

Evolution of the Tāla-Daśa-Prāṇa concept as seen in Musicological Works of the Vijayanagara Empire

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Abstract— The Tāla-Daśa-Prāṇa (ten Prāṇa-s or ten vital aspects of Tāla) concept is one of the fundamental concepts related to Tāla in Karnāṭaka music. Musicological works written prior to the period of the Vijayanagara Empire (1336 A.D. to 1565 A.D.) -Mānasōllāsa, Saṅgītacūḍāmaṇi, Saṅgītasamayāsāra and Saṅgītaratnākara describe the concepts - Kāla, Mārga, Kalā, Kriyā, Laya, Graha, Yati and Prastāra.

However, for the first time in Indian musicological history, it is in the work ‘Tāladīpikā’ (written by Sāluva Gōpa Tippēndra of the Vijayanagara Empire around 1474 A.D.) that these concepts have been grouped together along with two more- Aṅga and Jāti – and called the ‘Tāla-Daśa-Prāṇa-s’. Tāla-Daśa-Prāṇa-s have subsequently described in the later Vijayanagara works Tālakalābdhi and Saṅgītasūryōdaya.

This paper analyzes the birth and evolution of the Tāla-Daśa-Prāṇa concept as documented in these three treatises associated with the Vijayanagara Court. Of these musicological works, *Tāladīpikā* and *Tālakalābdhi* exist only in manuscript form. In order to examine the contemporary musicological climate, references to the descriptions of the Tāla-Daśa-Prāṇa-s from other musicological works pertaining to the same period have also been taken up wherever relevant.

I. INTRODUCTION

Several scholars have dealt with the Tāla-Daśa-Prāṇa concept. Sri B.M. Sundaram, in his work

"Tāla Saṅgraha" [1], a compendium of tāla-s in Karnataka Music, has explained the Tāla-Daśa-Prāṇa-s in the preface. "Bharatīya Saṅgīt Mēm Tāla Our Rūpa Vidhān" of Dr. Subhadra Chaudhary, published in Hindi and its translation by Smt. Hema Ramanathan, "Time Measure and Compositional types in Indian Music" [2], present an analytical and critical study of the concepts related to Tāla and the Tāla-Daśa-Prāṇa-s. Smt. Girija Eswaran has created a database of information on Tāla-Daśa-Prāṇa-s from musicological works [16]¹. Dr. N. Ramanathan in his paper on Tāla-Daśa-Prāṇa-s has provided a brief historical background for the Daśa-Prāṇa concept but has focused on the present-day musicological problems with respect to the Daśa-Prāṇa-s [20]. Sri Akella Mallikarjuna Sarma's two works, "Indian genius in Tālaprastāra" [3] and "Tālaprastāra of Nihśaṅka Śārngadēva's Saṅgītaratnākara - A critical Interpretation" [4] explain in detail every aspect of Tālaprastāra (one of the Prāṇa-s) and its use in modern context. Dr. R. Sathyanārāyaṇa mentions that the Tāla-Daśa-Prāṇa-s are dealt with in the musicological works Tāladīpikā, Tālakalābdhi and Saṅgītasūryōdaya in his paper [18].

However, none of the writings and research mentioned above has dealt with the three Vijayanagara treatises Tāladīpikā, Tālakalābdhi and Saṅgītasūryōdaya in depth from the perspective of origin and development of the Tāla-Daśa-Prāṇa concept. The objective of this paper is to present a

¹ Smt. Girija Eswaran's project is entitled 'Tālalakṣaṇa from various texts on music with translation' of which a part is the Tāla-Daśa-Prāṇa database. Refer to bibliography [17] for details of the report on Smt. Girija's project.

detailed analysis of the evolution of the Tāla-Daśa-Prāṇa concept and the development of the Tāla-Daśa-Prāṇa-s as seen in these musicological works pertaining to the Vijayanagara Court between 1336 A.D. to 1565 A.D.

