

## CHAPTER V

### Forts, Castrametation and the Royal Army

(I) Forts and CastrametationIntroduction :

Forts as a primary means of self-preservation appears to be as old as civilisation itself. A peep in-to the history of fortification reveals that their association with the war-machine had entrusted these with a significant role throughout the evolutions of human history. Success in war often depended on the number of forts a king was in possession of and for a great many Century, 'it continued till the invention of aeroplanes and other engines of destruction'<sup>1</sup>. True it is that the efficacy of forts has been minimised so much so as to render these obsolete now a days. Nevertheless, the study of the evolution and development of forts as a prized mechanism of war, remains ever edifying. And similar is the case with Castrametation, which often formed a part of a fort itself.

An attempt is being made in this chapter to present a viable picture of forts and fortifications in the Indian context as revealed from SLP, in a historical manner.

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1. Cf. Mortimer Wheeler in Introduction to AIW ..p.119.

Antiquity :

From the proofs that obtain through a perusal of the Vedas with its corroborative evidences in the spadework of the archaeologist, the art of fortification does not seem to be so recent. M.M. Ghosh<sup>2</sup> rightly observes the origin of fortification in the attempts of the pre-historic man to check the depredations of wild animals in-to human habitations which often took the shapes of layingout a thorn-hedge, burning of fire around or raising a bank of earth. Kamlapur<sup>3</sup> attributes their growth to the political factors - large number of small principalities ruled by feudal heads and their engagement in guerilla warfare with one another for territorial ambitions and more power, which had precisely resulted in improving upon the old art of defence and rendering equal, a fort and a town.

That pre-vedic time had seen the most important development in this regard no more remains a mere conjecture due to archaeological findings which reveal use of 'masonry' in that twilight period of human civilisation.<sup>4</sup>

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2. M.M.Ghosh "Forts of Ancient India" P&T of AIOC, Baroda, 1933, pp 549-53.
  3. J.N.Kamlapur, The Deccan Forts, Bombay, 1961, Introduction.
  4. Mortimer Wheeler, Ancient India no. 3.p.59 records that Harappa and Mohenjodaro were dominated by massively fortified citadels.

Citing references from Rgveda, S.B.Singh argues that "such prehistoric discovery has also resulted in lending a character and reality" to the Rgvedic informations on fortification, "which were earlier considered mythical<sup>5</sup> by scholars".

Besides references to forts in which Indra is exhorted to have rent the forts of the enemy (Rv 4.16.13) in Rgveda, we have another class of 'forts of ayas' (Rv. 1.58.8) for the protection of which gods like Indra, are repeatedly invoked. That the specious habitations of the Rgvedic people were adequately fortified with aśman (stone)(Rv 4.30.20), ayas (reinforced with use of metal) (Rv. 1.58.8, 2.20.8 etc.), an āmā (an unbaked brick-wall) (Rv 2.35.6) and dehī (defensive walls with pallisade and ditch)(Rv. 6.47.2), has led Singh to conjure up a prosperous picture of Ganges Valley " in which there is growth of <sup>township</sup> ~~township~~ under protection of a number of forts resulting in a great burgeoning of civil life ..."<sup>6</sup>

Even Pāṇini refers to town-planning, forts,<sup>7</sup> ramparts moats, gates and watch towers and the epics furnish a further corroboration of the Vedic and

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5. S.D.Singh , AIW ... pp. 123-124.

6. <sup>Op cit.</sup> ~~Ibid~~ p.131.

7. V.S.Agrawal, IAKTP, p.137.



archaeological evidence. Mbh. (1.299.29) contains a full-scale informations on fortification - a full proof stronghold with lofty walls, gates, abundant stock of weapons etc. and Rāmāyaṇa (1.5) speaks of protective measures of cities of Ayodhyā, Kiṣkindhā<sup>8</sup> and Lankā.

The Nikāyas and the Jātakas freely mention walled and battlemented - towns.<sup>9</sup>

These references seem to testify to the uninterrupted line of tradition in which the art of fortification got evolved through the centuries till we arrive at the age of the Brahminical texts of early and later days. Manu-smṛti and Arthaśāstra exclusively engage themselves on the topic of forts and fortification and serve as models for later writers of similar treatises like ŚN, YK and Mānasāra which grew in the light of the former. Somadeva goes as far as to say that a king, without a fort has no refuge, like a bird, let loose from a ship in the mid-ocean (Nītikāvyaṃrta, P. 80).

8. Rāmāyaṇa mentions firm-gates (drdhadvāra) of Ayodhyā which are secured by cross-bars (argala) (Bāla, 6.28[100.40]). The city of Kiṣkindhā has golden gates and is surrounded by a moat (Kiṣkindhā, 14.5) and the fortifications of Lankā are repeatedly mentioned, Prākāreṇa parikṣiptā etc. (Āraṇya 48.11)

9. See Singh, AIW .. P 132, Cowell, The Jātakas, Nos. 149, 546.

The authors of Pañcatantram (1.255) and (Śāraṅgadharapaddhati (SDP) Ed. Peterson, p.220) go to the extent of stating that ' a king without a fort is compared to a snake without its poison(ous fangs) and an elephant without tusks'.

With the growth of monarchy we observe the growth and importance of fortification and by the time of Shivaji, the great, forts have already come to tantamount to the general prosperity of a state (Sāmrajyalakṣmī)<sup>10</sup>.

With these outlines about the antiquity and tradition of fortification we now propose to analyse allied material on forts and fortifications from SLP. Closely following the rich tradition on the topic as reflected in theoritical brahmanical texts like MS, AS, SN and texts on archaeology like Mānasāra (Māns.), Mayamata (MM) and Agastyaśilpa (Agś), SLP elaborately deals with forts and the connected matter in eight Paṭalas (31.38).

#### Classification :

The account on forts begins with an enumeration of various classes of forts that are considered ideal for an ambitious king. The importance of having various

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10. See Āiñāpātra (Marathi), Ed S.N. Banhatti, Pune 1974, p.102.

types of forts on the part of a king lies in the very fact that the sovereign who has 'fleets of forts' at his command, can with ease, destroy the enemy forces (31.4-6) . Thus, arises the need for a correct knowledge of the art and craft of fort-construction, their classification, including the defective ones, which are to be abjured.

The chief categories according to SLP are eight in number, namely, Hill-forts (giridurgas), Forest-forts (Vanadurgas), Forts, built within a Cavern (gahvaradurgas) water-forts (jaladurgas) Mud-surrounded forts (pankadurga or kardamāvīta) , Mixed-forts (miśradurgas), Man-forts (nṛdurgas) and the store-forts (koṣṭhadurgas) (7-9).

Now we take up the individual types with their sub-divisions.

#### A. Hill-forts :

A hill-fort is described to be one, which is constructed in the middle or in front of a fine stretch of land, found on the promontory of a mount, which provides difficult access, which is vast, has stiff slopes, is

surrounded by great sālās (rampart walls) at the top and bottom and has a vast reservoir of water that never dries up (9-11). Hill-forts are generally constructed on the spurs of hills and keeping in view their inherent merits, are generally considered to be the best among the lot. Ancient writers on the subject like Kautilya, Manu, Śukrācārya and treatises like Mānasāra and Kāmandakiya are all in agreement in accepting the importance of this class of forts and have accorded to these pre-eminent place among the rest. The sites of such forts are generally well-selected on some difficult and selected hill-tops. Natural defences of such forts often consist of steep and smooth scraps in the vicinity rising hundreds of feet high <sup>and</sup> lending a special charm to their invincibility. Among the Deccan forts Sivner, Tornā, Rājgad and Purandar belong to this class.<sup>11</sup>

SLP mentions eight subdivisions of this class namely, Bhadra, Atibhadra, Candra, Ardhacandra, Nābha, Sunābha, Rucira and Vardhamānaka and proceeds to give the characteristic features of each. Accordingly, the bhadra type primarily belongs to the broad category

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11. See J.N. Kamlapur, The Deccan Forts (Chap.3)

of a hill-fort but is specially defined as one, which is a cave-like structure, has a circular shape, is polished and high, has a plain surface ~~a~~ around with a profusion of water and is hewn out of a single piece of rock. In praise of this type, it is further said that a king, who rides over elephants and has bhadra type of forts in his possession, is capable of routing the host of enemies and of ruling the earth at ease. (12-15).

The atibhadra is quadrangular from the base to the top, is high and has long-stretched-pools of waters with whirl-pools in them. The Candra type is shaped like a column at the base but is topped with a moon-like structure, is circular in shape and is encircled by inexhaustible sources of water. Such forts, the author adds, are even inaccessible to the deathless beings (gods) (amara). The king who possesses such fort rules over his subjects like <sup>the</sup> ~~a~~ moon with a calm mind. The ardhacandra type is constructed in a semi-circular pattern and has whirl-pools in the accompanying waters. The possession of such a fort ensures a two-fold benefit, as of effortless victory over the enemies and easy protection of the kingdom. The nābha type is one, which is slender at the base and high above, at top, becomes large with a gradual increase in size like the pericarp of a lotus.



The masters of such forts are generally attributed with longevity, like Padmanābha (Viṣṇu) after having won over enemies in battle-field. The Sunābha is said to be just the opposite of Nābha. It is large at the base and slender at the top with gradual decrease in size. The rucira type of forts are quite imposing in their size. From the base, these grow in-to gradual ascendance with a flight of commensurate steps around and like other hill-forts, have a splendid stock of water. The fort which is designed in the shape of a drum is known as Vardhamāna. The master of such a fort is stated to attain prosperity at every step with growing wealth and riches. (16-26). Mānasāra an encyclopaedic treatise on Indian architecture, mentions three types of hill-forts namely,

1. the fort which is surrounded by mountains,
2. the fort situated in the vicinity of a mountain,
3. and the fort situated on the promontory of a hill.

But inspite of this broad three subdivisions, the reader misses here the details of eight-fold classifications as is provided by SLP. Other authorities such as Manu,

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12. Parvatāvṛtama dhye ca parvatasya samīpake,  
parvatāgrapradeśe tu giridurgamiti tridhā

(Mā. 10.46.46)

Parāśara, Yājñavalkya, Kauṭilya and others feel<sup>s</sup> contended ~~to~~ in simply mentioning hill-fort as one of the categories<sup>but</sup> SLP goes ahead with a detailed description of the various sub-types namely, eight and enlists eight more defective ones which are to be abjured by the ambitious sovereign.

<sup>the</sup> In <sup>second</sup> thirty-~~two~~ Pātala we come across another <sup>division of</sup> eight types of hill-forts, the possession of which is said to be disastrous for the king and hence caution should be observed <sup>13</sup> to stay away from those. They are :

1. Sūcīmukha 2. naranibha 3. śūrpābha
  4. śakataṭkṛtī 5. madhyakhanda 6. ativakra
  7. dandākāra 8. halākāra 9. needle-faced
- or pointed 2. Man-like 3. Winnowing-basket-shaped
4. Cart-like 5. broken in the middle 6. Much
  - crooked 7. Column-like and 8. Plough-shaped 7

As the hill-forts of the aforesaid types give bad results, a king should never reside in such forts to avoid the impending disaster, that may arise for him, tagged together with a particular type. Thus if he

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13. atha durgāni vakṣyante varjanīyāni rājabhiḥ  
(32.1).

resides in a fort which is needle-faced, he would, face defeat in the battle-field, if in a castle, made in the shape of a human being, he would develop a varice for wealth. Stay in a castle shaped after the winnowing-basket, may render <sup>him</sup> the valourless and mistake crowns his head who resides in a cart-like castle. The life of a king is vitiated by a continuous flow of diseases who makes his seat in a castle which is broken in the middle and death lurks over his head who makes his habitat a much-crooked castle. Stay in stick or column-like castle proves blasphemous for the master and plough-shaped fort renders him perennially poor. (32- 3-7)

Such is the nature of positive harm that may accrue the master from a stay in the castles just recounted, in a magical way and hence, SLP strikes caution to the masters to keep away from the villified types that are positive impediments in the way of an aspiring emperor.

#### B. The Forest-forts :

The forest-forts (vanadurga) according to SLP weigh more than most of the forts.<sup>14</sup> AS on the otherhand,

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14. yadetat sarvadurgānāmadhikam ...(33.1)

favours water and the hill-forts which are considered best suited to defend popular<sup>ous</sup> centres (AS 2.3.2). Manu does not mention forest-forts but his category of Vārksya may resemble the vanadurgas of Mbh. (śānti, 5.5),<sup>15</sup> Mānasa (2.6.542), STR (5.6.48) and SLP (33.2). In this<sup>16</sup> context special mention may be made of the Yājñavalkyasmṛti which clearly elucidates the characteristics of a forest-fort in the verse as referred under. It runs -

ramyaṃ paśavyamājīvyam jāṅgalaṃ deśamāvaset,  
tatra durgāṇi kurvīta janakośātmaguptaye ,

the commentator explains this verse in the following manner -

"ramyaṃ, ramanīyaṃ, aśokacampakādibhiḥ  
paśavyaṃ, paśubhyo hitaṃ, paśuvṛddhikaram ,  
sajalataruparvato deśo jāṅgalaśaḍdenābhidhīyate ".

[The site must be beautiful with shaddy and fragrant trees like Aśoka and Cāmpaka, (it) must be dense and as such conducive for the growth of wild inhabitants and must have provision for roots, fruits and flowers. Such a site with water-courses, trees and mounts <sup>is</sup> are meant by the term jāṅgaladeśa.<sup>7</sup>

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15. Also, cf. S.C. Banerjee, Aspects of ancient Indian life ... Calcutta, 1972, p.146.

16. Mitākṣarā on YS (5.321),

In a sense, the reference just mentioned, sums up the pre-requisites of the class of forest-forts in a nut-shell. Other authors and works also take care to include all the characteristics of YS. but the description of SLP appears to be more vivid. According to such description, ~~the class of~~ <sup>of this class</sup> forts are constructed amidst a host of thorny trees, creepers and shrubs so that the approach-road is almost hidden from the outside view and thickets make it even difficult for rays of the sun to penetrate, the surroundings of which are inhabited by wild animals like lions, tigers and wild-boars; the locale, rendered further awe-inspiring by the protruding stones, projecting themselves from the banks of mountain streams, lakes and other reservoirs of immeasurable waters which are again indwelled by aborigines like Mlecchas and Śābaras. <sup>17</sup>

Compared to this account, the description given by Mānasa. or STR fades into insignificance, which

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17. <sup>Kantaka</sup> nānāvṛkṣaughalata-gulmādisaṁkule,  
gudhamārga duṣpraveśe sūryāṁśūnāmapi priye /  
simhavyāghravarāhādī duṣṭajantuniṣevite,  
pulindapulkaśamlechhaśābarādibhayāṁkare /  
agādha jalasambādhatatākāṇḍhu-samanvite ,.  
prakalpitaṁ puraṁ yadvai vanadurgāṁ taducyate /

(33.2-4)



however, records a new thing that water sources should not be visible to the outsider and these should be kept a secret. In this respect, both these works give similar description.<sup>18</sup>

Another point becomes quite clear here that the author of SLP does not feel comfortable in simply describing a locale, fit for the construction of a fort, but from his description, it becomes quite evident that the environs of a forest-fort, constitute in themselves a fort with its inaccessibility and awe-inspiring qualities. Thus, the utility of a forest-fort appears to be two-fold, the environment serving as a fort in the first place and the fort proper coming next. The use of choice-phrases in the definition like samkula (thronged), duṣpraveśa (of difficult access), duṣṭa-jantu (wild animal) and bhayaṃkara (fearful) etc. amply illustrates the point.

This is possibly the reason of attributing more weight in favour of this class of forts on the part of our author who considers forest-forts as the best among the lot.

### C. The Cavern-forts :

Now comes the type of forts which are constructed

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18. Vanadurgam samākhyātam ghanakaṇṭakaśākhibhiḥ /  
antastaiḥ samcitam toyam bahisthānām ca durlabham //  
<sup>^</sup> (Manasa. 26.546-47),  
 (STR 5.6.52-53).

in a cavern. It is defined as one, which is situated in a forest-hole (vale), which is very large and uneven, which immitates a mountain cave and is surrounded on all sides by small mass of rocks. It is so constructed that it is capable of duping the bystander, nearby, about its existence and expanse. And in such forts are stored sufficient quantities of grass, fire-wood and water. Such a fort, claims the author, remains insurmountable even for the deathless ones (33.5-7). The cavern-forts figures<sup>as</sup> as <sup>an</sup> independent class of forts in SLP only. Other works maintain a strange silence over according a special status to forts of this class.

However, a study of the spelt-out characteristics in respect of this class of forts reveals that these might strongly allude to the airina forts mentioned by SN. The cavern-forts are generally constructed in a terrain which is vast, rough and is studded with innumerable holes, resembling mountain caves. Such a ground is again covered with small mass of stones - a rock-strewn and hollow landscape. <sup>One of</sup> ~~The~~ characteristic features of such a fort, constructed amidst an arid landscape is that, it is completely hidden from view so as not to allow any knowledges about its existence to an

out-sider (enemy). Thus, such a fort must be existing much below the ground level and may presumably be branded as an underground edifice. This is discussed in some more details in connection with the airina forts of SN.

D. Water-forts :

Water-forts according to SLP are citadels, built on an island, surrounded on all sides, by the inexhaustible waters of rivers or natural reservoirs (deva-khātas) or by unfathomable waters of great tanks. Kautilya recognises the merit of this class of forts in defending populous centres alongwith the mountain class and gives a prime of place of the audaka class while recounting various forts (AS 3.2). This class of forts has found favour with most of the ancient writers on politics. Mānasa and STR give it first place.

As it appears, the merit of a particular class of forts depends on the natural environment in which it is located. Water, being a natural defence, which surrounds such forts, serves as a great deterrent to the enemy in his progress and offers great leverage to the native forces. Nevertheless, such forts also have some of their inherent limitation. Being

surrounded by sheets of deep waters, they provide some difficulty for the attacking enemy forces no doubt, but once these initial difficulties are overcome, little chance remains for the ground forces to take recourse to flight in face of an impending defeat. The enemy stands in an advantageous position, in such cases, to lay an easy siege over the forts, when they succeed to wade through the prime defensive, the sheets of water.

