

The Process Of Image Making In Indian Tradition

Special Project

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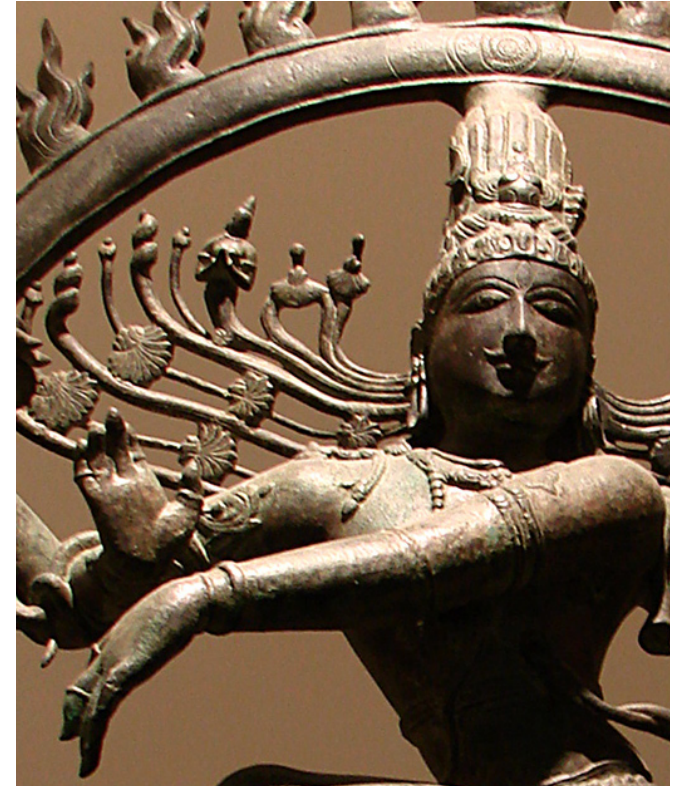
I am grateful to my guide Prof. Shilpa Ranade as she has always been my inspiration.

My family, my dearest friends and everyone at IDC.

Abstract

This project includes the documentation and comparative analysis of image making in Indian traditional art. It demonstrates the different grids used for creating the images of Gods, kings and sages along with other human figures. After studying various texts I learnt they were created in order to make a ready vocabulary and grammar of Indian art available for the artists in that era and also for further generations. These texts comprise of a good amount of information on image making, but all the information is very much verbal or descriptive and not illustrative. They talk about the technique but there are hardly any demonstrative images or examples available. In a way it is good as they encourage the reader to imagine and construct the image depending upon his understanding and imagination.

In this project I have made an attempt to create illustrative references for various types of images given, based on the available descriptions. These descriptions vary from one text to another. I have also analysed some of the ancient sculptures on the basis of given systems of measurement, in order to understand the image making in Indian traditional art.



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Introduction

This project is basically a study of process of image making in Indian traditional art. During this project I studied various methods used by ancient Indian artists to determine body proportions of human images or images of Gods and sages while making their sculptures and paintings. I mainly referred to some of the early texts like *Chitrasutra* from *Vishnudharmottar Purana*, as most of the Indian traditional art is based on the techniques of image making explained in these texts. Hence we can also say that texts like these gave a complete grammar to artists of that era.

Influences of these texts are seen on the art created during *Gupta period (fourth to seventh century)*^[7] which is known as 'the Golden Age of Art and Architecture in India', period in which some of the beautiful images of Buddha and famous paintings of *Ajanta* have been created. Art from *Chola Dynasty (ninth century to thirteenth century)* in southern part of India also seems to have a great influence of these texts on them. But we can not be sure if these text document the art that was being practiced by the artists in that time or artists have created those marvellous art pieces referring to these texts as there is no account of when exactly they were written. Some of these researchers say *Chitrasutra* was created in sixth century AD^[6], some say it must have been compiled and added to *Vishnu Purana* in the 7th century CE.^[4]

Standard methods were used to determine the proportions of different men and women while making their images based on the social strata they

belonged to. These texts are great examples of documentation of system designs available in ancient times which are still referred by some of the artists in India in order to preserve our traditional art.

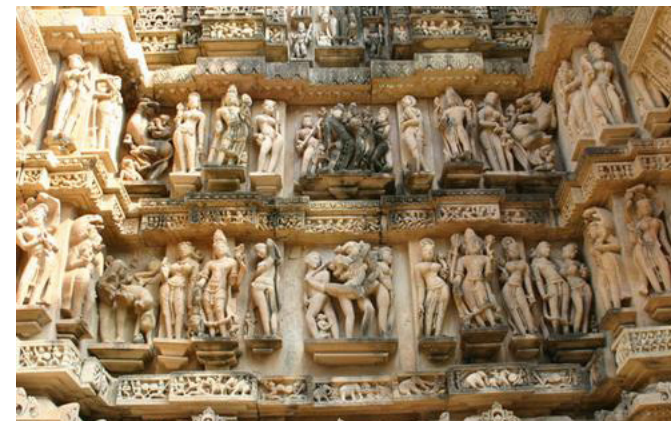


The Buddha preaching, Sarnath, fifth century A.D. (ASI Museum, Sarnath). This is the classic image of the Buddha that was developed in the Gupta period. The mudra suggests that he is teaching and setting in motion the wheel of Dharma, also seen in the panel. The inward look, with the gaze centred on the tip of the nose, conveys a great sense of peace and tranquillity^[1].

Scope of the project

When I look at this study from an animator's point of view I see a vague similarity between development of our traditional art and Japanese manga art. In Japan, 'Manga' (a word which is related almost exclusively to a style of film and children's animation) which basically is Japanese cartoon drawing, was originated almost eight hundred years ago in Japanese temples. It started as a temple art. Around the beginning of the thirteenth century pictures began to be drawn on temple walls, depicting images of the afterlife and of animals. These pictures were crude and deliberately exaggerated representations, and bear a remarkable similarity to modern manga. This phenomenon continued over hundreds of years, branching out to include numerous other subjects, although the style remained the same. In the Western world cartoons have always been seen as a child's phenomenon, but in Japan manga has always been the method of art for all of society's age groups.

If we look back in our own culture we can find a lot of similarities. Most of the temple art is illustration of stories and events from history. These sculptures and carvings narrate stories from our great epics Ramayana and Mahabharata.



Images of outer walls of Brahma Temple Khajuraho^[3]



Above images are of some of the examples of carvings done in eighth century A.D. Each of these narrate some story from history.

One on the right is an image of **Mahisasuramardini**, Mamallapuram. This depiction of Durga, which is one of the treasures of Indian sculpture, shows the goddess killing the demon of ignorance in the form of a "mahisha", or buffalo^[1].

Aim

Through this study of ancient texts I am trying to analyze, how in today's world we can make use of this immense knowledge that is available in our culture and how we can take it ahead through today's art so as to preserve it, because how much ever forward and innovative we are today, some way our culture and traditions make our identity. So instead of following western culture blindly, I feel it is important to understand and value what we have in our own culture and take it ahead regardless of which field of art and design we are in.

I am sure art changes with time. One can not expect today's artists to do what was done centuries ago, but making use of that priceless knowledge to create some real art for today is certainly possible.

Research & Analysis

Vishnudharmottara Purana

The Vishnudharmottara Purana, a text dated around sixth century AD is a supplement or an appendix to the Vishnu Purana. It is generally believed to be a later insertion into Vishnu Purana. The part three of the Vishnudharmottara gives an account of then - hitherto known branches, theories, methods, practices and ideals of Indian painting, among other things. It deals not only with its religious aspects but also, and to a far greater extent, with its secular applications. It initiates the aspirant to a world of joy and delights that only the colours, forms and representation of things, seen and imagined can bring forth.

The Vishnudharmottara asserts that it is but a compilation and is attempting to preserve the knowledge that was hidden in older sources. Sadly, all those older texts are lost to us. Vishnudharmottara is thus the earliest exhaustive treatise available to us on the theory and practice of temple construction, painting and image making in ancient India.

