarks upon government, undoubtedly representing his own views, which he puts into the mouth of Sultan Ghiyath al-din Balban.<sup>32</sup>

Sultan Balban, according to Barani, had been answering critics of his policy, explaining that the constant threat of the Mongols prevented him from leaving the capital. If he could relax his guard at Dehli, he too could, like his predecessors, despatch six or seven thousand horse and lay waste the territories of Hindu rulers who had a hundred thousand foot-soldiers.<sup>33</sup> The implication here is not that the Rajput was a worse horseman than the Turk: but rather that, after the initial establishment of Muslim power, he had access to fewer war-horses, a fact which is confirmed in the statistics of the chroniclers, examined later in this paper.

Shortly afterwards the historian attributes to Sultan Balban more detailed observations on the strategic importance of the Dehli Sultanate controlling supplies of war-horses and of elephants. The Sultan said that he had heard from trustworthy sources that the control of Hindostan (*or, according to a variant recension, the readiness of the army of the Hindis*) was based upon the elephant and the horse. Every elephant in the kingdom of Hindostan was worth 500 horses. He had given the realm of Sind to his elder son, whence many and choice sea-borne<sup>34</sup> and Tatar horses came to the capital city of Dehli. In the territory of the

<sup>32</sup> See P. Hardy, "The *Oratio recta* of Barani's *Ta'rikh-i-Firuz Shahi*" in *Bulletin of the School of Oriental and African Studies*, XX, 1957, 315-21.

<sup>33</sup> BTFS, p. 52: the text uses the Hindi terms *dhanuk*, 'foot(?) archer' and *pa'ik*, 'foot-soldier'. A few pages later Barani describes the same Sultan raiding the unsubdued territory of Kather (modern Rohilkhand) with 5,000 (mounted?) archers (*tir-zan, tir-andaz*): BTFS, pp. 58-9: BTFSA, f. 18B.

<sup>34</sup> Standard and variant recensions alike read BHRCHY, Bharochi, 'of Bharoch' in Gujarat: for the period about which the historian is writing this does not make good sense. It is probably a corruption, already present in the autograph transcripts of the historian, of BHRY, *Bahri*, sea-borne. For the antithesis of *Bahri* and *Tatari* horses, see p. 29 below.

Sivalik and around Sannam, Samana, Tabarhind, Thanesar and the camps of the Khokhars, and in the territories of the Jatus and Mundahirs a great number of fine Hindi horses were raised, by which many and cheap horses arrived to mount his army: and they sufficed for this, so that there was no need for horses coming from the lands of the Moghuls (Mongols) or from the army of the Moghuls to reach his army. He had entrusted the province of Lakhnnavati (Bengal) to his younger son, who had held control of it for years. From there elephants came to his elephant stable (*pil-khana*). His capital was thus furnished with many elephants and horses without number.<sup>35</sup>

The picturesque words of the chronicler embody a well developed sense of strategic realities. The survival of the Dehli Sultanate in the face of Mongol attacks depended upon an adequate supply of battle horses to mount the army when the export of horses from Mongol controlled central Asia was cut off: and possibly to some degree upon war elephants, used in the line of battle and inspiring great awe, which the Mongols did not possess. The success of the Sultan or his generals in warfare with Hindu principalities also largely depended on their ability to deprive them of the horses and elephants with which they could confront the Muslims in open battle or dominate the countryside and collect the revenue in their absence. Bearing in mind this exposition of the military needs of the Dehli Sultanate, we turn to the available information on the Indian horse trade of the thirteenth and fourteenth centuries.

<sup>35</sup> BTFS, p. 53; BTFSa, f. 16A. *Pil-khana* or *fil-khana* literally 'elephant house', is a term which covers both the buildings and the contents of the royal elephant stables. The forms are interchangeable: but for the sake of consistency *pil-khana* has been used throughout this study, except where the word occurs in direct quotation.

## THE SUPPLY OF WAR-HORSES

To understand the military necessities of the Dehli Sultanate we must have some idea of the size of its armies: but before we consider the available statistics, we would be prudent to recall the words of the *Adab al-harb*:—"Although the king or the commander (*sipahsalar*) of an army may know the numbers of horse and foot, he must say two or three times this number; for it may happen that spies and informers make known to the enemy the size of the army."<sup>36</sup> Medieval statistics are in general highly unreliable, though perhaps a distinction can sometimes be drawn between wild and inflated conjectures and figures which derive from contemporary muster-rolls.

In the fourteenth century the city of Dehli was second in size in the Islamic world only to Cairo, with a total urban population which we would tend to estimate at around 400,000. It was in the first instance a military and administrative capital, not a natural centre of trade. The army of the Dehli Sultanate had a decimal chain of command which was intended to put a million mounted men into the field.<sup>37</sup> One may doubt whether even half this number was ever attained in practice: and that only in brief periods of emergency. Barani at one moment states that when Qutlugh Khwaja, Chaghata'i prince of Transoxiana, invaded in 1299 A.D. and reached the walls of Dehli there were

<sup>36</sup> AH, p. 278.

<sup>37</sup> BTFS, p. 145: *Masalik*, p. 24 mentions, while describing the decimal chain of command in the army of Dehli, that the Sultan had 900,000 horse (cf. al-Qalqashandi, *Subh al-a'sha*, tr. O. Spies, Stuttgart 1936, p. 66). On the fairly numerous references to the armies of the Rajas of Vijayanagar and the Bahmani Sultans of the Deccan consisting of a million men or more, see S. H. Hodivala, *Studies in Indo-Muslim History*, Bombay 1939-50, I, 416-7.

six or seven hundred thousand horsemen on either side.<sup>38</sup> 'Isami, another mid-fourteenth century writer, estimated that when (about twenty years before the time of writing) Muhammad bin Tughluq confronted another member of the same Mongol house, Tarmashirin, the Dehli Sultan had raised an army of five hundred thousand horse.<sup>39</sup> Barani, discussing Muhammad bin Tughluq's scheme to conquer Khurasan, states that he had heard from the Deputy Muster-Master (*na'ib-i 'arza-i mamalik*) that in one year there were enrolled in the army 470,000 horsemen:<sup>40</sup> regrettably, in view of the doubts which it casts upon his accuracy, the historian afterwards amended this figure to 370,000 and omitted the mention of his informant.<sup>41</sup> The number was at all events an extraordinary one,<sup>41a</sup> for in the following year there was no money left in the treasury to pay those who had been enrolled. In the period of the decline of the Dehli Sultanate in the second half of the fourteenth century 'Afif several times mentions that the army of Feroz Shah Tughluq had 480 elephants and eighty or sometimes ninety thousand horse, exclusive of royal slaves.<sup>42</sup> (The royal slaves who were mounted must have included some

<sup>38</sup> BTFS, f. 96A: amended to 'such a mighty army as had never before been seen' in BTFS, p. 260, line 1. Qutlugh Khwaja does not appear in S. Lane-Poole's family-tree of the house of Chaghata'i, the descendants of Chingiz Khan who ruled in Transoxiana (see *Mohammadan Dynasties*, section 85). From Barani's information it is clear that he was one of the numerous sons of the reigning Khan, Duwa (r.c. 672/1274-706/1306), although the name of the latter is corrupted in most Mss (see BTFS p. 254).

<sup>39</sup> FS, p. 463.

<sup>40</sup> BTFS, f. 167A.

<sup>41</sup> BTFS, p. 477.

<sup>41a</sup> But see Wassaf, *Tajziyat al-omsar*, Bombay 1269/1853. This history was completed in 712/1312 at the court of the Ilkhans; and the author therefore cannot be considered a propagandist of the Dehli Sultans. In one place he states that the army of 'Ala al-din Khilji consists of more than 300,000 disciplined soldiers (*lashkar-i mujahid-i murabit afzun az sisad hazar*), p. 309, ED II, 36: elsewhere he says that at the time of writing 'Ala al-din possessed 475,000 of such soldiers, p. 528, ED II, 50. Wassaf gives the number of Mongol heads collected at 'Ali Beg's defeat and brought to Dehli as 60,000 p. 527, ED II, 48: however Amir Khusrav, recording the same campaign at Dehli, estimates 'Ali Beg's total force at 50,000 KF, p. 38, and associates the building of a tower of Mongol heads with the subsequent invasion of Iqbal and Taibu, KF, p. 45.

<sup>42</sup> ATFS, pp. 197, 298: cf. p. 109.

of the retinue of forty thousand in attendance upon him in the capital and a portion more of his total holding, estimated at a hundred and eighty thousand).<sup>43</sup> 'Afif states that his informant was his father, who had worked in the *divan-i wizarat* (and therefore presumably had seen the original muster-rolls).<sup>44</sup>

War-horses, unlike war-elephants, were not an exclusively royal possession, though the royal *pa'egah* (stables) must always have included many of the finest animals. The trooper, if he was paid by allotment and not merely a temporary recruit, had to find and maintain his own animal.<sup>45</sup> As in other Indian kingdoms the state tried to maintain a close control over horse traders. In Dehli we know that in some cases the state acted as financier, advancing money to merchants to purchase horses as well as slaves from abroad. The merchants were under contract not to carry the slaves away to Khurasan or to dispose of the horses in Hindu territory.<sup>46</sup> Probably such contracts were enforced by the taking of hostages or sureties, as in the case of the grain dealers who provisioned the capital city.<sup>47</sup> Ships owned by the Dehli Sultans which sailed between the ports of Gujarat and the Persian Gulf must have been engaged among other things in the import of horses.<sup>48</sup> Al-'Umari, the Arab geographer, on the strength of travellers' reports which are evidently of the reign of Sultan Muhammad bin Tughluq, states that the Sultan distributed to his retinue every year ten thousand Arab horses and countless others.<sup>49</sup> Only once is the number of animals maintained in the royal *pa'egah* mentioned: 'Ala al-din Khilji is said to have had seventy thousand horses there.<sup>50</sup> In the later fourteenth century the *pa'egah* was divided between five establishments. One of these was situated, like the *pil-khana* or elephant

<sup>43</sup> ATFS, p. 270.

<sup>44</sup> ATFS, p. 497.

<sup>45</sup> BTFS, pp. 303, 313: ATFS, pp. 220-1, 301.

<sup>46</sup> IM, p. 213.

<sup>47</sup> BTFS, p. 306: it is unlikely that the taking of sureties was confined to 'Ala al-din's reign.

<sup>48</sup> IB, III, 247: tr. Husain, p. 68: Gibb, *Travels*, p. 201.

<sup>49</sup> *Masalik*, p. 28.

<sup>50</sup> BTFS, p. 262: BTFSa, f. 97A says '70 or 80 thousand'.

stables, within the palace precinct at the capital and the other four were all at short distances from Dehli.<sup>51</sup>

From the figures quoted above it should be evident that vast numbers of horses were necessary to maintain the military machine of the Dehli Sultanate: a great part of these and probably all the best animals were imported.

The history of the horse in India, like that of the elephant, is a large and important topic demanding elucidation. The Indus Valley civilisation may have known the horse, but, if so, it was a rarity among them.<sup>52</sup> The destroyers of this civilisation certainly possessed the horse,<sup>53</sup> and may be identified with the Vedic Aryans with their horse-drawn chariots and their horse-sacrifices.<sup>54</sup> From this ancient time the horse has been bred in north-western and western India (i.e., the sub-continent including West Pakistan) and has spread to the south and east as a domestic and military animal. However the horse breeds with difficulty or feebly in the extreme south of the Indian peninsula and the military potentialities of the country-bred animal decline sharply towards the south and the East of the sub-continent: although to the extreme north-east, in upper Burma and the territories beyond it, good horses can once again be reared. Apart from this the best Indian breeding grounds for horses are on the broad north-western fringe of the sub-continent.

The country-bred even from this area has consistently been regarded as inferior to the horse imported by sea from the Persian Gulf or the Hadhramawt or, in the nineteenth century, from Australia: and also to the horse brought down from the highlands of Afghanistan or from central Asia beyond them. Nevertheless the Indian country-bred horses from the north-west and from the western littoral were serviceable war-horses whose stock was evidently improved through the centuries by cross-breeding with imported bloodstock: (some evidence suggests

<sup>51</sup> ATFS, pp. 318, 340.

<sup>52</sup> A. L. Basham, *The wonder that was India*, London 1954, p. 18.

<sup>53</sup> Op. cit., p. 27.

<sup>54</sup> Op. cit., pp. 35-6, 42.



that the strain degenerated after the introduction of British rule in the Panjab around 1850 A.D.).<sup>55</sup> The areas of north-western India in which such horses were reared around 1300 A.D. are specified in Sultan Balban's speech, quoted above—'the territory of Sivalik<sup>56</sup> and around Sannam,<sup>57</sup> Samana,<sup>58</sup> Tabarhind,<sup>59</sup> Thanesar<sup>60</sup> and the camps of the Khokhars<sup>61</sup> and in the territories of the Jatus<sup>62</sup> and Mundahirs.'<sup>63</sup> The only feature of this list which calls for comment is that the Dehli Sultanate was partly dependent on the horsebreeding of the tribes of the eastern Panjab, who were in an imperfect state of subjection and mostly unconverted to Islam. But the same tribes

<sup>55</sup> George Watt, *Dictionary of the economic products of India*, London 1885-96, IV, 293.

<sup>56</sup> From the associated place-names it is evident that Barani (like Juzjani in TN) is using *vilayat-i Sivalik* for the old *Sapadalaksa* territory in the east Panjab plains, and not for the Panjab hills, a usage already found in the chroniclers of Amir Timur's Indian campaign of 1398-9 A.D. and in TMB (e.g. p. 138): see Hodivala, *op. cit.*, I, 233: Sir H. Yule and A. C. Burnell, *Hobson-Jobson*, 2nd ed., London 1903, s.v. *SIWALIK*.

<sup>57-60</sup> The four towns mentioned are fortified settlements lying almost in a straight line, all very close to the 30°N parallel of latitude, extending from Thanesar, rather more than 100 miles north of Dehli and some miles west of the Jamuna river, to Tabarhind (Bhatinda), slightly less than 100 miles further to the west, at the western extremity of former Patiala state.

<sup>61</sup> Khokhar: one of the most numerous, influential and widely distributed martial tribes of the northern Panjab: see H. A. Rose, *A glossary of the tribes and castes of the Panjab and North West Frontier Province*, Lahore 1911-19, pp. 539-49, where much of their political role in the Dehli Sultanate is summarised.

<sup>62</sup> Jatu: a Rajput tribe claiming to be identical with the Tonwars who ruled in the town of Dehli before the Muslim conquest of 1192 A.D., in modern times settled east-north-east of Dehli from Rohtak through 'the whole of Hissar' (Feroza): see Rose, *op. cit.*, II, 378-9.

<sup>63</sup> Mandahar or Mundahir: a Rajput tribe, described in modern times as 'holding a compact block in Kaithal'. Kaithal, which lies between Thanesar and Samana mentioned in this passage of BTFS, was thickly forested during the Sultanate period and at least down to the early sixteenth century, when Babur despatched a force to chastise the Mandahars in their settlement: Ahmad Yadgar, *Ta'rikh-i Shahi*, ed. M. Hidayat Hosain, Calcutta 1939, pp. 125-7: Rose, *op. cit.*, III, 65. From the place-names and the names of tribes it is evident that the whole of the east Panjab, immediately to the north-west of Dehli and westward from the Jamuna, was a major horsebreeding area.

contributed to the military levies of the Dehli Sultanate<sup>64</sup> and probably economic incentives as well as coercion or the threat of it made them breed horses for the Dehli army. There is no record of any ideological rapprochement between these tribes and the Rajput opponents of the Dehli Sultanate to the south. Serviceable war-horses had evidently been reared in this region before the Muslim conquest.<sup>65</sup>

Unlike these Hindi horses, the ordinary Indian countrybred nag was not considered suitable for service as a war-horse in the Dehli Sultanate. The distinction is made by Barani in his note of the prices in the bazar of the capital city in the reign of 'Ala al-din Khilji. The third and cheapest grade of war-horses sold for from 65 to 70 silver *tankas* and 'what will not pass in the *divan* (i.e., of the 'arza or muster), which they call *tattu*' (a North Indian word still in use for a pony), sold for from 10 to 25 silver *tankas*.<sup>66</sup> Barani also mentions the suppression at this time of frauds in the bazar whereby dealers selling horses to mounted archers (*tarkashbandan*) passed off Hindi or Baladasti (Afghan or central Asian) horses as Arabs or Gulf Persians.<sup>67</sup>

<sup>64</sup> For Khokars, see TUN, p. 131, line 2,522: for Mandahars and Jatus, BTFS, p. 483, line 19, where JYWAN should read JTWAN, and p. 484, lines 4-5.

<sup>65</sup> Trigartta (Kangra?) is mentioned as a source of a supply of horses; R. C. Majumdar *et alii*, *The struggle for empire*, p. 523.