Possibly, for some such reason, SLP gives it <sup>at the</sup> 'fourth' place after the mountain, the forest and the cavern types. Unlike the authors of AS, Mānasa. or <sup>19</sup> STR who mention the water fortifications at the top, Mbh. <sup>20</sup> Manu, <sup>21</sup> SN, <sup>22</sup> Mānasāra and others accord it a place much below the other classes. However, whatever may be the defects of forts of this class, their importance as a whole, can never be minimised.

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19. Mbh. (12.5) accords it the last position after dhanva, mahī, giri, nṛ and jala durgas.
  20. MS (6.70-74) takes the name of abdurga after dhanu and mahī.
  21. SN (4.6. 1-7) gives it sixth place after airina, pārikha, pāriḡha, vana and dhanva.
  22. Mānasāra (10.45) gives it third place after giri and vana.

### E. The Mud-forts

Coming after the water-forts, this class of forts, with the treacherous surroundings in which located, remain quite formidable for the enemy. SLP describes these as 'citadels, surrounded by muddy and marshy patches of land, not visible from outside, rendered inaccessible by a thick layer of soft and polished mud, duly caused by hot waters oozing from under the soil and constructed on a high ground, amidst low and slippery land-mass.' (33.9-10). Mānasāra mentions pañka-durga as the fourth category after giri, vana and salila class and precisely agrees with the characteristics given by SLP in respect of such forts. Accordingly, it is a fort, protected on all sides by a muddy land-mass.

Mānasa and STR mention the mṛttikāmaya (earthenforts) as a class which as evinced from its characteristics, may at best mean a fort made up of soft clay.<sup>23</sup> The mahādurgas mentioned by Mbh. (12.5) and MS (6.70) point to a type, "which may either be surrounded by fathomless waters fit to be resorted to" or "which is constructed with stones and bricks, surrounded by a rampart about twelve cubits' high, having

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23. S.S. Mishra, Mānasollāsa : Eka adhyayana (Hindi) (Varanasi, 1966 p.186 .



a terrace, enabling one to move around it (for reconnaissance) during war and is fitted with many doors and windows that are kept concealed." 24

Thus it is seen that the earthen fort (mahidurga) mentioned by Mbh., MS and Agnipurāṇa are quite different from the kardamāvīta type of SLP. The mṛttikāmaya type figuring in Mānasa, and STR falls far short of the SLP description of the Paṅka durgas, at least, in description of their essential characteristics about which their respective authors maintain a strange silence. Other works like AS, KNS and SN take the option of not mentioning this class at all. Even in such cases, it cannot be explained, how could they neglect such a strong natural defence as that of mud. However, our approach in this connection, will be to regard the description of SLP more as a description of the environment than the fort proper. Thus, a Paṅka or Kardamāvīta type may point to a general fort with all its characteristics but situated in an area which is full of mud and marsh and all that goes with it as per the description (33. 9-10).

F. The mixed forts :

The mixed type of forts, as the title suggests, are a conglomerate of the essential characteristics of some of

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24. YS., mitākṣarā commentary on (5.321)

the prominent types, namely, the hill, the forest and the ones surrounded by muddy and marshy lands. Thus, such a fort highly banks on the environment which provides such facilities, concentrated in a particular locale. This type of forts though does not figure in some works like Mbh., MS and others, Mānasāra makes a mention of these as the seventh and last category. It defines miśra forts as 'Citadels, situated on hill-tops and surrounded by many a forest'. (10.52-53). SLP, on the otherhand, describes miśra fort as a citadel, which is surrounded by marshy lands, is situated on a mountain or is encircled by a forest. Such a fort, because of its conduciveness, remains invincible even for the divine beings and monsters, declares SLP (33.11-12). Thus a comparison reveals that while Mānasāra mentions 'mountain' and 'forest' as two essential factors comprising a mixed fort, SLP adds one more - that of the mud factor to it.

G. The man-forts :

Most of the ancient works on politics, barring a few like AS mention nr̥durga as a type of fortification. While SN calls it by a different name, the Sainyadurga, it does not differ from naradurgas mentioned by other works, atleast, in essence. This becomes clear from an analysis of the characteristics of this type described by ancient political treaties. Medhātithi, while commenting on MS(7.70)

describes man-fort as one, in which are indwelled the army with heroic soldiers and weapons. Here the word, man stands for a soldier. SLP describes such a fort with much vividness. Accordingly, 'it is a great semi-circular citadel, which is vigilantly guarded from all quarters by innumerable brave warriors, the best heroes wielding weapons like scimitars, javelins, spears, arrows and bows'. (33.12-14). Thus sainyadurga happens to be another name for the nṛdurga, the difference resting upon namesis only. The mention of this type of forts by Mbh., MS., Ag.Purāṇa, SN, Mānasa. and STR, is indicative of the popularity of such forts among kings and rulers of ancient India, over a long stretch of time.

In this connection it may be pointed out that whatever physical advantages a fort may offer, it is of no avail, provided the soldiers inhabiting it are not of high morale. Thus, "the strength of all types of forts rests with the nature and mettle of the human element, the valour and character of the troops occupying those".<sup>25</sup> And as the ultimate victory or defeat rests mainly with the soldiers occupying a fort of any description even a forest, a hill or a water fort may as well be

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25. B.D.Basu,<sup>Ed.</sup> SN (English translation) Allahabad, 1914, p. 214.

called ~~as~~ a man-fort. Possibly, herein lies the popular factor of such forts so as to be commonly described by most ancient authors on politics.

#### H. The Store-forts:

The Koṣṭhadurgas or the store-forts are the eighth and the last class of forts mentioned by SLP. with its eight subdivisions. These forts are meant for storing provisions, weapons, fodder, fire-wood and also soldiers in reserve. As such, these bear some resemblance to the 'peace-station-cantonments' of the Armed Forces of recent times. Because of the importance of such forts, equally during war and peace, these used to be very carefully constructed and vigilantly guarded.

The description of SLP provides a glimpse into some such factors as mentioned above. It describes store-fort as 'a citadel, surrounded by great ramparts and a fosse, in which are kept stock of materials like grass, fire-wood and water. It is fitted with hundred of fire-arms like rockets and cannons and is protected by a troop of soldiers.' (33.14-15).

It is interesting to note that a fort of this type, the possession of which is considered highly beneficial for

kings, is not mentioned in many old and standard works like the Mbh., AŚ, MS., Ag.Purāṇa , Mānasāra and Kāmandakiya. Comparatively recent works like SN mentions another class of forts known as the sahāyadurgas which betray some similarity with the Koṣṭhadurgas mentioned by SLP.

Quoting the opinion of the masters of science of construction, the Śilpaśāstra, SLP enumerates eight subdivisions of the store-forts. These are as follows :

1. The Vedāśra      2. Dīrghavedāśra      3. Vartula
4. Dīrghavartula      5. Pañcakona      6. Ṣaṭkona
7. Aṣṭāśra      and 8. Padmasannibha. (34. 4-5).

Thus, the store-house-fort may be of four, five, six or eight corners or of circular size imitating a lotus flower. A king, with the help of masons, should get for himself, a fort built of any one of the aforesaid description and reside therein. For, declares SLP that the real strength of a king lies in such types of forts, the store-houseones.<sup>26</sup>

A comparative study of the various texts which broach on the subject of fortification, brings to fore

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26. tadeva nrpavaryāṇām praśastam balamīritam ( 34.4)



many discrepancies regarding details about the classification of forts, their construction proper and some other factors. The discrepancies observed with regard to classification, concerns us at present.

Some varieties like the 'hill', 'forest' and 'water' are almost common to all of them. The Mbh., AS and MS include the dhanva type - such as a wild desert track, devoid of water and overgrown with thickets growing in barren soil - into their fold which, it seems, has been followed by other works like, Ag. Purāṇa, SN, Mānasa and STR. In some cases, it is taken as such, i.e. SN, while, others have preferred to call it maru as in the case of Mānasa and STR.

The airiṇa class mentioned by SN has possibly a reference to the forts, constructed under hollowed grounds (īriṇa). To translate airiṇa as 'pertaining to desert' might not be appropriate here, specially when, SN (4.6-1-3) mentions dhānva<sup>27</sup> and airiṇa as two distinct classes of forts. Thus, it appears that maru and dhānva are tagged together to point at a fort, surrounded by deserts or long-stretched-sandy banks of rivers or constructed on a sea-beach. The airiṇa

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27. MS (6.70-74) Mitākṣarā describes dhānva as follows  
asamveṣṭitaṁ caturdiśaṁ pañcayojanamanudakam<sup>24</sup>-  
dhanvadurgam.

class of forts <sup>is</sup> ~~are~~ the ones, constructed on hollowed lands. Thus most likely, a distant rhyme of underground construction ( a construction in netherlands) is heard here.

In our modest opinion, the cavern forts referred to by SLP and the airiṇa class of ŚN compare too well. But in the absence of any concrete evidence, the comparison might be too preposterous at this stage. However, we find that this idea is more clearly vindicated in Śilpaśāstra texts like Viśvakarma-vāstuśāstra which categories the forest forts under ūrdhvastha, bhūmibhāgastha and antastha categories; bhūmibhāgastha is further defined as bhūtalāśritam meaning 'constructed below the land's surface' and antastha is also described as surāṅgāśritā 'sheltered in a tunnel'. The author here seems to be more particular in conveying the exact import of the aforesaid varieties of forest-forts. That's why, after he has given the definitions, he leaves an instruction for the architects that the meaning should be understood in its correct perspective.

28

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28.     "ūrdhvastham tūṅgabhūmistham,  
           bhūmistham bhūtalāśritam /  
           surāṅgāśritamantastham,  
           bodhyam śilpaparāynaiḥ "//     VVS (10.7)

Thus, our presumption of the airina variety as one, constructed much below the ground - in netherlands, finds further corroboration here.

Other classes of forts referred to are the pārikha and pārigha (SN 6.3-4), ratha (chariot) and daiva (divine) (Mānasāra 10.45) and iṣṭikā and pāṣāṇa (brick-built and stone-built) Manasa (2.6.541-2) and STR (5.6.47).<sup>29</sup>

The pārikha fort is one, which is protected by moats and the pārigha forts are encircled by walls of bricks, stone and mortar. 'The chariot type of fort is that which is used as a place for detention of thieves, isolated from a village and has all the defects of vast expanse of wilderness around owing to absence of any tree and water' (Mānasāra). Thus, such forts were utilised as 'detention camps' for unsocial elements. And a daiva fort is described to be one from which 'it is possible to throw, when enemies are seen attacking, stones etc. towards its exit and entrance, with as much

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29. Besides, we have Kūrma or pāmsu to entice the enemy, the pārāvata, for self-protection in field of war, the prabhu which shelters the palace and the yuddha variety of forts. (VVS 10.31-46). Primarily for the kinness some of these exude to ~~to~~ other varieties dealt herein and also for fear of ~~ptolixity~~, we restrain from providing an elaborate treat for these ~~forts~~.

effect with the death-like (deadly) influence of incantation (mantra) and magic (tantra) and horrors as that of Brahmarākṣasa, Vetāla, Bhūta, Preta and other evil spirits, (Mānasāra) (10. 50-51).

#### Some General Observations :

It will be seen from the foregoing discussion that SLP does not mention the following types of forts, namely, dhanva, maru, airiṇa, pārikha, pāriḡha, sahāya, ratha and daiva.

There could be various reasons for it judging from the vast gulf of time that separates all these works which mention the variety of forts. A poet, more so, an author, generally reflects his time and the society he lives in with its customs and traditions. Not only he proceeds by the dictates of ancient authorities, his precursors, on every matter, though he might consult them for his reference at times. Thus, the absence of dhanva, airiṇa, ratha and daiva types from SLP may be explained by alluding to the fact that possibly, our author was familiar with a landscape which was devoid of deserts and hollowed lands and his society did not nourish forts of the ratha or daiva description. Under the stress of

such visual circumstances, our author might not have liked to follow the ancient texts or the subject too closely, forgoing the impact of tradition. Thus, effecting a change here and there, adding some new types to his treatise and abetting others, seem quite natural.

The logic behind not mentioning the pārikha and pāriḡha types appears to be quite clear. The general characteristics of a fort, most commonly, include a rampart and a moat. Thus to typify it again, would be redundant.

In respect of the ratha type of forts referred to by Mānasāra (Ch.10) it may be postulated that being an ancient work, it contains the living tradition of the time when goals did not exist separately to house the criminals and ratha type of forts, constructed amidst an arid and hostile landscape, devoid of trees and water-sources used to serve the purpose of containing the condemn characters like thieves and dacoits.

The daiva type seems to contain some unique references of ancient characters in which one observes the recorded practices of driving away the attacking enemy soldiers with stones, thrown at them from convenient

niches of a daiva fort. Such stones, thrown at the enemy are considered to be death-like missiles (Mānasāra 10.50-51). Such practices undoubtedly reveal before us a tradition which may seemingly be branded as antiquirian.

SLP being a work of comparatively recent times, neither had a tradition in which forts were constructed to house the thieves nor were these used as convenient citadels to hound away the attacking troops with stones etc. Thus, we can account for the absence of the aforementioned types of forts from our text. And, the addition of the gahvara, miśra and koṣṭha types not referred to in other works leaves us with little doubt about the twin purposes, the author of SLP had before him as that of originality and contemporaneity.

One more thing may be pointed out here regarding the magical nature of some of the forts mentioned in SLP. Good and bad results are found to be automatically associated with different type forts in a certain magical manner.<sup>30</sup> For example, a stay in a bhadra (auspicious) fort ensures the master sovereignty over the whole earth and a king who makes his abode a needle-faced-castle (sūcīmukha) is destined to be

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30. Cf. G.U.Thite Sāmrajyalakṣmīpīṭhikā ... magico religion" 'Sambodhi' VII, Ahmedabad, 1978-79, p.45



defeated in war. As described earlier, the eight types of hill-forts like bhadra, atibhadra etc. are examples of the forts giving good results and the eight inauspicious types (32<sup>nd</sup> paṭala), harbour bad results.

The author, while attributing 'good' and 'bad' elements to different forts, quite interestingly does not take in-to consideration any other factors like archaeological, geographical or locational etc. Which might have been said to contribute good and bad result to a fort in particular. But he goes on enumerating the forts associated with auspicious and ominous characters in a surreptitiously magical manner. And, such a leaning to magic, on the part of our author, seems to characterise the SLP tradition.

General guidelines on construction of a fort :

SLP, while discussing forts and the allied matter (paṭalas 30-47) appears to have included the palace construction also as a part of fortification. Thus, in the text a palace is not discriminated from a fort and vice versa in-as-much as a palace in view of our author, is only a variant of the store-house fort (34.6)<sup>31</sup> in which the king should dwell for the general prosperity of the seven-limbed-state (saptāṅga-rājyam).

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31. eṣāmanyatamaṁ koṣṭhaṁ kārayitvā suśilpibhiḥ  
āvāsaṁ kalpayedrājā saptāṅgabalaavrddhaye / (34.6)

Thus, it is to be seen that while dealing with the architectural informations on fort-construction, we have included similar informations on palace, throne and other indigenous material together with forts, trying to maintain the original sequence of SLP. While so doing, the ritualistic aspect has been purposively kept out with a view to describe those together with analogous material. (See Chapter III).

After describing the eight types of forts, the author now ordains that a king should construct for himself any one of the eight types of store-forts (Koṣṭha-durgas) and reside therein for the general prosperity of his kingdom (34.6).

To start construction of such a fort an auspicious day is selected. The king, on that day offers worship to Ganeśa and Viśvakarman, gratifies the masons who are invited for the purpose and asks them to start the work.(7).

Site : Generally a suitable site is chosen for such purposes. SLP informs us that such a site must have a highly elevated plain devoid of low and high lands in its vicinity and be surrounded by a landmass which can be quickly made use of, at the time of necessity. A fort is constructed generally with materials such as stone, brick and mud as per the instructions mentioned below (8-9).

The best variety of such a fort is said to measure  
<sup>32</sup>  
 eight hundred dandas, the middling, sixhundred~~ē~~ and the  
 inferior variety, four hundred~~ē~~ dandas only (12).

The spade-work begins by digging earth according  
 to the type of fort sought to be constructed and then  
 the site is purified with sand as per the rules. When  
 thus the digging of earth is over, a foundation wall  
 (bhitti) of 10 x 3 cubits is raised, part by part, and  
 is cemented with lime. It should also have a number of  
 minarets (śrṅga) with holes and in rows, immitating the  
 shape of nyagrodha (fig tree) leaves (13-16). This is  
 said to serve the double purpose of hiding the soldiers  
 (during attack) and beautifying the fort as well. As the  
 wall reaches navel-high, the architects whould emboss on  
 the stones ferocious vantras of bhairava, nāga, triśula,  
raju, kāṣṭha, maṇḍala, visakantaka, śukla, śūlamukha,  
dhanu, vyatastya and many other murals like those of  
 the duals of yakṣa, gandharva, kinnaras etc. <sup>33</sup> (17-19).

Then is constructed the vapra-vedi, ten cubits  
 'apart from the wall, which is transparent like a mirror and  
 which has steps of either stone or brick. (20-21).

32. One danda is said to equal four hastas (cubits)  
SED, p.466.

33. Cf. VV (10.46), SS (10.27) and Aparājitapṛcchā (72.14)  
 which mention the images of vidyādharis alongwith such  
 machines as outer murals of a fort-wall.

Thus, when the construction of the main rampart is accomplished, work on inner buildings is said to begin . At a distance of twenty cubits on all sides, from the outer wall another enclosure is made by raising a wall as high as eight cubits and with minarets, as in the case of the earlier. Within this enclosure are constructed the building complex. (35.3-4).