Stella Kramrisch (one of the researcher) says that while the Vishnu Purana cannot be earlier than the 2nd half of the 4th century CE, the chapters of the Vishnudharmottara that deal with painting must have been compiled in the 7th century CE.^[4]

Ancient treaties like Vishnudharmottara provided artists a grammar to articulate their art expressions. Apart from describing the basic tenets of painting, it literally provided hundreds of details on the art and the techniques of painting. The Citrasutra gave a framework of instructions and suggestions on the ways to prepare the walls and other surfaces that hold the murals; the preparation of colours and paints; appropriate choice of colours; different ways of shading; proportions and ratios to be maintained while making images of different kind of male and female figures according to their position and standing in the social strata and occupations; and ingenious ways of introducing symbolism through plants, birds, animals and other symbols and so on.

Citrasutra of the Vishnudharmottara Purana

Citrasutra is that part of the Vishnudharmottara which deals with the art of painting. As I mentioned earlier, according to some of the researchers it was created and compiled sometime between 6th century and 7th century CE and then attached to Vishnu Purana.

It is a compilation of the then known theories and practices of the art. Its compiler described it as "the legacy of the collective wisdom of the finest minds". Explaining why he took up the compilation, he said he was prompted by his concern for the future generations; for their enlightenment, delight and quality of life. He said it was his firm belief that paintings are the greatest treasures of mankind as they have the aura and power to beneficially influence the minds and lives of the viewers.

I truly believe that art is just not a form of entertainment but a greatest way of educating people. Art has this immense power to influence its audience and one needs to use it in a right way. Chitrasutra is a very good guide for the reader who wants to learn this art as it tells what kind of feeling emerges from a certain kind of a form.

Research & Analysis

In Vishnudharmottara the section comprising adhyayas (chapters) 35 to 43 is appropriately known as **Citrasutra**. It gives a comprehensive and systematic account of Citra (the art of image making). Out of these eight adhyayas we will study first four which deal with the proportions and systems of measurement in traditional art.

Adhyaya 35 – Ayamoccharayamana – It deals with the origin of painting, the connection between Nr̥tta and Citra, five types of men based on measurement, standard of measurement and brief account of the measurement of Hamsa type.

Adhyaya 36 – Pramanadhyaya – It deals with the measurements and proportions of the different parts of the body. Also describes the peculiarities of the five types of men.

Adhyaya 37 – Samanya mana – It gives in the first four verses the proportion of women who are also divided into five types. It also includes description of six types of hair, five types of eye-forms and their measurements.

Adhyaya 38 – Pratimalakshanam – This adhyaya mainly gives instructions about making the images of God in particular.

Research & Analysis

Systems of measurement and proportions

Measurement (mana) and **proportion (pramana)** are the essential principles of form. They are introduced with their peculiar terminology which constitutes the basis for reading and understanding the citrasutra.

Here we analyze the absolute and relative systems of measurement, it describes different types of angula measurement and explains the various measurements that can be taken along the body of an image. The system of proportion explained here includes physiognomy and the iconometric system.

In early days since there was no universal system of measurement, systems of measurement varied from one culture to another. These systems were designed mainly based on the natural things around like barley grains, dust particles, width of ones finger or length of ones palm as their dimensions remain more or less constant.

It is very interesting to know how they have related all these natural elements in a particular ratio in order to create the entire system of measurement. But obviously it isn't a perfect system as all the barley grains aren't exactly same in dimensions and every person's finger-width differs!

Research & Analysis

Absolute and Relative System

In Indian art, measurement and proportion are indispensable for strength and beauty, and measurement is considered the soul of all arts and crafts. According to Haridas Mitra, Indian Vastu and Shilpa Shastras recognize two standards of measurement: the absolute and the relative systems.

1. **Absolute System** – In absolute standard, the smallest unit of measurement is the almost microscopic particle of dust observable in the solar rays or atom, called Paramanu. Other measurements of the absolute system are the particle of dust called raja or renu, the tip of hair called balagra, valagra or keshagra, the nit called liksa or likhya, the louse or yuka, the barley corn or yava and the highest unit of this system is the digit or angula which corresponds to the width of the middle finger. They have a relation of 1 to 8 as follows:

8 Paramanu	=	1 dust particle (renu)
8 Renu	=	1 hair width (balagra)
8 Balagra	=	1 louse egg (liksha)
8 Likshas	=	1 louse (yuka)
8 Yukas	=	1 barley grain (yava)
8 Yavas	=	1 viral (angulam)

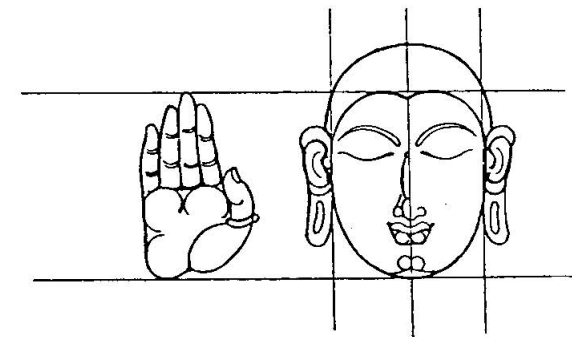
Research & Analysis

2. **Relative System** – The relative standard is constituted by the working measurements for making images in sculpture or painting. They include the measurements used in the citrasutras to explain the proportions of images. In this system, the tala measurement, also called mukha or face is the most frequently used, together with the angula. Other measurements are golaka, mushthi, bhaga and hasta or cubit. In this system, the barley corn or yava measurement is also used as a working unit for fractions of an angula. The relationship between these measurements is as follows:

8 yuvas	=	1 angula
2 angulas	=	1 golaka
2 golakas (4 angulas)	=	1 bhaga or 1 mushthi
3 bhagas (12 angulas)	=	1 tala or mukha
24 angulas	=	1 hasta

The Vishnudharmottara Purana mentions **tala** and **angula** as the two basic units of measurement.

From above data one can tell how much detailed study of human anatomy has gone into it while designing this system of measurement.



Length of the face – 1 tala (12 angulas)

Length of the hand – 1 tala (12 angulas)

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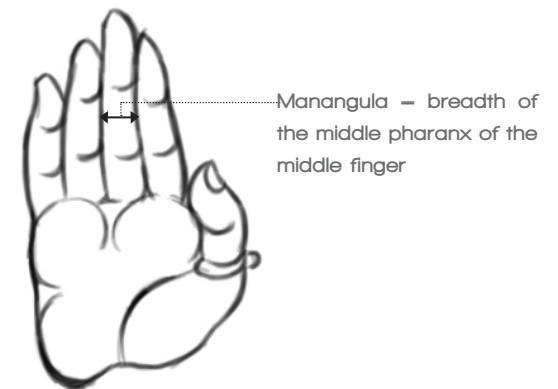
The digit or angula (viral) measurement

The viral is also called **angulam**, derived from the Sanskrit word anguli, meaning finger. **Angula (width of the middle finger)** is the basic unit prescribed to calculate the measurements of images. An angula is classified into three types:

(1) Manangula (2) Matrangula (3) Dehangula.

Manangula is a unit comprising of 8 barley grains or yavas. This measurement corresponds to the breadth (not to the length) of the middle phalanx of one's middle finger. This 'personal' unit multiplied by twelve would correspond to the length of the palm of the hand. It is also suggested that this unit will work very well as a mental measurement while reading the texts on proportion. It is believed that the use of a 'personal' angula is the most appropriate way to read the texts, and by keeping it in mind one will also be able to measure for oneself the suggested dimensions.

The matrangula is determined by the length of the middle phalanx of the patron's right hand and is employed for the construction of images or sacrificial altars. According to the ancient texts, matrangula is the kind of linear measure taken to be the length of the middle link of the middle finger of the artisan or of the patron that directs a monastery to be built or an image to be installed. This means that this measurement is a fixed unit determined



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before the realization of any work and is considered auspicious.

In today's context matrangula is pretty much like a standard unit like an inch or centimeter but restricted for a particular set of people working on a specific project. Since there used to be multiple artists or sculptors working under one roof in order to accomplish one project, for example making sculptures for a particular temple, they had to make sure all the sculptures made by various artists follow same measurements and same proportions.

