Journal of comparative Literature and Aesthetics Vol. 2 No. II Winter 1978

© Vishvanatha Kaviraja Institute: Orissa: India

INDIAN SILPA TEXTS ON THE DRAWING OF HUMAN FORM

JAYANTA CHAKRABARTI

Human form has been the pivot of Indian art from an early date. particularly from the Gupta period, simply because the mood and feeling, idea and vision of an Indian artist are generally expressed in and through the "appearances" of human form. They might have taken references direct from nature, but while representing the forms, as we see, they have hardly represented the model as such. Only the inner character or the spirit of the appearances are found to be expressed by the artists. It is also recorded in the Visnudharmottara, one of the early extant silpa texts: "sammukhatvamathaitesām citre yatnād vivarjayet." That is, close study (of an object) should be avoided in a painting. On one occasion, Coomaraswamy mentions that the "composition is valid because all appearances must be, logically, appearances of something other than the appearance itself; if this were not implicit, we should speak of the 'references' rather than the appearances."2 Wang Li, a Chinese doctor, poet and painter of 14th century, in his 'Introduction to my picture of Hua Mountain' has also expressed such an idea in the following statement: "Though painting represents forms, it is dominated by 'idea' (of the object represented). If the idea is neglected, mere representation cannot avail. Nevertheless, this idea is embodied in forms and cannot be expressed without them. He who can successfully represent forms will find that the idea will fill out those forms. But he who cannot represent them will find that not form but all is lost."3 It was believed by Indian artists that unless one can master the appearances, one cannot go deep into the forms and consequently fails to understand and express the spirit of the thing observed. Detailed instructions of human forms— their proportions, stances

^{1.} Viṣṇudharmottara, Part III, Ch. 43, Verse 30 b. 2. A. K. Coomaraswamy, The Figures of Speech or Figures of Thought, ch. XIV, footnote I of P. 213 (appears on p. 215).

or postures and angles of vision (foreshortening) are, therefore found in the silpa texts. A self-imposed restriction was a necessary discipline for the beginners and apprentices. These instructions seem to be concerned more with the work of a sculptor than with that of a painter, because there was every possibility of the stone being damaged if the artist did not have any precision.

PROPORTION AND MEASUREMENT *

There are frequent references to proportion, that is, māna or pramāna, in the silpa texts in connection with drawing in general and human form in particular. This proportion may mean the relative measurement of forms as also the mental proportion or measurement by which an artist decides how much of the background or the foreground has to be introduced in a painting, or which figure has to be made larger or smaller according to the demand of the subject. The mental proportion or measurement depends on the intelligence, perception and experience of an artist, whereas the relative measurement of forms is a guiding principle for the artists in general and assures the maintenance of a standard.

The Viṣṇudharmottara classifies human forms into five types 4 according to their nature and proportion. The names of the classified types of the male are Hamsa, Bhadra, Mālavya, Rucaka and Šaśaka (hamso bhadro'tha mālavyo rucakaḥ śaśakastathā / vijneyaḥ puruṣāḥ pañcā.....).

The broad measurement of these five types are given in terms of angula⁵ measurement. This angula, as a unit of measurement, appears to mean the measurement according to one's (artist's) own angula (svenaivāngula-mānena). So practically there was no standard measuring unit since the shape and thickness of angula were liable to vary from person to person. The vertical

- 3. Arthur Waley, An Introduction to the Study of Chinese Painting, London, 1923, p. 245.
- 4. V.D., Part III, ch. 35, Verse 8.
- * The table of the measuring length (as noted by Shrigondekar in the Mānasollasa, Vol. II, Introduction, p. 8) is given below:
 - 1. angula or $m\bar{a}tr\bar{a}=8$ yavas (or of $\frac{1}{4}$ musti or closed fist according to the Sukranīti.)
 - golaka or kalā = 2 angulas or mātrās
 - 4. mātrās or 12 angulas = 1 bhāga
 - 3 bhāgas or 12 angulas = 1 tāla.
- 5. angula is one-fourth of a muiti or closed fist (cf. Benoy Kumar Sarkar, The Sukranitt, trans., 2nd ed., Allahabad, 1923, p. 169.) 6. V.D., Part III, ch. 35, Verse 9b.

measurements of the five types are noted as follows—Hamsa is 108 angulas, Bhadra 106 angulas, Mālavya—104 angulas, Rucaka—100 angulas and Śaśaka—90 angulas.

The Brhat Samhitā⁷ also classifies human form into the same five types, but their measurements, as noted in the text, are almost inverse, that is, 96, 99, 102, 105 and 108 angulas respectively.