Now steps are taken to dig a moat at a distance of three cubits from the outer wall in a circular shape like that of a waist-string. The moat should be of 20 X 20 cubits. Both its banks are reinforced with stones or bricks to make these stronger. Now, are fixed doors in different directions\* (5-7). SLP informs that somekings prefer their forts to have three rampart walls and also three ditches, obviously to make these extra streng (8). The AS description on this aspect seems to be much akin to SLP✓ which records that around the fort of any description, "three ditches with an intermediate space of one danda (four cubits) from each other, fourteen, twelve and ten dandas respectively in width, with depth less by one quarter or by half of their width, square at their bottom and one third as wide as at their top, with sides built of stones or bricks, filled with perennial flow of water or

with water drawn from some other source and possessing crocodiles and lotus plants, shall be constructed ... " <sup>34</sup>

To such a fort are now fitted many gates (dvāra). The gate which is wide as three kiṣkus <sup>35</sup> and high as six, and has pumśila sounding like gong is the best, one, having 5 x 2 1/2 cubits' measurement is the medium which has strīśilā sounding like stringed instrument and the adhama or the inferior gate is said to be of 4 x 2 cubits' measurement and has the napumsakaśilā, sounding like bell-metal (36.2-6).

Each gate should have beautiful exteriors with mukhabhadras and auspicious motifs of yakṣas, rākṣasas and fearful lions in the posture of attack. These gates are said to carry above them the (load of) three to five-storeyed buildings. Each gate from outside is supported by a quadrangular threshold and is designed in the shape of leopard's mouth with a height almost commensurate with that of the wall. (7-10).

34. AS (2.3) translation Shamaśāstri pp.50-51.

35. One kiṣku is said to equal a cubit of fortytwo āṅgulas. cf. Brahmāṇḍapurāṇa (7.5.99)



The various apartments (halls) on the left and right (of these gates) are connected by a straight and wide hall (koṣṭha) (sub-way) in the middle, each kakṣa having a door. A gopura (principal gate) is constructed on the top of the last-door in the fashion of a three-storeyed building of the Vedāśra type. In the inner circle of this gopura is raised a pillared pavilion with many rooms to permanently house the warriors and guards. This is also said to be accomplished in fashion of a leopard's mouth (11-13).

Now, both ends of the outer walls (upaśāla) are joined. The doors fitted to such a fort also appear to follow a prescribed schedule, the eastern, facing <sup>to</sup> the south, the southern to the west, the western to the north and northern to the east. These should also immitate the shape of a leopard's face (14-15).

Statu<sup>es</sup> of deities like Gaṇeśa, Bhairava, Bhadrakālī, and Hanūmat are to be installed at the eastern, southern, western and northern doors respectively. Added to the big gates already mentioned, four small gates with two-fold doors are to be opened in the four sub-quarters (viāś) which should not be done after the tiger's mouth. All the doors are platted with sheets of iron, have strong bolts (argala) and <sup>are</sup> provided with pointed iron-pegs (śamku) in the shape of plantain-buds. This infrastructure



is said to render futile the canine attacks of enemy's elephants. Each of these small gate further carries the provision of small-straight cause-ways,<sup>36</sup> made of wooden planks, bricks or stones to enable one to cross the moat (16-21).

Eight Principal buildings of a fort :

The king is instructed to build eight buildings of the following description within a fort for his use during war. These are, Bhadra, Sarvatobhadra, Nandyāvarta, Jayanta,<sup>37</sup> Vardhamāna, Svastika, Picchanda and koṣṭha-mandira, in eight different directions. These structures at each step are fitted with Śataghni (hundred killers). To the eight directions on the rampart are fitted eight flags each carrying replica of Mahādurgā in her fearful form, Bhairava, the awful, kālamṛtyu, the terrific, Yama with the deadly, noose, Aghora with a deadly countenance, the the terror-striking Vetāla, Virabhadra, the mighty and kālarātri the awesome one. In the inner sanctum of the fort, should be installed, in temples, the idols of the

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36. SLP describes such contrivances as samkramasetu (36.21)

37. For some of their descriptions see SS P. 272 for Bhadra, p. 279 for Sarvatobhadra, p.274 for Nandyāvarta, and p.275 for Svastika.

presiding deity (ies), Candikā , Vighneśa, Kṣetrapāla,  
Śāstr , Mahālakṣmī, Keśava, Bhāskara, Tvaṣṭr and Vāgdevī  
 for the protection of the fort and be regularly worshipped.  
 (37. 3-10)

Articles to be stored in a fort :

It is quite well-known that a fort is a veritable store-house of men and material. Thus besides weapons of various kinds, provisions and other necessities of life are kept in reserve in such citadels. SLP while dealing with this topic mentions that in an ideal fort are to be maintained the reserve of the following articles by the intelligent king in their right places to make the fort much more invincible (38.3).

Among the weapons are mentioned ten thousands of bows and a good number of sharp arrows with Crescent-shaped heads - appearing like goad-hooks of elephants near the four main gates. Other weapons like lance, sword, scimitar, spear, discus, club, mallet-hammer etc. should be suitably stored with pieces of stone. (4-6).

Besides weapons of various kinds articles such as ghee, oil, wine, honey, salt, pepper, cumin-seeds (Panicum Miliaceum), aromatic roots like yacā (Acorus Colamus), āmāa (tamarind), metals like lead, a number of medicines,

fire-wood, horns, hides, different types of poison namely, halāhala (snake-poison), vatsanābha (poison from tree-extracts), different darts, mercury, betel-nuts, colours, dried-meat, paddy, wheat, grams, black-grams, beans, barley or corns etc. should be collected and kept in separate stocks in different rooms. And the most important duty of the master lies in the fact that intermittantly, the store of a fort should be replenished by him with fresh stock (7-11).

#### Puranirmāṇa (Castrametation)

Inside such a fort which is described to be of a store-house variety the king is ordained to build his palace (34.6). Inside the rampart wall, on a centrally located site, the king should get constructed his own palace, around which in a circular manner, mansions for the royal kith and kins like sons, sons-in-law etc. are located close to the royal (main) road (rājaviṭhi). We are informed that besides such a road, the fort has a number of other roads intersecting one another, which are broad enough to allow movements of elephants and horses. (39.2-4).

Beginning from the royal-road upto the high City Gate on the rampart wall, in all directions, are constructed shopping centres of different commodities. Shops dealing

with clothes are located to the east of the citadel, those dealing with wine (madhu) and meat to the south, those of scents, flowers, spices, vegetables, jewels and gold to the west and those dealing with paddy, salt, areca-nuts and betel-leaves etc. to the north (5-8).

The residence-complex of the elites like the princes, ministers, chapl<sup>a</sup>lins, astrologers, bards, archers, warriors, charioteers, cavaliers, actors, dancers, courtezans, artisans, instrumental artists like the flute and lute players, Pāṇigha (artists playing on hand-instruments) and drummers etc. should be glamorously built along the main-street, in rows, alongwith high-rising granaries, besides, ofcourse the temples, squares, lawns (catvara), lakes, ponds and other water-reservoirs that are said to be located beyond the elite-complex (9-16).

Houses for the night watchers (yāmika) are provided in the propinquity of the rampart-walls and beyond it, separate housing accomodations are made for the inmates of the four-fold caste, the śūdras occupying the frontiers.(16-18).

Such a township is stated also to have a number of stables, elephant-sheds (gaja-kūṭa) etc. and its four quarters are constantly protected by vigilant guards. (19).

### The royal-palace :

As it is noted earlier, the construction of the palace starts on a central site selected for the purpose, at a good distance from the ramparts. The construction work is begun on an auspicious day first, by cleaning the site by removing clods of earth, bones, pieces of wood and such other impurities. Then with stone, brick and mud is erected an enclosure-wall of the specification of (2 x 8) kiṣkus (cubits) and topped with sharp inter-twined spikes of iron or wood (40.3-7).

To the east or north is erected a very high gate which is broad enough to allow unimpeded movement of chariots, horses and elephants. It is painted with a variety of colourful motifs the chief of which is the image of Gajalakṣmī at the top. The strong threshold of the gate is said to house a two-fold door. (8-9).

### The Hall of Audience (āsthāna-maṇḍapa):

The āsthāna-maṇḍapa is stated to be made of teak-wood (sāradāru) and of the size of ( 8 x 36 ) cubits with side terraces and turrets, rendered approachable by a flight of steps at the front and with beautiful and painted walls.

It is made very high while flanked by two small mansions and topped with nine crests of gold. One of the important features of such a Hall is that it is provided with a day-dial (tithyāṅkana) firmly fixed to a post. Its floor is also made beautiful with lime-plaster and is softly cushioned (10-13).

Block of five halls :

Behind the Hall of Audience, a little away from it, a block of five halls is constructed with the usual terraces and turrets. The first of the halls is a pillared structure surrounded by walls in four sides. It should be big enough to house the elephant(s), utilised as royal carrier(s). (14-16)

The second hall is also a similar one except that it has a circular shape (āvṛtyākāra) and it serves as the stable to house the personal horses of the king. (17-18)

The third is also strongly fashioned and is meant for parking of the royal chariot(s) and other conveyances. (19).

The fourth hall is said to be utilised as an accommodation for the astrologers and the courtezans and fifth, the most beautiful one, for the poets, singers, the learned scholars, the chief lute-players, ministers and



the priests. These buildings are constructed on highlands and are not without tanks and other\$ sources of water. This block of five-halls is also kept under a wooden enclosure and gate, with strong doors, bolt, the image of Gajalakṣmī and other auspicious designs, fit to be fabricated for frontage of such gates (mukhabhadra). In front of such a gate is erected another curtain-wall (tiraskarīnī-kudya), overtopped with crests in the shape of the fig-leaf.(20-27).

#### Navaraṅga and other mansions :

For his own personal use, the king should get built a mansion known as Navaraṅga<sup>38</sup> which is described to be highly auspicious and rendered strong with planks of teak wood (sāradaru), its pillars are priceless and the walls bear portraits of king's predecessors. This mansion is guarded by hundreds of guards making it highly secure. To its front lies another edifice, white and transparent like a mirror. (41.2-5).

Among other mansions which constitute the royal palace, the sarvatobhadra<sup>39</sup> mansion is indicated as a quadrangular structure, has sixtyfour pillars, wears a

38. Navaraṅga prāsāda of SLP does not find mention in SS as such. However, we feel that the Navātmaka of SS p.346 strongly resembles it.

39. for details see SS. p. 333.

profound look with its exalted structure, grand terraces and smooth and polished turrets, from all sides, encircled by great walls. And the svastika<sup>40</sup> variety has lime-polished walls and wide doors. (6-8)

The royal palace has many rooms which are gilded. Some have silver tapestries, while others are artfully worked out with elephant-teeth and still others, have walls deeked with variegated paintings. Besides, other multi-storeyed buildings are dotted with auspicious saloons, made of sandalwood, the saloon, known as candraśāla and others, whose walls are lined with golden motifs. The palace also has a grand stage and auditorium (nāṭvaśāla), constructed as per the stipulated rules. (9-12)

#### King's private mansion (antahpura)

The private mansion of the king is said to be very strongly built and has four spacious halls (catuśśāla). It contains eight other apartments with strong doors and bolts, fit to serve as the royal residence. The eight apartments are located in the following manner and order. The bath should be to the east, the wind-room to the south-east, the bed-room to the south, the store of weapons to the south-west, the dinning hall in the back(west),

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40. for details see SS.p. 330

the caine-house (paśumandira) to the north-west, the treasury of gold (svarnaśāla) to the north and the temple to the north-east (42.3-6),

We are informed that this order and arrangement of these apartments might change but at any rate the palace should not be without the following sixteen apartments as detailed below, (7).

Under this arrangement the bath lies to the east followed by bhogamandira (apartment for enjoyment). In the south-eastern, there is the kitchen alongwith the granaries, bed-chamber is to the south coupled with the store-room. The armoury and the swimming-bath (majjanālaya) should be there to the south-west. To the west, the study and the banquet-hall. To the north-west the treasury and the jade-room (ratna-mandira), to the north, the store of clothes and the scent-saloon, to the north-east the temple and a room for playing dice (dyūta-mandira),<sup>41</sup> (7-11).

All these mansions and apartments are connected with suitable roads, † We further learn that inside the palace accomodation is provided in cluster of houses for wet-nurses (dhātrī), slaves and dancer<sup>s</sup>/danseuses in the harem, (12).

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41. Aś (2.4.14) mentions a room called akṣapātāla in the South-East (āgneya) which is identified as the accountant's office (see Shamsastri (Engtranslation of) Aś).

Pleasure garden :

In the residual, part, is raised a pleasure garden (ākṛīda) alongwith lakes and ponds dotting at places. Trees, such as sāla , Mango, coconut, Wood-apple (Kapitha<sup>t</sup>), Areca, Date-palm, pomegranate, Citron, Orange and rose-apple are mentioned with special fondness, which form essentials of such a garden. Besides these trees, the banana-plants also appears to have a special fascination for our author, which are stated to be planted on the banks of lakes, ponds and other reservoirs of water, amidst bowers and thickets. (13-15)

The palace, so built now stands in need of being suitably consecrated by a king. (The rituals and other details of such consecration are dealt under Chapter III).

Observation :

As is already pointed out, forts and fortifications are an ancient art which has elicited favours from the rulers and kings in India and elsewhere from quite early times. The cause of the growing importance of forts seems to have stemmed from a practical necessity more than the customs and traditions in those times when bows, arrows, swords etc. were the principal weapons in a war.

Pañcatantra, <sup>YK</sup>~~YK~~ and SN clearly, mention this, when these texts unmistakably hold that one soldier with arms

can successfully fight with a hundred, when under the protection of a rampart.<sup>42</sup> With such a popular tradition finding patronage in the royal hierarchy, forts started playing quite an important role in the political life of the country. This becomes evident by the frequent and copious references to forts we get at the hand of writers and poets of the olden days. Thus, the Epics, Smṛtis, Purāṇas, and even some inscriptions do not lag behind in glorifying forts as prized possessions of the ruling class. This is besides the elaborate treatment, the topic enjoys in treatises on politics and architecture.

Thus, in view of the vast material we have on hand, we propose to take in-to account the allied informations given by the representative theoretical and architectural treatises only while making a comparative resumé of these informations with those of SLP.

Most of the treatises refer to the rampart walls that surround a fort. VVS mentions five walls surrounding an Ekaṇanadurga and kūrmadurga while it prescribes as many as twelve enclosures for a Prabhudurga (10.27). A fort is made approachable with a flight of steps which lead to the

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42. Pañcatantram (1.252), SN (4.6.20-21).

main citadel but the entrance and exit of a fort should be hidden from the common view.

There is ofcourse unanimity of opinion among many authorities regarding different machines (Yantras) that are fitted to the walls of a fort in hidden niches. VVS (10.46). Nāradaśilpaśāstra while describing a yuddhadurga narrates four types of yantras that are to be kept hidden in the prākāra. These are the nālikā and yantras of truṭana, bhedana and vidārana. Mayamata is of the opinion that rampart should lie nine feet below the ground while projecting out eighteen feet and with provision for movement of guards while Agastyavāstuśāstra favours ramparts as high as 60 cubits. Viśvakarmāprakāśa enlists ten types of walls for enclosure and Jayapṛcchā goes to the extent of enumerating saṭtriṃśa (thirtysix) prākāras.

SLP. seems to toe the line of the predecessors in certain respects but modestly prescribes ramparts of (10 X 3) cubits which are built with stone and topped with minarets and with holes shaped after the fig-leaves. We have seen that ferocious yantras like Bhairava, Nāga etc. are fixed to these at navel-high level. (34. 14-19). This description appears to agree with the medium rampart of SS (10.27) and the mention of motifs of vidyādhari etc. tallies with that of Aparājitaṭṭhā (72.14) yodhavidyadhari etc.



It may be mentioned here that the author of SLP is not merely goaded by a sense of practical necessity in prescribing the carving out of holes in the minarets of the ramparts to hide the warriors and store the weapons etc. But his aesthetic sensibility too marches hand in hand, when he says that these holes are also meant to beautify the ramparts, (Śālaśobhāṛtham) (34.15).

Just as the texts like Kā.Śil., VVS., AS do, SLP also engages itself (in 36 pātala) to describe various doors that are fitted to the gates and sub-gates of a fort, pierced at different cardinal points. The <sup>U</sup>ttama, Madhyama and the Adhama gates which are so called according to their dimension, are said to have further, three types of stones, the Puṁ, <sup>C</sup>Strī and Napuṁsaka, - which probably constitutes the lintel, is found to be a special feature recorded by SLP only.

The decorations of a door appear<sup>belong to</sup> to be a very old tradition in India. A plain door without auspicious designs is considered inauspicious. Keeping with the tradition in this matter as set out in Bṛhatsaṁhitā, Matsyapurāṇa and SS etc. SLP also records such auspicious decorations of a door (mukhabhadra). The lion-motifs,

in a posture of bearing the load of the gopuram and the doors fashioned after a leopard's mouth add positive beauty to the doors described by SLP. Further we learn that the four major doors (gates) respectively carry the images of Vighnarāja, Bhairava, Bhadrakālī and Hanūmat. <sup>43</sup>

Added to these big four, many small doors are opened but without the design of the leopard's face. Each door is two-fold and covered with sheets of iron and reinforced with protruding iron-pegs and strong bolts. The outer doors which open near the moat are said to have suspended bridge-like devices that are employed in crossing the moats. Such are the eight doors of a fort according to SLP.

Coming to the śālās (halls) near the rampart, SLP prescribes eight such halls to be constructed, namely, the bhadra etc. (34.4) for king's use during war. Mayamata and VVS favour twelve such śālās for a yuddhadurga (śālādvādaśakāvṛta) and five for a kūrmadurga <sup>or six</sup> (pañcaśaiṣṣālakaiḥ) VVS (10.42) <sup>33 etc.</sup>. But about the location of the royal citadel in a fort VVS seems to agree with SLP

43. This appears to be quite popular in our tradition. Vāstumandana and Vāstumañjarī fully corroborate this view when these opine, 'gaṇeśo dhanado lakṣmīḥ puradvāre sukhāvahāḥ ' Vāstumandana (3.30) and 'dvāre dvāre dhanādhiśaṁ gaṇeśaṁ cet śrīyaṁ nyaset'. Vāstumañjarī (16.17)

that it should be situated at a central place, surrounded by other buildings.<sup>44</sup> Also, a sort of agreement is observed regarding the buildings facing the roads and the lanes<sup>45</sup> and carrying the auspicious designs like mukhabhadra.