Dehangula is the angula of the image itself which means that it is derived from the total height of the image to be fashioned. The dehangula is used for the construction of images and is essentially a relative unit, given that it is the height of an image which determines the length of the dehangula. The height of an image depends upon the given dimension of the material and the number of angulas and talas in which the image is to be fashioned.

For example, we will read it ahead in this report, that if its an image of a God or king like Ram or Krishna, the image is supposed to have 108 angulas. If the stone is of 'x' height and image is supposed to be of that height, then sculptor needs to divide the height by 108 which gives the length of one angula of the image. According to the length of this angula he needs to sculpt the image as all the required measurements for making the sculpture are measured in angula of the image itself.

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Following is the image of lord Shiva. It being an image in the God it comprises of 108 dehangulas.

It is very interesting the way they have determined these three types of angulas for three different applications. One might think what is the use of having three different types as it complicates the system even more, leaving the reader confused. But it is very much thoughtfully designed as manangula is just for the purpose of understanding the proportions, whereas matrangula standardizes the unit and can also become dehangula for the artist while creating the images.



Shiva from Kalyansundara^[2a]

Research & Analysis

The six axes of measurements

When an image is to be represented as a painting or as a sculpture, it is necessary to set out a various parts in accordance to a particular scale. For this purpose, it is essential to mark the main axes of measurement and compose the form within the grid. In the case of drawings and paintings that are executed on the plane surface, only the length and the breadth of the parts have to be defined. But in case of sculptural forms, length and breadth measurements alone would be insufficient, The third dimension of thickness - ghanamanam - has to be include in order to define volume.

Further, there are three other measurements which are of importance as far as sculptural images are concerned. The outer dimension of the parts of the image, the space between certain parts, as also the projection or set-back of the various parts have to be specified.

Since these measurements are necessary for the creation of a complete sculptural form, they are known as six basic measurements. They are as follows:

1. Manam – The length of the body – Manam refers to the vertical measurements such as the distance from the hair-limit to the eye-line, from that point to the tip of the nose, the length of the arms and of the legs and so on.



Parvati, Chola Bronze, Tamil Nadu (Saraswati Mahal Art Gallery, Thanjavur). The bronzes of the early Chola period are among the masterpieces of the art of India.

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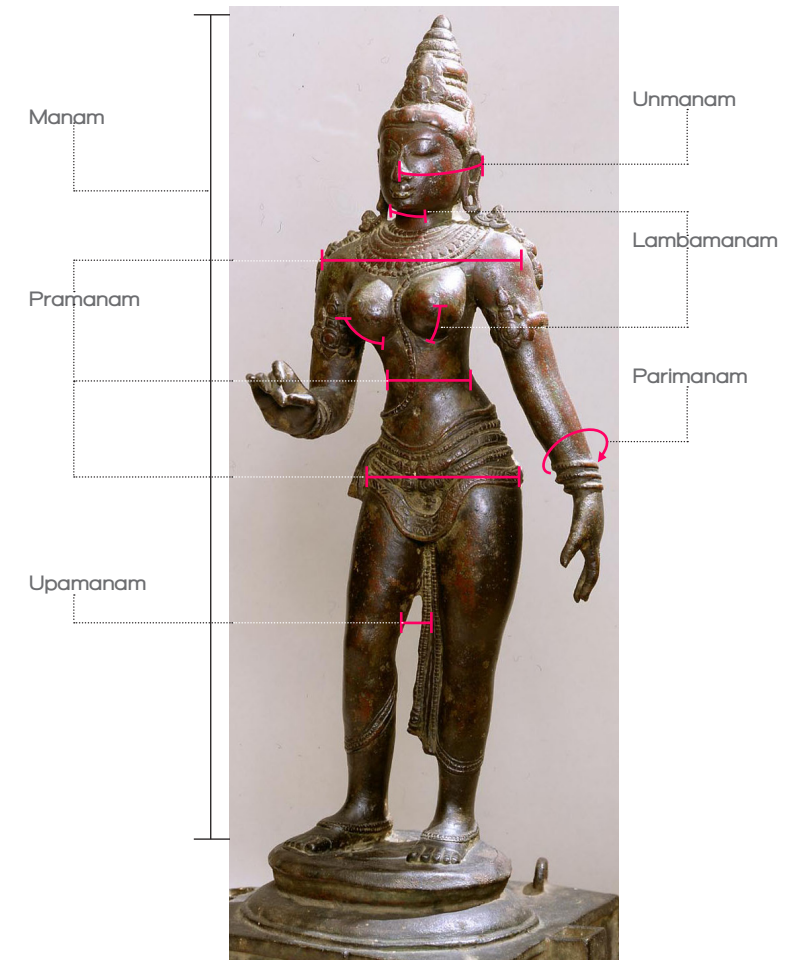
2. Pramanam – The breadth of the body – Pramanam is the horizontal measurement or breadth such as the distance between the two shoulders, the width of the body at the chest level, the width of the belly or the width of the arm or of the thigh.

3. Unmanam – The thickness or height – Unmanam is the measurement of the elevation or thickness, such as the height of the breasts or of the nose.

4. Parimanam – The outer dimension or girth – Parimanam is for instance the girth of the arm or of the thigh or of the neck.

5. Upamanam – The distance between parts, inter-spaces – Upamana is the measurement of the inter-spaces, like the width of the navel, the interval between the two thighs or the two big toes.

6. Lambamanam – The projection or set-back – It is the measurement taken along the plum lines, which are suspended in front of an image. After which, the distances from this line to the head, forehead, nose, chin, neck, chest navel and thigh are marked. Lambamanam seems to suggest a way to create proportion and symmetry.



Bronze sculpture, Chola Dynasty^[2a]

Research & Analysis

Talamana - Rhythmic measure

In the field of sculptural measurement, particularly in connection with divine images, there is a very special scale known as talamanam or rhythmic measure. The adoption of the talamanam not only ensures the symmetrical beauty and artistic grace of the images but also imparts unique spiritual meaning and symbolism to them.

The use of talamanam facilitates the description of artistic events, the various characters participating in them, their distinct characteristics, and also intangible spiritual and emotional tones. Even though the significance of talamanam is specially felt where divine images are concerned, this measure serves well to poetically represent other artistic compositions, like representations of the lives of great men, etc.

The grammar of measurement has been evolved through the formulation of an orderly system with regard to the constant rhythmic relationship between the parts of the body. The fundamental unit from which the rhythm of the various bodily parts can be interrelated is the length of the face. This facial length which is the basic unit is an extremely significant part of the sculptural tradition.

The head forms an important part of the whole body. In this the long portion between the forehead and the chin is called the face. The length of the

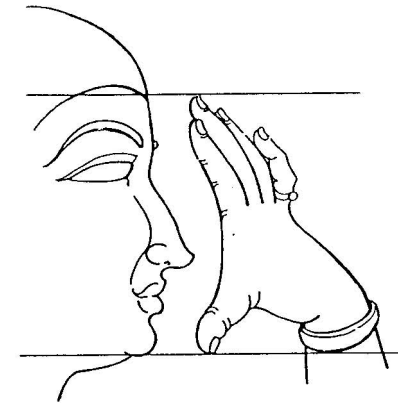
Research & Analysis

face or mukham is equal to the distance between the middle finger and the thumb of the extended hand. The length of the palm from wrist to the tip of the middle finger is called kai tala and this is also equal to the facial length. This length of hand, standing for the length of the face is adopted as the basic unit in sculptural tradition.

The sculptural tradition has correlated the facial or palm length to major and minor parts of the body.

From top of head to forehead	1/4th mukham	3 angulas
face (mukham)	1 mukham	12 angulas
neck	1/4th mukham	3 angulas
chest	1 mukham	12 angulas
navel (nabhi)	1 mukham	12 angulas
genital belt	1 mukham	12 angulas
thigh	2 mukham	24 angulas
knee	1/4th mukham	3 angulas
leg	2 mukham	24 angulas
foot	1/4th mukham	3 angulas
<hr/>		
Total length or height	9 mukham	108 angulas

This is a very ancient linear measure which speaks of the bodily form of the image as nava (nine) mukham in height.