It is said in the *Visnudharmottara* that the height and the breadth of a figure would be equal (*ucchrāyāyamatulyāste sarve jāeyāḥ promāńataḥ*). 8 Dr. Kramrisch explains it as 'the length of the body is equal to the length across the chest along the out-stretched arms from the tip of the right middle finger to the left'. 9

The Viṣṇudharmottora then states the proportion of the various parts and limbs in terms of tāla measurement. 'The tāla is stated to be 12 digits in extension' (dvādasāṇgula vistārastāla ityamidhīyate). 10 The height of the foot (pādacchrāya) upto the ankle is one-fourth of a tāla, i. e., 3 aṅgulas. The shank is equal to two tālas or 24 digits. The shank knee is equal to one pāda, i. e., 3 digits. The thigh is 2 tālas. The navel is one tāla above the penis. The heart is one tala above the navel, and the base of the neck is one tala above the heart. The neck is one-third of a tāla and the face is one tāla. The distance between the crown of the head and the forehead is one-sixth of a tāla. The penis should be (placed) in the middle. The arms (above the elbow) is 17 digits each and the forearms are also of the same length. Half of the chest is 8 digits (aṅgulas.) This is the measurement of the Hamsa type according to breadth. The measurement of other types should be calculated in accordance with this (proportion). 11

The Sukraniti Sāra¹² supplies instructions regarding relative measurements of the other types of male figure in detail (verses 196-255 and 341-402).

The measurement of a Hamsa type (stated above is followed by the detailed measurements of different parts and limbs in chapter 36 of the Viṣṇudha-

7. H. Kern, 'The Brhat Samhita' (Trans), JRAS, Vol. VII, 1875, pp. 93-97; also Stella Kramrisch, The Viṣṇudhamottaram Part III, Introduction, p. 12. 8. V.D., Part III, ch. 35, verse 9a. 9. Stella Kramrisch, The Viṣṇudharmottarem—Part III, p. 35 (foot note) 10. V.D., Part III ch. 35, Verse 11b. 11. V.D., Part III, ch. 35, Verse 1b (the verse begins after 26 lines which are written in prose), also see Priyabala Shah, Viṣṇudharmortara Purāna 3rd Khanda, Vol. II, p. 106. 12. Vide Benoy Kumar Sarkar, The Śukraniti (trans.) pp. 178-182 verses 341-402.

rmottara¹³ in the following order—The circumference of the head is 32 digits. The forehead is 4 digits in height and 8 broad. The temple (sankha) measures 4 and their height is 2. The cheeks (ganda) measure 5 digits each and the jaw (hanu) measures 4. The ears measure 2 each with a height of 4 digits. The nose measures 4; at the tip it is 2 in height and its breadth is 3. The extent of the nostril is one digit and the width is double. The position between the nose and the lip measures half a digit. The mouth is four digits in breadth. The lower lip is one. The eyes are one each in extent and 3 in width. The black orb is one-third of the eye and the pupil is one-fifth. The eye-brows are half a digit in width and 3 digits in length etc. etc.

This is the measurement of the Hamsa type, and it is the standard measure in relation to which the measurements of other types are to be worked out. (This has been done, we have already noted, in the Sukranīti Sāra.)

As regards the female form, ch. 37 of the Visnudharmottara states at the very beginning that like the men, women are also of five types. 14 But the respective names of the female types are not recorded. It may be that the female types were also known by the same terms (as that of the males) in their feminine forms. In a few erotic literatures of India, however, human forms (according to their nature) are found to be classified into several males along with the corresponding female types. Vātsyāyana's Kāma Sūtra (VI, I, 1—2), for example, mentions three types of men—śaśa (hare), vṛṣa (bull), aśva (horse) and their respective counterparts—mṛgī (doe), vāḍava (mare) and hastinī (female elephant).

A few other information of the female form, of course, are stated in the Viṣṇudharmottara¹⁵ which describes that 'a woman should be placed near her male partner so as to reach his shoulder. The waist of a woman should be made thinner by two digits than that of a male and the hip should be made wider by 4 digits. The breasts are to be made attractive and proportionate to the chest'¹⁶. The proportions of the female form are given in further detail in the Sukranīti Sāra which mentions that 'the height and thickness of the breasts of women are five digits... The limbs of the females have all to be made up in 7 tālas. In the

^{13.} The major part of this chapter (36) is only written in prose (except the last portion consisting of six \$lokas); the translation of this portion by P. Shah, (VD. Purāṇa—3rd Khaṇḍa, Vol. II, pp. 106-107) has been utilised with occasional modifications, as necessary.