Most of these treatises agree that various articles and weapons to be kept in store in a fort constitute the daily provisions and bows, arrows, swords. But still it is observed that some authors weigh their favour in respect of a particular article. As an example may be taken āmla (tamarind) which is mentioned by our author whereas VVŚ and others, overlook it. Mānasa, (6.550-555) contains such a list which includes molasses (gudā) alongwith oil, ghee, honey etc. and instructs snakes to be kept in jugs (kumbha) and ferocious animals like tigers and lions in suitable cages. AS (2.4.40-42) suggests weapons to be stored in kulyās (canals), specially dug for the purpose. Thus, it appears that these authors mostly enclose a traditional list of such materials, nevertheless, sometimes, not without the local variations which prompt an author to include an article while overlooking others.

44. Cp. SLP (34.3) with VVŚ (10.46)

45. Cp. SLP (36.7) with VVŚ (10.44).

One more thing which does not occupy our author is the women-folk about whom elaborate instructions are found in other texts. Jayapṛcchā (Prākāralakṣaṇam. 54) describes such purāṣ to be 'replete with beautiful ladies' (lalanāpuritairpuraiḥ) while YK (17.136) informs us about a generally accepted norm in the matter that treasury and the laides should be kept in secret places (gupte/strīkoṣasambhāram..).

#### Forts vis-à-vis palaces :

So far what we have seen appears to be the description of a fortified palace. SLP seems to favour the idea of a fort which is big enough to contain a whole royal establishment, the palace, market, mansions of the elite, well-laid-out streets, et al. But sometimes we find that a fort is prohibited to be converted to a town (janapada) for security reasons. VVS clearly embody such a tradition and holds a fort to be maintained in the through exclusiveness of a seat for the Army. <sup>46</sup>

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46. VVS (10.1) durgānāṃ sthāpanam prāyo,  
bhūpānāmātmarakṣakam /  
tasmāt śilpigaṇaiḥ kāryam  
na tatra nagarādikam //

Treatises like NJC , pp. 173-187, Samarasāra, pp. 93-109, STR , 7. 14-101 indicate that in India a science had developed to acquaint the invading king with the success or failure of a particular seige of a fort on the basis of a contrivance of astrological counting known as Koṭācakra. SLP however is found to be silent on this topic.<sup>47</sup>

Lastly, we may add that the SLP description of forts appears to deal with not merely a fort but a town within a fort, though in small proportions. We, moreover, are reminded to see in it a picture of forts and fortification contiguous to that of the 16-17 century A.D. India.<sup>48</sup> The description of the royal palace surrounded by lofty mansions of kinsmen, Officers, servants, the market description with all commodities laid out in respective places, the reserved arenas for the four-fold class, the ditches, ramparts under vigilant surveillance of the guards - all these clearly conjure up the picture of a prosperous township, well-fortified with battlemented towers, moats and ramparts like the city of Pāṭaliputra as witnessed by Megasthenes<sup>49</sup>, Rājagṛha as described by Mbh. (2.18.30, 2.19.2 ff.) or to take a laterday example, the city of Vijayanagar as witnessed by Paes and Nuniz.<sup>50</sup>

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47. For details and diagram etc. of the Koṭācakra see STR (7.14-101), NJC, Samarasāra etc.

48. Cf. V.S.Bendre , Gadakotadurga (Marathi) p.40

49. Megasthenes - Fragmenta XXV.. quoted by Amitā Ray, Villages, towns - 64.

50. Vasundharā Filliozat, Ed. The Vijayanagar Empire, Delhi. 1977, p.26.

## (II) - The Royal Army

### Introduction :

The importance of a standing army is found to be appreciated from quite early times. Kautilya records it as Danda and it unmistakably forms a part of the seven components of the state/ (AS. 6.1.1). Normally <sup>and consists of</sup> it is described to be four-fold (caturāṅga) the horses, elephants, chariots and the foot-soldiers, (Mānasa. 2.6.678-684) though six-fold (Sadvidham <sup>B</sup> balam including camels and bulls or mules, see Raghu. 4.26) and eight-fold (including viṣṭi, servants, spies and counsellors to the original four, see Mbh. 12.59.41) are not wanting.

Whatever, might be the constituents of an army the vital role it plays in the life of a king can never be minimised. Its role in war, in fighting battles, snatching victory for the master and in peace, in participating in games like hunting and in salvaging man and material during natural calamities - all this has made it the prized possession of all the rulers down the ages.

Army appears to be the nucleus in every age around which civilisations are built up and destroyed. Rulers



might have changed and so also the techniques of war, but the concept of a well-equipped army has turned only brighter with every passing age and its possession, a virtual necessity for the rulers.

It is in this light that the informations provided by SLP on this topic assume important proportions and are fit to be studied inas-much as these open up the veils of centuries and reveal before us state of Armed forces of the time of SLP (16th Century A.D.).

Now we propose to deal with the classical four-fold division of royal army, discussion on each of them, weaponry like bow and arrows, practices of a bow-man, targets (lakṣa) and arrows of different types, description of expedition and war and an epitaph on war-martyrs.

### Infantry :

#### The Foot-Soldier (Padāti)

Relative Superiority : The fate of an army at war is basically dependent on the quality of 'men' it comprises of. It is too well-known to repeat that all other components like forts, chariots, horses, elephants or tanks, planes and weaponry etc. in recent times, remain always subservient to the soldiers who handle these and therefore, even in modern times infantry is known as the 'queen of battle'.

Importance : SLP, while describing the importance of foot-soldiers harps on this point in quite unmistakable terms. The author says that 'among the four-fold army the first three, namely, Chariots, elephants and horses, remain under the fourth category <sup>51</sup> - the foot-soldiers. Therefore, possibly, the author dilates at length on the qualities of a soldier. Much depends on from which family a soldier comes.

Selection and recruitment : At the time of recruitment it was possibly the custom to appoint persons from martial families <sup>52</sup> which have produced soldiers of repute for generations - father, uncles, grand-fathers etc. besides his own personal qualities like good conduct, resoluteness of purpose (drdha-vrata) and truthfulness, courage and experience at war. (134.4-5).

Personal qualities of a warrior (bhata) : SLP describes a soldier as one, whose limbs are replete with scars of injuries, caused by sharp points of enemy's swords, who in the

51. 'trividham rathanāgāśvanāmakam balamasti yat /  
taddhi turyabalādhīnamiti nirṇītamadrije' //

(134.24-25)

Also Cp. SN (4.7.23) which prescribes an overdose of foot-soldiers in any army.

52. Perhaps here is referred to the Maula variety of Kautilya and others. Cf. AS (9.2.1)

din of battle is never known to retrace his steps, who with exemplary courage fights out and kills any elephant or horse that chances to come his way etc. Also, we have examples of such brave soldiers who, while placing their master in the rear, continue to fight at the front of the battle field, regardless of their lives. Such combatants while fighting, value their own kith and kins as nothing better than the spectacles of a dream. Thus without any family attachment they fight for the master. Further, the author expects them to fight unitedly in thought (aikamatya) and action, (Cp. Kirāta 1.19) while keeping their mind, which is very unsteady, like the leaf of a holy fig tree, under restraint (6-12).

**Bravery :** In the opinion of SLP he is the meritorious warrior, who in the midst of great wars does resist the stream of arrows of enemy with the nonchalance of one who has abandoned worldly objects (tyāgavān). The warriors are variously compared with the becurSED heavenly beings who, on dwindling of merits, have fallen from the starry kingdom (nakṣatra-pada) etc. (13-14).

**Dress Physical features, Weapons etc. :** From the description of SLP it can be gleaned that a soldier used to wear a dress flowing upto his feet (ābaddhakañcukapada) and

a girdle tied to his waist (kaksāsannaddha) besides the coat of mail on the breast (vakṣasthalavyūdhakāṅkata) and the turban (uśnīṣa) on the head. The soldiers used to be heavily-built, were of exalted stature with prominent chest, firm shoulders, long arms and of great strength. Further, we come to know that they used to wear ornaments at neck and were not unused to sweet perfumes which they applied to their body. Fillets on their head are described to be wound round with wreaths of flowers. (15-20).

Weapons : They are stated to be adepts with the use of a variety of weapons like bow and arrows, sword, lance etc. Normally some of them carry a sword in one hand and a shield in the other. Some bear discus, some mallet-hammers, (gadā), some bludgeon (parigha) while others carry Spike (śūla), hammer (mudgara) and Kuthāra or battle-axe. (20-23).

#### Organisation :

Commander : For hundred of such soldiers, a man who is braver than others, should be appointed by the king as commander (adhyakṣa). Such a person, we learn, has the privilege of travelling in an āṇḍolika (a kind of palanquin drawn by horses), which is fitted with an umbrella, a thong (kaśā) and is with musical instruments that are capable of playing tunes (tūrī). (25-27)

Commander-in-Chief<sup>e</sup> : Over such commanders, there used be commander-in-chief who is the bravest of all commanders. We are informed that for hundred of commanders there was a chief of staff (Senāpati) under whose control the armed forces used to be there. On his appointment, he was highly honoured by the king with tauryatrika (dance, song and music) while the bards sang praises for him and the king came out to honour him with precious presents. Thus, for each 10,000 (myriad) (ayuta) of soldiers there was a commander-in-chief, (28-30).

Observation : SLP information of recruiting soldiers from martial races, holds good even in case of the present day Armed Forces and so also the case with recruiting from a family whose members have already served the army. However, SLP does not inform us about the classification of the foot-soldiers into six categories like Maula, Bhṛtya, Maitra, Śrainā, Ātavika and Amitra (Mānasa. 2.6.556), Aś (9.2.1) etc. and the seventh category like the Autsāhika Aś (9.2.26) which is raised during war. Nor, we have any reference to pay and remuneration of such soldiers about which others have shown much concern. Mānasa (2.6.568-69), Kirāta (1.19) etc.

Similarly we only get cryptic information about their dress, weapons, organisation and the Commander-in-chief.

Thus it appears that the author wants to pass off while giving information of a general nature on this topic while leaving texts like Mbh. AS. and other texts on Military Science (Dhanurveda) to take care of the details.

Weapons : Bows and arrows etc.

In view of the importance of weapons<sup>53</sup> (Āyudha) in any military operation, the king should have a fair knowledge about them. And therefore, SLP devotes a full {patala (135) for the weaponry. In this section we get informations mainly about bows and arrows, targets and the qualities of a bow-man.

Importance of bow : The bow is still considered to be the greatest of all weapons (sarvāyudhamahāmātra). It is generally made from high quality bamboo-canes (sadvamśa) which have parvan (joints) and to its both ends (koṭi) are tied a string (jyā) . The bow-man who is highly skilled, operates such a bow to release arrows against the enemies. (135.4-5).

Classification : It is primarily divided into two classes, namely, the divine (daiva) and the human (mānuṣa). The

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53. The classical division of Weapons into mukta and āmukta etc. is also not mentioned in SLP. See NP (chapters 4 and 5) for this. SN 4.7. 191-193 divides weapons into two categories viz. astram and śastram. Also it mentions weapons that are rendered more potent with mantra and others, with fire.



former is considered <sup>to be</sup> superior to the latter. The bows of <sup>54</sup> the first class are five and half cubits' long, have nine or seven joints and a good iyā. On the other hand, the stick of the mānuṣa variety is four cubits' long and has three, four or seven joints and a good string. The daiva bows are stated to be used by divine beings like Śiva, Paraśurāma, Rāma etc. while the mānuṣa, by ancient kings like Yayāti, Nahuṣa etc. And the author is of the opinion that the mānuṣa variety is appropriate for the use of other kings. (6-15).

The defective bows :

We also find enlisted in the text some defective bows, which according to our author, should be avoided. Such bows if unwisely used, may bring in disaster. The relationship between the use of such weapons (bows) and the purported disaster associated with their use, does not appear to have any rational basis except perhaps harming and causing inconvenience to the bow-man but our author explains this in a magical way.

As <sup>an</sup> example may be taken the use of bow which has inherent defect (jātiduṣṭa). It is attributed that the use

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54. SLP does not say anything on the materials with which different kinds of bows are made. For a list of such material see HHC p.147 ff. verses 46-51.

of such a bow leads to quarrel with one's own relations. Similarly, are to be avoided bows, which have four, six or eight joints, which are very old<sup>or</sup> made of unripe bamboo. The bow made of very old bamboo (atijirṇa) is to be avoided as it may be difficult (hard) to handle whereas the bow made of unripe bamboo may be broken. The bow which has equal number of joints is said to cause grief and bewilderment (śokamohakara) and the bow which has a protuberance like that of goitre (galagranthi), reduces one to penury. Thus the bow-man should be careful to avoid these defects while selecting a bow (16-20).

Variety : A bow free from any defect of both the daiva and mānuṣa varieties when held by a bow-man is called Kodanda. Lord Viṣṇu's bow is known as the śāṅga or made of horn. It is stated to be made by Viśvakarman, is as long as seven vitastī (twelve āṅgulas) and is bent at three places. The Mānuṣa variety of this bow is described to be six and half vitastī long which is generally carried by soldiers fighting from elephant and horse-back. The charioted-bow-men and those who are fighting on foot use bows made of bamboo.<sup>55</sup> (21-26).

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55. See NP 4.21 which classifies bow as śāṅgika which is held to be same as trinata and the vainika as vaitastika.

The bow-string :

The bow-string is described to be of a number of varieties. The foremost among these is the one, made of silken threads (paṭṭasūtra) and is as thick as the little finger. It is as long as the bow (dhanuṣpramāṇa), is without any joint and has three strands, roped together. Other varieties are made of either the sinews (snāyu) of antelopes, buffaloes, cows or of human hairs (nṛloman) . Some are also made from the skin of ripe bamboos or from the bark of arka (*Calotropis Gigantea*) Plants. (27-30)

Arrows :

Generally, an arrow is described to be not very thick, nor very thin and made of nor very ripe shoots either. Those plants which grow on bad land, which are devoid of joints and which are broken, are to be avoided. On the otherhand, those arrows are considered good, which have fully developed joints, <sup>and are</sup> made of ripe bamboo canes of fine quality. (31-32).

Besides the bamboo canes, the feather of birds also form another component of an arrow. SLP prescribes strong and beautiful feathers of birds like heron (kaṅka), Swan,

parrot, peahen, flamingo and ospray (<sup>56</sup>kurara). To one arrow are tied as many as four feathers, each of six fingers' <sup>length</sup>~~breadth~~. While fixing these, care is to be observed to preserve the distinction between feathers tied to one side and those tied to the otherside of the arrow (Pakṣabheda). This in brief, explains the procedure that goes to make an arrow to be used in a bow made of bamboo-cane. The arrows used in a bow made of horn (śārṅga) have <sup>length</sup>~~breadth~~ feathers measuring ten fingers' <sup>length</sup>~~breadth~~ (33-35).

#### Categories of arrows :

Primarily, arrows are of three categories, the male, the female and the hermaphrodite (pumstriṣandha). The female arrows are those which are thick or bulky at the fore-most point (agra) while the male are bulky at the rear and the third variety <sup>of</sup> arrows are same from one end to the other. The female variety are good at longer flights (dūrapāta), the male are suitable at piercing hard targets (dr̥ḍhabhedana) while the arrows of the third variety are used with slight variations than the other two (36-38).

Besides these, there are other ten types of arrows as follows : Dhārāmukha, Ksurapra, Gopuccha, Ardhacandraka,

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56. Cf. HHC p.51, 83-84 where seven such sources are enumerated.

Sūcīmukha, Bhalla, Vatsadanta, Dvibhallaka, Vikarna and Kākatuṇḍa. We are further informed that particular arrows could be efficiently used against particular targets only. For example the dhārāmukha was used to cut only the leathern shield (carman) while the ksurapra was employed to cut enemy's bows. The sūcīmukha arrows were meant to destroy the coat of mails (kavaca), the ardhacandra, the head, the bhalla, the heart, the dvibhalla, the bow-string, the kākatuṇḍa, the arrow, and gopuccha, the targets made of iron (lauha-lakṣa). (39-42).

About the shape of these arrows, it is said that these immitate the shape and size as indicated by their names.<sup>57</sup> Added to these, we come to know about another variety of arrows, which are made of iron and are called nārāca which, when fitted with the attachment of five feathers, give good results at war. Then, there are the lighter variety of arrows known as the nālīkā which are made of the reeds of Nalakāṇḍa (Amphidonax karka). This variety is considered effective while striking from great heights of forts. (42-44).

#### Decorations :

All varieties of arrows are variously decorated. Sometimes, these are known as carrying shafts of gold

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57. Svasvanāmasamākārā bhaveyuh ..... (135.42).

(rukmapunkha), painted with a variety of colours and often, plated with gold or other fine metals. One significant practice mentioned by SLP centres round the fact that names of individual warriors were permanently inscribed on the arrows used by them.<sup>58</sup> This was done with a motive to inform the wounded that he was hit by the arrow of a particular warrior (44-45).

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#### Means of toughening an arrow :

Besides the choice of ideal and suitable material with which an arrow is made SLP states that extra strength and lethality of arrows can be obtained by first smearing these with an unguent prepared out of pippali (piper longum), saindhava (rock-salt), kuṣṭa ( a sort of poison) and cow's urine which is then to be heated in fire. This process is said to toughen an arrow which can even penetrate impenetrable and hard targets (46-47).

#### Targets :

First of all, three types of targets are mentioned a..the Cala ( moving) b. acala ( static) and c. calācala (moving and static) . The bow-man who can hit a moving target

58. Svasvanāmākṣaraiśaśvat cīḥnitāśca ... (135-45)

59. HHC (p.153, 114-117) mentions another decoction added to one described in SLP . For the purpose are mentioned five kinds of salts pounded with mustard seeds mixed with honey etc.



while remaining firm to his place is known to carry the epithet, Calabhedin. Similar was the case of one, who while moving, could correctly hit at a fixed target. And lastly, who while remaining firm yet moving could hit a target with a single arrow was known as calācalabhedaka - who can hit both a fixed and moving targets (48-52).