II. SOURCE TREATISES

A. Treatises Considered for this Paper

1) Pre-Vijayanagara Treatises

In order to view the developments in Tāla-Daśa-Prāṇa-s in the Vijayanagara treatises, it is necessary to have an overview of the information related to the Prāṇa-s in some of the treatises written prior to the period of the Vijayanagara Empire. However, it must be noted that the term ‘Tāla-Daśa-Prāṇa’ appears in treatises only in the Vijayanagara period, mentioned for the first time in Tāladīpikā of Sāluva Gōpa Tippēndra. The terms Aṅga and Jāti (which are two of the Daśa-Prāṇa-s) have not been used in the Pre-Vijayanagara musicological works.

The Saṅgītaratnākara (written by Sārṅgadēva in the 13th Century A.D.) [5] is a compendium of all the major concepts presented in the musicological treatises before it. It appears to have greatly influenced the authors of musicological works of the Vijayanagara Empire. For these reasons, this treatise has been used as the major source of reference in this paper for concepts relating to the ten Tāla-Prāṇa-s in the pre-Vijayanagara period.

Other treatises of the pre-Vijayanagara times which too seem to have had some impact on the Vijayanagara musicological works are Mānasōllāsa (composed in the year 1131 A.D. by Sōmēśwara) [6], Saṅgītacūdāmaṇi (composed between 1138-1150 A.D. by Jagadēkamalla) [7] and Saṅgītasamayāsāra (composed between 1165 and 1330 A.D. by Pārśvadēva) [8]. They have also been referred to in this paper wherever relevant. In some cases, it is seen that the descriptions given in these treatises are different from those in the Saṅgītaratnākara.

2) Treatises from the Vijayanagara period

Among the musicological works pertaining to the Vijayanagara Court, there are three which describe the concept of the Tāla-Daśa-Prāṇa-s : Tāladīpikā

by Sāluva Gōpa Tippēndra², written around 1474 A.D. [13], Saṅgītasūryōdaya by Bhaṇḍārū Lakṣmīnārāyaṇa which was composed between 1509-1529 A.D. [9] and Tālakalābdhi by Acyutarāya³ [14], written around 1543 A.D. These three works have been taken up for detailed analysis in this paper.

In addition to these, the work Saṅgītamuktāvalī by Dēvanācārya (written in the 15th Century A.D.) [15], also pertaining to the Vijayanagara court, mentions important information about Mārga and Kriyā (two of the Prāṇa-s) which has been referred to in this paper. Kallinātha who was under the patronage of the Vijayanagara King Praudhadēvarāya II has authored a commentary on the Saṅgītaratnākara in 1430 A.D. This commentary, called ‘Kalānidhi’ [10] documents an interesting development pertaining to the Aṅga Prāṇa⁴. This commentary too has been taken into consideration. Other than this, two treatises not directly pertaining to the Vijayanagara Court, but composed during the Vijayanagara period by authors from the Southern region who migrated to other parts of the country⁵ have been taken up. These are Nartananirṇaya (written by Paṇḍarīka Viṭṭhala between 1562 A.D. and 1576 A.D.) [11] and Rasakaumudī (written by Śrīkaṇṭha around 1575 A.D.) [12]. The former contains important information about the Prāṇa-s Aṅga and Jāti. The latter describes the Tāla-Daśa-Prāṇa-s. The references from Nartananirṇaya and Rasakaumudī have been considered where relevant.

² This work is yet unpublished

³ For many decades, there were no known manuscripts of this work. Dr. V. Premalatha published a paper in the Journal of Music Academy, Madras in 2009 giving details of manuscripts of this work, which were entitled ‘Tālakakṣaṇam’. Various scholars have also called this work ‘Tālakalāvārdhi’, ‘Tālamahōdadhi’ and Tālabdhi. Refer to Bibliography [19] for details. This work is yet unpublished.

⁴ For Kallinātha’s commentary Kalānidhi, apart from the Adyar edition of the Saṅgītaratnākara [10] (which also gives Kallinātha’s commentary), Dr. Subhadra Chaudhary’s translation of the Saṅgītaratnākara [5] with commentary has been referred to. Dr. Chaudhary has mentioned the gist of Kalānidhi.