14. V.D., Part III, ch. 37, Verse I b. 15. Ibid., Part III, ch. 38, Verses 2-3.

image of seven tālas the face is to be (made) twelve angulas or one tāla¹⁷. The female has all the parts of her body fully developed in her sixteenth year, the male in the twentieth.

Detailed instructions regarding proportions and measurements of human forms are also furnished by the Mānasollāsa in the tāla lakṣaṇa (Verses 193-205a) and the sāmānya citra prakriyā (Verses 234-686) sections.

POSIURES OR STANCES

Different postures (sthānas) or stances are referred to in the Viṣnudharmottara, the Samarāngana Sūtradhāra, The Mānasollāsa,, the Silparatna and also in a few Āgama texts. All these texts agree that the major stances are nine. These nine postrures are (stated in the Viṣnudharmottara, ch. 39, Verses 1-32):

(1) rjvāgata (2) anrju (3) sācikṛta śarīra (4) ardhavilocana (5) pārśvāgata, (6) parāvṛtta (7) prsthāgata (8) parivṛtta, and (9) samānata.

The present text of the Samarāngaṇa Sūtradhāra is so corrupt and multilated that it is very difficult to say anything definite, particularly about the stances. Only this much can be guessed (from the description of the ch. 79, Verses 1-4) that there are nine types of human poses. The Mānasollāsa and the Sīlparatna, on the otherhand, give more or less a clear idea about the stances. Both the Mānasollāsa and the Sīlparatna propose five varieties of principal stances and the names of the stances, noted in both the texts, are practically identical. In the Mānasollāsa they appear as rju, ardharju, sāci, ardhākṣi and bhittika; whereas in the Sīlparatna the principal stances are noted as rju, ardharju, sācika, dvyardhākṣi and bhittika. The Sīlparatna also adds that apart from these five stances there are four other types of parāvṛtta or dorsal poses. Thus it appears according to the Sīlparatna that the total number of stances is nine. Among them five are frontal and the rest four are dorsal or back view, and this also agrees with that of the Viṣṇudharmottara.

The Mānasollāsa and the Šilparatna refer to the sthānas or stances which are to be calculated on the basis of the positions of the brahma sūtra (central axis line) and the two pakṣa sūtras (side lines). But the nine stances of the Viṣṇudharmottara are not classified with the help of brahma sūtra and pakṣa sūtras. The

^{16.} Stetta Kramrisch, The Vişnudharmottaram Part III, p. 39 17. Benoy Kumar Sarkar, The Śukranīti, p. 179.

position of the different limbs are so vividly described in the Viṣṇudharmottara that the prescribed poses are easily comprehended. The Ardhavilocana or Adhyardhākṣa—sthāna may be cited here as an example. The description of this posture or sthāna, (which is almost a profile pose), is as follows 18.

In the face half-eye is shown and the other half is not shown (or dropped), so also the eye-brows. The contracted forehead should be of one mātrā or one angula. The essential part of the body, which is to be shown, should be exhibited little. The cheek should be measured one-half of an angula and the other half is deminished. The line of the neck should be shown one angula, while the chin should be exhibited one yava, i.e., one-eighth of an angula. Half of the front part of the chest should be shown and the (other) half should be omitted. Similarly, one angula should remain from the navel cavity. The waist and whatever else, are to be shown half. The adhyardhākṣa is recognised by its very shape. This is also called chāyāgatam.

After mentioning the nine postures the Viṣṇudharmottara opines that these nine poses should be understood for characterizing a particular mood; various other poses can also be imagined and depicted by superior understanding. It is also stated that the background should be properly divided and then the stances should be depicted in accordance with the measurement (of the space). 19

The different stances or postures are said to be represented (according to the Mānasollāsa and the Śilparatna) with the help of three imaginary lines—brahma sūtra or madhya sutra, i.e., the central exis line or the plumb line, and two pakṣa sūtras, i.e., side lines. According to the Mānasollāsa, 20 the line which begins from keśānta (where hair ends on the forehead) and passes through the middle of the eye-brows, the tip of the nose, chin, chest and navel to the middle of the two feet (covering from head to the ground), is called the brahma Sutra 21 or the central exis line. The two side lines or the pakṣa sutras (in case of strictly frontal pose) are usually six angulas away from the brahma sutra on either side. They start from the karnanta (top of the ear) and pass along the

^{18.} V.D., Part III, ch. 39, Verse 111-112; also see trans. of Priyabala Shah, Visnudharmortara Purāna 3rd Khanda, Vol. II, Gaekwad's Oriental Series No. 137, Baroda, 1961 p. 113. 19. Ibid. Part III ch. 39 Verses 33-37. 20. Vol. II, ch. I, Verses 177-192. 21. G. K. Srigondekar (ed.), Abhilasitārtha Cintāmaņi or Mānasollāsa, 'Gawkwad's Oriental Series, No. LXXXIV, Baroda, 1939, pp 7 and 8 (Introduction).

chin, the middle part of the knees, outside skin (joint of the chest and the arm), and the second finger near the toe to the ground. With the varying distance between the central axis line and the two side lines the five different poses are distinguished.