Other beliefs and practices :

The bow-man who could shoot at upper parts of the opponent, was believed to attain high heavens, if killed in a mace-fight. But persons who had not this proficiency are destined to suffer. A bow-man who hit parts below navel was believed to be punished with terms of stay in hell like niraya and for him, who hit the enemy's feet, awaited sufferings in Raurava.  
60

The presence of a single bow-man of fame in a particular locality was sufficient to keep the enemy at bay. (53-54).

Another important belief and possibly, practice of the day centres round the polarisation of a particular caste to a specific weapon. Bow was the weapon of the brahmins, the sword was monopolised by Kṣatriyas, the Vaiśyas were the

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60. Such practices appear to be guided by śāstric injunction on the matter. Cf. Mbh. (śalya 6.6) adhonābham na hantavyamiti śāstrasya niścayaḥ .

bearers of lance while the <sup>S</sup>sūdras used to fight with maces. (54-55).

### Exercises in Archery

#### Practices of a bow-man :

It is quite evident that no one can achieve the skill and dexterity<sup>61</sup> in the use of a weapon without the required exercises and practices in the field in which one wants to excel. Thus, SLP lays great emphasis<sup>61</sup> on such practices in respect of warrior bow-men and recounts in details some befitting exercises for them.

The śrama : The practice appropriate to the context, is technically known as śrama which involves the repeated hitting of a target placed before a bow-man with regular discharge of arrows from his bow while drawing the bow-string close up to his right-ear, in a variety of ways (bahudhā). As in such practices alone rests the welfare (śreyas), strength and fame of bow-man, he should continue such<sup>61</sup> śrama with utmost regularity (136. 3-6).

Regularity : The practices are regularly performed every morning and evening and it is said that any dereliction of

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61. Other texts like HHC lay great emphasis on such practices. See HHC. 5.200-207, STR 8.2.104-5 for for an eulogy on such practices.

this score even for one day results in a slackened fist and blurred vision. The eye and the fist move in a variety of directions (probably owing to lack of concentration) nānakārā Galati. Thus regularity in practice leads one to victory in war. (7-8).

The ways of such practices and the methods of actual exercises are to be determined as per the instructions of the preceptor.(9).

Inauspicious traits : We observe that certain things, if observed during a session of practice are considered taboo. As examples are recorded sighting of a serpent, breaking of the bow or bow-string etc.<sup>62</sup> and SLP ordains that in all such cases practice should be stopped or discontinued. (9-10).

Position(s) (Sthāna) :

Five positions are mentioned to be suitable for a bow-man, viz. Ālīdha, Pratyālīdha, Viśākha, Dardura and Gāruḍa. (STR. 8.2.82-87) also gives similar account.

a. The Ālīdha position is that in which the bow-man places his left foot in front while stretching back the right foot. This position, we are informed, is useful to shoot at a target which is near.

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62. Cf. HHC.(5.133-134).

b. In Pratyālīdha he reverses the position of his legs and this is said to be assumed when aiming at a distant target.

c. The Viśākha (forked position) is mentioned to be useful for hitting the concealed targets (kūta-lakṣa). In this posture, the bow-man equally stretches both of his feet allowing only a cubit's gap inbetween. It is perhaps similar with the sampāda position of Agnipurāṇa (249.9).

d. Dardura position is adopted for hitting the Kaṇṭaka (pointed) targets in which the bow-man positions himself on both the knees which touch the ground while his body remains curled and contracted.

e. Similarly for penetrating hard or firm (dr̥dha) targets one should adopt the Gāruda posture in which the left knee is placed on the ground and the right, bent and contracted, is placed in the front (agrataḥ) (12-18).

NP also mentions five positions of a bow-man and calls it (dhānuṣka-vṛtti) instead of Sthānaka. It gives the positions in somewhat changed order, namely Pratyālīdhaka, ālīdha, samapada, viśāla and mandala. (NP 4.24). The commentator also describes these differently. For example, Pratyālīdha is described as 'bending up to the floor' (bhūparyan<sup>t</sup>amanam) and so <sup>on</sup> and so forth.

Similarly, we come across nine positions in Ag.Pu.  
(249.9-19) Samapada, Vaiśākha, Maṇḍala, Ālīdha, Pratyālīdha,  
Niścāla, Vikāṭa, Saṃputa and Svastika.

The cause of such differences, we feel, is due to the various traditions followed by the authors.

Mustī (clenched fist) <sup>63</sup>

In matter of release of an arrow from the bow, the role of the fist is no less important. SLP mentions five types of mustis namely, Pataṭkā, Vajramuṣṭī, Siṃhakarna, Matsarī, and Kākatundī.

In Pataṭkā, the dīrghā (long finger) and the tarjani (fore finger) are fixed at the root of Anguṣṭha (thumb). This is obtained to facilitate release of nālikā variety of arrows.

If the thumb enters in to the middle of the fore and the middle (madhyamā) fingers, it is known as Vajramuṣṭī posture, conducive for shooting with Sthūlatārā variety of arrows.

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63. According to MM as quoted in NP, p.11, "mustī is responsible for regulating weapons released by oneself." Also see HHC, p. 137, verse 277 which has a similar description.

When the tip of the middle finger gets firmly fixed to the root of the nail of thumb, it is known as Siṃhakarna, utilised for releasing arrows of Vatsadanta variety.

Similarly, when the tip of the fore-finger is firmly joined to the base of the thumb-nail, it is called matsarī. With this fist the bow-man is described to shoot at variegated targets (Citra-lakṣa).

And, finally, when the tip of the thumb and the mouth of the fore-finger are joined, the posture is known as Kākatunda which is assumed while hitting at a subtle and fine target (sūkṣma-lakṣa) (19-25).

Connection between the positions of bow-man and the fists :

Now is described the intimate connection that is purported to exist between the Sthānakas and the muṣṭis, In Ālīdha posture is adopted the patākā position of fist, in pratyālīdha, the Vajramuṣṭi and in viśākhā, the siṃhakarnikā. Matsarī is said to be suitable for dardura posture while kākatundikā is employed in the posture known as Gāruda (25-27).

Besides this we also observe in STR that pātākā is used to discharge the Nālikā variety of arrows, the



vairamustī for thick arrows made of iron (sthūlanārāca), siṃhakarna is utilised for piercing hard targets (Dhanurveda- saṃhitā, 87 as quoted in STR (Vol.II p.627), the Matsarī, while penetrating variegated targets and the kākatundi for subtle targets. (STR. 8.2.90-94).

#### Time and Placement of targets :

Much stress seems to have been given to the time of practice vis-a-vis the targets. SLP informs us that at sun-rise the target should be placed in the quarters of Agni (South-East) and in the afternoon to the east. A target placed to the north is considered the best for all times. About restrictions of such placement we are informed that a target should not be placed in the south except when necessitated by war. (28-29).

The reasons behind such placement appears to be guided in the first place by position of the sun while in case of the south it seems to have been prompted by a magico-religious prejudice.

#### Distance and quality of targets :

When a target is placed at a distance of sixty cubits, it is the best, at forty cubits, the medium and at twenty, it is considered to be of the inferior variety. (29-30).

Practice-exercises : (Śramasādhya-kriyākalāpa)

Exercises during a practice course <sup>are</sup> ~~is~~ defined as those the knowledge of which works towards success for a bow-man.

First, he casts a careful glance over the bow followed by tying of the bow-string (iyā) to the top of the column (cūlikā). Now he takes up the position while holding an arrow with his hand. He lifts the bow with his left hand. Then holding first to it (ādāna) he fixes the arrow to it (sāndhāna) and drawing the string for once only, he has to release the arrow successfully at the target. SLP instructs that having drawn the string, one should stop one's breadth (kumbhaka) so as to fix the arrow to the target and discharge it with the interjection hum. This is precisely described to be the practice a success-intending-bow-man should adopt. (30-34).<sup>64</sup>

Time of Practice and expertise :

One is said to achieve perfection of fist with a six months' practice. Similar practice for one year, makes him expert in successful discharge of arrows. But, it is said that perfection in shooting with nārāca (iron-arrows) <sup>is</sup> ~~in~~ achieved by one with blessings of Lord Śiva only. A perfect marksman should lift the arrows with the ease one

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64. Cf. STR (8.2.106).

lifts a flower, he should bend the bow in the way a serpent recoils and he should direct his looks at the target with the intensity with which one looks at wealth (35-36).

Success in the art of handling a bow (cāpakriyā) is said to be achieved quickly, if someone begins his practices with left hand, which when achieved should prompt the practitioner for similar attempts with his right hand and then with both hands with arrows made of bamboo-canes and iron (nārāca) (37-38).

#### Tests of archery :

One, who can successfully hit at a target with fourhundred arrows both at morning and evening, is acknowledged as the best of archers. Striking the target with three hundred arrows confers one with middle rank while similar performance with two hundred arrows leaves one with the low rank, (Kenīṣṭhaka). Similarly, it is held that if a bow-man can hit his target on the upper portion of the body (ūrdhva-bhedin), is the best. The archer who shoots at the navel level is the medium and the lowest is one, who hits targets at the foot-level (39-41).

Besides these, we have more difficult tests to which we will come at a later stage. Now, a few remarks on concentration and physical alertness of a bow-man at practice.

Physical alertness, position of limbs etc. :

At the time of aiming at a target, an archer should keep the upper and lower portions of his body erect, even (Samau) and upright. Both shoulders are placed on exactly at the same level and both hands are held motionless. He fixes his gaze at the target without slightest movement of his eyelids. When he assumes such a position, the target is now covered by his fist which holds the bow. Now it is his duty to adjust the position to the level so that the target is covered by the arrow-point. And, when thus the target is glued, as it were, to mind's eye, he should release the arrow. Thus released, it is <sup>65</sup> claimed that an arrow never misses the target (41-43).

<sup>66</sup> Acts like bringing out (arrows) from the quiver, placing those on the bow, drawing the bow-string and discharging the arrows (to its target), one, who practices these expeditiously and regularly is said to attain <sup>67</sup> perfection in shooting (samdhāna) quickly. (44-45).

65. Cf. NP (4.10-14).

66. The description of the four acts during shooting of an archer, given here finds its corroboration in the tradition of Dhanurveda as quoted by NP(p.40). Also see HHC p.138, verse 292 for similar description.

67. One is said to be perfect in the art when one's arrows invariably hit the target.

'yadā muñcet śaraṁ vidhye, kṛtahastastadocyate' NP,4.14

Causes of unsteady movements of arrows and overcoming those :

A marksman, who wants to achieve excellence in archery, should be aware of the factors that are responsible for making an arrow unsteady and wavering.

An arrow is said to be unsteady if it moves either north, south, upwards or downwards from the target. It acquires its proper trajectory, if, while releasing it, the fist of the bow-man, holding the arrow from behind with the bow-string (guṇa-muṣṭi) only shows signs of *g* quivering while the other fist holding the bow (dhanurmuṣṭi) stays motionless at the front. If on the otherhand, the archer's grip over the bow is loose and devoid of straightness, the arrow, so released doubtlessly picks up a southward path, informs, SLP.

If the bow is held in a manner when the (Cāpamuṣṭi) is kept above the guṇa-muṣṭi, and an arrow is released, it goes above the target and when vice versa, the arrow moves downward. (46-50).

Ideal of Conditions :

It is only when the target, the arrow-point and the eye of the archer come together (saṁgati) on the same plane

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that the arrow hits the target with certainty and so also is the case of an arrow which is evenly held between both the fists, is flawless and is released without a flutter. Such a sharp and pure arrow is mentioned to penetrate targets like man, horse or elephant without sticking to the body. (51-53).

### Superior tests :

Now are mentioned a variety of training and practices which can rightly be called the superior tests in archery.

The first in these series is the one in which the arrows of an archer can successfully penetrate targets like a pot, lump of clay, leather and iron. It is said that the hard adamantine Vajra cannot hold the arrow of such an archer<sup>69</sup> (53-54).

### The Experts :

He is said to be a dr̥dhabhedhīn who with a single arrow, can penetrate strong iron wares of half a finger's

68. "lakṣyabānāgradr̥ṣṭīnām saṃgatistu yadā bhavet,  
tadānīmujjhito bāno lakṣāṇa skhalati dhruvaṃ "  
(136.50-51).

69. Four types of targets such as the statāc, small, subtle and heavy are enumerated in NP. (4-15).



thickness. Similarly, whose arrow can penetrate twentyfour pieces of hides held together, his arrows goes out even after piercing the body of an elephant. (54-56).

He is known as the bhramabhedin, who with his arrow, can hit a moving pitcher placed amidst water and a lump of clay on a revolving disc (56-57). One of the difficult feats in this series probably is the hitting of a revolving cowrie (varātaka) fastened to a stick with a hair(61). Besides, an accomplished archer is mentioned to be one, who knows the art of cutting in-to pieces the well-aimed-arrow of the opponent before it hits its target<sup>and</sup> who can<sup>✓</sup> with adroitness, hit at a revolving wooden target and possesses the knowledge of successfully piercing a point or two round marks of the target (58-59).

There are also other experts in this field who are known as (banabhedinah) destroyer of arrows who straightaway can cut the arrow of an opponent even before it could be released, or with slight adjustments (tangent or meandering) of their grip, can cut arrows, flying straight or moving tortuously towards them on a one to one basis (60-61).

Then there are others, known as the (kāṣṭha-bhedin) who have the capacity to pierce a wooden<sup>/</sup>target shaped after a cow's tail with the kṣurapra variety of arrows. Other

experts in the field are known as biṇḍubhedin, who can hit a red point in the shape of bandhuka flower (*Pentapetes phoenicea*) on a target which is white. Who with simultaneous discharge of two arrows can speedily cut two balls (gola-yuga) or globular water-jars, at their extremities (prānta), fixed to a piece of wood, is known as the yugmabhedin who is described to be honoured by other kings. (62-65).<sup>70</sup>

#### Tryst while moving :

Such practices, we are informed, also could be carried out by an archer variously, while riding a chariot, horse or mounting an elephant or while running, all the time trying to hit the target without fail. He may also try this while making a number of circular movements, while moving forward or backyard, left or right or while making zig-zag movements (gomūtragati). (66-67),

#### Arrows and Targets :

We have also information regarding a particular type of arrow which was used for a particular target.

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70. For an account of various tests of archery see HHC, pp. 173-175, verses 362-384. The highest skilled archer is mentioned here to be one, who is a manovedha. It appears that such a person can hit at a target by merely reflecting its picture in his mind.

Iron-targets are pierced with arrows of Kākatuṇḍa variety, leather with dhārāmukha and for penetrating clay-targets are prescribed the sūcīmukha arrows. (57-58).

Days unsuitable for such practice :

Days like the 8th (aṣṭamī), new-moon (amāvasyā) full-moon (pūrṇimā) and the 14th (caturdaśī) are not considered propitious for such practices and these should be avoided. Added to these days are also mentioned the anadhvāyadivasas - days, on which study (vedic) is interrupted, <sup>which</sup> are also to be avoided for this purpose. Therefore, one should attentively study (practice) dhanurveda on the propitious <sup>71</sup> days only (68-71).

Observation :

Three important points emerge out of the above description. Firstly, we come to know the special leaning of our author, which he has, for bows and arrows as a result of which other weapons such as the sword, mace and javelin etc. are overlooked. From this it follows that bows and arrows were still the principal weapons of the time.

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71. ŚTR while providing a list of propitious days for starting the practice appears to have gone a step further. Not only it enlists days like Monday, Friday, Thursday etc. but it mentions favourable asterisms like punarvasu, Rohinī, Uttarā also. See ŚTR (8.2. 27-30). Also Cf: HHC p.155(131-133).

Secondly, war does not appear to be a Kṣatriya monopoly alone. Other castes are stated to actively participate in it with their weapons. This lends credence to the fact that war as a phenomenon had become quite pervasive affecting all strata of society.

And thirdly, we observe that the description of targets of our text highly resembles the concept of modern-day targets. A snap-shooting marksman of modern times compares too well with the calācalalakṣabhedin of SLP.

True it is that archery has ceased to be a killing art now but nevertheless, it has gained some new grounds in the realm of sports and athletics. And we see no reason why informations as these, cannot be interesting even today. Thus, the relevance of bow arrow as tools of Athletics remain beyond any question mark, even in modern times. Finally, it is believed that earlier texts like Dhanurvedasāhita, Iśānasāhita, Vīracintāmaṇi and Śrīkodandacaturbhujam, etc. might have served as source-Books for our author in his attempt to enlist 'elements of archery' in SLP.

### Elephants

A study of Indian history through centuries reveals that till the discovery of gun-powder and fire-arms

elephants were playing pivotal roles<sup>f</sup> in war-field. In crushing the enemy forces to surrender, in battering the rampart-walls of fortress or in deciding the fate of a king at war, the formidability of war-elephants remains a foregone conclusion.

It is in this light that we can understand the copious references to elephants strewn throughout Sanskrit literature from quite early times. And it is of little surprise that special treatises could come to be written covering different aspects of elephants.<sup>72</sup>

SLP. gives a wholesome picture of war-elephants. While so doing the author takes care to throw some light on the following points namely, their origin, classification, characteristic features and strength.

#### Mythological Origin of elephants

While trying to trace their origin SLP follows older authorities<sup>73</sup> on the subject and states that elephants took their origin from the dust particles that had arisen from the

72. Hastyāyurveda, Gajaśāstra, Mātāṅgaśīlā etc.

73. Cf. Hastyāyurveda of Pālakāpya, Ed. M.C. Apte, Anandāśram<sup>α</sup>, Poona, 1894 (pp. 7-11).

body of Mārtāṇḍa (Sun-god) and to this factor is attributed the unusual fondness of elephants to dust with which these keep on playing. (SLP 132. 3-4).

The second reference to myth comes in the following form. The author says that once upon a time the elephants were like the mountains and were winged creatures, capable of moving at will. Further we are informed that these were protean (kāma-rūpa) by nature. Once these had incurred displeasure of a sage Dirghatamas by name by landing en block on the branches of a banyan tree near the Himalayas under which the sage was practising penance. The tree was broken causing all those to fall and the sage was disturbed. Because of this act of insolence, they were cursed by him to be cleft of their wings and serve the kings as their carriers (vāhana). And, since then, severed of their wings,<sup>74</sup> these are used as domesticated animals. (5-9).

The author of SLP appears to be content with such mythic account of the origin of elephants. Now let us pass on to their classification.