Length of the face – Distance between middle finger and wrist

Different types of talas

Till now we studied making of an image created in navatala which consists of 108 divisions, since 1 tala has 12 divisions. The 108-part navatala forms the middle measure or maddhyama navatala. To this 4 parts are added, which gives rise to uttama navatala (of 112 parts), and 4 parts reduced forms adhama navatala (104 parts). The 4 additional measures are called pranamsa. With each tala comprising 12 units. we have:

dashatala	10 x 12	120 angulas
navatala	9 x 12	108 angulas
ashtatala	8 x 12	96 angulas
satpatala	7 x 12	84 angulas
shattala	6 x 12	72 angulas
panchatala	5 x 12	60 angulas
chtustala	4 x 12	48 angulas

In the same way as calculated for navatala, by adding 4 parts and subtracting 4 parts from the medium measure, we get the uttama and adhama tala of each type. Thus we have 124 parts of uttama dashatala and 116 parts for adhama dashatala. Similarly 64 parts for uttama panchatala and 56 parts for adhama dashatala.

Each tala scale is suitable for specific sacred images. Very interestingly they have created a hierarchy through their proportions for making images depending upon their strata in the society. Further we will get to know which scale is used for creating which type of images.

Dashatala Images

Uttama Dashatala: Brahma, Vishnu, Shiva, Ardhanarishwata, Buddha, Mahavira, Vasudeva.

Maddhyama Dashatala: Uma, Lakshmi, Saraswati, Durga, Shri Rama.

Adhama Dashatala: Indra, Agnee, Varuna, Surya, Yama.

Navatala Images

Uttama Navatala: Devis and Devas, Kubera, Ashtamurtis, Vashishta, Garuda, Guru, Shukra, Shani

Maddhyama Navatala: Ashta Murtis, Yaksha, Apsara, Marutagana and Vidyadharagana.

Adhama Navatala: Asura, Siddha, Gandharva, Pitru.

Ashtatala Images: Human forms, Kashyapa.

Saptatala Images: Human forms, Rishis.

Maddhyama Saptatala: Agastya, Hanuman.



Standing Hanuman, Chola Dynasty, 11th Century
Maddhyama Saptatala

Shattala Images: Dwarves

Panchtala Images

Uttama Panchatala: Vinayaka, Balakanda, Vamanamurthi.

Maddhyama Panchatala: Bhutas

Adhama Panchatala: Balakrishna

Chatushtala Images: Monkeys, Palaka.

Tritala Images: Kinnara, Kimpurusha.

Dwitala Images: Matsyavatara Murti.

Ektala Images: Tortoise, Egg Shapes, Kurmavata, Headless torsos.

Apart from above ten types, some texts have also included an eleventh type known as *navardhatala*. They state that the images of *Sita*, *Satyabhama* and *Rukmini* should be fashioned according to navardhatala measurements. This has $12 \times 9^{1/2}$ (114 parts). It falls midway between *navatala* and *adhama dashatala* scales^[a].

Research & Analysis

Five Purushas

Ancient texts like the Vishnudharmottar Purana, Chitralakshana of Nagnajit, explain the theory of proportion, taking five stereotypes of men or panchapurushas as examples. The names of five types of men are *Hamsa*, *Bhadra*, *Malavya*, *Ruchaka* and *Shashaka*, whereas Chitralakshana of Nagnajit gives different names for these men, *Chakravartin*, *Sadhu*, *Malavya*, *Vyanjana* and *Giridhara* respectively.

According to some of the texts like Bruhat Samhita and Saravali, each of these five personages were said to be born due to the predominance of a particular planet. However, in the Vishnudharmottar Purana and Chitralakshana by Nagnajit, the five men play the role of an artistic stereotype for portraying kings, gods, demons and so on. In particular, the division of men into five stereotypes becomes more significant due to a list of figures described together with the proportions to be adopted in their representation. This list is as follows:

Hamsa-Gods to be portrayed in this type of proportions;

Bhadra-Sages, gandharvas, daityas, danavas, ministers, astrologers, vidyadharas and royal priests are to be drawn in this type of proportions;

Malavya-Kinnaras, nagas, rakshasas & household women fit in this type;

Ruchaka- Yaksas, courtesans and vaishyas belong to type;

Shashaka- Shudras to be portrayed in this type of proportions;

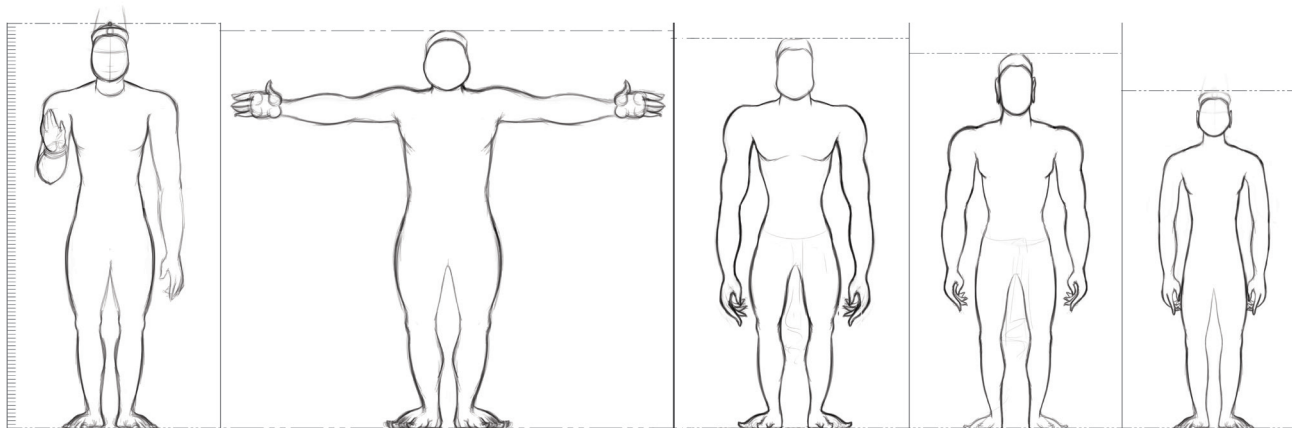
Pishacas, Dwarfs, Hunchbacks and Pramathas are to be represented regardless of proportions and colours. Hence, they do not belong to any of the above categories.

The Vishnudharmottar Purana, Chitralakshana of Nagnajit and few other texts list the measurements of length of the above five types of men in angulas. But these measurements vary from text to text.

According to Vishnudharmottar Purana their measurements in angula are as follows:

Types of men	Hamsa	Bhadra	Malavya	Ruchaka	Shashaka
Measurements in angula	108	106	104	100	90

These texts more properly and carefully explain the most important stereotype of all, Hamsa or Chakravartin, and from him we are invited to calculate and derive these proportions of other four types.