<sup>66</sup> BTFS, p. 313: BTFSA, f. 119A.

<sup>67</sup> BTFSA, f. 119A.

## A. THE SEA-BORNE TRADE

Balban's speech, quoted above, refers to *Bahri* or sea-borne and *Tatari* horses. Amir Khusrav writes of the horses of the army of Ghazi Malik on his way to the throne:—

Sea-borne, mountain and Tatar steeds.

Pheasants of the garden, partridges of the mountainside.<sup>68</sup>  
The provenance of the mountain (*Kohi*) horses will be considered below, but there is little difficulty in identifying the sources of supply of the *Bahri* and *Tatari* horses.

The sea-borne horse-trade to the Indian sub-continent is of considerable antiquity. The sixth century Christian monk, Cosmas Indicopleustes mentions the shipping of horses from Persia to Ceylon, where they were bought by the ruler for military purposes.<sup>69</sup> The purchasers in this sea-borne trade were already the rulers of states. A modern historian, writing of the twelfth century, remarks that horses "were the most costly and wasteful of India's imports in this period",<sup>70</sup> a point of view which does not take military survival as an economic priority.

The ships which travelled from the Persian Gulf to the Indian coast were, at any rate not long after the end of our period,

<sup>68</sup> TUN, p. 88.

<sup>69</sup> *The Christian topography of Cosmas Indicopleustes*, tr. J. W. McCrindle, London 1897, pp. 371-2. An even more ancient though less clearly datable reference to the trade occurs in the old Tamil poem *Paddurpallai* (quoted by R. K. Mookerji, *A history of Indian shipping*, 2nd ed., Calcutta 1957, p. 95):—"Horses were brought from distant lands beyond the seas."

<sup>70</sup> U. N. Ghoshal in Majumdar, *The struggle for empire*, p. 522.

generally of not more than 125 modern tons.<sup>71</sup> They usually carried horses as a part of their cargo on the voyage to India. Marco Polo provides a concise description of the vessels:—“They have one mast, one sail one helm (or rudder) and are not decked (*or* have one deck): when they have laded them, they cover the cargo with hides, and on top of these they place the horses which they ship to India for sale.”<sup>72</sup> ‘Abd al-Razzaq, Timurid envoy to Calicut in the mid-fifteenth century describes his embarkation:—“At the end of the monsoon, which is a time when pirates become active, we were given leave to depart (from Hormuz). They divided the people and the horses into two groups, on the plea that they could not be contained in one boat, and put them on the ships and raised the sails, setting off on their course. And when the smell of the boat reached the nostrils of your humble servant (*in za‘if*), he became in some manner unconscious.”<sup>73</sup>

The Ilkhanid court historian Wassaf gives details of the commercial arrangements under which horses were imported into the Pandyan kingdom, which, being in the remote south of India, probably had the greatest need of them of all. Malik al-Islam Jamal al-din, negotiating both on his own behalf and on behalf of the community of Persian merchants with the Pandyan king Sundara, agreed to despatch from Kais (Kish) in the Persian Gulf to Ma’bar 1,400 horses ‘of his own breed’ (probably meaning horses reared on the Persian side of the Gulf). In addition horses were to be procured from ‘all the isles of Persia’, Katif, Lahsa, Bahrayn, Hurmuz and Kulhatu. The price which had previously been in force, 220 *dinars* of red gold for each horse, would continue to be paid; and the Indian king would pay it for all horses lost on the voyage. At the time of

<sup>71</sup> W. H. Moreland, “The ships of the Arabian Sea about A.D. 1500” in *JRAS*, 1939, p. 176: he argues that the ordinary merchantmen were of not more than 250 tons ‘of the period’ at the outside. Elsewhere he shows that the ‘tunnage’ of the Indian trade in the sixteenth century should be reduced by 2/5 to 3/5 to compare with modern registered tonnage: see Moreland, *India at the death of Akbar*, London 1920, Appendix D—“The shipping tun”, p. 289.

<sup>72</sup> Polo, Yule and Cordier, I, 108; Latham, p. 36; Marsden, p. 67.

<sup>73</sup> ‘Abd al-Razzaq Samarqandi, *Matla’ al-sa’dayn*, ed. M. Shafi’, Lahore 1941-9, II, 729.

the Atabeg Abu Bakr, the historian adds, 10,000 horses were exported annually to Ma'bar, Kambayat (Cambay) and other western Indian ports: and 2,200,000 *dinars* were paid for them, out of the Hindu temple revenues and the tax upon courtesans attached to the temples.<sup>74</sup> Wassaf and Marco Polo both comment upon the effect of the mishandling and unsuitable diet given to the imported horses in South India. Polo maliciously adds that the merchants of the Gulf refused to let any horse-doctor travel to Ma'bar to teach the inhabitants better "because they are too glad to let them die at the King's charge."<sup>75</sup> Wassaf remarks, "There is therefore a constant necessity of getting new horses annually and consequently the merchants of Islamic countries bring them to Ma'bar."<sup>76</sup>

The horses brought from Persia were evidently often reared inland. Marco Polo, after describing the provinces of Persia relates:—"In these kingdoms there are many fine horses, and many are carried for sale to India ... Some indeed most of them fetch fully two hundred pounds of Touraine apiece ... The men of these kingdoms drive the horses ... to Kais and Hormuz and to other places on the coast of the Indian sea where they are purchased by those who carry them to India."<sup>77</sup>

On the south side of the Persian Gulf and along the coast of the Hadhramawt almost every port of consequence seems to have been engaged in exporting horses to India, which were collected from the Arabian hinterland. *Shami* or Syrian horses are mentioned a number of times by writers of the Dehli Sultanate,<sup>78</sup> which perhaps indicates the western periphery to which the demands of the sea-borne horsetrade reached. Al-'Umari mentions horses coming from Yaman and 'Iraq which were exported to India, and the particularly high prices which were paid for

<sup>74</sup> Wassaf, p. 302.

<sup>75</sup> Polo, Yule and Cordier, II, 340 (this phrase omitted): Latham, p. 237.

<sup>76</sup> Wassaf, loc. cit. Yule, who comments on the similarity of Marco Polo's and Wassaf's accounts, would believe that here and elsewhere Wassaf derived information from personal contact with Marco Polo: see Yule and Cordier, I, intro., 121: II, 348-9, n. 7. But Wassaf's obvious informant was the Malik Jamal al-din mentioned in the passage.

<sup>77</sup> Polo, Yule and Cordier, I, 83: Latham, p. 30.

<sup>78</sup> KF, p. 163: tr. Habib, p. 106.

the 'Iraqi horses.'<sup>79</sup>

Al-'Umari also emphasizes the importance of Bahrayn as an entrepot<sup>80</sup> and mentions the name of a great merchant, 'one of the *amirs* of Bahrayn', 'Ali bin Mansur al-'Uqayli, who was engaged in exporting horses to the Sultan of Dehli. He commented on the discrimination of the people of the Dehli Sultanate with regard to buying horses and on the great prices which they were prepared to pay for them.'<sup>81</sup> Marco Polo's observations on the main Arabian ports, Kulhatu (near Muscat), Zofar, al-Shihr and Aden all mention the export of 'innumerable fine chargers and pack-horses of great worth and price' to India, on which the merchants are said to have made a handsome profit.<sup>82</sup> Before the coming of the Portuguese the profits of the Indian horse-trade were important in the internal economy of south Arabia.<sup>83</sup>

Marco Polo refers to the transshipment of horses in Thana (on the western Indian coast near the more recent city of Bombay).<sup>84</sup> Horses therefore may not have come direct from the Gulf or the Hadhramawt to their final destination in India. From Dehli Arab as well as central Asian horses were occasionally allowed to pass onwards to the Muslim kingdom of Bengal, a fact of which Sultan Ghiyath al-din Balban is said to have reminded his son Bughra Khan in Bengal.<sup>85</sup> On the occasion of a treaty of peace between the two monarchs, Feroz gave 500 central Asian and Arab horses to the Bengal Sultan.<sup>86</sup> There were also instances of (presumably) Arab horses

<sup>79</sup> *Masalik*, p. 21.

<sup>80</sup> *Ibid.*

<sup>81</sup> *Masalik*, p. 28.

<sup>82</sup> Polo, Yule and Cordier, II, 438, 442, 444, 450: Latham, pp. 282, 283, 284, 285.

<sup>83</sup> R. B. Serjeant, *The Portuguese off the South Arabian coast*, O.U.P. 1968, p. 167, n.B.

<sup>84</sup> So according to Ramusio's version of Polo's text, Marsden, p. 385; but the passage may be an inaccurate condensation of the account of the King of Thana's claim to any horses captured by pirates using his harbour, cf. Yule and Cordier, II, 395: Latham, p. 266.

<sup>85</sup> BTFS, p. 96.

<sup>86</sup> ATFS, p. 159

being presented in small numbers to Mongols and other visitors from central Asia. The Mongol chieftains visiting Dehli received from Sultan Muhammad bin Tughluq horses with accoutrements.<sup>87</sup> Malik Shams al-din Kurt of Herat, besieging the fort of Bhakkar on the Indus around 1300 A.D., was bought off with five *Tazi* (Arab) horses and fifty slaves.<sup>88</sup> On the exceptional occasion of his embassy to the Chinese emperor, Muhammad bin Tughluq intended to despatch 100 fine horses by the sea route to China. These certainly never reached their destination, but they may have been shipped by Ibn Battuta from Gandhar in Gujarat to south India.<sup>88a</sup>

<sup>87</sup> BTFS, p. 462.

<sup>88</sup> Isfizari, *Rawzat al-jannat fi awsaf-i madinat-i Harat*, ed. S. M. K. Imam, Teheran 1338, Shamsi, I, 416.

<sup>88a</sup> IB,IV,2, 58-9: it is unlikely that the 70 horses of the 'present' which Ibn Battuta says he shipped at Gandhar were part of the annual 'present' or tribute from the Hindu ruler to the Sultan, as the ships were sailing to south India. Probably they were a portion of the presents to the emperor of China which still remained in the possession of the envoys.

## B. THE OVERLAND TRADE

The horses of the Panjab and its adjacent hills were among the best bred in India: beyond the North-West Frontier of what is now West Pakistan lay the lands known collectively in the Dehli Sultanate as *mulk-i bala*, *mulk-i baladast* ('the high land', 'the land on the higher side') where very superior horses could be raised wherever there was enough food to maintain them. The fact that such horses were available in almost limitless numbers to those who held power in central Asia makes the survival of the Dehli Sultanate in the face of Mongol onslaughts the more remarkable. But it is evident that in ordinary times the commerce in *Baladasti* horses brought down to Dehli was not normally cut off by the Chaghata'i Khans of Transoxiana or their deputies: while some of the tribal groups of the Mongol horde or army (*sipah-i mughal*) themselves sold horses for the Sultan of Dehli's army, most probably those who came down peaceably to winter pastures not far from Dehli.<sup>89</sup> But the remarks attributed to Sultan Balban emphasize that it was unwise to be dependent on a source of supply controlled by a formidable enemy.<sup>90</sup>

There is little evidence of the exact provenance of central Asian or *Baladasti* horses in the earlier days of the Dehli Sultanate, or of how the pattern of supply was changed when the whole area was overrun by the Mongols. The *Adab al-harb*, written before the rise of the Mongols, contains long but possibly not very practical disquisitions on how to recognize the good and bad qualities of horses by their colours, markings and physical

<sup>89</sup> BTFS, p. 53. In some periods at least of the early fourteenth century Mongol tribal groups used to come down with their flocks and herds to winter peaceably in the territories of the Dehli Sultan, cf. BTFS pp. 461-2.

<sup>90</sup> BTFS, p. 53: see above, p. 22.



characteristics. The only regional preference is indicated in an anecdote of a man from Khuttalan (on the south bank of the upper Oxus), who in the Samanid period went to Bukhara, where he would not admit that the animals in the stables of the Amir were worthy to be called horses. Accordingly he was sent to purchase horses in the cattle-market (*nakhkhas*) of Khuttalan. He then demonstrated the superiority of the horses of Khuttalan by riding up to the Amir on one of these, seizing the Amir's cap off his head and outdistancing his enraged pursuers. All was forgiven him.<sup>91</sup>

Writers of the fourteenth century frequently refer to the *Tatari* horse. One would be inclined to think that this was, like *Baladasti*, a name for any kind of central Asian horse, but for a passage in the *Travels* of Ibn Battuta, which reveals the main source of supply of such horses in the early fourteenth century and shows to what distant areas the economic influence of the Dehli Sultanate had reached. Great numbers of horses were despatched to the Dehli Sultanate by the portion of the Mongol horde then settled in the steppelands of southern Russia known as the Tatars. Ibn Battuta, after describing his journey through the Crimea and his arrival at Azaq (Azof), writes:—

“The horses in this country are exceedingly numerous and their price is negligible . . . . These horses are exported to India (in droves) each one numbering six thousand more or less. Each trader has one or two hundred horses or more or less. For every fifty of them he hires a drover, who looks after their pasturage, like sheep . . . . When they reach the land of Sind with their horses, they feed them with forage, because the vegetation of the land of Sind does not take the place of barley, and the greater part of the horses die or are stolen. They are taxed on them in the land of Sind (at the rate of) seven silver *dinars* a horse, at a place called Shashnaqar and pay a further tax at Multan, the capital of the land of Sind. In former times they paid in duty a quarter of what they imported, but the King of India, the Sultan Muhammad, abolished this practice and ordered that there should be exacted from the Muslim traders the *zakat* and from the infidel traders the

<sup>91</sup> AH, pp. 218-20.

tenth (*'ushr*). In spite of this, there remains a handsome profit for the traders in these horses, for they sell the cheapest of them in the land of India for a hundred silver *dinars* (the exchange value for which in Moroccan gold is 25 *dinars*) and often sell them for twice or three times as much. The good horses are worth 500 (silver) *dinars* or more. The people of India do not buy them for (their qualities in) running or racing, because they themselves wear coats of mail in battle and cover their horses in armour; and what they prize in these horses is strength and length of pace. The horses which they want for racing are brought to them from al-Yaman, 'Oman and Fars, and each of these horses is sold for from one to four thousand *dinars*.'<sup>92</sup>

Gibb identifies Ibn Battuta's Shashnaqar with Hashtnagar near Peshawur. If this identification is correct, the caravans must have come down the Khyber Pass and therefore should have come all the way from Azaq (Azof) by a route north of the Caspian Sea, through the Dasht-i Qipchaq and Transoxiana. Barani, in the speech of Sultan Balban, seems to imply that Tatar horses also arrived by sea from the Persian Gulf.<sup>93</sup> This may indicate that some of the drovers took a more southerly route through Persia, in which case the horses might well be drawn into the sea trade with India: but the statement may equally spring from the loose thinking of a habitually inaccurate historian.<sup>94</sup> If the identification of Shashnaqar with Hashtnagar is correct, the route to Dehli *via* Multan is a very devious one. The evidence of the actual route by which the caravans came from Azaq is therefore indecisive.

<sup>92</sup> IB, II, 371-4: translation from Gibb, II, 478-9.

<sup>93</sup> BTFS, p. 53.

<sup>94</sup> Barani's inaccuracies have been the subject of comment since the time of Edward Thomas, *op. cit.*, pp. 133, 141. The present writer, who hopes at some future date to publish the results of his research on the text of Barani's history, believes that these are even more extensive than his hitherto been supposed.

### C. THE PRICE OF HORSES IN DEHLI

Ibn Battuta's "silver *dinar*" in the passage quoted above is the silver *tanka*, the heavy and pure coin of *circa* 170 grains. The prices which Ibn Battuta cited from memory would, if correct, have been current in Dehli in the period from 1334 to 1340 A.D. (or a year or two after this).

- (i) A race-horse of quality from Arabia or Fars from 1,000 to 4,000 *tankas*.
- (ii) An exceptional *Tatari* war-horse 500 *tankas*.
- (iii) An ordinary *Tatari* war-horse 100 *tankas*.

Barani gives the prices for war-horses, graded in three classes, which he alleges were in force in the bazaar of Dehli in the reign of 'Ala al-din Khilji (1295-1315), probably in the years after 1300 A.D:—

- (i) First class from 100 to 120 *tankas*.
- (ii) Second Class from 80 to 90 *tankas*.
- (iii) Third class from 65 to 70 *tankas*.
- (iv) *Tattus* unfit for the muster from 10 to 25 *tankas*.<sup>95</sup>

The silver weight of these prices conveys little without other data of the purchasing power of money at this period. Fortunately Barani, whatever suspicions attach to the accuracy of his memory, gives other prices which he alleges were current in the bazaar of Dehli at the same period, of which those of slaves and of other livestock are quoted below for comparison:—

<sup>95</sup> BTFS, p. 313.