⁵ Paṇḍarīka Viṭṭhala who was originally from Kaṇṇāṭaka migrated to North India. Śrīkaṇṭha was originally a Southerner who migrated to Gujarat. For more details, refer to Introductions by the editors for Nartananirṇaya [11] and Rasakaumudī [12]

B. Acronyms used for Treatises

SR	Saṅgītaratnākara of Sārṅgadēva
SSS	Saṅgītasamayāsāra of Pārśvadēva
SC	Saṅgītacūḍāmaṇi of Jaḡadēkamalla
M	Mānasōllāsa of Sōmēśwara
TD	Tāladīpikā of Sāluva Gōpa Tippēndra
TK	Tālakalābdhi of Acyutarāya
SSU	Saṅgītasūryōdaya of Bhaṇḍārū Lakṣmīnārāyaṇa
SM	Saṅgītamuktāvalī of Dēvanācārya
RK	Rasakaumudī of Śrīkaṇṭha
NN	Nartananirṇaya of Paṇḍarīka Viṭṭhala

Please see Bibliography for details of the sources pertaining to the above musicological works.

III. OVERVIEW OF THE DESCRIPTIONS OF THE PRĀṆA-S IN PRE-VIJAYANAGARA MUSICOLOGICAL WORKS

A. Kāla

In the Saṅgītaratnākara, Tāla is described as the measure of time (Kāla) that is bound by the Kriyā-s (actions of the hand) and which is associated with music, drumming and dancing. (SR, 5, 3) There are two approaches to standardizing Kāla which are seen in pre-Vijayanagara treatises:

- 1) As seen in Mānasōllāsa (M, 4, 846 cd-848) Saṅgītacūḍāmaṇi (SC 16, 49 cd-50) and Saṅgītaratnākara (SR, 5, 16)

A basic unit called 'Mātra' is defined as the time taken to utter five 'Laghu Akṣara-s' or syllables. Laghu, Guru, Pluta are defined as follows:

Laghu = 1 Mātra
Guru = 2 Mātra-s
Pluta = 3 Mātra-s

- 2) As seen in Saṅgītasamayāsāra (SSS, 7, 2cd-4)

The time units Kṣaṇa, Lava, Kāṣṭha etc. are defined as below:

Time taken to pierce 100 lotus petals = 1 Kṣaṇa
8 Kṣaṇa-s = 1 Lava

8 Lava-s = 1 Kāṣṭha
8 Kāṣṭha = 1 Nimiṣa
8 Nimiṣa = 1 Kala
2 Kala = 1 Caturbhāga or Truṭi
2 Caturbhāga-s = 1 Ardhadruta.⁶

B. Mārga

Mārga literally means 'path'. A Mārga characterizes different ways of rendering a Tāla on the basis of elongating durations of the time units.⁷ There are two systems of Mārga which are seen in pre-Vijayanagara treatises:

- 1) As per the Saṅgītaratnākara: The system of Mārga-s - Dakṣiṇa, Vārtika, Citra, and Dhruva, defined on the basis of the unit Kalā (Guru) (SR, 5, 10cd).

Dakṣiṇa: Kalā = 8 Mātra-s
Vārtika: Kalā = 4 Mātra-s
Citra: Kalā = 2 Mātra-s
Dhruva: Kalā = 1 Mātra

- 2) As per the Saṅgītacūḍāmaṇi: The system of Mārga-s - Dakṣiṇa, Vārtika, Citra, Citratara, Citratama and Aticitratama is seen (SC, 16, 51-54 ab),⁸. In addition to Dakṣiṇa, Vārtika and Citra as defined earlier, we have another three Mārga-s :

Citratara: Kalā = 1 Mātra
Citratama: Kalā = ½ Mātra
Aticitratama: Kalā = Druta⁹

The Saṅgītasamayāsāra describes both the systems of Mārga-s and calls Citratara, Citratama and Aticitratama as 'Dēśī' Mārga-s (SSS, 7, 13cd-20ab).

⁶ The SR does not mention the Anudruta or Ardhadruta. However, Simhabhūpāla who has written a commentary on the SR in the 14th century mentions the Ardhadruta. Refer [10], page 9, Simhabhūpāla's commentary on SR, 5, 16.

⁷ This description is as per Dr. N. Ramanathan's paper on Tāla-Ḍaśa-Prāṇa-s [20]

⁸ The Mānasōllāsa too mentions these Mārga-s except Aticitratama.

⁹ This seems to be a scribal error, because ½ of a Mātra is equivalent to Druta, which is the Kalā for Citratama. For Aticitratama, following the same pattern, it should be half a Druta or ¼ a Mātra.