It is already noted that in the perfect frontal pose (1) rjusthāna, the distance between the central exis line and pakṣa sūtras or side lines is six digits on both sides (II). Ardharju sthāna is that in which the distance from the central axis line (or plumb line) to the one pakṣa sūtra or side line is eight angulas on one side and four digits on the other. (III) The sāci sthāna is that in which the distance from the brahma sūtra to one pakṣa sutra is ten digits on one side and two on the other. (IV) In ardhākṣika sthāna the distance from the central axis line to one of the side lines is eleven digits and one to the other. Bhittika sthana is that in which only two side lines would be visible and the brahma sutra (also known as lamba sutra) would disappear, that is to say, one of the side lines (pakṣa sutra) would merge with the central line or brahma sutra.

In the tiryanmana lakṣaṇam section of the text (Mān., Vol. II, ch. I, Verses 205—234a) there is a description of how to prepare graph-like horizontal lines which help in depicting parāvṛttā (dorsal) poses, as well as proper placing of nose, eyes etc. In fact, the tiryanmāna with its horizontal lines and the three imaginary vertical lines (brahma sūtra and two pakṣa sūtras) would combinedly give a perfect idea of the position of different limbs and their parts in different movements; it is the easiest process of preparing a proportionate drawing, and helpful for an amateur or beginner. The lines—horizontal and vertical—in fact supply the exact co-ordinates of any point or location in the picture, thus helping production of any necessary enlargement, reduction or exact reproduction.

The Silparatna (Part I, ch. 46, Verses 60—110) also prescribes an identical process of representing the different stances with the help of three imaginary vertical lines—brahma sūtras. It also mentions that in rju sthāna of or perfect frontal pose the distance between the brahma sūtra or central axis line and the two pakṣa sūtras or side lines is six angulas each; and in different stances the distance of one pakṣa sūtra from the central brahma sūtra would gradually increase, while the other decrease. In this way the two side lines or pakṣa sūtras being shifted from the central axis line would at last form the bhittika sthāna in which only the two pakṣ sūtras would be visible and the brahma sūtra would disappear or merge with one of the pakṣa sūtra. The only difference between the Manasollāsa and the Silparatna, on this particular point, is that the Silparatna

gives a more comprehensive description of the different parts of the body through which the three vertical imaginary lines pass while showing the different stances in the drawing.

After the description of the five principal stances, the Silparatna speaks of another four stances and thus makes a total number of nine stances. The four stances stated later, are the dorsal (parāvṛtta or parāvarta) poses. These dorsal views can also be drawn (even by an apprentice) with the help of the three imaginary lines. The four dorsal poses are named, after the first four frontal poses, rjuka, ardharjuka, sāci, and dvyardhākṣi. In these cases the front side of the body should be turned towards the wall and the back side would be visible.

The Silparatna further states that there may be numerous mixed (misra) poses, apart from the nine poses or sthanas. The text also cites an example that while the face is in rjusthana, the body below the neck may be in another stance. Of course, there cannot be any restriction for an experienced or talented artist. He is allowed to draw any pose which he thinks suitable for his expression. 22

LAW OF FORESHORTENING

After discussing the different stances, the Visnudharmottara, in the same chapter (39, Verses 38-46), deals with the principle of foreshortening (kṣaya-vṛddhi) which is also universally recognised as one of the fundamental rules of drawing an object. This aspect of drawing, stated as kṣaya-vṛddhi (principle of diminishing and increasing), appears only in the Visnudharmottara. An artist applies this principle to dipict his figure in different angles and poses—dynamic or static. An Indian painter uses it for other purposes too. He uses the principle of kṣaya (diminishing) and vṛddhi (increasing) in his composition and makes his figures smaller or larger according to their relative importance in the subject. Therefore visual perspective is almost absent in his drawing. It is the multiple perspective or better to say the mental perspective which regulates the drawing of his composition.