*Slaves:—*

A servant girl	from	5 to 12 <i>tankas</i> .
A concubine	from	30 to 40 <i>tankas</i> .
A pretty boy	from	20 to 30 <i>tankas</i> .
An experienced man	from	10 to 15 <i>tankas</i> .
An inexperienced boy	from	7 to 8 <i>tankas</i> . <sup>96</sup>

*Animals:—*

A pack mule of the best class	from	4 to 5 <i>tankas</i> .
A mule of another class		3 <i>tankas</i> .
A cow for eating	from	1½ to 2 <i>tankas</i> .
A milch cow	from	3 to 4 <i>tankas</i> .
A milch buffalo	from	10 to 12 <i>tankas</i> .
A buffalo for eating	from	5 to 6 <i>tankas</i> .
A fat sheep	from	10/48 to 14/48 of a <i>tanka</i> . <sup>97</sup>

From Barani's remarks upon the cheapness of Indian country-bred mounts for the army of the Dehli Sultans<sup>98</sup>—taken with his statement that the *Tattu* or nag would not pass at muster—it is evident that Indian countrybreds are included in the three classes of war-horse whose prices in the Dehli bazaar he has quoted: though probably these country-breds comprise the lower range of the prices quoted. From a variant recension of this historian's text it is also apparent that imported sea-borne (*Darya'i*) and central Asian (*Baladasti*) horses were sold in the same bazaar and should also be included in the three classes whose prices were quoted.<sup>99</sup> If neither Barani's nor Ibn Battuta's memory is at fault, there can have been no sharp difference in price between good Indian country-breds and the common run of imported horses. Assuming at there was no sharp rise in the price of horses, owing to scarcity, in the first third of the fourteenth century, Barani's first class of horses which fetched from 100 to 120 *tankas* evidently corresponds with the ordinary *Tatari* horses which thirty years later fetched from 100 *tankas* upwards. If however a significant rise in prices had taken place, Barani's second class of horse which fetched from 80 to 90 *tankas*

<sup>96</sup> BTFS, p. 314.

<sup>97</sup> BTFS, p. 315.

<sup>98</sup> BTFS, p. 53.

<sup>99</sup> BTFSA, f. 119 A.

may be the *Tatari* horses which thirty years later, in a period of extravagant spending, fetched 100 *tankas* and more. In this case Barani's first class may have represented the earlier price of ordinary imported Arabs or Gulf Persians.

The prices here mentioned by both authorities are expressed in a coin of the same intrinsic value. Ibn Battuta elsewhere expresses the prices of Indian commodities in heavy pure silver *tankas* ('the silver *dinar*'), though he was in India at a time when this was being replaced, in the territories of the Dehli Sultan, by a very debased coin of *circa* 140 grains. In the passage quoted above, the exchange rate mentioned against the Maghribi gold *dinar* confirms that the prices are expressed in terms of the 170 grain fine silver *tanka*.

When however Barani contrasts the prices prevailing in his youth with those current in his old age (c. 1355 A.D.) there is little doubt that the latter prices are expressed in the principal current coin, the 140 grain *tanka* of very debased silver. Barani remarks that in those days one could get a horse for 80 or 100 *tankas* which nowadays could not be had for one thousand and five hundred *tankas* (*hazar u pansad tanka*).<sup>100</sup> Barani elsewhere laments similar increases in the price of slaves and other commodities. Clearly the debasement of the currency is responsible for a major portion of the rise in prices from half a century earlier. The 140 grain *tanka* probably contained, in the early years of the reign of Feroz Shah Tughluq (r. 1351-88), about 28 grains of silver against nearly 170 grains in the older pure silver coin.<sup>101</sup> Prices should therefore have risen about six times to represent

<sup>100</sup> BTFBSB, f. 144B.

<sup>101</sup> See H. Nelson Wright, *The coinage and metrology of the Sultans of Dehli*, Dehli 1936, pp. 163-4, regarding the introduction of the 80 *rati* (140 grain) billon *tanka*; and pp. 406-7, 409 for assays of these coins. According to the assays conducted for him, the 140 grain billon coin, when first introduced in 728 A.H., contained nearly 45 grains of silver. Late in the reign of Muhammad b. Tughluq, *probably* in the years 745-7 A.H., the average silver content diminishes to *circa* 32 grains. From the reign of Feroz Shah Tughluq two coins of 766 A.H. when assayed each yielded just over 27 grains of silver, while coins of later years in the reign yielded an average of under 26 grains. It therefore seems probable that the silver content of the issues current in 757 A.H. when Barani was writing, was between 32 and 27 grains, and probably closer to the latter figure.

the same value in precious metal. A horse which cost from 80 to 100 *tankas* in the earlier period would have been of the historian's own second class or at the lower end of his first class. If the price had risen merely in accordance with the diminution of precious metal in the coinage it should have fetched up to around 550 *tankas* at the time when the historian was writing. It is possible that he meant to say not fifteen hundred *tankas*, but rather a thousand or five hundred *tankas*, an increase in price which does not definitely show an added scarcity of the commodity. For comparison, Barani elsewhere states that the best pack-mules, which in the earlier reign could be had for from four to five *tankas*, latterly cost from 30 to 40 *tankas*<sup>102</sup>—a seven or eight-fold rise in price compared with the six-fold devaluation of the metal content of the *tanka*.

By an engagement probably dating from early in the reign of Feróz Shah Tughluq the Jam of Thaththa undertook to provide annually 50 horses of the value of one *lakh* (100,000) *tankas*.<sup>103</sup> These horses which were to be despatched in tribute to the Dehli Sultan were therefore to attain an average value of 2,000 *tankas* each. In view of the geographical position of the territories of the Jam, the horses were almost certainly intended to be Arabs or Gulf Persians rather than local breeds. If the value is reckoned in the debased 140 grain coin, the horses to be supplied by the Jam must have been ordinary war-horses of superior quality, for average value of the horses does not compare with the prices mentioned by Ibn Battuta for racing Arab or Gulf horses (*viz.*, 1,000 to 4,000 pure silver *tankas*). If however the pure silver *tanka* was still being used as a money of account in official documents, a proposition which is not favoured by Barani's and 'Afif's usage, then the fifty horses to be supplied annually must have been racing animals.

An anecdote of 'Afif about the laxity of Feroz Shah Tughluq towards his troopers suggests that the quality of the mounts of the army of the Dehli Sultanate may have deteriorated towards the close of that reign.<sup>104</sup>

The demands of the royal *pa'egah* and the market at the

<sup>102</sup> BTFS, p. 315.

<sup>103</sup> IM, pp. 186-8.

<sup>104</sup> ATFS, p. 301.

capital probably continued to dominate the North Indian horse trade until the last quarter of the fourteenth century. For the earlier part of the reign of Feroz Shah Tughluq the correspondence of the administrator 'Ayn-i Mahru shows the demands made upon provincial governors whose assignments were situated on trade routes for horses to be despatched to the capital city. On one occasion, when the writer was *muqta'* of Multan, he was required to despatch 2,500 horses.<sup>105</sup> His relations were engaged in private horse-trading and other correspondence refers to the delivery of horses at the capital city.<sup>106</sup> Stories of traders wandering through the Indian countryside in search of purchasers for their strings of horses perhaps reflect the decay of the central authority of the Sultans of Dehli at the close of the fourteenth century,<sup>107</sup> when adequate numbers of war-horses no longer seem to have reached the capital city. In the struggles following the death of Feroz Shah Tughluq (d. 1388) one of the pretenders, Muhammad b. Feroz was still able to muster a force reckoned at 50,000 horse.<sup>108</sup> But when Mahmud b. Muhammad, the last Sultan of the house of Tughluq, faced Amir Timur outside Dehli in 1398 A.D., a Timurid historian estimated that the Sultan and his supporters had only 10,000 horse.<sup>109</sup>

<sup>105</sup> IM, pp. 105-6.

<sup>106</sup> IM, pp. 175, 204: cf. also pp. 91, 100-12.

<sup>107</sup> Cf. the curious story of the rise of Kala Lodi, father of Sultan Bahlul, in Muhammad Kabir, *Fisana-i Shahan-i Hind*, B.M. Add. 24, 409, ff. 7B-9A. S. A. A. Rizvi, *Uttar Taimur kalin Bharat*, I, 360-1. For an anecdote of the early 15th century which refers to a horse-trader passing through the north Indian countryside with a string of seven or eight hundred Turki and Arab horses, see 'Abd al-Quddus Gangohi, *Anwar al-'uyun fi asrar al-maknun*, Lakhnau 1295, p. 68.

<sup>108</sup> TMB, pp. 146, 147.

<sup>109</sup> Nizam al-din Shami, *Zafar-Nama*, ed. F. Tauer, Praha 1937, I, 189.

#### D. HIMALAYAN AND NORTH-EASTERN SOURCE

A verse of Amir Khusrav already quoted referred to *Kohi* or mountain horses.<sup>110</sup> Elsewhere, on the occasion of the surrender of the stable of the Ray of Arangal, he wrote of its contents as *Bahri* and *Kohi* horses.<sup>111</sup> In the first of these references it would be possible that the 'mountain horses' were reared in the sub-Himalayan ranges close to the territories of the Dehli Sultans; or that they were some variety of *Baladasti* horses other than the *Tatari*, perhaps from the hills on the North-West Frontier or from the upper Oxus. However this is unlikely to be the case with the horses in the stables of the Ray of Arangal (Warangal in the south-eastern Deccan), because such horses would in that case have had to pass, in great numbers, through territories firmly controlled by the Sultans of Dehli in order to reach this hostile Hindu ruler. The Ray's *Kohi* horses can hardly have been bred on the Deccan plateau, for some centuries later such horses did not rank high among Indian breeds. The most obvious provenance of horses called *Kohi* or 'mountain' would be from the Himalayas or the lands beyond them, or from the ranges further to the north-east of the sub-continent. A considerable supply of such *Kohi* horses could have been transported to the Coromandel coast from territories over which the Sultans of Delhi had little or no control.

Barani and 'Afif both indicate that, at least in the period

<sup>110</sup> Above, p. 29 and note 68.

<sup>111</sup> KF, p. 101.



between 1350 and 1360 A.D., the army of the Sultans of Bengal was greatly inferior to that of the Dehli Sultan in cavalry, mustering only 10,000 horse, and was partly dependent on the goodwill of the latter for the supply of war-horses.<sup>112</sup> The Chinese traveller Mahuan, who was in Bengal in 1405 A.D., remarked that horses were plentiful there, though he does not specify that these were war-horses;<sup>113</sup> while Pires, writing between 1512 and 1515 A.D., thought that at that time there must have been 100,000 mounted men in the Kingdom of Bengal,<sup>114</sup> even though he believed that the King of Dehli was 'a much greater lord'.<sup>115</sup> Marco Polo and the Persian chronicler Juzjani testify to a trade in horses, well established in the thirteenth century, from areas across the mountains into Bengal; and it seems probable that some of these horses were sent from Bengal to other areas of eastern India.

Marco Polo is in general remarkably accurate with regard to the patterns of Asian trade; but difficulties in the identification of the places which he describes increase in his more easterly travels. According to Polo there were large and excellent horses in Carajan (identified by his editors unanimously with Yun-nan and the city of Talifu on its western edge); these horses were carried to India for sale.<sup>116</sup> Polo also refers to the export of horses in great numbers to India from Aniu (Anin, Amu).<sup>117</sup> His editors are in disagreement as to the identification of this locality, but there is no doubt that it lay somewhere to the south of Carajan. Polo reckons the journey from Aniu to Caugigu to the west at 25 (or 15) days, and from Caugigu to Bengala at another 30 days, evidently along a commonly used route.<sup>118</sup> From his remarks it would seem that horses passed along two routes from the border areas of south-west China through the

<sup>112</sup> BTFS, p. 594: ATFS, pp. 114, 119, 158-62: TMB, p. 127.

<sup>113</sup> Geo. Phillips, "Mahuan's account of the Kingdom of Bengala (Bengal)." in *Journal of the Royal Asiatic Society*, July 1895, p. 531.

<sup>114</sup> *The Suma Oriental of Tome Pires*, ed. and tr. A. Cortesao, London, 1944, I, 89. *The Book of Duarte Barbosa*, tr. M. Longworth Dames, London 1918-21, II, 147 also mentions the abundance of horses in Bengal.

<sup>115</sup> Pires, I, 90.

<sup>116</sup> Polo, Yule and Cordier, II, 78: Latham, p. 151.

<sup>117</sup> Polo, Yule and Cordier, II, 119: Latham, p. 162.

<sup>118</sup> Polo, Yule and Cordier, II, 120.

Kingdom of Mien (Pagan) in upper Burma to the Sultanate of Bengal. The more northerly route was from the city of Carajan (Talifu) through Vochan (Yung-chang) in the country of the Golden Teeth, and thence by a 'great descent', said to be of fifteen days through very difficult country, to Mien (Pagan, possibly confused with Tagaung, Old Pagan). The more southerly route evidently passed westwards through the modern South Shan States, and then either joined the northern route at Vochan (Yung-chang) or went by passes south of this to Pagan.<sup>119</sup> As there is no mention of other than a land journey, the routes must have continued through the Lushai and Tipperah hills into Bengal. Other evidence of this Sino-Indian trade-route in the thirteenth and fourteenth centuries is found in references to a low denomination currency of cowries current in Yun-nan,<sup>120</sup> which clearly must be part of the import into Bengal from the Maldives; and in the surviving plentiful silver coinage of Bengal, for which no nearer source of supply can be found than the Shan silver-mines.<sup>121</sup>

<sup>119</sup> Polo, Yule and Cordier, II, 106-9.

<sup>120</sup> Polo, Yule and Cordier, II, 66, 74n. For the trade between the Maldives, principal if not sole source of these shells, and Bengal during the fourteenth century, see IB, IV, 122: Yule and Burnell, *op. cit.*, s.v. *COWRY*.

<sup>121</sup> The problem of the silver coinage of later medieval Bengal can only be briefly stated here. In Bengal a silver coinage continues in great abundance from the fourteenth century up to its reincorporation in a north Indian empire by Sher Khan Sur c. 1539 A.D. In the Dehli Sultanate after 1330 A.D. and in the provincial Indian Sultanates of the fifteenth century there are signs of an acute scarcity of silver. In Bengal silver is not mined in greater quantities than elsewhere in India, see Watt, *op. cit.*, VI, Pt. 3, 239. If a far eastern maritime source of supply is assumed, it is difficult to see why this silver did not also reach the Deccan and Gujarat Sultanates. Moreover Pires, *op. cit.*, II, 93 states that 'silver is a fifth part cheaper /in Bengal/ than in Malacca', which would indicate a movement in the opposite direction. Accordingly we must look for an inland source of supply in the argentiferous galena on the confines of Assam; in upper Burma and the Shan states and possibly in Yun-nan itself. Tavernier in the seventeenth century says that the ruler of Tipperah, on the confines of Bengal, exported coarse silk and gold to China and received silver in return, *op. cit.*, II, 216. Tavernier also states that the ruler of Tipperah coined money with this silver, and it is presumably this eastern source of supply which is responsible for the relatively pure and abundant coinages of Assam, Tipperah and other states on the Bengal frontier between the sixteenth and eighteenth century.

The remaining reference to the organised import of horses from the north east in our period is by Juzjani, the early thirteenth century Indo-Persian historian. He relates in some detail, from the account of a survivor whom he had met, the tale of Muhammad Bakhtyar Khilji's disastrous expedition from his capital of Lakhnnavati through the hills to the north-east. After ten days of marching up the beside a great river in Kamrud (Assam), the expeditionary force crossed a great stone bridge. On the sixteenth day beyond this, they reached the edge of the plain of Tibet (*sahn-i zamin-i tibat*), a populous expanse, the entry guarded by a fortress and 5 *farsangs* away on the plain a city called KRMBTN<sup>122</sup> with a population of about 50,000 Turks armed with bows. The Bengal Sultan had to retreat. Juzjani states that he made inquiries in Bengal regarding this city. *Inter alia* he was informed that in its cattle-market (*nakhkhas*) 1500 horses were sold every morning. "All the *Tanghan* horses which come into the territory of Lakhnnavati (the Bengal Sultanate) are brought from the country. The roads pass through defiles as is usual in that land, so that from the land of Kamrud to that of Tibet there are thirty-five mountain passes, through which the horses are brought to the land of Lakhnnavati."<sup>123</sup>

Juzjani's account of the campaign was taken from the lips of a witness 40 years after the event;<sup>123a</sup> and his geographical indications are not very clear. After much controversy, it is now reasonably certain that Muhammad Bakhtyar's raiding expedition went up the north bank of the mainstream of the Brahmaputra and crossed the Baranadi by the bridge at Silhako. The location of the great city which they approached remains a matter of conjecture. Perhaps Lhasa is the most reasonable guess, though Bhatgaon and Patan in Nepal were considered (and dismissed) by Raverty; while N. Bhattasali would suggest Kera Gompa in the south-west of Bhutan and Z. V. Toghhan two areas on

<sup>122</sup> For equally unidentifiable variant readings of the name, see TN, ed. Habibi, I, 429, n. 6.