C. Kriyā

Kriyā stands for action of the hand that is used to reckon Tāla. The Saṅgītaratnākara gives the description of the Saśabda Kriyā-s (actions with sound) - Dhruva, Śamyā, Tāla, Sannipāta and Niśabda Kriyā-s (actions without sound) - Āvāpa, Niṣkrāma, Vikṣēpa and Pravēśa (SR 5, 4-6). These have been defined for the Mārga Tāla-s. This treatise also defines additional hand actions called ‘Mātrā-s’ (also known as Mārga Kalā-s).¹⁰ The Mārga Kalā-s are Dhruvakā, Sarpiṇī, Kṛṣṇā, Padminī, Visarjitā, Vikṣiptā, Patāka, Patitā. (SR, 5, 11-16ab) These were to be used in conjunction with the Saśabda Kriyā-s. Of these, only Dhruvakā is Saśabda and the rest are Niśabda.

The Mātrā-s for the different Mārga-s are defined as follows:

Dhruva - Dhruvakā¹¹
 Citra - Dhruvakā, Patitā
 Vārtika - Dhruvakā, Sarpiṇī, Patāka, Patitā
 Dakṣiṇa - Dhruvakā, Sarpiṇī, Kṛṣṇā, Padminī,
 Visarjitā, Vikṣiptā, Patāka, Patitā

The Saṅgītasamayasāra too follows the above definitions for Kriyā and Mātrā (SSS 7, 5 - 13ab).

D. Aṅga

In the Vijayanagara treatises, Anudruta, Druta, Laghu, Guru, Pluta have been classified as the various ‘Aṅga’-s or limbs of a Tāla. However, the term ‘Aṅga’ has not been used in the Saṅgītaratnākara and other pre-Vijayanagara treatises. Saṅgītaratnākara and Mānasōllāsa do define Druta, Laghu, Guru, Pluta in terms of Mātrā (SR, 5, 16-17ab, 257-259), (M, 4, 846cd-848). The Saṅgītasamayasāra defines Ardhadruta, Druta, Laghu, Guru and Pluta as per the Kṣāṇa, Lava, Kāṣṭha system (SSS 7, 2-5). Virāma has been mentioned not as a separate entity but as an addition to Laghu, Guru, Pluta and Druta which increases the duration by half in the Saṅgītaratnākara. (SR, 5, 261).

¹⁰ This Mātrā is different from the Mātrā-s which is defined as the time taken for the utterance of 5 syllables defined under Kalā.

¹¹ The Mātrā for the Dhruva Mārga has not been explicitly defined in this text but it is implied that it is Dhruvakā.

E. Graha

Graha means ‘to catch/grasp’; it refers to the commencement of Tāla with respect to Gīta/Vādyā/Nṛtya. The Saṅgītaratnākara and Saṅgītacūdāmaṇi define Tāla being simultaneous with Gīta etc. as ‘Sama’ Graha, Tāla commencing after Gīta etc. as Anāgata Graha and before Gīta etc. as Añita Graha (SR, 5, 51-52) (SC, 16, 54-47).

F. Jāti

The Vijayanagara treatises define ‘Jāti’ as ‘class’ of Tāla-s and mention Caturaṣra, Tryaṣra, Khaṇḍa, Miṣra and Saṅkīrṇa as the five Jāti-s. However, the term ‘Jāti’ has not been defined for Tāla in the Saṅgītaratnākara and other pre-Vijayanagara texts. The terms Caturaṣra, Tryaṣra, Khaṇḍa, Miṣra and Saṅkīrṇa have been defined for Mārga Tāla-s in these texts (SR, 5, 17cd-18, 40-41) (SSS, 7, 20ab-24ab) (M, 4, 841-844ab) (SC 16, 44-48). These are defined on the basis of the number of Guru-s in the Tāla-s. Catcatpuṭa and Cācapuṭa are named Caturaṣra and Tryaṣra respectively because of the occurrence of 4 and 3 Guru-s in their Ēkakala form. The mixture of these Tāla-s is named ‘Miṣra’. Saṅkīrṇa Tāla-s are those in which Guru-s occur in multiples greater than three and four¹². Khaṇḍa Tāla-s are formed by breaking Guru, Pluta etc. into smaller units.