Characteristics of Hamsa

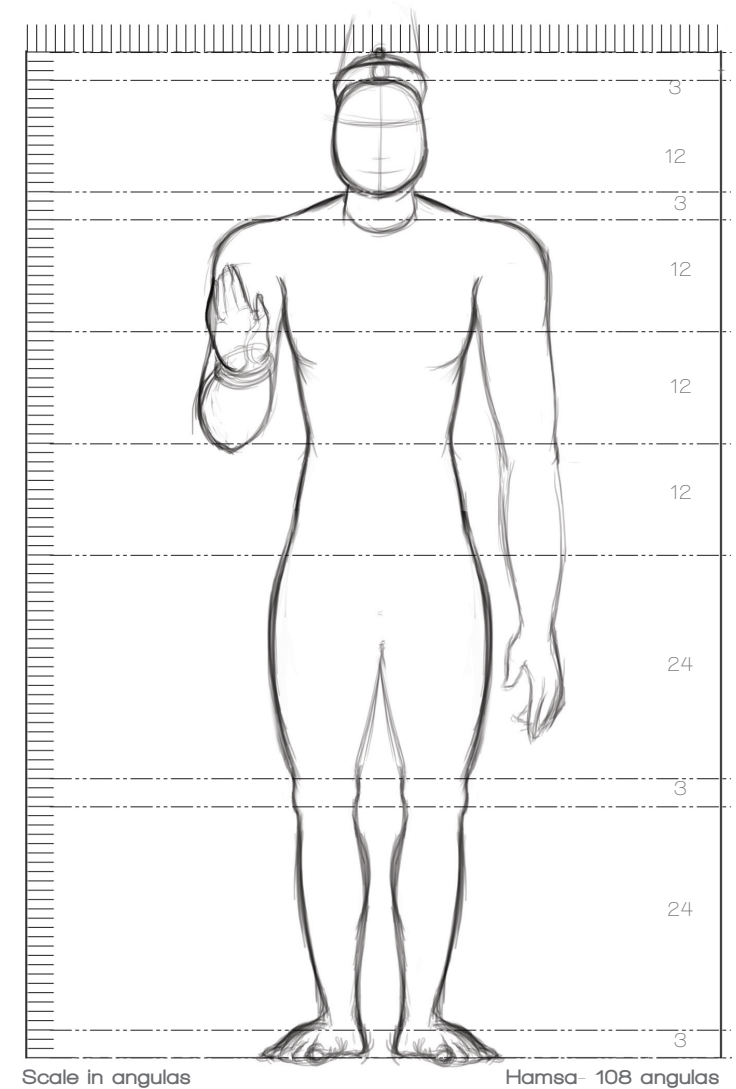
In Vishnudharmottar Purana Hamsa type is described as one who has honey-red coloured eyes, is fair like the moon, has arms which resemble the elephant's trunk and is swan-like in gait. He has a beautiful slender waist and is strong and handsome.

Bruhat Samhita also has similar description. Hamsa type is one who has a reddish face with fleshy cheeks, raised nose, golden hue and round head. His eyes are like honey in colour and his nails are reddish, his voice is as sweet as that of a swan, he has beautiful feet and clean limbs, he has virile power coming under Jupiter and is fond of sporting in water.

Hamsa type perfectly fits in navatala proportions of talamana. Measurements of all five male types is given in terms of their own angula.

Following is the illustration of interpretation of hamsa type of proportions according to me.

Since there are no illustrative references of male or female body types of proportions, wherever it is possible I have made an attempt to create illustrations of the same according to my interpretation, based on the available description.

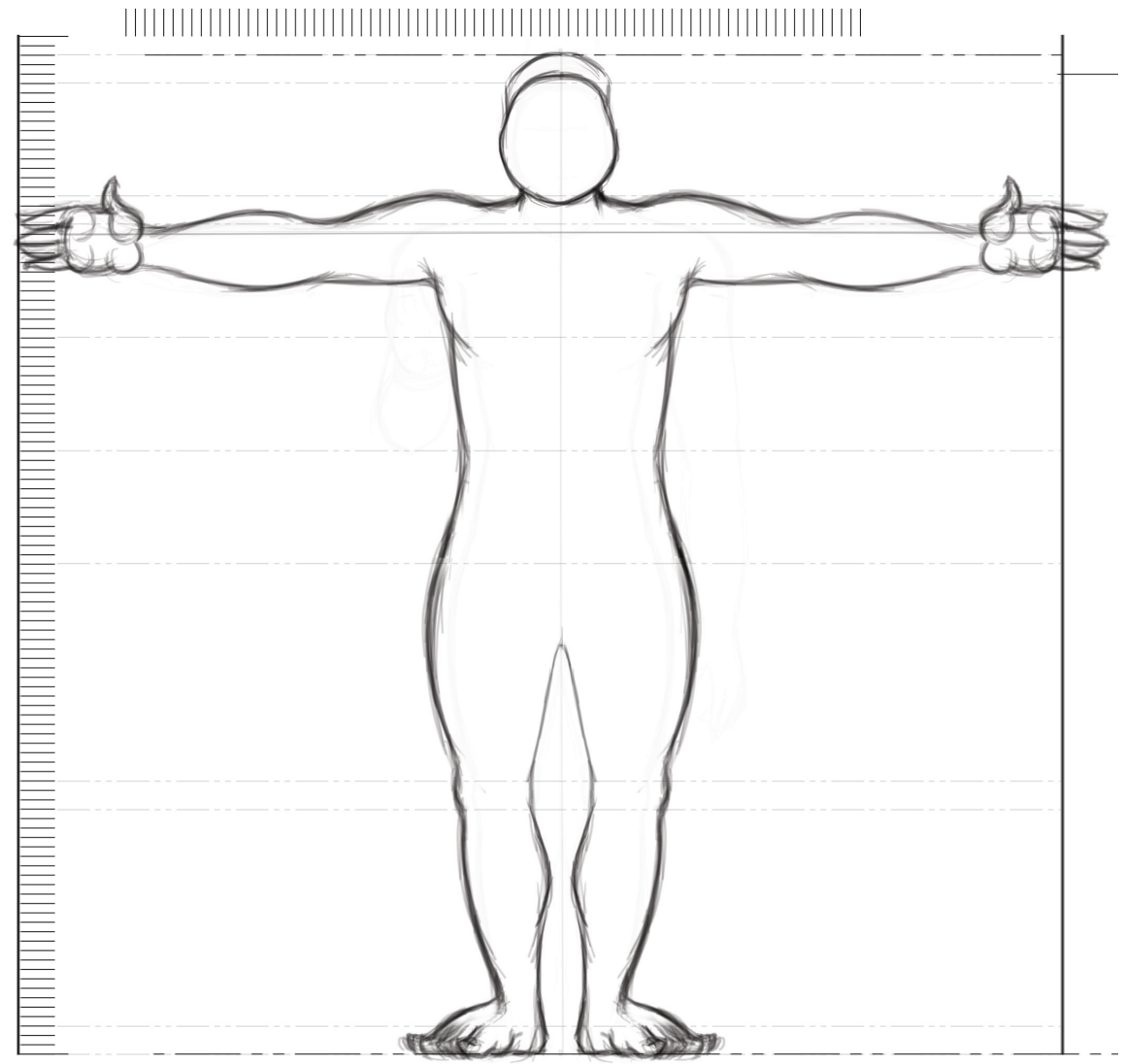


Characteristics of Bhadra

Bhadra type is bushy on his cheeks, his gait is like that of an elephant and he is noble minded. He has rounded and heavy arms, and his hands and feet resemble a lotus.

Influenced by Mercury, possesses developed, equal, round and long arms, a height equal to the length of his outstretched arms and temples densely covered with tender and fine hair.

His face is like a tiger and he has broad chest, long strong hands and a square body. He is sensuous, valorous, learned, endowed with prowess and is conversant with yoga. His body emanates a smell akin to earth and sandal paste. He knows the shastras and is independent in all his undertakings.