<sup>123</sup> TN, pp. 153-4: ed. Habibi, I, 428-9.

<sup>123a</sup> TN, p. 153.

the northern fringes of Tibet.<sup>124</sup> If Muhammad Bakhtyar after crossing the Baranadi continued east up the Brahmaputra, and then followed its westward flowing tributary the Zayul-chu, his wanderings through the mountains might have brought him to Talifu (Polo's town of Carajan, Rashid al-din's Qarajang), which corresponds in several points with Juzjani's description.<sup>125</sup>

The name given to the variety of horse by Juzjani, TNGHN (*tanghan*) and the relationship of this breed to *Kohi* horses remain to be discussed. Abu'l-Fazl, writing about the breeds contained in the imperial Mughal stable at the close of the

<sup>124</sup> TN, tr. Raverty, pp. 562-8, notes: H. Blochmann in *Journal of the Asiatic Society of Bengal*, 1875, pp. 282-3: N. Bhattasali, "Muhammad Bakhtyar's expedition to Tibet" in *Indian Historical Quarterly*, IX, 1933, 49-62: Z. V. Toghan, "About the campaign of the Indian Khalach-Turks against the Keraites of Mongolia in the Northern Tibet in the years 1205-6" in *Proceedings of the XXXVIIth International Congress of Orientalists*, Delhi 1968, II, 174-8. Major Raverty argued that Muhammad Bakhtyar's army went up the western bank of the Tista, a large westerly tributary of the Brahmaputra to reach Sikkim. Blochmann favoured an even more westerly route up the Karatoya. An inscription found in this century within a few miles of North Gauhati commemorating a defeat of 'Turushkas' (Turks, Muslims) in 1206 A.D. provides a decisive refutation to their objections to the identification of the great stone bridge as that of Silhako, across the Baranadi some miles away from North Gauhati; and N. Bhattasali has convincingly traced the progress of the expedition to this point. He then argues that Muhammad Bakhtyar turned north from there and "possibly crossed the first line of mountains into Bhutan. Tibbat was still far off." KRMBTN he identifies with Karugompa (Keru Gompa), observing that "it would be interesting to inquire if there is actually a fort on this track, and if Karugompa is a walled town." A part from the insignificant obscurity of this place, it is only 60 miles from Silhako; and it is difficult to share Bhattasali's assumption that a raiding party of cavalry would, even in mountainous country, proceed at a rate of four miles a day. Raverty seems to have favoured the identification of the great city as Lhasa, but does not directly commit himself in contrast to his clear but unacceptable ideas about the earlier route of the expedition. Z. V. Toghan would put the great city somewhere in Tsaydam (N. E. Tibet) or (simultaneously?) in the lower Kwen-Lun range south of Yarkand. In spite of Habibi's recent edition, the text of TN remains much in need of elucidation. Of the manuscript readings urged by Raverty one can gratefully accept '50,000 Turks armed with bows' in place of '350,000': but his reading of 'Tirhut' for 'Tibet' on the second occasion where the name occurs (viz., 'from the land of Kamrud to that of Tibet') cannot be correct.

<sup>125</sup> Polo, Yule and Cordier II, 80, n. 1.

sixteenth century, remarks:—"In the northern mountainous district of Hindostan (*i.e.*, in the Himalayas), a kind of small but strong horse is bred, which is called *gut*; and in the confines of Bengal, near Kuch (-Bihar), another type of horse occurs, which ranks between *gut* and Turkish horses, and are called *tanghan*; they are strong and powerful."<sup>126</sup> A misleading etymology has in more modern times given the impression that the *Tangan* or *Tanghan* was an especially small breed of horse as well as a breed from the Himalayas (*pahari*, cf. *kohi*).<sup>127</sup> A breed so named, wherever it came from, was found in central India in the 7th century A.D. in the stables of King Harsa:—"Old people sang the praises of the tall *Tangana* horses, which by the steady motion of their quick footfalls provided a comfortable seat."<sup>128</sup>

<sup>126</sup> Abu'l-Fazl 'Allami, *A'in-i Akbari*, tr. H. Blochmann and D. C. Phillot, Calcutta 1927, I, 140.

<sup>127</sup> Shyam Sundar Das *et alii*, *Hindi sabdasagara*, Kasi, Nagari Pracarini Sabha 1916-28, s.v. *TANGAN*. It is there suggested that the word may be a cognate of Hindi *thengna*, 'small'. 'wee' or a *tadbhava* of Sanskrit *turangam*, 'steed'. Yule and Burnell, *op. cit.*, s.v. *TANGUN*, *TANYUN*, which they define as 'the strong little pony of Bhutan and Tibet,' would derive the word 'from Tibetan *rTanan*, the vernacular name of this kind of horse (*rTa* 'horse')'. But it is difficult to accept any of these etymologies in view of the 7th century Sanskrit reference to 'tall *Tangana* horses', see note 128 below.

<sup>128</sup> Bana, *Harsa-carita*, tr. E. B. Cowell and F. W. Thomas, London 1897, p. 201.

## E. IMPORTED HORSES AS PLUNDER OR TRIBUTE: THE PRE-EMINENCE OF THE DEHLI SULTANATE IN CAVALRY

As Hindu rulers, particularly those with access to the sea, bought imported horses to build up the strength of their own armies, it naturally became an object of the policy of the Dehli Sultans and of their generals to deprive them of war-horses so acquired as of well as other resources of war—elephants and treasure. The great Deccan expeditions of Malik Kafur were most successful in this respect. Rudradeva of Arangal (Warangal), making peace in 709/1310, is said to have surrendered 20,000 *Kohi* and *Bahri* horses.<sup>129</sup> In praise of them the poet and historian writes:—“The sea-borne horse flies like the wind on the surface of water, without even its feet becoming wet. And when the mountain horse steps on a hill, the hill trembles like a Hindi sword.”<sup>130</sup> On Malik Kafur’s final Deccan expedition an unspecified number of horses was surrendered by the Hoysala ruler:<sup>131</sup> and when a count was taken after plundering the stables of the Pandya ruler, it was found that 5,000 fine horses had been taken, of the *Yamani*, *Shami* and *Bahri* breeds.<sup>132</sup> When circumstances permitted, annual tributes of such imported horses were imposed upon the Hindu rulers of the Deccan. In 717 A.H., Rudradeva of Arangal was required to remit annually to Dehli 1,000 horses as well as 100 elephants.<sup>133</sup> In the later fourteenth century, the Jams

<sup>129</sup> KF, p. 101.

<sup>130</sup> KF, loc. cit: tr. M. Habib, p. 72.

<sup>131</sup> KF, p. 138.

<sup>132</sup> KF, p. 163.

<sup>133</sup> *Nuh Sipihir*, p. 128.

of Sind had undertaken to supply 50 fine horses annually (whose value has been examined above) and were reprimanded for failing to do so.<sup>134</sup>

Once the Dehli Sultanate had been established, the surviving land-bound chieftains of northern India were probably very ill-provided with horses. Barani makes Balban refer to the fact that with six or seven thousand horse one could overcome 100,000 foot-soldiers of such a prince.<sup>135</sup> Cahada Deva, a powerful chief of the early thirteenth century, according to Juzjani had 200,000 foot but only 5,000 horse.<sup>126</sup>

In spite of the north-eastern source of supply, Bengal and Orissa also appear to have been chronically inferior to the Dehli Sultanate in cavalry. In 680 A.H. (according to a rather suspect source) the Ray of Jajnagar (Orissa) could put into the field 50 elephants, 5,000 horse and 10,000 foot.<sup>137</sup> Bengal, according to 'Afif was 'the land of foot-soldiers' (*zamin-i rijala*):<sup>138</sup> on the occasion of Feroz Shah Tughluq's first expedition to Bengal, Shams al-din, Sultan of Bengal, put into the field 50 elephants, 10,000 horse and 200,000 foot according to the same source.<sup>139</sup> The number of horse with the Dehli Sultan is not mentioned on this occasion, but there is no reason to suppose that it was less than during his second expedition to Bengal, when it is given as 70,000.<sup>140</sup>

<sup>134</sup> IM, pp. 186-8.

<sup>135</sup> BTFS, p. 52.

<sup>136</sup> TN, pp. 215-6. Amir Khusrav in verses praising 'Ala al-din Khilji's victories says that Hammira Deva of Ranthambhor had 10,000 swift horses, DRKK, p. 65. In the same poem he states that Koka, the minister who held power in the Hindu state of Malwa had 40,000 horse besides innumerable foot, DRKK, p. 67. But he then relates that Koka was overthrown by a force of 10,000 horse despatched from Dehli, and we may therefore suspect that the figure of 40,000 horse is a magnification which the poet did not intend to be taken literally.

<sup>137</sup> *I'jaz*, Bk V, p. 9.

<sup>138</sup> ATFS, p. 119: see Hodivala, op. cit., I, 312.

<sup>139</sup> ATFS, p. 114.

<sup>140</sup> ATFS, p. 144.

## CHAPTER THREE

# THE ELEPHANT IN MEDIEVAL INDIAN WARFARE

The domestication and use in warfare of the elephant has since Carthaginian times been almost confined to Greater India, with rare and tactically insignificant importations into the Middle East and other areas. In India itself the elephant was employed in warfare at least since the fourth century B.C. and was probably domesticated some centuries before that. Improved musketry rendered its employment in battle almost obsolete in the seventeenth century, when elephants were principally used to mount generals or commanders, in order that they might be seen by their troops and obtain an extended view of the battle; even this had its disadvantages and Nadir Shah is alleged to have remarked:—"What strange practice is this that the rulers of Hind have adopted? In the day of battle they ride on an elephant and make themselves a target for every one."<sup>141</sup> When wounded, elephants were liable to get out of control and escape at the top of their speed. Irvine cites the case of 'Azim al-shan, contender for the Mughal throne in 1712: his elephant when wounded jumped off a high bank into the river Ravi, drowning the prince along with himself.<sup>142</sup>

The elephant had incidental uses in medieval warfare outside the battle line. Heavily armoured, it could be used as a living battering ram to push down the gates of a fortress. Many of the strongest fortresses in India have elephant spikes upon their

<sup>141</sup> Dalpat Ray, *Malahat-i maqal*, quo. by W. Irvine, *The army of the Indian Moghuls*, London 1903, p. 177.

<sup>142</sup> Irvine, loc. cit.



doors to hinder this form of assault.<sup>143</sup> In one instance in the period of the Dehli Sultanate we read of elephants being brought against the gate and the fortress falling.<sup>144</sup> The elephant could also serve as a pack animal carrying a very large indivisible load, for instance a royal tent, and is recommended by Sir George Watt, writing at the close of the nineteenth century, as a means of transport through dense and impenetrable country.<sup>145</sup> In 'Afif's account of one of the campaigns of Feroz Shah Tughluq we read of the solution of the problem of how to ford a river flowing so swiftly that men and horses were liable to be borne away. The elephants were deployed in two chains, attached to one another by ropes, and were made to stand upstream and downstream of the ford. The chain of elephants upstream broke the force of the rushing waters, and the chain downstream served as a net, against which horses and riders who had been carried off by the water were caught instead of being swept away altogether.<sup>146</sup>

Nevertheless elephants were principally esteemed and treasured in medieval India for their performance upon the field of battle. About this Professor Basham speaks with less than his habitual charity:—"The great reliance placed on elephants was, from the practical point of view, unfortunate... Even the best trained elephants were demoralized comparatively easily... The pathetic Indian faith in the elephants' fighting qualities was inherited by the Muslim conquerors, who, after a few generations in India, became almost as reliant on elephants as the Hindus and suffered at the hands of armies without elephants in just the same way."<sup>147</sup> In the Dehli Sultanate, the only army with elephants which suffered at the hands of a foreign and elephantless army was that of 1398 A.D. The most apparent cause of its defeat was its pathetically diminished numbers both of horses and of elephants, compared with the armies which the Sultans of Dehli had put into the field during earlier invasions.

<sup>143</sup> S. Toy, *The strongholds of India*, London 1957, pp. 6-7: the same, *The fortified cities of India*, London 1965, pp. 24.

<sup>144</sup> TMH, f. 426A: *pil u lashkar bar dar-i qal'a-i Kotra burd*.

<sup>145</sup> George Watt, *op. cit.*, III, 221.

<sup>146</sup> ATFS, p. 111.

<sup>147</sup> Basham, *op. cit.*, pp. 129-30.

The elephant is a picturesque animal, and medieval authors are all convinced that it was a great asset in battle. Examples of its performance on the battlefield during the Sultanate period do not decisively support this view, and we must allow for the aesthetic enthusiasm which the elephant, like the horse, evoked:—  
“... a meet seat for a king and a servant of the court, its body was heavy and its paces were gentle; it could break the enemy lines yet fight in ordered ranks. ‘And when they were together in a row, there is an earthquake of *Fad! Fad!* and *Saf! Saf!*’ ”<sup>148</sup>

Al-‘Umari describes the three thousand elephants of the Dehli Sultan. They had litters or howdahs upon them and were covered in wartime with gilt or perhaps inlaid (*mudhahhab*), steel animal armour (*barkustuvan*), in peacetime with *dibaj*, *vashi* and other types of silk. The superstructure of their howdahs consisted of a broad back-plate or platform to which was nailed a tower of wood. The Indian drivers rode in front of these. The elephant could carry six to ten men according to its size.<sup>149</sup> Later al-‘Umari describes the employment of the elephant in battle. The Sultan in the *qalb* or Centre of his army would be surrounded by *a’imma* and *‘ulama*: before him and behind there would be archers. To the left and the right, without any break, were the wings. The elephants stood in front of the Sultan, clad in steel armour and upon their backs the covered towers with warriors inside, as previously related. These towers had apertures through which arrows were fired and flasks of Greek fire (*qawarir al-naft*) were thrown. In front of the elephants stood foot-soldiers in a small troop to clear a path for the elephants and to ward off the enemy cavalry before they reached the elephants; and these foot-soldiers were themselves covered by the archers or firethrowers in the towers on the elephants. Al-‘Umari once again in the same passage refers to the arrows and the *naft* launched from the elephants.<sup>150</sup>

Other references support al-‘Umari’s statement that the elephants were placed in the front rank and generally in the centre, although at the battle of Kili in 1299 A.D. there were evidently

<sup>148</sup> KF, p. 107: translation of M. Habib, p. 76.

<sup>149</sup> *Masalik*, pp. 24-5.

<sup>150</sup> *Masalik*, pp. 52-3.

considerable numbers of elephants—'two hundreds' according to 'Isami—at the wings.<sup>151</sup> However the Indian elephant is capable of what has been called 'a fast shuffle of about fifteen miles an hour'<sup>152</sup> and they seem on occasions to have been brought to charge, when it would have been almost impossible to keep them in their protective phalanx of foot-soldiers in the manner which al-'Umari describes. The poet Amir Khusrav describes the elephants closing into battle:—

The rank of elephants was like a line of baneful clouds,  
Each cloud with lightning to attack, swift like the wind,  
In its swift motion each elephant like a splendid mountain,  
The armour upon it like the cloud upon the mountain;  
On the back of the elephant Turks with arrows by their thumb-  
rings,

Like a mountain which has seated itself on a mountain;  
Behind the elephants the cavalry with their line drawn out  
In frenzy drawing spume from the back of the cosmic fish;  
Not a single rank, nay rather a hundred weighty ramparts  
From which the empty space of the world became crowded.  
In the midst of the Centre, the *murtadd* with his umbrella over  
his head,

Beneath the (royal) umbrella a little moist toadstool.<sup>153</sup>

Amir Khusrav was writing from the point of view of the other side, who won the battle without the aid of elephants, slaying one elephant and capturing twelve. He describes the elephants in defeat:—

From arrows the elephant was grafted with arrow-notches  
Like a porcupine with its back full of quills:  
From the elephant its driver was hanging,  
His body hanging and his life fled:  
Other drivers were endeavouring and hurrying  
To make the elephant enter an ant-hole.<sup>154</sup>

As in this battle, in the disaster of 1398 A.D. very few elephants appear to have been killed on the battlefield.<sup>155</sup> The

<sup>151</sup> FS, p. 260.

<sup>152</sup> Watt, op. cit., III, 219.

<sup>153</sup> TUN, p. 92: cf. FS, p. 440.

<sup>154</sup> TUN, p. 98.