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74. The entire account of myths is comparable to Pālakāpya's narration. See Hastyaśurveda (1.84-90), (207-208)(211) etc. Also, ŚTR though has some different story on their divine origin (7.11.4-7) yet supports in a cryptic way, the sage's curse which was responsible in bringing these to earth (Ibid, 8).



### Classification

Primarily elephants are classified in-to four classes.

A. Bhadra, B. Manda, C. Mrga and D. Misra. Each class is said to have its special characteristic features and our author says that the first three classes of elephants were extant respectively in Kṛta, Tretā and Dvāpara-yugas only and what we have in this age of Kali belongs to the Misra variety only (9-10).

A. The Bhadra, or the best of these classes, is described as one, who exudes fragrance through its nostrils, whose tongue, lips and palate are of copery red colour, who is great in boldness (pratibhāneṣu vipula), has a handsome hinder part, is with a broad face, elevated at front and drooping at back, its spine measuring four cubits (dhanurvitatavaṁśa), with even feet, teeth and ears, with twenty nails, an auspicious fore-quarter (gātra) and a lovely pair of eyes. Elephants of this class are neither afraid of forest-conflagration (dava), lions, lightning, nor the goad. <sup>They</sup> Are capable of understanding the meaning of conventional commands, of heroic disposition, forebearing by nature and not rough or harsh (karkaśa). They are of salutary intelligence (Kalyāṇamedhas) and highly energetic (tejasvin). (11-14).

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B. The Manda variety has a pair of stout tusks, a long and hairy lip, the body shaped after that of a tortoise (elevated) and is of a slow gait. Sleepily moving with half-closed eyes, it has an abiding interest in the she-elephant and is said to be not exhausted, even after much labour and does not seem to know fear (15-17).

C. The Mrga has a delicate and smooth skin, small ears, attenuated legs, a fine face, slender physique and a smaller procreative organ (mehana). Its spine is slender, belly, thin and the fore-quarters, large. Tusks are longer and so also the tongue and hairs. At front, its body is described to be stooping (sannata).

Equally accomplished in a place of refuge in the field of action and at rest, it remains ever-unsettled for fear of being over-powered by other beings (rūpa). Possessing a pair of small ears and a short tail, it has long strides. It is described to be a dull-headed one, who moves with intermittant roars. It takes a lot of food, has a large fore-head and is intolerant of being hooked with a goad. It walks faster and is not tired of carrying load. Tamed with sweet words, it is annoyed with harsh treatment (17-22).

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75. Some authors prefer to call this class, Mandra  
Cf. Hastvāyurveda (1.44) p.4, STR (II.7.11.31)

D. The Misra or the mixed variety, as the name indicates, roughly possesses the characteristics of the aforementioned varieties. (23)

Eulogy :

SLP at the end incorporates a lot of praises on elephants. It says that being embodiment of victory for kings<sup>76</sup> and carriers of divinities (devavāhya), the elephants in rut are treated as living-gods themselves. In receiving instruction they are obedient like the disciple, servants in compliance of one's wishes (chandonuvartana) and silently they pass off to another's hand when sold or gifted like a slave. They are compared to thunderbolt (vajra)<sup>77</sup> in the act of breaking ramparts, city-gates, buildings. Further, these are lauded as the best mode of conveyance, the worthy decoration of an army so far as their tenacity and for-bearance are concerned. These are stated to serve the twin purposes like defending one's own troops when in a happy mood in the din of battle and destroying enemy soldiers when enraged.<sup>78</sup> One elephant, it is stated, can win over

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76. Cf. Hastvāyurveda (1.223) which reads as follows :

rājñām hi vijayo nitvaṃ vāraṇeṣu pratiṣṭhitah '

77. Cf. ŚTR (7.11.221-223) which quotes verbatim from SLP (123, 26, 29, 30 etc.)

78. Cf. ŚTR ~~123~~ (7.11.223).

79

as many as six thousand horses and therefore, a king should collect and maintain a number of these for one's own army. And having selected the best elephants from forest, he should train them to docility by verily causing brave soldiers to mount over them. (23-24).

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### Observation

In the above account on elephants we observe that our author appears to be too much guided by older authorities like pālakāpya. And inspite of it, the informations incorporated, appear to be of general nature. Nor do we find in SLP the details of treatment accorded to these in STR which discusses at length the forest habitats of elephants in different regions like Saurāṣṭra, Kaliṅga, Aparārka etc., enlists their relative merits, classifies them as belonging to Indra, Kubera, Varuṇa etc. besides the usual classification of Bhadra, Mandra etc. and a four-fold division based on Brāhmaṇa, Kṣatriya, Vaiśya, Śūdra etc. Inspite of the deficiencies, however, we feel that the account serves too well its purpose of educating a king.

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79. Cf. STR ~~and~~ (verse 220).

80. Seven ways of training war-elephants are mentioned like upasthāna, saṁvartana, saṁyāna, Vadhāvadha, Hastiyuddha, Nāgarāyana, and Sāṁgrāmika etc. see AS (BK II. 32), Mānasa. (2.3.306 ff.)

## Horses (Hypology)

Horses come next only to elephants in matter of importance in the war-field. SLP in its treatment of horses, tries to cover points like their origin, classification, auspicious marks on the body and strength. 81

### Origin and myths :

First of all, horses are divided in-to Ayonija and Yonija. Now follows account of the Ayonija variety. SLP states that unlike elephants, who are described, to have originated from the dust particles of Mārtāṇḍa, the origin of horses and mules (aśvatara) are attributed to the sacrificial ash of Prajāpati in his attempt to create the world. And therefore, the author argues that even now horses are playfully attracted to ash. Some other horses of this variety are said to have originated from the turbid drops of tears of the creator, duly caused by the sacrificial smoke in the great sacrifice of Dakṣa, when the former had gleefully collected those and

81. Treatises exclusively dealing with the horse-lore are the Śālihotriya, Aśvavaidyaka attributed to Jayanta and Nakula and Aśvaśātra (Tanjore) also attributed to Nakula. SN, YK, STR etc. also deal with this topic. Most of these texts support and propound the mythological origin of horses as we find in SLP. See SN 4.7.43 ff, YK pp. 181 ff. and HHC 3.20 ff.

had besmeared, his limbs with the precious collection. Thus, some were born from his mouth, some from hands, shoulders and feet etc. Another occasion is described to be the churning of Ocean where-from alongwith neetar, had come out the horse Uccaiśravas with the roarings of thunder, produced by great clouds. We are further informed that it was caught by Bali in its speedy attempt to escape from the waters to sky. But due to the strong grip Bali had on its hinder legs, it got tired and could not escape. To this mythological incident is attributed the inability of horses to rest, even at present and the peculiar mode of their resting, which is effected by throwing upward the hinder legs while leaning against the two at front (133.4-11).

Another such story is recounted regarding their divine origin. Once <sup>gr</sup>Uṛga, the son of creator, was cursed to be an owl (ulūka). From the union of the mythological lovely progenitress of antelope (mṛgī) and the ulūka, were produced some eggs wherefrom are said to have born a number of horses. Still some other horses are assigned their origin to the Gandharvas (who regulate the course of the sun's horses) and are known as Yonija (12-14).

We are further informed that both the Yonija and Ayonija varieties of horses had earlier wings and they used to fly alongwith the clouds. This made Śatakratu



(Indra) intolerant who commanded Śālihotra (the sage and author of Veterinary sciences in Indian tradition) to sever their wings with the weapon Isikā (reed-like weapon) so that they could be used as carriers and Śālihotra did as desired, to please Indra but he was nevertheless, moved with the entreatings of the horses and had blessed them with the boon that their legs, henceforth, would be agile enough to give them speed like their erstwhile wings and they would now become carriers of gods and men. (15-19).

#### Classification :

Like the human beings, horses are also classified into four categories - Brāhmaṇa, Kṣatriya, Vaiśya and <sup>82</sup> Śūdra which is based on the individual characteristic features of a horse. Of the four, the Brāhmaṇa horses are considered to be the best and their comparative merit is to be understood in a successive order.

The Brāhmaṇa horse is described to be of white colour, the Kṣatriya red, the Vaiśya, grey with a <sup>tinge</sup> ~~large~~ of yellow and the Śūdra black. The Brāhmaṇa variety is

82. This appears to be the conventional four-fold classification, for most of the treatises on hypology have something to say on it.

Cf. AS.Ś, vāhanaśikṣā ..4.ff , YK P.195 verses 34 ff., SN p.195. 34 ff and HHC 4. 213 ff.

considered conducive for use in all auspicious and peaceful occasions (kṣemakṛtya) while in activities during a war, the Kṣatriya is the best. The Vaiśya horses are proficient in the conduct of profit-giving activities (dravyārjana) and the śūdra horses are successfully employed for all other purposes.

It is said that horses remain asleep all the time in this world but during war, not only these are awake and alert but there's no better friend than these. (2 19-23).

#### Measurements :

Two Principal Ways : Two principal ways of measuring a horse are the horizontal (tiryak) and the vertical (ūrdhvamāna). The former is taken from the end corner of the eye to the root of its tail while the latter is done from the hoof-end to the hump (kakud). (24)

The best horse : The horse which is four cubits in height and five cubits in length and whose mouth measures twentytwo<sup>83</sup> anḡulas (finger-breadth) is considered to be the best. The experts opine that such a horse possesses an even neck<sup>c</sup>

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83. The account of measurement appears to vary from text to text. However, all agree with ~~the~~ positions of āvartas which go to characterise a good horse.

as long as fiftysix anṅulas and its bosom and the neck are same as the mouth that is of twentytwo anṅulas. Its ears measure seven anṅulas and the palates, six anṅulas each. The tail is of twenty anṅulas and is fine and straight. The shanks (janṅhā) are as high as twentytwo anṅulas and the hooves, seven anṅulas each. (25-28)

Position of the āvartas : Ten dhruvāvartas, = (points on the crown<sup>w</sup> and different parts of the body from which the hairs radiate or curl backward) if found distributed on the body of a horse in the following order, are considered quite auspicious. One, on the forehead, two on the head, two each, on the flanks, two on the breast and one on the anus region (apāna)(29).

The midling variety :

Horses of the midling<sup>d</sup> (madhyama) variety are known to measure three and half cubits in height and four cubits in length. The mouth equals to twenty fingers' length. The neck measures fortysix anṅulas, the height of the shanks, eighteen anṅulas, each of the hooves is six anṅulas and the āvartas (points of curls of hair) are present as in the case of the best variety of horses (30-33).

The inferior horse :

A horse of the adhama variety measures (3 x 3) cubits in length and height. Its mouth is seventeen anṅulas, the neck thirtysix anṅulas, a hoof is as small as five fingers' measurement and the āvartas are similar as in the case of the other two varieties (33-34).

Besides these three primary divisions, SLP describes five other types of horses which appear to be quite famous in Indian horse-lore. <sup>84</sup>

The first among these is mentioned as the Medhra horse whose testicles are round (vr̥tta), of uniform size like

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84. The quality of a horse is often said to be determined by its contiguity with a particular land. See YK (P.186). Also we find the same text dealing in details about the four-fold classification of horses on the basis of their Physical measurements. (Ibid). P.182 (33-37) while SN does not seem to <sup>regard</sup> remember the land as the determining factor of the quality of a horse. However, it mentions the unit of measurement of a horse as equivalent to five grains of barley. (SN, 4.7.43)

About these, there is observed a general agreement among authors. See ASS. P.38, SN 4.7.110 ff., YK, p.185, HHC, p. 111 etc.

that of a Bilva fruit (Aegle Marmelos), are without hair\$ and devoid of any black mark whatsoever, even on <sup>its</sup> ~~their~~ body. Such a horse is considered to be the best. (34-36).

The horse whose entire body is white save one ear which is black is known as the Syāmakarna variety and it is considered suitable for Aśvamedha sacrifice. (37)

It is known as the Aṣṭamaṅgala variety whose all four feet are white alongwith the tail, eyes and face, even the hairs on its body bear a whitish tinge (Sitābha) (38).

Similarly, in case of the horse known as Pañcakalvāṇa the mouth and four legs are stated to be white(39).

The Mallikākṣa variety has a crescent -shaped ring on its forehead (face) which is as black as the jambu fruit (EugeniaJambolana) and all its feet are stated to be white. (40)

Next, we have horses from different geographical regions and origin of a horse in a particular place is stated to regulate its qualities.

Qualities of a horse vis-à-vis its land of origin :

In this connection our author appears to pay his rich tributes to the horses from Persia. Without mincing words he proclaims the superiority of the Persian horses. Also is accorded a similar place to the breeds from the Konkan (Western shore of Deccan) and Saurāstra- region (Surat of modern Gujrat).(41)

The horses from Uru<sup>86</sup> lands, Kīla<sup>87</sup> or from the Aratta (Punjab) and from the land of river Indus are said to belong to the middling (madhyama) variety.

85. Uttamā vajīnah proktā pārasīkasamudbhavāḥ (133.41).<sup>Y</sup>  
YK. on the otherhand mentions tājītā (Afgan), Khuraśāla (Garwal) and tuṣāra (Tokharian) to be the best. (P.181, 26). Text like HHC (3.95) regards the Kāmboja to be the best of all. The Epic tradition on the otherhand, regards Sindhu, Bālhika and ofcourse Kāmboja horses to be the best. See Rām. 1.6.23-24, Mbh., Sauptika, 13.2 etc.

86. Uru or Uruga is identified as the Hazra country between the Jhelum and the Indus.

87. Kīla country is variously identified as Kailokila, the capital of konkan or the Kilamuttugura in the North Arcot district of Karnataka. See N.L. Dey, GDAMI and S.S.Chitrāv, BSK.



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And horses from Śābala country or those which are dappled, the Ārya country (North central India), the Sārasvata country (N.W. of Delhi), the <sup>89</sup> Taṅkaṇa lands and those from the south eastern part of the country are credited with the lowest rank. (42-43)

Occasions when horses are to be punished :

SLP enlists six occasions when a horse is to be punished i.e., when it starts neighing, when it stumbles upon (skhalana), when it shows signs of fear, when it goes astray or the wrong way, when it becomes angry and lastly, in the event of a horse being confused or perplexed (bhrāntacitta). (44) And, we feel that such occasions and punishment pertain to the time of training of a horse. (Cf. AS .Ś Vāhanaśikṣā ... verses 18-20).

88. This could not be identified as a country. Hence we feel that the term is used here as an adjective with the meaning dappled.

89. By Taṅkaṇa which land the author had in view is difficult to ascertain. However, Rājavyavahāraśāstra (17 AD)- a lexicon of administrative and colloquial vocabulary written under the orders of Śivāji the great refers to Taṅkana to a hilly track in general. 'Pārvatīyastu taṅkanah'

(Caturāṅgavarga, 34)

Further it is said that horses have no fault of their own. If these are small, it is the fault of the owner, for their slow-speed is made responsible the rider and for their weakness, the fault rests with the master.  
<sup>90</sup>  
 (45) .

Prognostication of long-life and the Physical features of a horse :

Long life : The horse who has a big nose (mahāghoṇaḥ) is large-bodied, long-sounding and whose body is glossy and soft is said to have a long-life.

Similarly, the anteriors of whose ears are depressed and whose blood quickly wears the look of vermillion, they are said to live for long.

Those who are good at eating and donot scatter the grass, those who have a short membrum virile (mehana),  
<sup>91</sup>  
 large heads and wide fore-heads, possess a long-life. (46-48)

90. For a similar idea see SN (4.7.121) which makes the trainer responsible for the flaw and deficiency of a horse.

91. This in short, appears to be the basis on which the longevity of a horse is determined. Cf. HHC (p.140. verses 826, 828 & 832) which almost tally with SLP. (46-48) and similar is also the case with ASŚ (Āyūrlakṣaṇādhyaṃ) (verses 1-9).

Merits : Great merits are attributed to soldiers who are killed while fighting from a horse-back. Even such a person is considered to gain greater merit than a person performing, Aśvamedha sacrifice. Achievement of victory, fame and kingdom all are said to be possible due to the prowess of a war-horse. The real value of horse is said to lie in the fact that a horse though wounded or tired by carrying of heavy loads, it never forsakes its master in the field of war (49-53).

Magical property of horse-motiffs : Further, we observe that SLP attributes magical nature to painting one's residence with horse-motiffs. The author says that such action removes and pacifies the sins of a king.<sup>92</sup>(54).

Horse-behaviour and Omens :

Particular behaviour of horses are associated with omens of both good and bad nature.

When a well-accutred (<sup>o</sup>sannaddha) horse (or one, who is fastened nearby) starts neighing with up-ward face while scrubbing the ground with its hoof-points - it is

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92. āmūlamandiraṃ yasya pure santi na vājinaḥ /  
grhyabhittisu lekhyāste tena rājñoghaśāntaye // (133.54)

considered to be an indication of sure victory in war. While on the other hand, acts like frequent passing of urine and excretion at short intervals on the part of a horse who remains melancholy are indicative of great defeat and humiliation (55-56).

Similarly, the neighing of a horse at the end of night presages the approach of enemy's army and a horse, with a horripilated tail, is suggestive of the imminent march or expedition of a king who is stable and settled. The possession of a horse from whose tail emanate sparks of fire at night-end suggests the destruction of the master.<sup>93</sup> (57-59).

It was possibly, the common belief of the age that the entire earth can be brought in-to subjugation by the help of a thousand horses and therefore, SLP argues that kings intending to earn victory and subsequent stability and prosperity of their kingdoms should collect and maintain a number of these in their army. (60-61)

93. These omens, both good and bad, also find their corroboration in other texts. Cf. Āśś (23.3 ff.) .

See also YK p.189, verses 99-100, which gives an additional information that if the stable is haunted by bees and hives, it is suggestive of destruction of horses. To rid oneself of such danger, one should cause to recite the sacred-lore by a priest, offer oblations of sesame and repeat the śatarudriya verses (98-18).