Scale in angulas

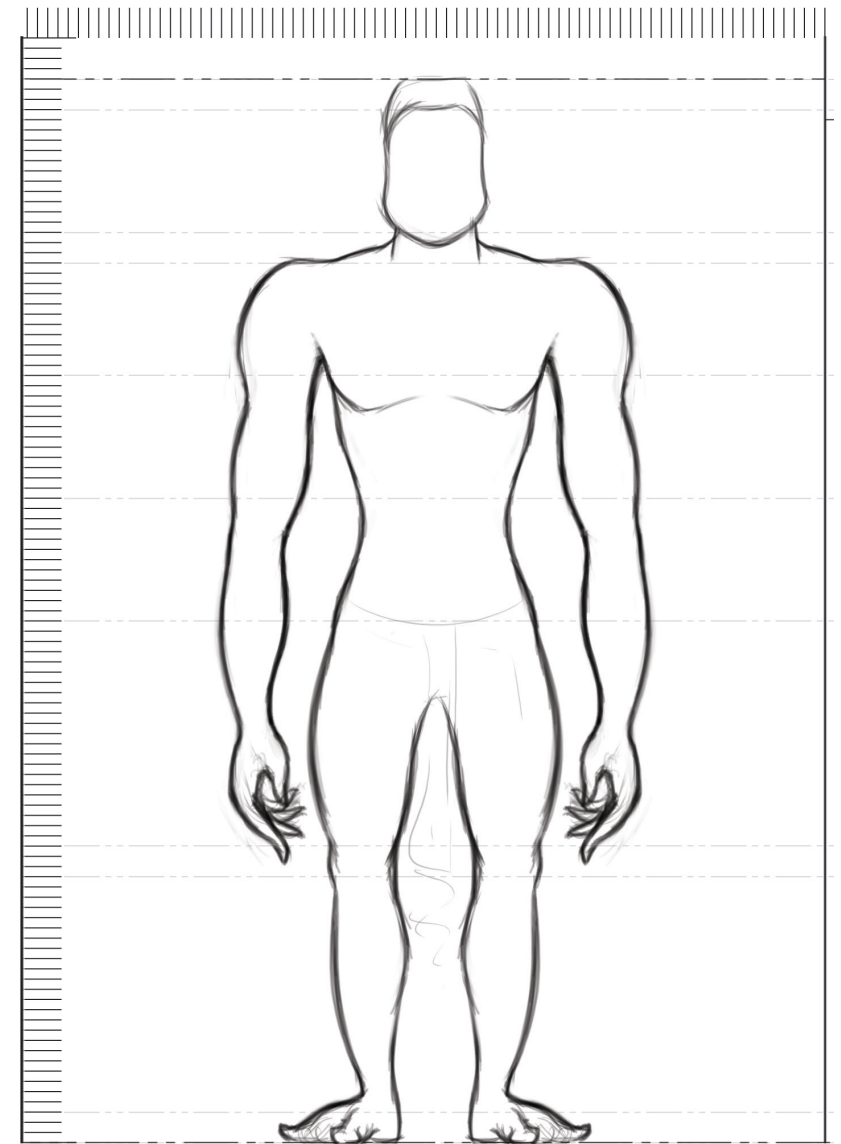
Bhadra- 108 angulas

Characteristics of Malavya

Vishnudharmottar Purana describes a malavya type is dark like the green pulse, he has slender waist, beautiful body with long arms reaching the knees, broad shoulders, prominent nose like an elephant's trunk and large jaws.

According to Bruhat Samhita, a person belonging to the malavya type is influenced by Venus, possesses arms that are long like the elephant's trunk, hands that touch the knees, limbs and joints are full of flesh, an even body, attractive and slender waist. His face is 13 digits long and his ear holes are 10 digits apart. He has shining eyes, fine cheeks, equal and white teeth and not a very fleshy lower lip.

Men belonging to this type have an even physique, thin waist, splendour equal to that of the moon, majestic voice, pleasant odor of the body, piercing sight, even and white teeth.



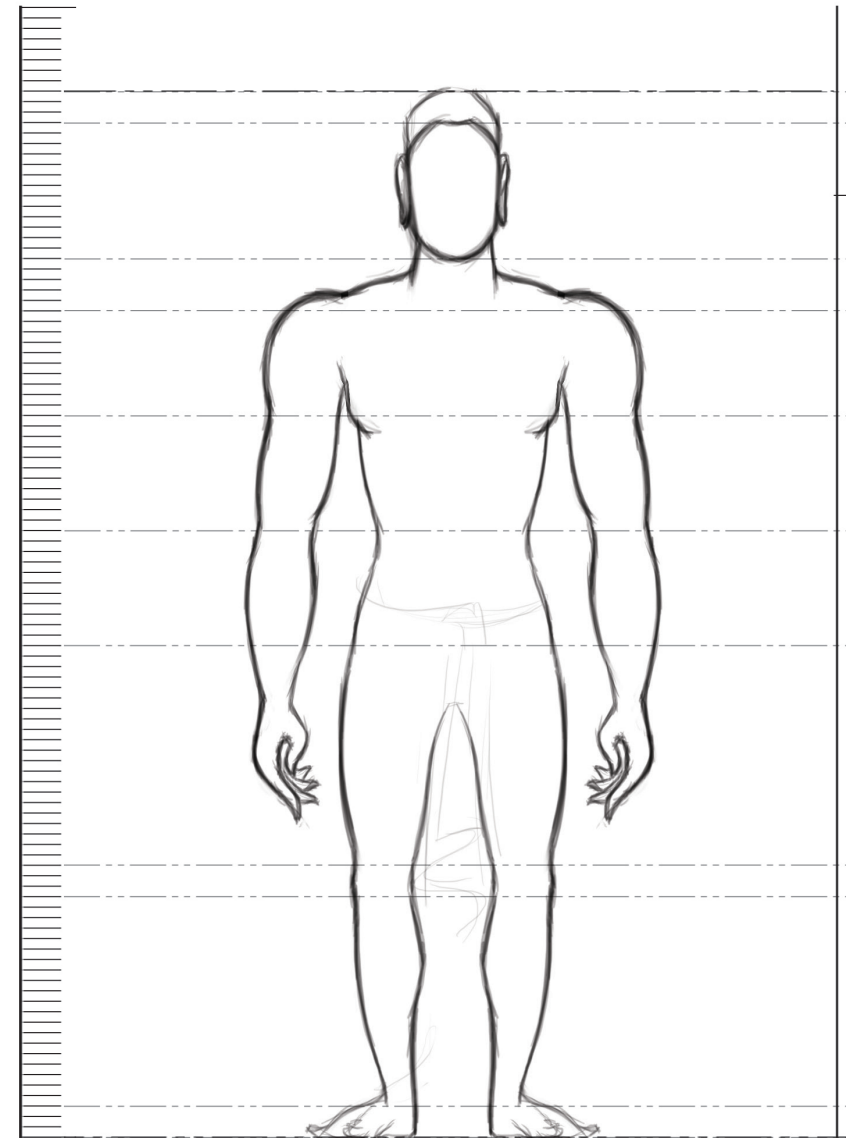
Scale in angulas

Malavya- 104 angulas

Characteristics of Ruchaka

According to Vishnudharmottar Purana, Ruchaka type rucaka type is reddish brown like the autumn, he has a conch-like neck and is highly intelligent, courageous, laborious, strong and endowed with great taste.

According to Bruhat Samhita, a person belonging to the rucaka type is influenced by Mars, has fine brows and hair, dark and red complexion, conch-like neck and an oblong face. He is heroic, cruel, a leader among men, a minister, the leader of a gang of thieves and hard working. The Saravali adds that he has attractive eyebrows, blue hair, thin shanks and he knows the mantras.