<sup>155</sup> See below, p. 81.

largest proportion noted of elephants killed in battle is in 'Isami's description of the battle of Kili in 1299 A.D. where he has mentioned 'two hundreds' of elephants drawn up in the wings of the Sultan's army<sup>156</sup> and states that 30 were killed when Zafar Khan with the Right (*maymana*) was encircled by the Mongols.<sup>157</sup>

Barani's descriptions of the same incident illustrate both the advantages and the disadvantages of the employment of war-elephants. The Mongol Left gave way and Zafar Khan and the Sultan's Right pursued them, unsupported, for 18 *kos* into what may have been an ambush. Zafar Khan and his force perished after putting up a desperate resistance with their arrows. His elephants were wounded and the drivers killed.<sup>158</sup> The variant recension adds the detail:—"and six or seven elephants which were in front of Zafar Khan suffered severe wounds: they threw their drivers and came back safely."<sup>159</sup> In this case the elephants, when they were out of control, had broken through the ranks of the encircling enemy and presumably carried some at least of those who were in their howdahs to safety.

<sup>156</sup> FS, p. 260.

<sup>157</sup> FS, p. 267.

<sup>158</sup> BTFS, pp. 260-1.

<sup>159</sup> BTFSA, f. 97A.

## A. THE NUMBERS OF ELEPHANTS IN THE PIL-KHANA

Perhaps our strictures with regard to medieval statistics are less true with regard to elephants than with regard to either horses or men. The numbers of elephants being so much smaller, the individual elephant is of greater importance. Amir Khusrav, writing an official account of the great Deccan campaigns of Malik Kafur, could devote space to the story of the pursuit and capture of three elephants which had been withheld when the Ray of Arangal had surrendered his total store.<sup>160</sup> Afif describes with laudatory phrases the hunt of Feroz Shah Tughluq in which seven wild male elephants and one particularly savage female were captured.<sup>161</sup> Occasionally a mistranscription or slip of the memory can occur, as when Barani says that 612 elephants were passed in review before the Sultan as spoils of Malik Kafur's southern expeditions,<sup>162</sup> whereas Amir Khusrav, who is probably his source, says 512.<sup>163</sup> But it is on the whole relatively difficult to doubt such small and circumstantial figures.

The Ghaznavid kingdom had employed war-elephants on a considerable scale. Mahmud of Ghazna inspected 1,300 elephants at the muster of 1023-4 A.D. and his son Mas'ud 1,670 elephants in 1031 A.D. As Bosworth remarks, the last number agrees with that mentioned in a contemporary verse of Farrukhi:—

<sup>160</sup> KF, p. 88.

<sup>161</sup> ATFS, p. 168.

<sup>162</sup> BTFS, p. 333.

<sup>163</sup> KF, p. 161.

“One may ask, ‘What are those 1,700 odd mountains?’ I reply, ‘They are the 1,700 odd elephants of the Shah’ ”<sup>164</sup> Compared to the numbers of war-elephants mentioned in the Dehli Sultanate, these figures for the Ghaznavid kingdom seem surprisingly high, but it is difficult to doubt their authenticity. Even the court poet Farrukhi, presenting a *qasida* on a specific occasion, would be unlikely to congratulate the Sultan on having 1,700 elephants if the real figure was nearer, say, 700: though he might round off 1,670, the figure mentioned by the historian Bayhaqqi, to 1,700.

It is possible that the north Indian breeding grounds of the elephant may have been diminished by over-exploitation or by settlement and cultivation between the early eleventh century and the thirteenth. This would account for a relatively higher number of elephants in the Ghaznavid *pil-khana*. Some support is given to this idea by the numbers recorded by the Ghaznavid historians as captured from individual north Indian rulers:— “350 from Qanawj and 150 from Mahaban in 409/1018-9 and 580 from the Raja Ganda in 410/1019-20.”<sup>165</sup> However the detailed information from the early sixteenth century which we possess regarding the capture of elephants in northern India seems rather against this hypothesis.<sup>166</sup>

The numbers of the war-elephants of the Dehli Sultanate may also be compared with later figures of elephants employed in warfare in India. Two high figures for the fifteenth century should be treated with caution. Sultan Mahmud Sharqi is said to have marched against Bahlul Lodi in 865/1452 with 1,400 war-elephants (*fil-i jangi*) and 170,000 horse and foot. However the figures are those of an early seventeenth century source of no great liability.<sup>167</sup> Farishta quotes from a lost contemporary chronicle of the Bahmani rulers of the Deccan, which writes of the exceptional number of 3,000 elephants which were collected in the *pil-khana* of Muhammad III Bahmani (r. 1463-82 A.D.)<sup>168</sup>

<sup>164</sup> C. E. Bosworth, *The Ghaznavids*, Edinburgh 1963, pp. 116-7.

<sup>165</sup> Bosworth, *op. cit.*, p. 116.

<sup>166</sup> See below, pp. 30-1.

<sup>167</sup> ‘Abd Allah, *Ta’rikh-i Da’udi*, ed. S. A. Rashid, Aligarh 1954, p. 13.

<sup>168</sup> Farishta, *Ta’rikh*, ed. Maj-Gen. J. Briggs *et al.*, Bombay 1831-2, I, 563. Regarding elephants in the Deccan in the late fourteenth century, Farishta has some large and suspect figures. In the war of 767/1366 the Ray of Bijanagar

However this description specifically states that this was the number of elephants of all kinds, big and small, male and female, in the *pil-khana*. Only a portion of these, perhaps a quarter, would be war-elephants, a large, but not improbable number for a monarch who, more than the rest of his dynasty or neighbouring rulers, invested his resources in elephants. (Cf. Nizam al-mulk in the Deccan in the early eighteenth century, who at one moment had with him 1,026 elephants, of which 225 were provided with armour and “presumably were used in battle.”<sup>169</sup>)

Some of the estimates regarding the employment of elephants by the Mughal emperors in the sixteenth century appear to be very high. Akbar, when setting out against ‘Ali-Quli Khan in Jawnpur, is said by his court-historian to have ‘chosen out 2,000 war-elephants to accompany the troops.’<sup>170</sup> But the same authority a few pages later says that he had only ‘about 500 elephants’ with him at the decisive engagement of this campaign.<sup>171</sup> Other figures of war-elephants in the campaigns of Akbar quoted by Horn are smaller than this;<sup>172</sup> while the statement by Badayuni that the rebel general Hemu had 1,500 elephants in his army appears improbable,<sup>173</sup> as does Farishta’s assertion that the central Indian Queen Durgavati had the same number.<sup>174</sup>

After the end of the sixteenth century (and possibly for some (Vijayanagar) set out with a force of 30,000 horse, 900,000 foot and 3,000 elephants, op. cit., I, p. 550. Muhammad I Bahmani, according to a passage notorious in the controversy regarding the introduction of firearms into India, captured from the Ray 2,000 elephants, 300 gun-carriages and 700 Arab horses, op. cit., I, p. 552.

<sup>169</sup> Irvine, op. cit., p. 180.

<sup>170</sup> Abu’l-Fazl ‘Allami, *Akbar-Nama*, ed. A. A. ‘Ali and A. Rahim, Calcutta 1873-87, II, 290: tr. H. Beveridge, Calcutta 1897-1921, p. 246: P. Horn, *Das Heer- and Kriegsgewesen der Grossmoghuls*, Leiden 1894, p. 52.

<sup>171</sup> *Akbar-Nama*, II, 293: tr. p. 431.

<sup>172</sup> Horn, loc. cit.

<sup>173</sup> Horn, loc. cit: Badayuni, *Muntakhab al-tawarikh*, ed. W. Nassau Lees et. al., Calcutta 1865, II, 14. Badayuni also states that nearly 1500 elephants were captured after the battle, II, 16.

<sup>174</sup> Horn, loc. cit.: Farishta, I, 481: Badayuni, II, 66, gives her 700 elephants, while Abu’l-Fazl, *Akbar-Nama*, II, 214 states that 1,000 elephants were taken after her defeat and also that she had 1,000 ‘famous elephants’ (*filan-i nami*), II, 211.

decades before this), with more rapidly firing artillery and hand-guns the elephant, in Irvine's words, "ceased even in the East to be of much value in the fighting line of battle."<sup>175</sup> "To the last some elephants protected by armour were brought into the battlefield. But their use was confined almost entirely to carrying generals or great nobles, and displaying their standards"<sup>176</sup> Contemporary estimates of the number of elephants kept by the late sixteenth and seventeenth century Mughal emperors varied wildly, from 400 to 30,000:<sup>177</sup> but we may take as probably true for its day, around 1650 A.D. the evidence of that sober observer Tavernier, who states that he had inquired from the keeper of the royal elephants in the capital city (Shahjahanabad) how many elephants he had under his charge, and the latter had replied that he had 500 elephants 'of the household', of which 'only 80 or at most 90' were used for war.<sup>178</sup> Such *khassa* elephants, although for the most part not used for war by this time, would probably be animals of sufficient quality to train as war-elephants. In this period also there were probably considerable numbers of royal elephants stabled away from the court in provincial establishments and in those *pil-khanas* in the countryside which have given their names to a number of north Indian villages. But a number of potential war-elephants does not seem to be implied which would be out of all proportion to the number available in the thirteenth and fourteenth century Dehli Sultanate.

For the total number of war-elephants in the *pil-khana* of the Dehli Sultans at the height of their power we possess two estimates. Sultan 'Ala al-din Khilji in the third year of his reign (1299 A.D.), according to the variant recension of Barani's history, had 'one thousand and five hundred' elephants in his *pil-khana*.<sup>179</sup> When rewriting his history in the final version, the same historian changed this figure to 'many elephants'<sup>180</sup> and it is therefore difficult to know if any reliance should be put upon it at all.

Al-'Umari provides an even larger figure, of 3,000 elephants.

<sup>175</sup> Irvine, *op. cit.*, p. 179.

<sup>176</sup> Irvine, *op. cit.*, p. 175.

<sup>177</sup> Tavernier, *op. cit.*, p. 224n. where varying estimates are quoted.

<sup>178</sup> Tavernier, *op. cit.*, p. 224.

<sup>179</sup> BTFS, f. 97A.

<sup>180</sup> BTFS, p. 262.



Al-'Umari's descriptions of India are (apart from some traditional and legendary matter) based upon detailed questioning of returning travellers. In general his information must be taken as referring to the middle years of Muhammad bin Tughluq's reign, around 1340 A.D. "The Sultan of Dehli," he writes, "has 3,000 elephants of different kinds and sizes, and for the expenditure on their food the revenue of a large kingdom would hardly suffice. The largest variety require 40 *ratls* of rice and 60 of barley (*sha'ir*) daily, with 20 *ratls* of butter and half a load (*himl*) of hay. Beyond this there is the expenditure on their attendants. The *shihmat al-fila* is a great man with an *iqta'* the size of a great land like 'Iraq."<sup>181</sup> These elephants were 'of different kinds' and therefore, even if al-'Umari's figure is not exaggerated, as in the case of Muhammad III Bahmani's elephants, only a portion of these would be war-elephants. If a quarter of them were, it would give Sultan Muhammad bin Tughluq a force of 750 war-elephants. In the following reign, when a decline in the total resources of the Dehli Sultanate had taken place, Feroz Shah Tughluq set out on major campaigns against Bengal and against Sind with 470 and 480 elephants respectively.<sup>182</sup> A maximum number of from 750 to 1,000 war-elephants in the possession of the Dehli Sultans in the period of their greatest power in the early fourteenth century appears not unlikely. Before the conquest of Gujarat and the plundering of the Hindu states of the Deccan the total number of war-elephants was probably not so high.<sup>183</sup> After 1350, in the third quarter of the fourteenth century the number of war-elephants in the *pil-khana* was probably maintained by the strenuous efforts of Feroz Shah Tughluq at a little below 500. In that monarch's old age and in the strife after his death the *pil-khana* evidently declined swiftly to the mere 120 beasts which the Sultan of Dehli could put into the field in 1398 A.D.<sup>184</sup>

Accessions to the *pil-khana*, even of insignificant numbers of

<sup>181</sup> *Masalik*, pp. 51-2.

<sup>182</sup> ATFS, pp. 144, 197.

<sup>183</sup> Barani's reconsideration of the number of 1500 elephants may have been prompted by the recollection that he was writing of the period before the Deccan expeditions of Malik Kafur.

<sup>184</sup> See below, pp. 80-1.

elephants, are frequently mentioned by historians of the Dehli Sultanate, from whose references it is possible to compile the following catalogue of entries:—

(i) In 588/1192 14 elephants were acquired with the conquest of Dehli, Kuhram and Ajmer.<sup>185</sup>

(ii) In 590/1194 100 elephants were acquired from the expedition which defeated Jitacandra of Kanawj, according to one contemporary source;<sup>186</sup> other sources state 90 or 80 elephants.<sup>187</sup>

(iii) In 622/1225 Ghiyath al-din 'Ivaz Khilji, established as ruler of Bengal, sent to Dehli 30 elephants as tribute.<sup>188</sup>

(iv) In 657/1259 two elephants arrived from Lakhnnavati (Bengal) as tribute.<sup>188a</sup>

(v) In 662/1264 60 (or 63) elephants were sent from Bengal to Dehli as tribute, evidently to conciliate the new Sultan, Balban.<sup>189</sup>

(iv) In 680/1281-2 an expedition despatched by Sultan Balban against Jajnagar (Orissa) killed four of the elephants of its ruler and captured 20. The Ray, treating for peace, agreed to surrender 50 more elephants.<sup>190</sup>

(vii) In 695/1295 31 elephants were taken in the raid of the future Sultan 'Ala al-din upon Devgir, of which 30 fell to him on the day of his arrival at the city, which he surprised in the absence of the Ray.<sup>191</sup>

(viii) In 708/1308-9 17 elephants were taken by Malik Kafur, general of 'Ala al-din, from his sack of Devgir.<sup>191a</sup>

<sup>185</sup> TFM, p. 22.

<sup>186</sup> TFM, p. 23.

<sup>187</sup> Ibn al-Athir, qu. in ED II, 25; Hasan Nizami, *Taj al-ma'athir*, qu. in ED II, 233.

<sup>188</sup> TN, p. 171.

<sup>188a</sup> TN, p. 226.

<sup>189</sup> BTFS, p. 53.

<sup>190</sup> *I'jaz*, Bk V, pp. 9-11: Ms, ff. 385A-387A, which reads *bist*, 'twenty' in place of *shast* (with *sin*) 'sixty' in the lithographed edition, as the number of elephants taken in battle. The information is suspect, as it is possible that this *fath-nama* is a later imaginative composition of Amir Khusrav.

<sup>191</sup> BTFS, pp. 223, 228: on the first occasion Barani writes *si u and*, 'upwards of thirty', and on the second *si u yak*, 'thirty one'. It is possible that one or other reading is corrupt.

<sup>191a</sup> BTFS, p. 326.

(ix) In 709/1309-10, during the second Deccan expedition of Malik Kafur, three huge elephants belonging to the Ray of Arangal, which had been concealed at some distance from his fortress, were pursued and captured.<sup>192</sup> When the Ray treated with the invaders 'hundreds' or 100 elephants were surrendered.<sup>193</sup>

(x) In 710-11/1310-12, during the third Deccan expedition of Malik Kafur, the Ray of Tilang (Arangal) despatched 23 elephants to join the Muslim army.<sup>194</sup> The Hoysala ruler at Dhorasamudra surrendered '36 huge elephants'.<sup>195</sup> 108 (or 120) elephants were captured from Vira Pandya at Kundur (Cannanore?).<sup>196</sup> 250 elephants were captured from the same ruling family at Brahmatpuri (Chidambaram?).<sup>197</sup> But only '2 or 3' elephants fell into the Muslim hands at Madura in the same kingdom.<sup>198</sup> In all 512 elephants were entered into the Sultan's muster-roll by the end of the expedition.<sup>199</sup>

(xi) In 711/1312, on the return of Malik Kafur's army, according to Barani, 612 elephants were paraded before the Sultan among the spoils.<sup>200</sup> The figure is evidently misquoted from the 512 of Amir Khusrav's immediately contemporary account.<sup>201</sup>

(xii) At the end of 711/1312 20 more elephants reached Dehli as tribute from the Ray of Arangal.<sup>202</sup>

(xiii) In 717/1317-8 the Ray of Arangal, besieged again by

<sup>192</sup> KF, p. 88.

<sup>193</sup> KF, p. 101 reads *sadha*, 'hundreds': DRKK, pp. 69-70 twice says *sad*, 'a hundred'.

<sup>194</sup> KF, p. 120.

<sup>195</sup> KF, p. 138.

<sup>196</sup> KF, p. 153: Kundur is identified as Cannanore by S. K. Aiyangar in his introduction to Habib's tr., p. xxxv.

<sup>197</sup> KF, p. 156: Brahmatpuri is identified as Chidambaram by S. K. Aiyangar, *South India and her Muhammadan invaders*, O.U.P. (Madras) 1921, pp. 99, 108-9.

<sup>198</sup> KF, p. 160.

<sup>199</sup> KF, p. 161.

<sup>200</sup> BTFS, p. 333.

<sup>201</sup> See note 199.

<sup>202</sup> BTFS, p. 334.