### Observation

It appears that most of the texts dealing with horse-lore like YK., HHC., SN etc. rarely differ from the tradition of the Aśvaśāstra. Judging from their description of a good horse, we may, in the line of SN, sum up the broad characteristics to be as follows :

The ideal horse is one which has a face without whiskers, is beautiful, courageous, has a high nose, a long and raised crest and head , a short belly, hoof and ear, is impetuous and fast, neighs like a cloud or goose, is neither too fierce nor too mild, is pleasing like a god; It is of excellent beauty, flavour and colour and is endowed with the good āvartas. (SN, 4.7.75-76). This, we hope, portrays the prototype of an ideal horse with all its aspects like, body, character, colour, steps, voice, smell, shade and the circular hairy formations, etc.

However, from the foregoing description of SLP we observe that the author has tried to follow the tradition of horse-lore quite faithfully. But he does not seem to be blind to his own times, also. Thus we find that he categorically mentions Persian horses as the best (41) whereas others, like YK and HHC respectively

favour the tājita (Afgan) and Kāmboja with similar ranks. One more thing of a unique nature described by our author relates to the use of horse-motiffs as domestic murals and the magical power attributed to it - This phenomenon appears to have escaped the notice of others.

### Chariots of War

Chariots, like forts, have had a grand role to play in ancient warfare. While waging an offensive battle, war-chariots have found more favour with battle-experts of yore, than other components of war like horses, elephants and the common soldiers fighting on foot. SLP records a vivid description of such chariots of war with their construction and ornamentation.

Three reasons : SLP declares that whether he is a sovereign or ruler of a small state, a king should have war-chariots (yuddhārha-ratha) for the following reasons. To gain victory in war, to maintain steady prosperity of his empire and lastly, to decorate the army (131.4-5). In view of such important purposes that could be accomplished by chariots of war, these had come to be invariably associated with the army of any ruler of significance and were regarded as 'prized possessions' for kings, both in war and peace.



Its Construction : The construction of such a chariot begins with king's inviting and suitably honouring artisans, well-versed in the science of architecture, with presentation of new garments etc. who, in turn, are said to worship Vighneśa, the lord of obstacles to mark the beginning of such an effort.

As components, SLP prescribes new planks of the <sup>94</sup> Sāra (Khadira - Acacia catechu ) wood which are ślakṣṇa (smooth and polished) and sutastā (suitably chiselled). The ādhārapīṭha (supporting pedestal) of such a chariot is square or octagonal in shape, measuring five cubits on all sides and the corners, fastened strong with iron-plates. Then, to the corners are fixed four or eight <sup>a</sup>pillars with round-tops. A variegated crest (śikhara), made of various metals (nānādhātu) forms the front of the chariot while the rear and the sides are covered in a full-proof manner (nīrandhra) with sāra planks. Below the ādhārapīṭha is firmly fixed a wooden axle with the help of pegs (kīlakas) that are further secured by sharp iron nails (śanku). To both ends of the axle are now fitted two wheels, the outer circumference of which are plated with iron-spokes.

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94. SN (4.7.60) mentions iron also <sup>as</sup> a material  
(Lauhasāramaya).

Two lynch-pins of iron (ayomani) with rounded tops, are pierced at the outer faces of the axle to hold the wheels secure to their places. Another strong and polished pole known as 'Kūbara' is then fitted centrally to the axle at the front-end of which is fastened the shaft called yuga (yoke). At both ends of this yoke are laid hold a pair of horses, mules (aśvatara) or Oxen.<sup>95</sup>(5-16)

Ornamentation : A superstructure so made, is to be wrapped with sheets of gold, silver or some auspicious and painted metal-covering. The outer ridges of roof Valabhī (turret), on all sides, should be decorated with golden motifs of swans, peacocks etc. The Śikhara (crest) of such a chariot is generally not without a banner, bearing the royal insignia or mark of the desired deity. But we observe that SLP while prescribing option, records its decided preference to a banner with mark of Garuda, that is mounted atop the crest of a war-chariot (dhvajam garudacihnitam). (17-19).

Stock of Weapons : When such a chariot is ready, it should have reserve of the following weapons in it. Weapons like

95. In the above account we miss one important factor namely , the measurement. See AS which gives measurements like (10 X 6-12) Purusas (AS .2.33.3-4)

bows, arrows, swords, barbed missile (Prāsa) , lances (tomara), Cudgels (yaṣṭi), discs (cakra) , spears (śūla) , battle-axes (kuṭhāra) , Clubs (kheta), mallet-hammer (mudgara), missile (kaṁṣāṇa) and other ferocious weapons connected with war, form the great weaponry of such a chariot. (20-21).

The Rathin : Thus, a chariot which is strong (hard) like Vajra and immitates the rumblings of thunder, when<sup>96</sup> in motion, awaits the mounting of a warrior (rathin) who is of calm disposition, an expert in war, after fighting many a battle (nanāyuddhaviśārada), is gifted with swift movement of hand, has a wide chest, covered with strong armour (sudrdhavyūdhakaṅkaṭa), tied to his waist and wearing a foot-wear (āmuktapādakañchuka). Being adroit in handling weapons of various kinds, he is said to be accessible to enemy's secrets (paramarmañña) and possesses a magestic personality. Such a warrior, SLP enjoins, should be carefully chosen, whose chivalry has already attained fame (prakhyaṭapauruṣa) (21-24).

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96. Besides rathin, we have also references to Mahārathin - who can single-handedly fight against ten thousand warriors and Atiratha who can stand against amita soldiers. See Śrīdhara on (1.6) of BG., WIAI pp 13-14, SKD p.669 etc.

The Sārathin ? To man the chariot of such a hero, a suitable charioteer (sārathin) is selected by the king. Various qualities with which he should be endowed can be summarised as follows : While staying with all the paraphernalia (upaskara) of war, the Sārathin is a far knowledgeable person in the pros and cons of war. He must have the talent to study the mind (behaviour) of horses and in critical moments, he must have the where-withal to safeguard with ease, the horses, the fighter and himself . (25-26)

The place of Sārathin is near the shaft (kūbara) at the front-end and two more persons well-experienced in war serve as wheel-guards at the rear. In between the charioteer and the wheel-guards, lies the place where the chariot-warrior is ensconced. (27)

Variety : Besides such a war-chariot, SLP informs us that other types were also preferred namely, chariots with three or five compartments (kakṣa) and with still beautiful tufts, decked with precious jewels, wrapped with variegated metal-sheets and fluttering numerous colourful banners, which are described to be further embellished with motifs of peacocks and flamingoes. Ladden with complete weaponry, such chariots often possess four-wheels and are drawn by four horses. These are manned by skilled charioteers and

wheel-guards and are commanded by warriors of great fame (mahārathin). (28-31)

A king is advised to have all varieties of chariots with the help of which he defeats the enemy and eternally rules over his kingdom. It is also believed (in a magical way) that a chariot does fulfil all the desires of a king at war (āji). (32)

Panegyrics : Now follows a number of panegyrics on chariots. A king, so enjoins SLP, gets all his wishes fulfilled in war with the help of a chariot and where myriads of soldiers fail, a single charioted warrior succeeds. Continuing further, the author alludes to the victory of Lord Rāmchandra over Rāvaṇa which could be easily accomplished with the chariot of Indra. Other kings like Yayāti and Nahuṣa are also stated to have conquered the whole earth with the help of chariots etc. And, therefore, concludes the author that the necessity of possessing chariots of various sizes with all their paraphernalia becomes a royal prerogative for kings who desire to gain victory in war (32-38).

#### Observation :

As the foregoing description reveals, SLP describes the construction of a chariot which is fit to be used in

war (yudhārha). Kautilya's AS (2.33.5) also mentions six types of chariots, namely, deva, puspa, sāṃgrāma, pāriyānika, parapurābhigāmika and vainavika. We feel that the description in SLP may at best resemble the sāṃgrāma type of Kautilya or the syandanaratha as described in the Pratāpasimhodaya<sup>97</sup> of Gopāla.

A chariot being a component of the war-machinery, since quite ancient times, references to chariots, charioteers and chariot-warriors are copiously strewn throughout Indian literature from the times of the Vedic Aryans. Even the civilisation that grew around Mohenjodero and Harappa was<sup>98</sup> fully 'Cognisant with the wheeled vehicle'.

Mānasa (2.7.685-86) also advises the king that he should have such chariots in his four-fold army, the chariots in which are stored a host of weapons, which have banners and flags aflutter, have four horses yoked to it, <sup>they are</sup> ~~is~~ manned by a stout charioteer and commanded by a brave warrior.<sup>2</sup>

The mention of a varied host of weapons in a chariot reminds us of the multi-dimensional-skill of a chariot-

97. An unpublished manuscript of PUJL No.726. It is a paper MSS. written in Nāgarī characters by one Gopāl a court<sup>^</sup>poet of last Marāthā king of Satārā (1808-1855) It also purports to be a royal manual in the line of YK or STR. In the chapter called Rathaparīkṣā, the ~~the~~ above reference is found.

98. S.D. Singh, Ancient Indian Warfare .. 'Leiden, 1965, p.23.



warrior who is supposed to be an expert in the use of various weapons (sarvaśāstrāstrakuśala) (131.24).

Inspite of the combined merit a chariot<sup>99</sup> affords in giving speed<sup>e</sup> and surprise to the enemy, it has some limitations nevertheless. On a plain ground, more so, in a pre-determined site, it might be efficacious. But once such practices were discontinued and wars started being fought on unfamiliar grounds, chariots began losing their utility and scholars attribute to it a secondary place after the Epic period. Singh rightly presupposes that 'after the Epic period, chariots in a war, perhaps<sup>100</sup> played only a second fiddle till the 19th century'.

However, from the description of war-chariots and their utility it appears that the author of SLP is still under the strong influence of the custom of the

99. "It could ably and effectively resist the attacks of the enemy, suddenly occupy positions of advantage and quickly abandon disadvantageous situations, easily rally the soldiers fallen into disorder, break through the ranks of the enemy, and threaten enemy's rear". AS (10.4), NP (6.62-63) translation V.R.R.Dixitar, WIAD, P.162.

100. Singh, Ancient Indian warfare .... P.52. Dixitar, WIAI, p.166 also supports this by citing examples from Bāṇa's Harṣacarita (7th A.D.) where the description of Harṣa's army contains no reference to chariots and similar is the case with the army of Pulakeśin II. 641 A.D.

day in the first place or may it be that he is trying to exalt the already decadent practice of charioted warfare under the patronising influence of a king. Of the two, the latter proposition appears to be more convincing to us.

### A Military Expedition (dandayātrā)

#### Preliminaries :

It is customary on the part of kings to undertake march of their army which is known as Dandayātrā. Agnipurāṇa (Chap. 242) records both long and short marches of kings and states that the month of Mārgaśīrṣa is best for longer marches and the Caitra, for shorter ones. We come to know from SLP that such expeditions are undertaken by kings with two principal motives, namely, to protect one's country and to achieve victory in war. Other exigencies of such armistice marches against an enemy are described to be when a king, equal or unequal, (samāna or asamāna) joins the enemy and threatens from a particular direction or leads an attack into one's kingdom or ridicules or provokes one's allies or smiles out of derision in an assembly - in such cases, the king should punish him without delay and with utmost swiftness. Thus, a military expedition is said to be necessitated from time to time by the above factors/ (128-3-5).

Mode of leading an expedition :

Once the decision is taken the king selects the most auspicious time, conjugation of planets, day and month et al<sup>y</sup> and raises a high and big tent of white cloth in the direction in which the enemy is there. A flag with the royal emblem is tied to its top. The victory drums are sounded and the personal weapons of the king are kept there after being worshipped. The royal priest being urged by the king now prays to the weapons, in a manner as described in SLP (108. 25-28). Thus praying, the priest hands over the weapons to the king and causes him to be strengthened with his benediction. (6-14)

The king at the onset of propitious time, worships golden idols of deities like <sup>J</sup>Jayadurgā, Vakradanda and Ganeśa in the company of the priest and at the conclusion of the Pūjā, gives away the idols to suitable brahmins with donations. And now he proceeds to the direction in which the enemy is there while meditating on the overlord of that direction. Two priests precede him while chanting sūktas like Svasti (RVKh. 5.51.1) and Śākuna (Rv 2.42-43) and he, while wearing full military accoutrements, rides the royal elephant and reaches the white tent of cloth. On reaching there he himself is required to say his

prayers to the weapons while attentively reciting the eight verses which are similar to those described in ~~(109. 6-14)~~ (15-20).

### The March :

Then we have a lively picture of the king proceeding on such expedition. The foot-soldiers holding swords and shields, march with up-ward leaps (utplutva), the heads among them experienced at war, forming the frontal cover of the king, the horse-soldiers making up the flanks of the king and the princes, on stout and speedy horses, covering him from all sides - Thus, he marches on, when conglomerate of different sounds appear to rend the skies, as it were. From the front emanates the sound of the war-band while the rear is supplemented by sounds coming from large kettle-drums. The neighing of horses, the trumpeting of elephants and above all, the lion-like roars of the foot-soldiers - all seem to contribute to a great noise. And amidst such heroic and charged atmosphere the victorious king leads his marches/ (129. 10-16).

### War :

War and peace are often described as the two wheels of the chariot of human civilisation. 'The concept of a supreme sovereign and universal conquest takes root

as early as the Rgveda'. (S.D.Singh AIW... P.154).

And down the ages, "for kings and rulers, war has remained  
<sup>101</sup>  
 as a political institution". SLP while recounting the  
 causes of war states that it is to be resorted to as  
 the final means when other expedients of state-craft  
 like sāma<sup>n</sup> (conciliation), dāna (gift) and bheda  
<sup>102</sup>  
 (dissension) have failed.

Causes and the means employed ..

In exigencies <sup>103</sup> like rāṣṭrasandhi (transition of  
 power from one ruler to another), when enemies become  
uddhata (insolent) and torture the subjects and other  
 live-stocks (animals) and in such other cases, the king  
 so affected, should try to solve these, problems by taking

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101. WIAI, p.1

102. Cf. Mbh, śānti, 103.16 Ø, SN, 5.6.299-300 etc.  
 also appear to toe the same line in taking recourse  
 to war. Also see WIAI, pp. 62-63.

103. STR enlists in detail, such causes in an elaborate  
 manner. The author chiefly enumerates eight factors  
 namely, women, greed, territory, pride, ambition,  
 folly etc. as responsible for a war/ (5.11.46 ff.)

recourse to the expedients referred to above/. First, by adopting a straight and direct posture (riṣumārga) and with reconciliatory words (sāmabhāṣana) , he should please the enemy. It is said that by such tactics one can not only befriend an enemy but also can easily satisfy him. Therefore, Sāma<sup>n</sup> is held as the greatest of the expedients/ (137.3-6).

But if it is found that the enemy cannot be brought home this way, then, he should be allured through presentation of gifts. If still he remains disenchanted, the king should try to keep him under control by effecting dissension among its ranks and file. And those of the enemies who are not amenable to all these methods, they should be brought to book by adopting the last method, i.e. coerced in-to submission. It is also said that a king who leads frequent incursions un to the enemy is held in utter fear by all. On the otherhand, mildness (mr̥dutva) and temerity (bhīrutā) are the epithets of one, who does not tread the path of war. Therefore, war is lauded as the best expedient of states<sup>craft</sup>. <sup>104</sup> Added to this there was the belief that if some one won a battle,

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104. Cf. Kirāta (1.42),



he was assured of all sorts of pleasure in this world and if he is killed in the battle field, of the fabled prosperity of high heavens in the next world. Therefore, war is considered efficacious<sup>105</sup> in both the worlds for kings. (7-12).

But possibly, because of its largescale devastating power and loss of precious lives it involves, it is time and again, cautioned that a king should adopt this in case of extreme necessities like, when one's own life is end-angered by either resorting to war or otherwise.<sup>106</sup> Thus, being compelled by necessities, a king decides to wage a war. (13-17). Such a king, with full preparation marches out of his city (similar to one described in Pātala 128) and stations himself in a śibira (Camp).

105. Yuddhameva param śreyah paratreha mahābhujām(137.12)

also cp. Mbh. (śānti 99.43-45), Bṛ (II.31-32),  
ŚTR (5. 14.43) etc.

106. Yadāmṛtyurayuddhepi yuddhe jīvitasamśayah

(137.17)

Cp. "Notwithstanding the love of glory and the spirit of heroism, which actuated the warrior, recourse was had to war only, if the instrument of diplomacy failed to effect the desired end".  
WIAI (p.62)

107

The Camp (Śibira) :

When a king has decided in favour of war, he orders for other analogous preparations like raising separate military tents (Śibira) at suitable distances for his own soldiers and the allied forces. Such camps are described to be quite spacious, strewn with variety of shops, and with provisions of roads (Viśikhā). In a circular way, the arena is reinforced with a covering of thorns (kantakavyṛtti) and all its four gates are guarded by ferocious warriors. From a distance of about one krośa it is protected by the line of guards (ārakṣa) from all sides. From two krośas from there, separate camps for the allied kings (upajīvanrpati) - on whose help the king depends and the Pārśnigrāhas (kings fighting from the rear) etc. are built to prevent any untoward quarrel taking place among them. A camp, we are further informed, has the provisions for parking of vehicles, housing the horses, elephants and a number of small tents of silken cloth for the four-fold soldiers. Other necessities like various corns, fodder, salt and

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107. Encampment as a strategical point is to be considered by the commander, See Rām 6.42.22, Brahmānda<sup>Purāṇa</sup> 3.49.9 etc.

and fuel etc. are stored there along with the stock of weapons. (18-44).

King's exhortations :

When such preparations are over, the king summons all the commanders and his followers and informs them about the impending war while exhorting them to exhibit their valour in it. Having thus addressed, he now distributes presents like perfume, camphor, musk and gold-embroidered clothes among them. (45-46).

Listening to the spies and dispatch of envoy :

Then are summoned the spies (cāra) before the king. From informations provided by them, he acquaints himself with the comparative strength and weaknesses of the enemy. And then, he is approached by an envoy (dūta) who is described to be highly intelligent who knows his duties on specific occasions, is eloquent, resolute etc. His activities are said to be not known to the enemy. The king duly honours him and appraises him about his duty that he should go to enemy-camp and announce his arrival and after conducting himself near their king, disclose his identity and inform him about,

the preparedness of his master to fight the war on the morning of the day after. So saying, he should return to his camp. With these instructions, the envoy is despatched. (47-52).