G. Kalā

Kalā has been given two meanings in the Saṅgītaratnākara: one, Kriyā (both Saśabda and Niśabda) (SR, 5, 6) and the other, Guru (SR, 5, 20). In the Ēkakala-Dvikala-Catuṣkala forms, the number of Kalā-s (Guru-s) double in each subsequent form. In Citra -Vārtika-Dakṣiṇa Mārga-s, the number of Kalā-s (Kriyā-s) remain the same, but the duration of a Kalā increases from 2 Mātrā-s to 4 to 8.

¹² Sārṅgadēva quotes Saṅkīrṇa Bhēda-s (varieties) of 4, 8, 16 Kalā-s for Catcatpuṭa Tāla and 3, 6, 12, 24, 48, 96 Kalā-s for Cācapuṭa Tāla according to one view and 5, 7, 9, 10 and 11 Guru-s according to another view.

H. Laya

Laya is defined in the Saṅgītaratnākara (SR, 5, 44-45), Saṅgītacūḍāmaṇi (SC, 16, 58) and Saṅgītasamayāsāra (SSS, 7, 15cd-16ab) as the rest period immediately following a Kriyā. It is of three types – Druta, Madhya and Vilamba. For each of the three Mārga-s, these three Laya-s are applicable.

I. Yati

The Saṅgītaratnākara (SR, 5, 47-50), Saṅgītacūḍāmaṇi (SC, 16, 59), and Saṅgītasamayāsāra (SSS, 7, 16cd-17ab) define Yati as the rules concerning the usage of Laya. The rules basically deal with changes in Laya. Three types of Yati-s are defined –

- Sama where the Laya remains the same – either Vilamba, Madhya or Druta
- Srōtōgatā where the Laya goes from Vilamba to Madhya to Druta or Vilamba to Madhya or Madhya to Druta
- Gōpucchā which is the opposite of Srōtōgatā.

J. Prastāra

A brief description of Prastāra and related concepts¹³ as given in the Saṅgītaratnākara (SR, 5, 314-409) is as follows:

Prastāra stands for the break-up of a part (Avayava) of a Tāla such as Guru, Pluta etc. into smaller units.

For example, the Prastāra-s of Guru are given below:

Since 1 Guru = 2 Laghu-s and 1 Laghu = 2 Druta-s, the following are the possible Prastāra-s

(Here S denotes Guru, l laghu and o Druta)

			S
		l	l
	o	o	l
	o	l	o
	l	o	o
o	o	o	o

Associated with Prastāra are Saṅkhyā, Naṣṭa, Uddiṣṭa, Pātāla and various Mēru-s (tables). A brief description of these is as follows:

- Saṅkhyā: is a row of numbers which indicate the total number of Prastāra-s and the number of Prastāra-s ending with Guru, Laghu, Pluta etc.
- Naṣṭa: The method of arriving at the structure of a Prastāra knowing its sequence number in the sequence of Prastāra-s. For example, determining the structure of the 4th Prastāra in the above example would give the structure olo .
- Uddiṣṭa: The opposite of Naṣṭa, i.e. determining the sequence number of a Prastāra knowing its structure.
- Pātāla: A row of numbers indicating the total number of Druta, Laghu, Guru, Pluta etc. in a Prastāra.
- Mēru: A table of several rows and columns indicating the number of Prastāra-s with a particular Aṅga. For example, a Druta Mēru would indicate the number of Prastāra-s with Druta. Each column represents a different Avayava – o, l, ol, S etc. Each row gives the number of Prastāra-s with 0 Druta, 1 Druta, 2 Druta etc. .

IV. DEVELOPMENTS IN THE TĀLA DAŚA PRĀṆA-S AS SEEN IN THE VIJAYANAGARA TREATISES

A. Kāla

Tālādīpikā¹⁴ describes only the first system of standardization of Kāla i.e. in terms of Mātra. Tālakalābdhi (TK, Page 14, 16 & Page 32, 28b) and Saṅgītasūryōdaya (SSU, 1, 65-68) describe both the systems of standardization of Kāla – in terms of Mātra as well as in terms of Lava, Kāṣṭha etc.