Khusrav Khan surrendered more than 100 elephants.<sup>203</sup> An annual tribute of 100 elephants was imposed upon him.<sup>204</sup>

(xiv) In 722/1322 the unfortunate Ray of Arangal was attacked and carried away to Dehli by the future Sultan Muhammad bin Tughluq, with all his riches, including an unspecified number of elephants.<sup>205</sup>

(xv) In the same year this prince also marched on Jajnagar where he took 40 elephants which were despatched to Dehli.<sup>206</sup>

(xvi) In 724/1324 Sultan Ghiyath al-din Tughluq invaded Bengal and overcame both the rival Sultans of Bengal. Regarding the conquest of the second of these, Barani remarks:—  
“All the elephants of the country were sent to the royal *pil-khana* and the army acquired great spoil in the campaign.”<sup>207</sup>  
As Bengal was an area where war-elephants were trapped locally as well as imported, the number taken to Dehli on this occasion may have been considerable.

For the reign of Muhammad bin Tughluq (724-52/1324-51), when the Dehli Sultanate was at the height of its splendour, no specific references survive concerning the capture or acquisition of elephants to the *pil-khana*, although Ibn Battuta alludes to the trade in elephants from Ceylon to mainland India.<sup>208</sup> As Muhammad's kingdom stretched to the extreme south of the Indian peninsula, there was no possibility of sensational accessions to the *pil-khana* by despoiling hitherto undespoiled Hindu princes; and throughout his reign the Sultan was mainly preoccupied with the suppression of his rebellious Muslim subjects—while his chronicler Barani is preoccupied with explaining the disasters which befell him. Barani's moralizings on the necessity of controlling Bengal, in order to procure elephants, probably indicate that this important source of supply was cut off by the rebellion of the province in the 1330s. But the great numbers of elephants acquired between 1309 and 1324 A.D. may have left a surplus in the *pil-khana*, where, in view of the

<sup>203</sup> *Nuh sipihr*, p. 120; BTFS, p. 398.

<sup>204</sup> *Nuh sipihr*, p. 120.

<sup>205</sup> BTFS, p. 449.

<sup>206</sup> BTFS, p. 450.

<sup>207</sup> BTFS, p. 451.

<sup>208</sup> See pp. 71-2 below and note 254.

longevity of the animals and their small casualties in battle, the need for replacements would not have been felt for many years. However the acquisition of elephants is known to have been a major preoccupation of Muhammad's successor, Sultan Feroz Shah Tughluq (750-90/1351-88):—

(xvii) In 755/1354 Feroz Shah Tughluq made his first invasion of Bengal. Sultan Shams al-din Ilyas drew up in battle before him with 50 elephants.<sup>209</sup> Three of these were slain and the remaining 47 captured.<sup>210</sup> Three more would appear to have been lost or given away, as only 44 were displayed in the victory celebrations at Dehli.<sup>211</sup>

(xviii) In 760/1359 five elephants arrived as tribute from Bengal; the small number incensed the Sultan.<sup>212</sup>

(xix) In the same year Feroz Shah Tughluq invaded Bengal for the second time. In the negotiations for peace the Sultan of Bengal sent 40 elephants to him<sup>213</sup> and in addition promised a yearly tribute of 40 elephants.<sup>214</sup>

(xx) Feroz Shah Tughluq then retired to Jawnpur and proceeded on an expedition into Jajnapur (Orissa), the principle purpose of which seems to have been to acquire elephants. The Ray of Jajnapur had fled from his capital, leaving an indomitable elephant standing loose in front of his throne-room: as this could not be captured it had to be slain.<sup>215</sup> The Sultan then organized the hunt in which he captured eight wild elephants.<sup>216</sup> The Ray then treated with Feroz and surrendered 20 elephants, or 18 according to another source, which adds that he was allowed to keep one elephant.<sup>217</sup> The Sultan, after a period when he was lost with his army in the Rajmahal hills, returned to Dehli with 73 new elephants, of which the

<sup>209</sup> ATFS, p. 114.

<sup>210</sup> ATFS, p. 118.

<sup>211</sup> BTFS, pp. 593-4.

<sup>212</sup> TMB, p. 128.

<sup>213</sup> ATFS, p. 161.

<sup>214</sup> ATFS, pp. 161, 163.

<sup>215</sup> ATFS, p. 166.

<sup>216</sup> ATFS, pp. 168-9.

<sup>217</sup> ATFS, loc. cit.: *Sirat-i Ferozshahi*, qu. in J. M. Banerjee, *History of Ferozshah Tughluq*, Dehli 1967, p. 42, n. 185.

provenance of five is unrecorded.<sup>218</sup>

For the remaining 28 years of his reign Sultan Feroz Shah Tughluq is not recorded as having himself captured any more elephants, though reference is made to his arrangements for purchasing elephants from overseas.<sup>219</sup>

(xxi) In 722/1370-1 Malik Raja Faruqi, in possession of Thalner in central India, is said to have captured five large and ten small elephants from a ruler called Raja Bharji or Biharji, which were despatched to Sultan Feroz Shah Tughluq in Dehli.<sup>220</sup>

This is the last recorded entry into the Dehli *pil-khana* before the debacle of 1398 A.D. but probably elephants were being purchased from overseas at a later date than this. Sahrindi, writing some forty years after the event, maintains that a yearly tribute of elephants continued to be sent to Dehli from the Ray of Jajnagar and the ruler of Lakhnawati (Bengal) until 796/1394. In that year Khvaja-i Jahan Sarvar, given the title of *Sultan al-sharq* and despatched eastwards (with 20 elephants) to combat Hindu insurrections, established himself at Jawnpur. Thereafter these tributes of elephants were despatched to him.<sup>220a</sup>

<sup>218</sup> ATFS, pp. 172, 173.

<sup>219</sup> ATFS, p. 486: see p. 72-3 below.

<sup>220</sup> Farishta, op. cit., II, 542.

<sup>220a</sup> TMB, pp. 156-7.

## B. THE SOURCE OF SUPPLY

Elephants could come into the Sultan's *pil-khana* as plunder, as tribute from subordinate rulers or governors, by purchase from outside territories or trapped directly from a wild state. The relatively high figures, quoted above, of the contents of the Ghaznavid *pil-khana* suggest that by the thirteenth and fourteenth centuries the wild elephant may have grown less plentiful in northern India. But in the sixteenth century elephant trapping was still carried out extensively in areas to the south of the Gangetic plain. Kabir, who was probably living in the vicinity of Benaras around 1500 A.D. employed in his popular verses similes of the breaking in and training of elephants.<sup>221</sup> The emperor Babur, writing not long before 1530 A.D. mentions that the inhabitants of thirty or forty villages in the district of Karra (modern Allahabad) gained a living as trappers of elephants; and that the wild elephant grew more plentiful towards the east.<sup>222</sup> The emperor Akbar (1556-1605) was connoisseur of elephants, and it was thought that the choicest in his possession came from Pannah, ~~near Bundi in east Rajasthan,~~<sup>223</sup> (about which Watt remarks that it is 'a region where the elephant rarely, if at all, now exists').<sup>224</sup> However many other places in northern India are also mentioned from which Akbar procured some of

<sup>221</sup> Kabir, *Dohavali*, 13 : 19-20: ed. C. Vaudeville, Pondichery 1957, p. 58.

<sup>222</sup> *Babur-Nama*, tr. Mrs. A. S. Beveridge, London 1922, p. 488.

<sup>223</sup> *A'in-i Akbari*, tr. I, 129-30.

<sup>224</sup> Watt, *op. cit.*, III, 209.

his elephants.<sup>225</sup> His successor Jahangir, in a royal hunt in Gujarat (a territory which had been firmly under the control of the fourteenth century Dehli Sultans) captured 69 elephants.<sup>226</sup> But in the literature of the thirteenth and fourteenth century Dehli Sultanate, there is no reference to any local source of supply within the control of the Sultans, while the chroniclers painstakingly record the arrival of small numbers of elephants from distant lands.

The descriptions of a single elephant hunt of the Dehli Sultans survives, a hunt which took place during Feroz Shah Tughluq's raid upon Jainagar. The eight large elephants (one being a female of great ferocity) were captured by the 'kheddah' or enclosure method. 'Afif, who mentions a wooden palisade (*katgarh*), has not very clearly understood that the animals were driven into it. Tame elephants and vast numbers of beaters with loud musical instruments were used to contain the elephants. 'Afif states that when the captured animals had been sufficiently reduced by starvation, the mahouts climbed out on the branches of trees and dropped onto the backs of the elephants.<sup>227</sup> This would of course be a very perilous action, if they had not previously persuaded them to accept from their hands the food which they otherwise lacked; but 'Afif does not mention this circumstance. However this hazardous method of taming was also practised in fifteenth century Vijayanagar; and by the Mughal Emperor Akbar in person.<sup>227a</sup>

When elephants were wrested by the Dehli Sultans from other Indian rulers, it does not follow that they were native to that part of India. The elephants taken from the Ray of Jainagar or from his dominions on three separate occasions are likely to have been locally trapped; but, as we know from a remark of Amir Khusrav, this was definitely not the case with those taken from the Ray of Arangal.<sup>228</sup> Even if they did not spend treasure

<sup>225</sup> *A'in-i Akbari*, loc. cit.

<sup>226</sup> Nur al-din Jahangir, *Tuzuk-i Jahangiri*, tr. C. Rogers and H. Beveridge, London 1909-14, II, 12. Similarly in 973/1566 the emperor Akbar is said to have captured 350 elephants in a single day, see Nizam al-din Ahmad, *Tabaqat-i Akbari*, Kanpur 1875, p. 265.

<sup>227</sup> ATFS, pp. 168-9.

<sup>227a</sup> Hodivala, op. cit., I, 419 on ED, IV, 110.

<sup>228</sup> See p. 69 below.



with the lavish hand of the Dehli Sultans, the Hindu rulers of the Deccan had been devoting a portion of their resources to a medieval Indian armaments race, whose consequence we see in the immensely profitable Arab and Persian Gulf horse trade. The princes of India, including the Dehli Sultans, put their faith in elephants in warfare; besides which the actual possession of elephants was an important symbol of royalty and independent power. Idrisi, writing in Sicily in the twelfth century, had heard of the lust of the Kings of Hind to possess great and tall elephants, upon which they spent great sums of money, paying for them according to their height.<sup>229</sup> Cosmas Indicopleustes, the sixth century Christian monk, writes of Kings “of different places in India, who keep elephants, such as the Kings of Orrhotha, and the King of the Kalliana people, and the Kings of Sindu, of Sibor and of Male. One will have 600 elephants, another 500, and so on, some more and some less.”<sup>230</sup> The testimony of Megasthenes makes it clear that the acquisition of elephants from distant sources of supply was established in northern India by the third century before Christ.<sup>231</sup>

<sup>229</sup> Idrisi, *Nuzhat al-mushtaq*, on India, ed. S. Maqbul Ahmad, Aligarh 1954, pp. 11, 79: tr. by the same, *India and the neighbouring territories*, Leiden 1960, pp. 36, 71.

<sup>230</sup> *The Christian Topography*, pp. 371-2.

<sup>231</sup> J. W. McCrindle, *Ancient India as described by Megasthenes and Arrian*, Bombay/London 1877, *passim*. The fragments which have been preserved of Megasthenes describe Candragupta Maurya at Pataliputra as the possessor of 8,000 or 9,000 elephants, pp. 139, 155-6. The rulers of other tribal groups are said to have possessed very much smaller numbers:—

The king of Automela	1600 elephants (p. 147)
The king of the Andarai	1000 elephants (p. 138)
The king of the Gangaridai	700 elephants (p. 155)
The king of the Kalingai	700 elephants (p. 136)
The king of the Pandai	500 elephants (p. 147)
The king of the Toluktai	400 elephants (pp. 137-8)
The king of the Charmai	‘but 60’ elephants (p. 147)

Before the rise of the Mauryas the Gangaridai are said to have possessed 4,000 elephants, p. 34. The Varetatae or Suaratartae ‘keep no elephants but trust entirely to their horse and foot’, p. 146. References which imply a trade in elephants are to 5,000 councillors, each of whom furnished the state with an elephant (p. 67): to the method of training elephants, pp. 90-1: to a ‘half-wild’ class of elephant hunters, pp. 136-7: to an elephant catcher unwilling to sell an animal to a king, pp. 118-9: and to the royal monopoly of elephants, p. 90. For the trade from Ceylon to India, see p. 70 below.

It is obvious to Barani, writing in the middle of the fourteenth century, that the main source of war-elephants for the Dehli Sultans was Bengal. Down to recent times the thick jungles of eastern Bengal have been an important source of wild elephants. No figure of elephants arriving in Dehli from Bengal is recorded comparable to the magnificent 512 brought back from the Deccan by Malik Kafur, but there may have been a steady supply through the years which did not attract the attention of the chroniclers. Bengal in the thirteenth and early fourteenth century was sometimes under the direct control of the Dehli Sultans, when the *muqta*<sup>232</sup> or Governor was not expected to retain any elephants in his own control. In other periods the Muslim rulers of Bengal were in a fairly amicable tributary relation, which had to be maintained by the occasional despatch of elephants to Dehli. Barani attributes a letter to Sultan Ghiyath al-din Balban, addressed to his son Bughra Khan when he gave him the province of Bengal. The Bengal ruler should continue to send presents, offerings and trustworthy and well disposed emissaries to Dehli so that the Sultan of Dehli should not consider an expedition against the Kingdom of Lakhnnavati (Bengal) the most urgent of matters. From time to time he should send a certain number of elephants to Dehli, which would have the consequence that the Sultan of Dehli would not close the road for horses (from the north-west or the Arabian Sea) to reach Bengal.<sup>233</sup> There was in fact a *quid pro quo* in the relationship. When Feroz Shah Tughluq had, at the peace after his second invasion of Bengal in 760/1359, extracted 40 elephants from the Sultan of Bengal, he presented him with 500 fine horses.<sup>234</sup> This would hardly be a fair exchange if one reckons, as Barani did, a single elephant to be worth 500 horse: but then these were fine Arab and central Asian horses. On another occasion, when a strong and successful warrior, Sultan Balban, had usurped the throne of Dehli, prudence dictated the despatch by Tatar Khan from

<sup>232</sup> BTFS, pp. 82-3: the case of the *muqta*<sup>232</sup> Mughith al-din Tughril during the reign of Balban.

<sup>233</sup> BTFS, p. 96.

<sup>234</sup> ATFS, p. 159.

Bengal of a particularly large tribute of elephants.<sup>235</sup>

Many of the Bengal elephants may have come from beyond the frontiers of the territories firmly held by the Sultans or Muslim governors of Bengal. From the territory of the Ray of Jajnagar Mughith al-din Tughril, Balban's governor of Bengal, was reported to have been taking elephants which had not been despatched to Dehli.<sup>236</sup> Other elephants were being brought into Bengal by sea, as we know from the complaint of Feroz Shah Tughluq recorded as made in 756 or 757/1355 or 1356 that the presents offered by Shams al-din of Bengal were not adequate: in future they should include choice elephants of the sort acquired from sea-ports (*az banadir*).<sup>237</sup>

The 360 odd elephants taken by Malik Kafur from the Pandya Kingdom alone—'Ma'bar', the extreme south of the Indian peninsula—suggests a great plenty in that area. The hundred or more elephants surrendered the previous year at Arangal are also said to have been from Ma'bar:—"They are all 'must' elephants of Ma'bar, not vegetable eating elephants of Bang (Bengal)."<sup>238</sup> In the extreme south of India, the final range of the Western Ghats as well as Coorg and parts of Mysore to the north are a habitat of wild elephants, which were extensively trapped there in the late nineteenth century. On the other hand we know from inscriptional evidence that the Pandya kingdom was in the mid-thirteenth century kingdom was in the mid-thirteenth century taking elephants from Ceylon<sup>239</sup> and there are many other references to this easy sea-borne trade across

<sup>235</sup> Cf. the 60 (or 63) elephants which arrived in the year of Balban's accession, no (v) on p. 60 above.

<sup>236</sup> BTFS, pp. 82-3.

<sup>237</sup> TMB, p. 126.

<sup>238</sup> KF, p. 101.

<sup>239</sup> K. A. Nilakanta Sastri, *The Pandyan kingdom*, London 1929, pp. 161-2, 176: inscriptions of the reign of Jatavarman Sundara Pandya in the mid-thirteenth century at Tirupundurutti (No. 166 of 1894) and at Pudukottai (No. 366). The historical proem of the latter, which mentions a tribute of elephants from Karnata and of elephants and pearls from Ceylon, is omitted in *A chronological list of inscriptions of Pudukottai*, Pudukottai 1929, p. 54.

the narrow straits, of an earlier as well as of a later date.<sup>240</sup> A difficulty in identifying Malik Kafur's Ma'bari elephants as of Sinhalese origin is the statement that the elephants were young and still possessed both their tusks.<sup>241</sup> The male of the Sinhalese elephant is generally tuskless, and as it is closely related in the same species to the Indian elephant, this is a minor genetical mystery: it has been suggested that the tusked Sinhalese male elephant has been bred out by the particularly ruthless demand for ivory in that country.<sup>242</sup> We cannot therefore assume that in the fourteenth century male Sinhalese elephants were tuskless.