Royal address to the allied forces :

Now the king approaches the allied kings of his side and addresses them briefly on their own strength and weaknesses of the enemy obviously, to boost their morale. The envoy on his return from the hostile camp appraises the king about their decision on hearing of which he first, makes up his mind for waging war and then sends for the commanders and categorically informs them that a great war is going to be waged the next morning. They in their turn, are described to keep the allied forces informed of the decision, keep in readiness their own soldiers, horses and elephants. (53-57).

King's preparation on the day of war :

Early morning on the day of war, the king after performing his daily-chores, is said to worship the sun-god (bhāskara), his tutelary deity, preceptors and the brahmins and make some gifts. Now he dresses himself with the leather coat of mail and ornaments and wields

a sword. He mounts war-elephant laden with all the provisions of war and leaves for the war-field alongwith his quadripartite army to the tune of a host of musical instruments like bherī and kāhalaka. Then also, the bards sing songs of glory which are described to be joined, in a heightened repertoire, to the 'Cries of Victory' shouted by all ~~and~~ sundry from the camps, (58-61).<sup>108</sup>

He departs for the war-field :

Now, follows a good deal of poetic description of king's march. We may note here one important point regarding this description. While so doing, the author seems to have left indelible marks of his being influenced by ancient poets like śubandhu. The reader frequently comes across many similarities with works like Vāsavadattā,<sup>109</sup> (62-73).

108. AS (10.3.368) while describing the duty of a king on the eve of war gives us an idea how in the previous eve he used to fast and lie down on his chariot with weapons. How the bards and sooth-sayers proclaimed heaven as the goal for the brave and how the priest hinted at the auspicious aspects of witchcraft performed. See also AG.P.(Ch. 236), STR 5.14, 8.24 etc. for royal duties ~~as~~<sup>on</sup> such occasions.
109. Cp. Vāsavadattā ORI, Rājastan, Jodhpur, P.5 the simile yaśodayānvita .. etc. with SLP (137.70).

Thus being honoured and regaled by the inmates of the camp, the king proceeds and reaches the vicinity of the enemy soon after which he, commands his forces to be positioned in suitable formations (vyūha)(74).

<sup>110</sup>  
The battle-formations (Vyūha).

SLP throws abundant light on this important aspect of war also. In this connection, a number of battle-formations are mentioned in which troops are said to be deployed.

Garuda :

First, is the Garuda (Indian Pelican Bird) Vyūha in which the deployment of troops resembles the bird with tail, wings and beak. The deployment order is mentioned as follows. In place of the mouth are assembled chariots, horses in its breast and the tail-place is occupied by the elephants. In rest of the parts which remain vacant are positioned soldiers while the king stations himself in place of its belly. (75-77)

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110. Most of the ancient authors who deal with war have given their attention to the arrangement of the four-fold army in war-field in expeditions etc. It is also pointed out which terrain is suitable for which type of formation. See AS (10.5.373), Mbh. Śānti 2.19ff, Bhīṣma (20.18) etc. and Ag.P (242.35 ff). NP sums it up by saying that Vyūhastu balavinyāsaḥ (p. 58) meaning <sup>that</sup> these formations are nothing but 'arrangement of forces'.



Padma :

If the above mentioned deployment is not considered suitable the King may opt for the Lotus-formation (Padma-vyūha) immitating the shape of a lotus flower. The chariots make the Karnikā (pericarp) of such a lotus which is encircled in a girdle-like (valaya) manner by the elephants and horses. In places of its eight petals are deployed soldiers and being surrounded by all, the position of the king is situated in its middle. (78-79).

Cakra :

Or else he should favour the Discus formation (Cakra-vyūha) . In this the first circular rampart is made up of soldiers-warriors (bhata), the second, with horses, the third, with elephants and the fourth with chariots. The king joins the fighting with his trusted companions while stationed in the middle (80-81).

Miscellaneous :

Among other formations are mentioned the ardhendu<sup>111</sup> (crescent) and the danda (staff). In all such

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111. The Danda formation appears to be quite akin to the extended-line formation of modern times which is resorted to in the event of a hand to hand fighting. Also, See AS (10.5.378).

formations also the king is mentioned to direct the battle while staying in the centre. (82).

It appears that SLP only follows older authorities on this matter. However, we do not see here a lot many others like vāhinī, pratana, camū, anikini etc. of Mbh (śānti (2.19 ff), snake, cart-like, crocodile, vaira (AS 10.5.373) and the neddle-like etc. (SN 4.7.272).

#### War Proper :

The actual war is joined with the despath of a number of soldiers stationed in the front line and holding weapons like bow, sword, spear etc. to fight with their counterparts from enemy's side. When this first batch of soldiers are successful in pulling down and piercing in-to the enemy ranks by shattering and causing destruction un to them, now the king himself approaches near the enemy and a great fighting is resumed to the multiple sound of conches, drums, shouts of victory, the rattling of the chariots and trumpeting of elephants, neighing of horses and lion-like-roarings of the foot-soldiers (83-89).

#### Norms :

SLP informs us that in such a fight, as a rule, the charioted-warriors, the elephants, the horses and the foot-

soldiers fight with their counterparts only. Such a fight is described to be one, which proceeds on the path of righteousness (dharma-yuddha) .<sup>112</sup> It was possibly the belief of the day that by adhering to such a fight a king reaps copious and magnificent results. But we also find that inspite of such belief and practice, its violation was never a rarity (90-91).

The obverted-way :

A king, who intends to wrest victory at any cost is exhorted to conduct the war in an obverted manner (vyutkrama) by going out of the right path. Such a war is also described with equal gusto wherein the foot-soldiers fight with the horse, the horse fight with the elephants or the horse and the elephant join with an admixture of soldiers of all variety (Samkara-bala), with the result that the charioted-soldier kills one, fighting from elephant-back, the latter killing the horse-soldier, who

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112. Cf. Mbh. 12.96.9,14 etc. The idea that fight should be between equals rings throughout Mbh. 12.96. 7, 10 etc. A king is advised to fight with a king and other ranks are even forbidden to approach a king. But SN 5.6.353 gives sanction to both dharma-yuddha and Kūṭa-yuddha and appears to recognise the merit of the latter in destroying strong and powerful enemy. SN 5.6.362.

in his turn might freely kill another on foot and so on and so forth. At places soldiers are described to be engaged in pitch-battle on sword to sword, mace- to mace or hand to hand basis. And still some, fight with blows and others are engaged in physical bouts - giving full exposition to their anger/ (92-96).

#### Royal participation :

SLP instructs that in such a situation, the king also should jump in-to the fray with weapons, if he has the required skill and expertise or else, he should continue to fight with bows and arrows. The arrows personally used by the king are described to be with glittering feathers (rukmapuñkha) and his name is inscribed in each of those. Now follows a detailed description of king's fight first, with arrows of all the five varieties and throwing a number of phalla (missile with sharphead) with which he is said to have wrought much havoc in enemy-ranks (97-105).

#### Tactics : (Offensive)

When the battle thus continues and the soldiers from the opposite camp appear to be slowly tired and exhausted, the king with flash dispatch of a great force should try to inflict the fatal blow on the enemy by indiscriminately killing its troops, friends, allies et al/. If he is

successful, victory is his and if not, he should keep <sup>on</sup> as repeating his tryst with still greater reinforcements. And still if he fails, he should not hesitate to perform <sup>113</sup> Abhicāra, rites (exorcising spells for malevolent purposes) through suitable priests of effect dissension (vidveṣa) in enemy's ranks or by adopting any other means, he should some how destroy the enemy. (106-111).

#### Defensive :

When all these tactics fail to give the desired results the king is advised to resort to the Vaitasī vṛtti (bending oneself or lying low for sometime in face of danger like a bamboo-cane in face of strong winds) and when the situation turns to his favour, he should try for the annihilation of the enemy. (111-113).

Or he may adopt the restraint of a tortoise (kaurmasaṁkoca) - who completely withdraws his limbs in face of danger and waits patiently till it passes off and lifts

113. True it is that victory was the summum bonum in the life of a king. But wresting victory by adopting vile methods like black magic, exorcism etc. does not seem to have the epic sanction, specially of Mbh. See Mbh.(12.97.23).

its head only when things have become favourable. Similarly, exercising restraint at critical moment, the king should lift his head when favourable situations evolve. (113-114)<sup>114</sup>

The author is of the opinion that by following all possible tactical methods,<sup>115</sup> by spending all his resources, a king should try to achieve victory by destroying the enemy at war and then only he should settle to peaceful administration. On the otherhand, a king, who out of lethargy neglects an enemy and a disease he is destroyed within a short time.<sup>116</sup> To drive home his point, the author quotes the names of a number of kings like Manu, Mādhātā etc. who are credited with prosperous rule owing to victory over their enemies. Therefore, it is desired that all kings should conquer their antagonists to assure themselves of steadied sovereignty and continuous prosperity. And it is rightly said by the wise that a kingdom without enemy is a veritable heaven on earth and its king, the Purandara (Indra). (114-121).

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114. Cf. SN (5.6.275-277, 374 etc.) which recommends withdrawal in clear terms.

115. Such methods in modern parlance relates to the various strategy and tactics adopted by the contending troops. In his The official source book of the British Infantry Henderson defines such strategy as 'the art of bringing the enemy to battle while tactics are the methods by which a commander endeavours to overreach the enemy when the battle is joined'. See Dixitar, WIAI, p.236.

116. Cf. Pañca. 1.8.256-8.



### Resort of War-heroes

As is already pointed out, war has remained a sort of obsession with kings and rulers. The twin ideas of unstinted supremacy<sup>c</sup> and continued prosperity has guided the royal activities through ages. As such, frequent fightings and the consequent killing of precious human lives have chequered the course of human history. But the common soldiers who bravely fight even at the cost of their lives, to achieve victory for their masters, are seldom remembered. In this background it is worthwhile to note the dominant motives which have guided the belief of those heroes who were required to sacrifice their lives on the altar of war.

SLP in (patala 138) records such motives which rightly serve as epitaph<sup>h</sup>notes on these warrior-martyrs, while aptly mirroring the beliefs and ethos of the period.

### Awards relate to the other worlds :

The fate of a soldier who bravely sacrifices his life while fighting in the battle-field is variously recorded in our text which ofcourse, concerns with the posthumous treatment these heroes are said to earn at the cost of their

lives. For such martyrs of war, great and varied, are the rewards in the other world (heaven) to which they are believed to ascend after death. <sup>117</sup>

Legendary account :

SLP says that a charioted-soldier who in course of war has killed his counterpart but in the process gets killed himself, is conducted to the eternal world of Indra, while riding the celestial car. Similarly, who, while trying to kill an elephant loses his life, fatefully attains the good fortune of being embraced by the stout-breasted celestial beauty Rambhā. It is believed that Urvasī the divine danseuse waits upon him - as unto a god-who gets killed, while fighting from his galloping horse-back with the glory of having killed his enemy. Those warriors who are killed with weapons while fighting among themselves (probably, in a pitch<sup>ed</sup>-battle) ascend to a heaven Nirmala by name. And, those of the warriors who value wealth and other valuable things (dhana) as death (nidhana) and keep themselves engaged in war (pradhana) they attain

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117. SN (4.7 306-11) gives a vivid account of such beliefs and ethos both for kings and common soldiers.

heaven like those who are glued to the path of truth and righteousness (satvarata). The soldier who is killed while fighting with the proclamation that even the deathless ones (amaras) are not equal to him earns the company of the celestial nymph Menā. Similarly, who in war is cut to pieces with enemy's arrows he, in heaven, fancifully plays with the divine damsel Tilottamā.<sup>118</sup> (138.5-12).

He is described to enjoy for a kalpa the company of the nymph Manjughosā in heaven who captures the enemy with sweet words, kills him and later gets killed himself. Similarly, one is destined to get the company of the divine damsel Sukesī, who in a pitch<sup>2</sup> (literally, hair to hair) battle is killed by an arrow of the enemy. 'In war the Kinnaras are only equal to me', so saying, if a person is killed while engaged in fighting, he is honoured by the Kinnaras (reckoned with the celestial choristers) in heaven. And a warrior who casts off his body in the battle-field after patiently fighting for long like a Vidyādhara (a supernatural attendant of Śiva) he, on his death, is surrounded by the Vidyādharas. Who enters the battle-field with the nonchalance of entering in-to the kingdom of nymphs, he, on his death revels with the nymphs. 'Can a Kimpurusa-

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118. Cf. SN. 4.7. (310-312).

an attendant of Kubera - stand when I am fighting' , with such exclamation if one is killed then he is revered by the Kimpurusas . The Gandharvas (celestial muscians) are said to honour him who with one stroke of his weapon kills the horse and the rider and is killed subsequently. And, who in the war-field, having exhibited a lot of bravery according to his own mite sacrifices his life as a sacrificer (Yajvan) his oblations, enjoys celestial beauties fit to be enjoyed (13-20). 'How in this war shall I die like a Siddha' (a semi divine being of great purity and perfe<sup>c</sup>tion), with such conviction if someone jumps in- to the war and is killed, he is honoured by the siddha<sup>s</sup>.

Who while fighting with arrows (Viśikha) is killed with a trident-shaped arrow (triśikha), he is said to attain the forme<sup>d</sup> of Śiva and journeys to the Śivaloka (World of the lord Śiva).

Similarly, 'Do you have the strength to kill me' so uttering, if someone gets killed in the fight, he reaches the abode of Brahman and so on and so forth (21-24).

### Mythical Weapons :

Like a good gem which is devoid of any flaw (trāsa) if a warrior does not show any sign of fear (trāsapātala)

but is pierced to death with a Vajra, he attains the world of Vajrin (Indra), and similar are the cases with brahmadanda (the creator's staff), Nārāyanāstra or Pāśupatāstra etc. The very fact of being killed by these weapons ensures one, place in the concerned world of the gods, (25-29).

### Three types of heroes etc :

Besides such fabulous account which we find enlisted in the text regarding the rewards that await a war-martyr, <sup>w</sup>we have some informations on the principal types of heroes, the discrimination to be used in selecting a weapon while hitting a target and the best mode of 'killing' in war.

Among the three principal types of heroes, those belonging to the Kṣatriya class are best, those from the Pādaja (śūdra) are the middling and the fighters from the Samkara (mixed) class are the inferior ones, (4-5).

### Sagacity in the use of weapons :

We learn that a weapon is to be used with due care and caution. According to the targets, are determined the weapons before the use of which the comparative strength and weakness of the weapon and the objects against whom these are going to be used, must be thoroughly

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assessed. This is because of the fact that a weapon used without discrimination is bound to frustrate the mission, it is desired to achieve (29-30).

### Degrees of Killing (Vadha) :

The best form of killing is the killing of a Sūdra at the hand of a Kṣatriya. In reverse order, if it takes place from the Sūdras to the mixed class, it is considered to be worst. And it is believed that the best form of killing can bestow good results to those who are killed. However, it is interesting to note that even being crushed to death by animals like elephants, horses or camels etc. in war-field is considered not in-auspicious. Such deaths are held as Samīcina (proper)(30-33).

### Observation :

We have seen in the foregoing pages that wars in India were not only generated by territorial ambitions. We find that warfare is coupled with a still greater necessity, a wider and nobler end. For a Kṣatriya <sup>h</sup>Heaven is the ultimate goal and its attainment necessitates the conquest of earth which serves both the ambitions, peace and

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119. Vicārvānyonvaśatrutvaṃ śāstrāstrāṇi prayojayet, /  
avicāryaprayuktāni vyarthāni syurvarāṇane //

(138. 29-30).



prosperity here and happiness and glory in heaven. In its elaborate description of War SLP also faithfully toes such a line of approach (137.15-16).

We also observe that in such a grand endeavour, mere physical strength was not considered sufficient. Victory, being the ruling passion of every such attempt however, divine power was beseeched. This fact gets confirmed in king's worship to Sun-god and the weapons. This we find, is corroborated in texts like AS (10.3.368), Ag. Purāṇa (236) and STR (5.14,8,24) etc.

The description of SLP on some matter like the battle-formations, may appear to be only cursory in face of their detailed treatment in other texts like AS, Ag. Purāṇa, and even the Epics.

However, we feel that within the given scope the author appears to have done a commendable job in faithfully transmitting the ancient tradition in the first place and secondly, <sup>has provided</sup> ~~by attesting~~ proofs of the prevalence of those, during his times. Even in his cursory dealing one thing becomes clear. The treatment of actual fighting of the king - which is so gloriously meted out here, appears to have escaped the attention of most other authors.

### Conclusion

The description of the quadripartite Royal Army as we have dealt in this Chapter consists of the foot-soldiers, the charioted-warriors, soldiers who fight from the elephants and those others from the horses. Regarding their individual and relative importance, lot of material is found in ancient texts proclaiming their inalienability from the war-apparatus. HAV., 1.223 proclaims the superiority of elephants in war, "<sup>120</sup> rājñām hi vijayo nitvaṃ vāraneṣu pratisthitah" and says that elephants weigh heavily in conferring victory to the contenders. Elsewhere, we find that infantry is hailed as 'queen of the battle' and <sup>is</sup> ~~is~~ preponderance <sup>121</sup> is highly praised. The AS.S (p.4, verses.25ff). praises a horse for its speed power to organise, separate etc. <sup>122</sup> in the war-field. And in a similar way is glorified the role of a chariot as we have seen in SLP 131. In SN however, we come across description of an ideal army as consisting of

120. Also, Cf. WIAI, p.170

121. Ag.P. Chapter 228, Senā padātibahutā śātrūṃ jayati sarvadā. Also, Cf. NP, 6.66-67.

122. Kṣanādekatvamāvānti, kṣanāṭ vānti sahasradhā etc.

an overdose of foot-soldiers, medium horses and even quantity of elephants, bulls, camels etc. but never with a preponderant elephant force. Thus what we see, relates to the fact that each of the above four constituents, are equally important and each has its own role to perform and glory to share.

In the above light the informations as incorporated in SLP appear to be highly valuable inasmuch as these embody an ancient tradition of the military genius of India.

Thus, SLP a traditional hand-book for ancient kings serves as a rich source-book on many topics, interesting from the point of view of cultural history of India.