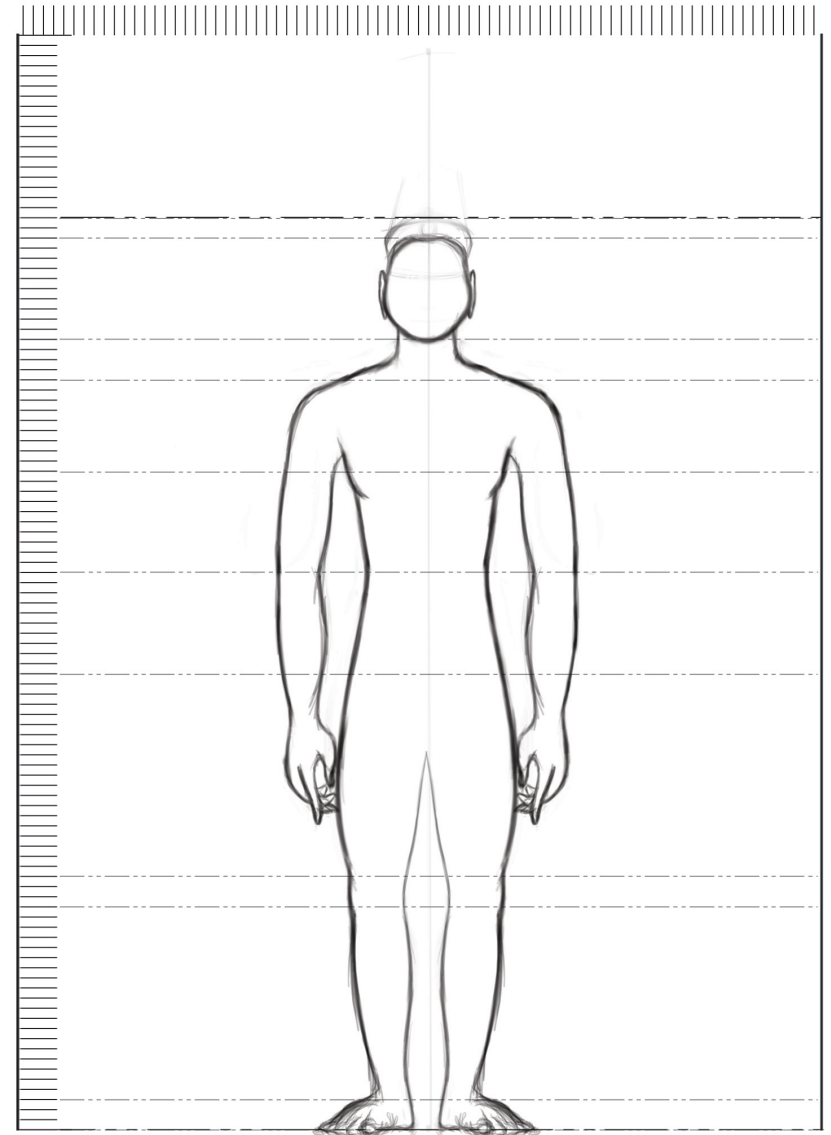
Scale in angulas

Ruchaka- 100 angulas

Characteristics of Shashaka

Vishnudharmottar Purana describes a shashaka type is dark red or reddish brown in complexion, he has slightly protruding teeth, full cheeks, large eyelids and is clever.

Bruhat Samhita explains that a person belonging to the shashaka class, is influenced by Saturn, has slightly raised and small teeth, thin nails, large pupils, brisk gait and plump cheeks. He is attached to learning pertaining to minerals and metals and is engaged in trade. He is a leader of armies, fond of sexual pleasures, addicted to others' wives, fickle-minded, heroic, devoted to his mother and a lover of forests, mountains, rivers and fortresses. According to Saravali this type has a small face, weak loins, long body and eyes resembling the lotus.



Scale in angulas

Shashaka- 90 angulas

Characteristics of Women

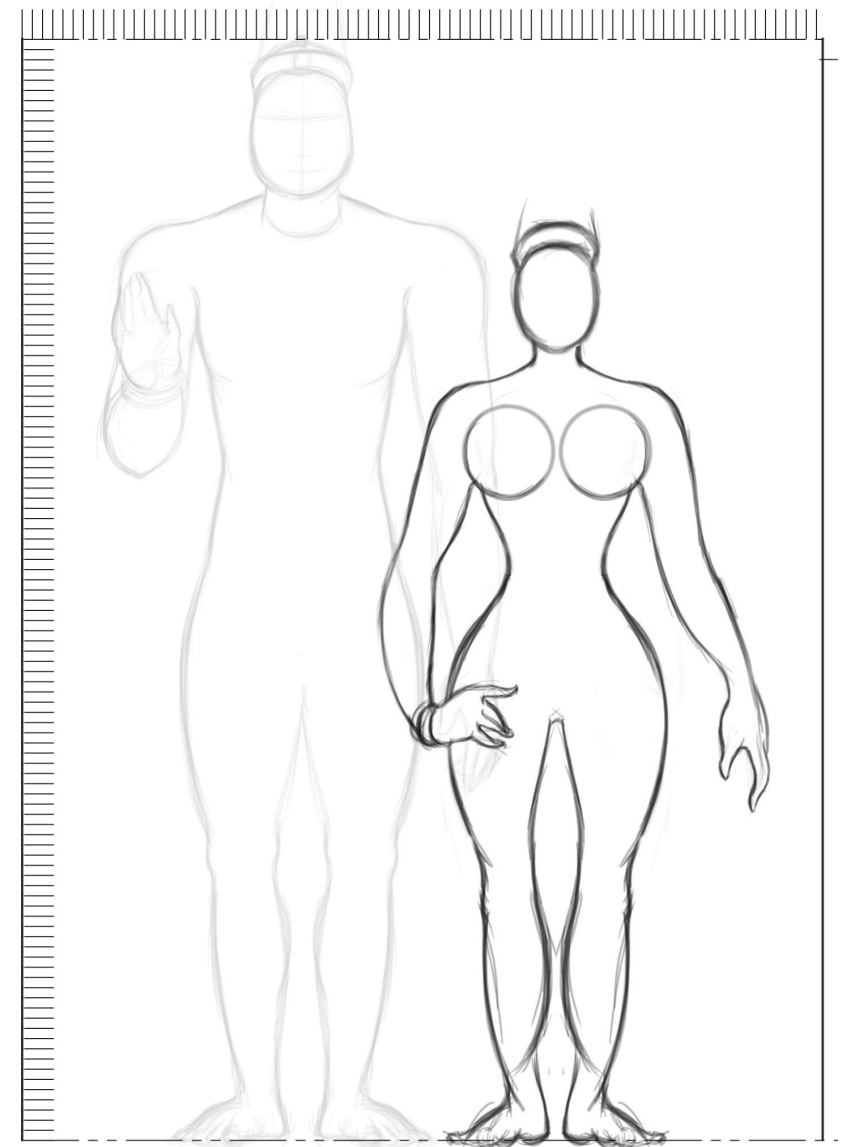
Like men these is mention of five types of women body types as well in the ancient texts. But very little information is given about characteristics of women for image making in Chitrastotra or any other text.

The Vishnudharmottar Purana only mentions that women should be made as tall as the men's shoulder. Their waist is 2 angulas less than that of the male. Similarly, their hips should exceed that of the male by 4 angulas. Chest and breasts are to be made beautiful.

The way reader is invited to imagine in order to construct images of four types of purushas based on hamsa type of proportions, as hamsa plays a model to derive rest four types of men, reader can develop images of five types of women in a similar manner considering each of these male types as references.

Following is my interpretation of image of woman that can be fashioned after Hamsa type of male proportions.

One of the texts names Samarangana Sutradhara mentions, this female counterpart of hamsa type is called 'Dandini'.



Hamsa type of male figure

Female counterpart of hamsa type

Following sculpture is known as,
 Kalyansundara- currently at Tanjore art gallery^[2a]
 It is one of the bronzes of the Chola period
 (9th century-12th century AD) / Tamil Nadu, seen here from left,
 unknown goddess, Parvati and Shiva.

I think this is a great example to study image making of that era. The tallest image is of *lord Shiva*, as we studied earlier, he seems to follow *uttama dashatala*, hence his proportions seem so massive in front of other two figures.

The image of *Parvati* seems to be following exactly the same characteristics of women that we studied in the previous chapter. Even though she follows *maddhyama dashatala*, her body structure and body form is very much similar to the description that is given in Vishnudharmottar Purana. She is as tall as her man's shoulder, waist is thinner by 2 angulas than that of male and hips exceed by 4 angulas if compared.