There is no doubt of the antiquity of the trade in Sinhalese elephants to much more distant areas of the Indian sub-continent. Megasthenes refers to their presence at the 3rd century Mauryan court at Pataliputra in Bihar.<sup>243</sup> Cosmas, writing in the 6th century A.D. mentions the good price which the King of Ceylon (Seiladibe) gave for the elephants, at a fixed rate according to their height.<sup>244</sup> He mentions this in a passage concerning both the import of horses into Ceylon and the holdings of elephants of distant Indian monarchs; their export as a royal monopoly is therefore implied. The detail of Sinhalese elephants being sold according to their height is mentioned by many travellers, among

<sup>240</sup> It is uncertain to what extent this trade was interrupted by the frequent and savagely conducted warfare between the medieval dynasties of South India and of Ceylon. Dr. Padmanabhan informs me that the Telugu poem *Harivilasam*, written in the reign of Devaraya II of Vijayanagar (1422-46 A.D.), refers to a patron of the poet who was a 'shetty' or merchant supplying the Vijayanagar and Bahmani courts with elephants from Ceylon; and in the fifteenth century the trade to South India seems to have been well established, see note 245. Pires refers to an annual tribute of 40 elephants from Ceylon to Quilon, interrupted by the Portuguese, *op. cit.*, I, 80. For the 16th and 17th century export of elephants from Ceylon to India see Linschoten, *Travels*, tr. Burnell and Tiele, I, 81: P. E. Pieris, *Ceylon: the Portuguese era*, Colombo 1914, II, 66-8: S. Asaratnam, "Dutch commercial policy in Ceylon and its effects on the Indo-Ceylon trade, 1690-1750" in *Indian economic and social history review*, IV, 2, June 1967, p. 109.

<sup>241</sup> KF, p. 101.

<sup>242</sup> Tavernier, *op. cit.*, I, 222n.

<sup>243</sup> McCrindle, *Megasthenes*, p. 170.

<sup>244</sup> *The Christian topography*, pp. 371-2.

them 'Abd al-Razzaq writing in the mid-fifteenth century<sup>245</sup> and Pires some seventy years later.<sup>246</sup> The Sinhalese elephant was smaller than the greatest of Indian elephants but was valued for its reputed greater sagacity and bravery in battle.<sup>247</sup>

Sinhalese elephants were probably to be found in the royal elephant stables of north Indian princes in the period before the establishment of the Dehli Sultanate. " 'Utbi records that the Thanesar expedition of 405/1014-5 was provoked by Mahmud (of Ghazna)'s desire to get some of the special breed of Sailamani elephants excellent in war..."<sup>248</sup> Hodivala in his commentary on this passage suggests that the elephants probably were not Sinhalese at all, but must have been wild-elephants of the sub-Himalayan range near Thanesar. Possibly, he suggests, like the Sinhalese elephants these may be tuskless, and for this reason the name may have been transferred to them.<sup>249</sup> But even if the elephants of Ceylon were tuskless in the early Middle Ages, we have no other references to the bravery and desirability of these sub-Himalayan elephants. The early sixteenth century poet Jayasi, writing in a rural environment in the Gangetic plain, constantly refers to the excellence of Sinhalese elephants. "Thousands of strings of horses went with them and a hundred strings of Singhali elephants."<sup>250</sup> "Where are my horses, gallant and strong? Where are my Singhali elephants?"<sup>251</sup>

Barbosa, writing before 1518 A.D. twice refers to the transport of Sinhalese elephants to Gujarat. The Sultan of Gujarat is "a lord of horses and elephants in great numbers. The

<sup>245</sup> 'Abd al-Razzaq, op. cit., II, 805: Pires, op. cit., I, 86: A. Nikitin tr. in R. H. Major, *India in the XVth century*, London 1857, p. 20.

<sup>246</sup> Pires, op. cit. I, 86.

<sup>247</sup> Watt, op. cit., quoting Linschoten: V. Minorsky, *Marwazi on China, the Turks and India*, London 1942, pp. 46-7: Megasthenes (McCrindle, *Megasthenes*, p. 170) appears wrongly to have believed that the Sinhalese elephant was larger than the Indian, but he also alludes to its reputation for superior intelligence.

<sup>248</sup> Bosworth, op. cit., p. 116.

<sup>249</sup> Hodivala, op. cit., I, 144-5.

<sup>250</sup> Malik Muhammad Jayasi, *Padmavat*, ed. V. S. Agravala, Cirganv 2012 V. S., p. 391, stanza 385: *Padmavati*, tr. A. G. Shirreff, Calcutta 1944, p. 232.

<sup>251</sup> Ibid: Agravala, p. 409, stanza 404: Shirreff, p. 242.

elephants come from Ceilam and Malabar to be sold there.”<sup>252</sup> I. H. Qureshi who noted these references argued that it would have been too expensive to import Sinhalese elephants to thirteenth and fourteenth century Dehli:<sup>253</sup> but medieval Indian princes did not hesitate to spend upon elephants and horses.

Two contemporary references appear to allude to the traffic of Sinhalese elephants to the capital city of Dehli, probably through a port in Gujarat. Ibn Battuta, describing the elephants in Ceylon, says that some of them are transported *ila hazrati mulki'l-Hind*.<sup>254</sup> In this period *mulku'l Hind* may be equated with the Dehli kingdom, while *hazrat*, in the fourteenth century Indo-Persian usage with which Ibn Battuta after several years residence was familiar, refers to the capital city of the Sultan. The Sinhalese elephants would have been arriving at the *pil-khana* of Muhammad bin Tughluq.

The second reference to this traffic is by 'Afif, and must allude to a fairly late period in the reign of Feroz Shah Tughluq—certainly after 1369. A royal *farman* had been issued to the effect that if any merchant should bring elephants from the *jaza'ir-i rod-i nil*, the price of any elephant which had perished on the journey would be paid by the treasury. (For simliar reimbursements in the sea-borne horsetrade, see the remarks of Wassaf, reproduced above). Acting on this *farman*, Shams al-din Aburja—a minister of the Sultan for whom 'Afif had a great dislike—had fraudulently collected the price for several elephants from the *divan-i vizarat*.<sup>255</sup> *Jaza'ir-i rod-i nil*, 'the islands of the river Nile' or 'the islands of the blue water' is an unfortunate but not really misleading phrase: for 'Afif maintained through the hundreds of pages of his history his own remarkably crude style of *saj'* (rhythmical prose with internal rimes) in which *pil* or *fil*, 'elephant', usually brings *nil* to mind.<sup>256</sup> Ceylon is the nearest and most likely source for a direct maritime trade in

<sup>252</sup> *The Book of Duarte Barbosa*, tr. M. Longworth Dames, London 1918-21, I, 117-8: II, 113.

<sup>253</sup> I. H. Qureshi, *The Administration of the Sultanate of Dehli*, 4th ed., Karachi 1958, p. 143, citing Barbosa, I, 119.

<sup>254</sup> IB, IV, 77.

<sup>255</sup> ATFS, p. 486.

<sup>256</sup> Cf. ATFS, pp. 197, 428-9.

elephants to the ports of Gujarat, still at this time in the possession of the Dehli Sultans.

It is likely that Ceylon was in this period not the only source of elephants imported by sea into India. Barbosa, writing before 1518 A.D. referred to the export of elephants from the King of Pegu (lower Burma, near Rangoon), "which they sell in many lands, but most of them in the kingdoms of Narsyngua (*i.e.*, Vijayanagar), Malabar and Cambaya (*i.e.*, Gujarat)." <sup>257</sup> In the late sixteenth century very large numbers of elephants were trapped in Pegu, the realm of 'the Lord of the White Elephant'. <sup>258</sup> If Sinhalese sources are to be believed, in the mid-twelfth century not only were single elephants offered in tribute to Parakramabahu, King of Ceylon, whenever Sinhalese ships called at the Burmese coast, but Sinhalese merchants also purchased Burmese elephants to carry abroad (to Ceylon?) <sup>259</sup> There are therefore grounds for believing that a sea-borne trade in elephants across the Bay of Bengal from lower Burma was well established before the fourteenth century. When Feroz Shah Tughluq, in 756 or 757/1355 or 1356, complained that the Bengal Sultan was not sending him choice elephants 'from the sea-ports', <sup>260</sup> the elephants to which he is referring are likely to have come to the ports of Bengal from the delta of the Irrawaddy rather than from Ceylon. <sup>260a</sup>

<sup>257</sup> Barbosa, *op. cit.*, II, 154-6. Barbosa refers to the export of elephants from Champa to 'many lands' (II, 209): these would probably include the Indian subcontinent; see note 260a.

<sup>258</sup> R. Fitch in *Early travels in India, 1583-1619*, ed. W. Foster, O.U.P. 1921, p. 32: see also Moti Chandra, "The white elephant" in *Lalit Kala*, 1-2, 1955-6, p. 96.

<sup>259</sup> E. W. Nicholas, *Concise history of Ceylon*, Colombo 1961, pp. 325-6.

<sup>260</sup> TMB, p. 126: see p. 69 above.

<sup>260a</sup> In the seventeenth century elephants were being shipped in considerable quantities from Siam and also probably from Indo-China to the Indian market,—see Husayni, *Safina-i Sulaymani*, tr. J.O'Kane ("The ship of Solomon", London 1971, in the press).

## C. THE ROLE OF THE PIL-KHANA IN THE DOWNFALL OF THE DEHLI SULTANATE

Amir Timur's supposedly irresistible role as a world-conqueror, as well as the scanty and contradictory chronicles of late fourteenth century Dehli, have diverted attention from the rapid and disastrous breakdown of the Dehli Sultanate at the centre in the years from 1388 to 1398. This decade witnessed the dissipation of the greater part of the resources at the command of the Dehli Sultans in their capital city and the repeated failure to establish the authority of a single Sultan or a single mayor of the palace. In the struggle for power, possession of the *pil-khana* was one of the most important assets. In all the complicated manoeuvres of the decade the rule seems to hold good that he who held the elephants of the *pil-khana* and the loyalty of their attendants, could not be defeated in the open field by his opponent, however strong the support which the latter commanded.

The configuration of the capital city of Dehli in the late fourteenth century favoured a polarization of politics into two main opposing factions, with their respective bases in the palace-precinct and garden city of Ferozabad and the older highly fortified triple city of Dehli-i Kuhna, Siri and Jahan-Panah some miles to the south. The number of defensible strongholds in the latter favoured a further division of power amid warring factions, which occurred in the three years before 1398. Civil war broke out in 1387 when Sultan Muhammad, second and eldest surviving son of Feroz Shah Tughluq, overthrew and slew the *vazir* Khan-i Jahan, and the Ferozshahi slaves rallied against him at Ferozabad around the persons of the aged Sultan and his grandson Tughluq Shah. When Sultan Muhammad had driven his opponents to the doors of the palace-precinct (*kushk-i khass*), his aged and senile father was put upon his mount of



state, brought out and displayed. At this, according to one source, the army and the elephant-drivers (*lashkar u pilbanan*) deserted Sultan Muhammad for their old master.<sup>261</sup> Sultan Muhammad retreated towards Dehli (the old cities), where the *Shihna* of the city closed the gate in his face. Routed, he fled with a small body of cavalry into the Panjab hills. In Ferozabad Tughluq Shah was installed upon the throne, with his supporters in possession of such of the *pa'egah* as was stationed in Dehli and of the *pil-khana*.

Sultan Muhammad was the most able and persistent of the later princes of his house. He enjoyed extensive support among the free urban population, the great *iqta'*-holders and the lower military commanders.<sup>262</sup> He was able to muster 50,000 horse before two of his marches upon Dehli.<sup>263</sup> Yet he was repeatedly unable to gain a victory on the battlefield; and one reason for this may be sought in his opponents' possession of the *pil-khana* and employment of elephants in battle against him.<sup>264</sup> By contrast, his opponents were hindered in their contest with him by feeling unable to leave the capital city unguarded for any length of time, probably in view of the sentiment of the free population in favour of Sultan Muhammad.<sup>265</sup>

After the murder of Tughluq Shah in a palace resolution and the flight of his successor Abu Bakr Shah to escape a similar fate, Sultan Muhammad accepted the invitation of his erstwhile enemies, the Ferozshahi slaves and the other Amirs at Ferozabad to resume the throne there.<sup>266</sup> When he reached the banks of the Jamuna, all the Maliks and Amirs, with the entire *pil-khana* and *pa'egah* as well as the keys of the city-gates, came to wait upon him.

<sup>261</sup> TMH, f. 416A: TMB, p. 139.

<sup>262</sup> TMH, f. 421B: TMB, 145, 148.

<sup>263</sup> TMB, pp. 146, 147.

<sup>264</sup> TMH, f. 421B, Muhammad's battle with Abu Bakr outside the walls of Dehli: f. 422A, Abu Bakr taking 'all his elephants, horses, Mughals and servants' attempts to surprise Muhammad at Jatesar, but has to retreat when Muhammad makes for Dehli: TMB, p. 138, Abu Bakr defeats Humayun, son of Muhammad, when another large force of cavalry has been raised against him.

<sup>265</sup> TMB, p. 148.

<sup>266</sup> TMH, f. 423A: TMB, p. 149.

After his reascension of the throne and the distribution of offices and largesse, Sultan Muhammad was mainly preoccupied with how to wrest *de facto* control of the *pil-khana* and the *pa'egah* from the hands of the slave *amirs*. Both *pil-khana* and *pa'egah* were in Ferozabad. (The *pil-khana* was probably situated in the great rectangular walled enclosure at the southern side of the palace-precinct now known as Feroz Shah Kotla). Sultan Muhammad left Ferozabad for the older cities of Dehli, to visit the tombs of Sultans and Shaykhs, and began to show interest in the repair of the *Kushk-i hazar-sutun* (the palace of the thousand pillars), a building with strong historical associations. As most of the slave Amirs had households in the garden city portion of Ferozabad, they departed to them during the Sultan's expedition, and only a few remained on guard at the *pil-khana* and the *pa'egah*. Sultan Muhammad made a surprise attack upon these and gained possession of the elephants and horses. He then gave the Ferozshahi slaves three days to depart from Dehli. Many of them went to Mewat, to join Abu Bakr Shah, the Sultan who had recently fled from them. Those who remained in Dehli were hunted out and killed after three days. The elephants of which Sultan Muhammad gained control were shortly afterwards brought to bear upon the doors of a fortress some miles from Dehli, where his rival Abu Bakr Shah had taken refuge: and with the surrender of this prince Sultan Muhammad enjoyed undisturbed possession of the throne for nearly three years until his death.<sup>267</sup>

In 795/1393, when the throne passed to Sultan Mahmud son of Sultan Muhammad, the *pil-khana* again became a counter in the struggle for power in the capital city. The principal offices of state were divided among the great officers (*bandagan-i kibar*) of the Sultan's father, who very quickly fell out among themselves.<sup>267a</sup> Khvaja-i Jahan Sarvar departed to quell Hindu insurrections in the East, taking with him 20 elephants of the *pil-khana*; with his establishment at Jawnpur, as mentioned above, the tribute of elephants from Jajnagar and Bengal is said to have

<sup>267</sup> TMH, ff. 424B-426A: TMH, pp. 150-1.

<sup>267a</sup> TMH, f. 432B.

ceased to reach Dehli.<sup>268</sup> An expedition of the Sultan with his *vazir* Sa'adat Khan to quell the Hindus of Bayana led to the establishment of a triumvirate within the old triple city of Dehli, consisting of Muqarrab Khan, probably a close relation of the Sultan, Mallu (Iqbal) Khan and Bahadur Nahar (or Bahadur Khan), a tribal chieftain from the neighbouring Mewat. Sultan Mahmud remained in the palace fortress of Ferozabad, under the control of Sa'adat Khan and Tatar Khan.<sup>269</sup> This pair brought out Sultan Mahmud 'with all the elephants and *hasham*' to besiege the triumvirate in Dehli. They were encamped at Hauz-i Khass outside the city walls, where the Sultan managed to flee from his tent to join their opponents, taking refuge with Muqarrab Khan in Jahan-Panah. 'Most of the population' of the city came out in a sortie to do battle for the newly arrived Sultan: but the other side still possessed the elephants and the rest of the *hasham*. The citizens were routed and left a thousand horse and foot dead on the field.