Ksaya-vrddhi, of course, generally means the process, with the help of which the different poses of a figure can be drawn. Therefore it may be regarded as another expression of the same process which is involved in the execution of different stances. It is natural, therefore that some of the names of ksaya-vrddhi

^{22.} Śilparatna, Part I, Ch. 46, Verses 110b-111a.

coincide with some of the stances. The kṣaya and vṛddhi are applied for showing different parts and limbs (of a body) with which thirteen sthānas or samsthānas are said to be composed. These thirteen samsthānas are: (1) dṛṣṭagata (2) onṛjugata (3) madhyārdha, (4) ardhārdha (5) sācīkṛtamukha (6) naṭa (7) gaṇḍaparāvṛtta (8) pṛṣṭhāgata (9) pārèvāgata (10) ullepa (11) calita (12) uttāna and (13) valita.

It is said that these are to be done according to the need of different compositions and mandalas. The mandala (which is a distinct physical movement of the body) is to be shown through the movements of the legs, and mandala has been rendered by Dr. Kramrisch as 'legs in circular motion' 23.

Regarding the representation of female form, the Visnudharmottara says² that a sportive woman should be represented with one leg in even and steady pose and the other languid (vithvala ²⁵); the body in motion (śarīram ca salīam) should be shown with a leaning (avasṭambha) or somewhat running (drutam) at times. The hip (jaghana) should be broad and gracefully twisted.

The laws of proportion, stances and foreshortening prescribed in the silpa texts, are found to be utilized by the Indian mural painters at Ajantā, Bāgh, Bādāmi, Sittanavasal, Ellorā, Tanjore and other places. The dancing damsels that appear in the court-scenes at Ajantā, or in the feast scene at Bāgh or at Tanjore or other places would show how different poses and bends of the body are beautifully rendered applying the canonical formulae of proportion, stances etc. and the artist's own ingenuity. In actual execution of painting, mixed stances and frontal poses are generally found; complete dorsal pose is hardly seen in mural painting, though in sculpture it is not completely unknown.

The different sthanas and bhangas (deflexion) of human forms are practically the keys to their movement in space. 'Ceaseless movement which includes pauses and stances, is a subtle and difficult exercise in the control of balance and weight²⁶', and the sthanas, bhangas and mudras (position of hands

^{23.} Stella Kramrisch, The Visuudharmottara—Part III, p. 41. 24. Part III, ch. 39, Verses 49-50. 25. This particular way of standing with one leg engaged (steady) and the other free (languid) reminds us the well-known contrapposta or counterpoise pose in which the Doryphorus by (gr) Polyclitus was executed [cf. H.W. Janson, History of Art, New York, 1965 (1st. ed. 1962), p. 102.] 26 & 27. Niharranjan Ray, Idea and Image in Indian Art, New Delhi, 1973, p. 92.

and fingers), as Dr. Niharranjan Ray observes, 'are but devices as much for the correct distribution and control of balance and weights as for the evocation of the desired bhāva and rasa through well-known and understood symbols. This too, holds good as much for sculpture and painting as for dancing²⁷, since dance means a movement, full of rhythm, cadence, harmony and balance. This may explain why the Visnudharmottara mentions that knowledge of choreography is essential for proper understanding of a painting.²⁸ Dr. Kramrisch also observes, 'what is meant by the derivation of painting from dancing is the movement in common to both these expressive forms... The moving force, the vital breath, the life movement (cetana), that is what is expected to be seen in the work of a painter, to make it alive with rhythm and expression' ²⁹.

A casual reader of Indian silpa texts may think that Indian artists of earlier period could not give free reign to their fancy and imagination, since all the possible details of measurements and drawing of forms, particularly human forms, are specified and pre-defined. There is no doubt that a broad section of Indian silpa texts contains instructions in detail, but the extant specimens of early Indian art do not give the impression that the artists had to follow any rigid or non-flexible formulae. Had it been so, the entire story of Indian art would have been an endless repetition of a set stereotyped pattern. In fact, a very close and minute study of the silpa texts would show that there are very subtle hints strewn here and there suggesting the imaginative and working freedom of an artist.

Indian artists and æstheticians know it very well that unless one studies the appearances and objective reality, one cannot reach at the deep spiritual unity. It is for this reason that every detail of the form is mentioned to be studied, particularly by the trainees and apprentices, in order to avoid all unsavoury inaesthetic effect of a work of art. In the actual execution of form, we also find that the ancient Indian artists are not ignorant of the anatomy, the law of balance or the 'rhythmic vitality' and yet, as great artists they never emphasise on the mere form or appearance by sacrificing its spirit.

28. cf. V.D., Part III, ch. 2, Verse 4. 29. Stella Kramrisch The Visnudharmottara--Part III, Calcutta 1928, p. 10.

Kala-Bhavana P.O. Shantiniketan (W.B.) Pin-731235