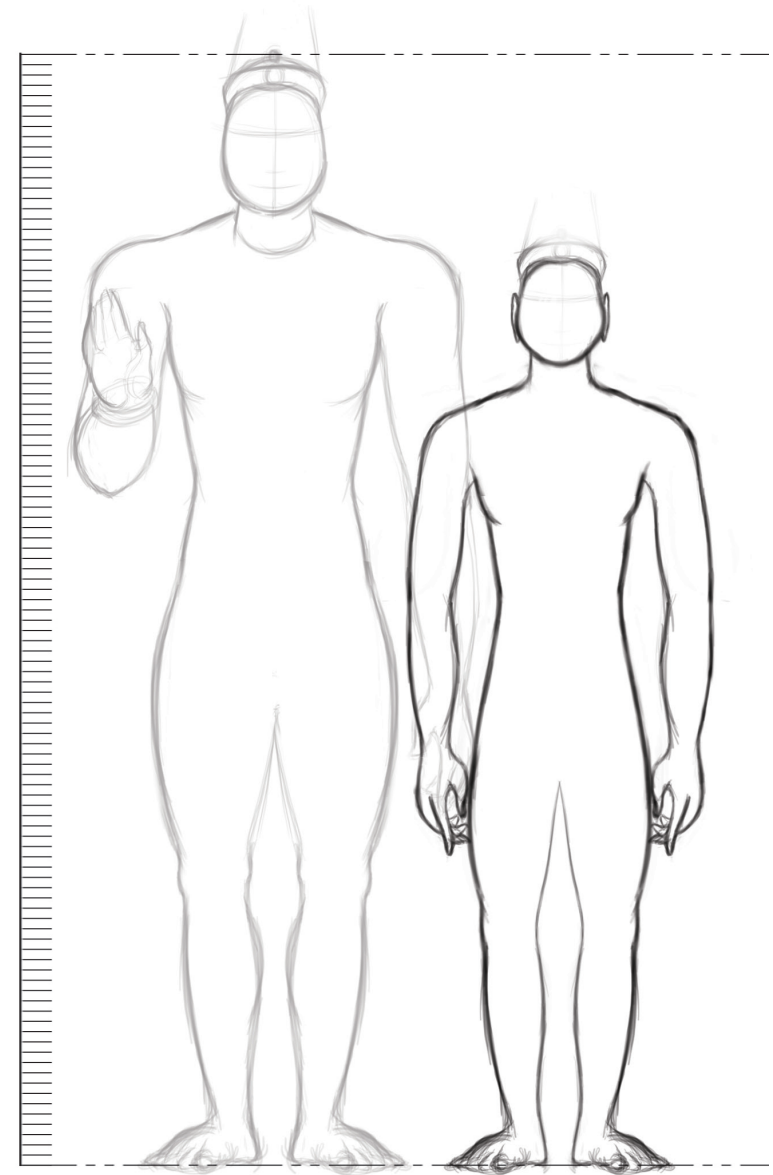
But there is no mention of the identity of the third figure in the sculpture. They have called it an unknown goddess. But if one does comparative study of her body proportions to that of *Parvati* or lord Shiva, one can easily tell that her image definitely does not belong to *Dashatala* or even *Navatala* scale of proportions.



According to me her image either belongs to *Ashtatala (96 angulas)* scale or *Saptatala (84 angulas)* as she has a human form.

Another assumption can be made based on the study of image making of *Panchamahapurushas*. If we compare proportions of these five male types to one-another, there is a vast difference between the scale of *hamsa* type of male and *shashaka*. We almost get to see similar difference between the goddess Parvati and the unknown figure.

As some of the texts mention that gods belong to the hamsa type of proportions, if we assume that Parvati belongs to the female counterpart of hamsa type, '*dandini*', the short female figure standing next to her can belong to *the female counterpart of the shashaka type*.



Comparison between Hamsa type of male figure and Shashaka type



This is another very much similar example of proportions of God and goddess, Shiva (uttama dashatala) and Uma (madhyama dashatala), almost from the same time period.

Somaskanda (Shiva and his wife Uma)
12th century, Chola dynasty^[2b]

Few other sculptures

This sculptural relief was excavated recently in Panigiri, in the Krishna Valley in Andhra Pradesh. This is a stupa's vedika relief depicting the birth of the Buddha.

This art form is from the first century A.D.

If we have a close look at this piece of art, it does not seem to follow chitrasutra, as the scale of all the images in it is almost the same. There is no hierarchy seen in the picture in terms of proportions. Descriptions of various types of images given in chitrasutra does not seem to be matching with this artwork according to me. The detailing and gracefulness in the figures is missing if we compare it with the other artworks that we have seen from much later centuries.

Even though these conclusions are easy to make, the artwork is said to be from first century AD. Which clarifies the fact that it was made way before the Chitrasutra of Vishnudharmottarapurana was created.



Few other sculptures

Even though this sculpture is a replica of art piece that belongs to tenth century, that is from the era when art was highly influenced by sutras given in chitrasutra, this one does not seem to follow it according to me. As all three main figures seem to have almost same scale for body proportions, where as Krishna being the God, his image must follow proportions of God, as well as Subhadra should have been as tall as their shoulders and should belong to much smaller scale than what it is now.

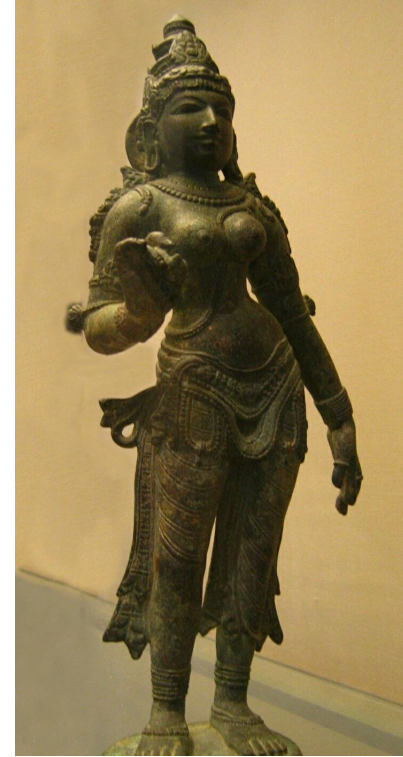


This bronze statue is a one of a kind sculpture, hand cast by the artists of Bangladesh. This piece is a copy of the Krishna-Balarama-Ekanamsa. Imadpur, A.D. 1026, The British Museum, London. From left to right are the three figures of Balarama and Krishna on both sides and sister Subhadra in the centre.

Few other sculptures



A granite rock carving from the 7th Century.
The Five Rathas, Mamallapuram, south India.



Bhudevi, Chola Dynasty, Tamilnadu.



'Lord Shiva'

Ajanta Paintings

Ajanta paintings seem to have influences of the grammar of image making provided by these ancient texts. They seem to follow the guidelines given in the Citrasutra of the Vishnudharmottara Purana to a certain extent.

The artists of Ajanta, who created those valuable treasures of art world, were the inheritors of an ancient tradition that painted and decorated places, temples and caves. The theories, principles and techniques followed by those artists came down to them through oral traditions bequeathed by a long line of artists spread over several generations. The artists of Ajanta were also inspired and guided by the principles and techniques described in texts such as the Chitrasutra of the Vishnudharmottara Purana, which attempted to preserve the ancient and pass it on in its purity to the subsequent generations.

The artists appeared to have taken full benefit of the liberty provided by the text. Shakti Mairia a noted artist writes "I did not see the figures as having been rendered in a particularly formal way. Their proportions were usually off – head and upper torsos are too long for the rest of the body, arms out of proportion with lower limbs, there was hardly any evidence that the strict rules of drawing in the Vishnudharmottara had been followed! What I saw was a powerful freedom and looseness in drawing, what we artists hope to achieve after we have learned all the rules of drawing. These illustrative



Ajanta paintings, Sixth-Seventh Century

images were free from formalism, and that is the strength of the expressed emotions and lavanya of this work. For me, the reason why the Ajanta paintings are so great is that they did not get bogged down in the formalism of art making. As an artist, I would urge you to experience the mysteries beyond cognitive intellect. Don't just try and understand the work, try also to experience it directly. That is where the real rasa is."

I find above statement very inspirational, especially for today's Indian artists and designers who are trying to establish their own style of work by gazing at the western art. True Indian art is there in our blood and in our own culture we have a lot of material available to learn from.



Ajanta paintings, Sixth-Seventh Century

Conclusion

After reading and studying about ancient Indian art I realized how enriched Indian art culture is! I got an opportunity to learn so much about the vocabulary and grammar of Indian art.

As a film maker or an animator I felt why not have a similar grammar for today's artists? Everyday we animators are trying to experiment with new techniques which lead us to unexpected innovations and some really good results. But we usually fail to document the whole process. Where as this data is essential for the learners and also for further generations. Hence, my first proposal could be to create grammar specifically for Indian Animation, similar to Chitrasutra.

Secondly, this study also inspired me to develop some piece of Animation taking Chitrasutra as a reference. Motive is ti give our animation a face, an identity which it has not yet found. However, if we look at the history of Indian art, our sculptures and paintings have established a very strong identity of their own, then why not give a similar identity to our animation as well!

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