As Sa'adat Khan and Tatar Khan had lost control of the person of the Sultan, they put up a cousin of his as his substitute in Ferozabad, with the title of Nusrat Shah. Our source remarks that they kept Nusrat Shah as a figurehead and ruled according to their own counsels. In the end a difference arose between Sa'adat Khan and Tatar Khan, and the latter 'proved the stronger'. Sa'adat Khan fled with some of his supporters from the palace to the walled city, where he was received with honour but not long afterwards killed by Sultan Mahmud's mentors.<sup>270</sup> Sahrindi, who up to this point has omitted to notice the role of Tatar Khan, gives a rather different account of Sa'adat Khan's flight. Some time after Nusrat Shah's elevation to the throne by Sa'adat Khan, he states, some of the Ferozshahi slaves<sup>271</sup> and some of the elephant keepers (*pilbanan*) made friends with the Sultan.

<sup>268</sup> TMB, p. 156.

<sup>269</sup> TMH, f. 432B: TMB, p. 158. Tatar Khan's alliance with Sa'adat Khan is not mentioned by TMB which speaks of him being raised to the *wizarat* and honoured with this title at a later date by Nusrat Shah, p. 160.

<sup>270</sup> TMH, ff. 432B-433B: TMB, pp. 158-9.

<sup>271</sup> *Sic*: but TMB, pp. 147,150, has already described the massacre and almost total dispeppession of the Ferozshahi slaves in the provinces and in the capital.

They mounted Nusrat Shah upon an elephant and everyone began to rally round him. Sa'adat Khan saw that resistance was hopeless, and fled by the *haram* door to enter the city of Dehli.<sup>272</sup>

Fighting went on continuously between the supporters of Sultan Mahmud and Sultan Nusrat Shah in the few miles between their respective bases—every day through three years according to Sihrindi.<sup>273</sup> After the departure and death of Sa'adat Khan, Nusrat Shah began to be frightened of or dissatisfied with his remaining mentor, Tatar Khan. He would appear to have seized his opportunity when Tatar Khan, accompanied by ten elephants and some of the royal slaves, left Dehli to combat Sarang Khan, who had control of Multan and was advancing towards the capital.<sup>274</sup> (Sarang Khan was the brother of Mallu Khan, but does not appear to have been acting in concert with him). Mallu Khan had been sending messages and making overtures to Nusrat Shah; Bihamad Khani describes Mallu Khan as a crafty man and Nusrat Shah as lacking in sense.<sup>275</sup> A meeting took place between the two on the neutral ground of the shrine of Qutb al-din Bakhtyar Kaki, outside the walls of Dehli-i Kuhna.<sup>276</sup> Mallu Khan promised to enthrone Nusrat Shah in the *Kushk-i hazar sutun*, ancient throne-room of the Dehli Sultans, in Jahan-Panah, the middle portion of the triple city, and to expel Sultan Mahmud.<sup>277</sup> Nusrat Shah therefore 'hastily and inauspiciously' departed from the palace of Ferozabad with all his elephants and military following. When he approached the city walls, Mallu Khan came out to receive him with 'some thousands' of horse, and he was installed, as promised, in the *Kushk-i hazar sutun*.<sup>278</sup> Sultan Mahmud and his kinsman Muqarrab Khan seem to have been obliged to retreat from this palace in Jahan-Panah, into the adjoining city to the south-west, Dehli-i Kuhna, where the Mewati chieftain Bahadur Nahar was already in residence. Within the triple walled city there

<sup>272</sup> TMB, pp. 159-60.

<sup>273</sup> TMH, f. 433B; TMB, pp. 160-1.

<sup>274</sup> TMB, p. 161.

<sup>275</sup> TMH, f. 433B.

<sup>276</sup> TMB, p. 163.

<sup>277</sup> TMH, f. 433B.

<sup>278</sup> Ibid.: TMB, p. 163.

were now lodged two Sultans and three would-be mayors of the palace. Mallu Khan openly supported Nusrat Shah while secretly entering into correspondence with Sultan Mahmud and Muqarrab Khan. "As he did not think him worthy to rule," Bihamad Khani observes, "he took into his own keeping all his elephants." Nusrat Shah then fled from the city 'in some direction'.<sup>279</sup> Sahrindi says that Nusrat Shah with his followers escaped from the city, but in the flight all the 'celebrated elephants' (*pilan-i namdar*) fell into Mallu Khan's hands. Nusrat Shah went again into Ferozabad, but after a while departed with all his following to join Tatar Khan,<sup>280</sup> distaste for whose tutelage had led him to negotiate with Mallu Khan: Mallu Khan by the capture of what was left of the *pil-khana* had himself, in Bihamad Khani's words, become 'the possessor of power and pomp.' Of the other members of the triumvirate, Bahadur Nahar evidently decided that the immediate prospects in Dehli were poor and went off to his own tribal territories. Mallu Khan had gained possession of Ferozabad, but himself continued to reside at Siri, the north-eastern unit of the triple walled city of Dehli, where he was installed before he lured Nusrat Shah to his downfall.<sup>282</sup> Sultan Mahmud and Muqarrab Khan were obliged to treat with Mallu Khan. Sultan Mahmud once again moved from Dehli-i Kuhna into the *Kushk-i hazar sutun* in Jahan-Panah, while Muqarrab Khan also took up residence close to this palace; but Mallu Khan 'with the prestige of all the elephants' kept the gates of the Sultan's residence closed. After suitably prolonged demonstrations of friendliness, Mallu Khan surrounded Muqarrab Khan's residence and brought him to a miserable end.<sup>283</sup> Mallu Khan, with Sultan Mahmud in his power, then led out a force against Tatar Khan, Nusrat Shah's former *vazir*, at large to the north of Dehli. He defeated him and recaptured the (ten)

<sup>279</sup> TMH, f. 434A.

<sup>280</sup> TMB, p. 163.

<sup>281</sup> TMH, f. 434A: TMB, pp. 163-4.

<sup>282</sup> TMB, pp. 163-4, where it is stated that there were two months of fighting every day between Mallu Khan and Muqarrab Khan, presumably *within* the walls of the triple city.

<sup>283</sup> TMH, f. 434A: TMB. p. 164 adds that after guaranteeing his life he killed him.

elephants of the *pil-khana* in his charge, which Tatar Khan had preferred to leave inside the walled town of Panipat while himself making a raid upon Dehli.<sup>284</sup> Now for a brief period Mallu Khan was undisputed mayor of the palace, with the only surviving Sultan and the entire *pil-khana* under his control.

The end of the *pil-khana* came very shortly afterwards, in December 1398 when the armies of Amir Timur of Samarqand drew up for battle outside Dehli. "On the other side," Timur's chronicler Nizam al-din Shami remarks, "was Malikzada Sultan Mahmud with Mallu Khan and other leaders and commanders of the land of Hind, with 10,000 horse and 20,000 fully armed foot<sup>285</sup> and 120 war-elephants, surging like the ocean and trumpeting like thunder clouds, armoured and with structures placed upon their backs." Beside the elephants stood *ra'd-andazan* (throwers of explosive grenades) and *takhsh-afkanan* (either crossbowmen or rocketmen) while on top of each elephant there were several archers.

In spite of their long record of victories, the army of Timur showed some alarm at the sight of the elephants. Timur observing this ordered a certain Mawlana in his train to spread the prayer-carpet and offered up prayers to the Almighty for victory.<sup>286</sup> Practical preparations against the elephants included the erection of palisades and the digging of a trench in front of the army. In front of these buffaloes were tied together, and smiths were ordered to manufacture caltrops to be distributed to the footsoldiers to throw in the path of the elephants.<sup>287</sup>

<sup>284</sup> TMB, p. 164.

<sup>285</sup> 40,000 according to a slightly later authority: see Yazdi, *Zafar-Nama*, ed. M. 'Abbasi, Teheran 1336 Shamsi, II, 77: the figure of 12,000 horse, found in the translation of Yazdi in ED III, 498, appears erroneous, possibly from the reading of a corrupt Ms. The information regarding the battle in both *Zafar-namas* appears to derive from Ghiyath al-din 'Ali Yazdi's *Roznama-i ghazawat-i Hindostan*, of which the unique Ms is in Tashkent—see Storey, *Bio-bibliographical survey of Perslan literature*, p. 278, No. 353. The microfilm of this Ms at the India Office Library is unsatisfactory, but there appears to be no additional information in its florid account of the battle which is not reproduced by either Nizam al-din Shami or Sharaf al-din 'Ali Yazdi.

<sup>286</sup> Shami, *Zafar-Nama*, ed. F. Tauer, Praha 1937, I, 189-90.

<sup>287</sup> Yazdi, *op. cit.*, II, 78.

An initial attack on Timur's right by the Dehli forces was unsuccessful, being itself attacked in the rear by Timur's vanguard. As on other occasions, the Dehli elephants were mostly in the centre with the Sultan.<sup>288</sup> They advanced in good order but the warriors of Timur, in Shami's words, "struck at the rank of the elephants and turned the elephant drivers upside down."<sup>289</sup> The young prince Khalil Sultan, after killing the driver of an elephant, led it off to Timur 'as a husbandman drives a buffalo.'<sup>290</sup> From the Dehli side Sahrindi says that some elephants fell into the hands of the enemy in the battle, but Mallu Khan led back most of them by stratagems and hard driving inside the city walls. The Indian forces retreated to the walled city, where great numbers were crushed trying to enter the gates.<sup>291</sup> During the night, with Timur encamped outside, Mallu Khan and Sultan Mahmud secretly fled away, leaving the inhabitants of the cities of Dehli, whose great fortifications had never fallen to siege, to make their peace with Timur, only to be subsequently plundered, and enslaved. Yazdi states that among the plunder 120 elephants were paraded before Timur and sent off to Samarqand and other places within his dominions.<sup>292</sup> This is the same number which Shami mentioned in the battle-line; it suggests that, as on other occasions, few of the elephants were killed or seriously injured in battle. A curious detail is added by another early fifteenth century Timurid chronicler. The elephants were laden not only with treasure but also with carved stone to adorn the great mosque of Samarqand with marble (*sang-i rukham*).<sup>293</sup>

This may be one of the causes of the puzzling and almost complete absence of elaborate stone carving on later fourteenth century monuments in Dehli. There is no sign of Indian carved stone or marble upon the great mosque of Samarqand and it may be presumed that the elephants and this portion of their burden were mislaid or perished upon the journey. Possibly, like the

<sup>288</sup> Yazdi op. cit. II., 83.

<sup>289</sup> Shami, op. cit., I, 190.

<sup>290</sup> Yazdi, op. cit., II, 84.

<sup>291</sup> TMB, p. 166.

<sup>292</sup> Yazdi, op. cit., II, p. 91.

<sup>293</sup> Mu'in al-din Natanzi, *Muntakhab al-tawarikh-i mu'ini*, ed. J. Aubni, Teheran 1336 Shamsi/1957, p. 372.

two parrots presented to Timur by Bahadur Nahar, which could remember conversational phrases from the court of Sultan Ghiyath al-din Tughluq three-quarters of a century before,<sup>294</sup> many of the elephants had grown old in the Dehli *pil-khana*.

The decline in the number of war-elephants from 470 early in Feroz Shah Tughluq's reign to a mere 120, which is more than matched by the decline in the number of horse from 80,000 or 90,000 to 10,000, shows how greatly the resources of the Dehli Sultans had diminished. But even 120 elephants were enough to cause concern in the nearly invincible armies of Timur and to maintain the semblance of allegiance to the Sultan's authority among the Muslim fief-holders of northern India. In Sahrindi's descriptions of the next few years, Mallu Khan and other noblemen marched upon the capital with four or ten elephants<sup>295</sup> and the capture of two elephants in battle was noteworthy.<sup>296</sup> It is therefore possible to see the loss even of the reduced *pil-khana* of 1398 as what, more than anything else, placed the holders of the capital city of Dehli on terms of mere equality with those who now held power in Gujarat, Malwa and Jawnpur. The north Indian Sultanates had to build up their *pil-khanas* from scratch. To judge from the information of the early Portuguese sources, a balance of power was maintained in this renewed but traditional Indian armaments race.<sup>297</sup>

<sup>294</sup> Yazdi, op. cit. II, 99.

<sup>295</sup> TMB, pp. 167, 168.

<sup>296</sup> TMB, p. 169.

<sup>297</sup> Barbosa, op. cit., II, 113, 154-6 (imports from Ceylon). Barbosa estimated that the King of Narsingua (Vijayanagar) possessed 900 elephants, I, 209-10; the King of the Cambaia (Gujarat) 400 or 500, I, 118. Pires' estimates are probably too modest. The King of Gujarat possessed '300 elephants, about 100 of which are fighting elephants', Pires, op. cit., I, 40-1; the King of the Deccan 'about 50 elephants', I, 52 (cf. pp. 56-7 above); the King of Vijayanagar 500 elephants, I, 64; the King of Dehli 'a very large number', I, 90. Babur estimates that Sultan Ibrahim Lodi of Dehli and his great officers brought about 1,000 elephants to the battle of Panipat in 1525 A.D., op. cit., tr. Mrs. Beveridge, p. 463. For a probably exaggerated estimate of the elephants of the Sultan of Jawnpur in the fifteenth century, see p. 56 above. We have no estimate of the total holding of the Sultans of Malwa: 23 elephants were captured from the Malwa army by the Bahmani forces at the battle of Kherla in 1468 A.D. (Mahmud Gavan, *Riyaz al-insha*, ed. S. Chand b. Husayn and G. Yazdani, Haydarabad, Dn. 1948, p. 85.



## SHORT BIBLIOGRAPHY: ABBREVIATIONS

- TFM Muhammad b. Mansur b. Sa'id Mubarakshah 'Fakhr-i Mudabbir', *Ta'rikh-i Fakhr al-din Mubarakshah*, ed. E. Denison Ross, London 1927.
- AH The same, *Adab al-harb wa'l-shaja'a*, ed. E. S. Khvansari, Teheran 1346 Shamsi.
- TN Abu 'Umar Minhaj al-din b. Siraj al-din al-Juzjani, *Tabaqat-i Nasiri*, ed. Capt. W. Nassau Lees *et al.*, Calcutta 1864. Where relevant, references are also given to the edition of A. H. Habibi, Kabul 1342 Shamsi: and to the English translation of H. G. Raverty, Calcutta 1897.
- FS 'Isami, *Futuh al-salatin*, ed. A. S. Usha, Madras 1948.
- BTFS Ziya al-din Barani, *Ta'rikh-i Ferozshahi*, ed. S. A. Khan *et alii*, Calcutta 1862.
- BTFSA A Ms. of a variant recension of this work, representing an earlier draft of the author: writer's collection, Accession No. 57.
- BTFSB Another variant Ms. of BTFS: Bodleian, Ethe No. 272.
- ATFS Shams al-din b. Siraj al-din 'Afif, *Ta'rikh-i Ferozshahi*, ed. M. Vilayat Husain, Calcutta 1891.
- TMB Yahya b. Ahmad b. 'Abd Allah al-Sihri, *Ta'rikh-i Mubarakshahi*, ed. M. Hidayat Hosain, Calcutta 1931.
- TMH Muhammad Bihamad Khani, *Ta'rikh-i Muhammadi*, Ms: B. M. Oriental 137.
- IB Ibn Battuta, *Rihla*: (i) ed. C. Defremery and B. K. Sanguinetti, Paris 1853-7: (ii) tr. Sir Hamilton A. R. Gibb, Vols. I and II, Cambridge 1958-9: (iii) on India, the Maldives and Ceylon, tr. Mahdi Husain, Baroda 1953: (iv) *Travels* (selections), tr. H. A. R. Gibb, London 1929.
- Masalik* Ibn Fazl Allah al-'Umari, *Masalik al-absar fi mamalik al-amsar*, portion concerning India, ed. K. A. Fariq, Dehli (1961).

- Polo** Marco Polo, *Travels*: (i) *The book of Ser Marco Polo*, tr. Sir Henry Yule and H. Cordier, London 1903-20: (ii) tr. R. Latham, Harmondsworth 1958: (iii) tr. W. Marsden and T. Wright, Letchworth 1908. For the complex textual tradition of this work see the introductions to (i) and (ii).
- KF** Amir Khusrav Dehlavi, *Khaza'in al-Futuh*, ed. M.W. Mirza, Calcutta 1953: some felicitous sentences have been quoted from the translation of M. Habib, Madras 1931.
- DRKK** The same, *Daval Rani Khizar Khan*, ed. Rashid Ahmad, 'Aligarh 1917.  
The same, *Nuh sipihir*, ed. M. W. Mirza, Calcutta (O.U.P.) 1948.
- TUN** The same, *Tughluq-Nama*, ed. S. H. Faridabadi, Awrangabad 1933.
- I'jaz* The same, *I'jaz-i Khusravi*, V vols. in II, Lakhnau 1876. A variant reading is cited from a Ms. transcribed in 1114-15/1702-4: writer's collection, Accession No. 34.
- IM** 'Ayn al-din 'Ayn al-mulk 'Abd Allah b. Mahru, *Insha-i Mahru*, ed. S. A. Rashid, Lahore 1965.
- ED** Sir H. M. Elliot and J. Dowson, *The history of India as told by its own historians*, London 1867-77.

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