Since the Ardhruta (called Anu/Aṇudruta in Vijayanagara texts)¹⁵ came into vogue as an independent Aṅga in the Vijayanagara times, (as shall be seen later in this paper), the Lava, Kāṣṭha

¹⁴ TD Page 3, Ślōka ‘Pañcānām Laghuvarṇānām.... Laghvādīparikalpanā’

¹⁵ TD uses the term Ardhruta, mentioned earlier in Simhabhūpālā’s commentary on SR and also in SSS. SSU and TK use the term ‘Anudruta’. RK refers to the same Aṅga as ‘Aṇudruta’.

¹³ These have been referred to as ‘Tāla Pratyaya’-s in the SR

system seems to have gained importance in standardizing the Kāla Prāṇa.

B. Mārga

Among the Vijayanagara texts, we can see the following references to Mārga:

- Both the systems of Mārga i.e. Dhruva, Citra, Vārtika and Dakṣiṇa as well as Aticitratama, Citratama, Citratara, Citra, Vārtika and Dakṣiṇa have been mentioned in Tāladīpikā¹⁶ and Tālakalābdhi (TK, Page 16, 17). Tālakalābdhi describes the latter as Dēśī Yōgya (fit for Dēśī music). In the Tāladīpikā, for Citratama, the Kalā is ‘Druta’ and for Aticitratama, it is ½ a Druta¹⁷ - these are equivalent to ½ a Mātra and ¼ Mātra respectively.¹⁸
- Saṅgītamuktāvalī mentions The Mārga-s Citratama, Citratara, Dhruva, Citra, Vārtika and Dakṣiṇa (SM, Page 111-113, 105-106).
- Saṅgītasūryōdaya defines the four Mārga-Dhruva, Citra, Vārtika and Dakṣiṇa and an additional Mārga, Kṣipra (SSU, 1, 93).

In the Vijayanagara period, for the Mārga Prāṇa, the Dēśī Mārga-s Kṣipra, Citratara, Citratama and Aticitratama which involved smaller Kalā-s like Druta and Anudruta seem to have come into prominence.

C. Kriyā

We see the following information about Kriyā in treatises of the Vijayanagara period:

- The Saśabda and Niśabda Kriyā-s, Mātrā-s and the allocation of the Mātrā-s to the various Mārga-s as given in the Saṅgītaratnākara have been described in the works Tāladīpikā¹⁹, Tālakalābdhi (TK, Page 22-28, 21-25) and Saṅgītasūryōdaya (SSU, 1, 73-96). The Mātrā-s have been referred to as Dēśī Kriyā-s in the Saṅgītasūryōdaya and Tālakalābdhi.

- The Mātrā-s and their allocation to various Mārgā-s as given in the Saṅgītaratnākara has been defined in the Saṅgītamuktāvalī (SM, Page 111-113, 105-106). In addition, this treatise defines the Druta as Mātrā for Citratara and Anudruta for Citratama.
- In the Saṅgītasūryōdaya, for the additional Mārga Kṣipra, the Kriyā-s ‘Dhruvaka, Candragāmini’ are given (SSU 1, 96). It might be that the latter stands for Anudruta, since ‘Candrakalā’ is one of the synonyms defined for the Anudruta in this treatise. This treatise also describes the hand actions used in contemporary Lakṣya (practical music) in Dēśī Tāla-s.

An interesting development in the Kriyā Prāṇa which is seen in the above points is the allocation of specific Kriyā-s to Aṅga-s. In the Mārga tradition as described in the Saṅgītaratnākara, for each of Guru, Laghu, Pluta etc., there were different Kriyā-s which could be used. However, in the Dēśī tradition, it appears that for each the Aṅga-s there were specific Kriyā-s. This can be seen from the following references:

- In the Saṅgītamuktāvalī, Druta and Anudruta have been mentioned along with the Mātrā-s Dhruvakā, Sarpiṇī etc. while detailing the Mātra-s to be used in various Mārga-s (SM, Page 111-113, 105-106). This indicates that Druta and Anudruta have been used here in the sense of hand actions. Therefore, there must be specific hand actions prescribed for the two Aṅga-s Druta and Anudruta.
- The Saṅgītasūryōdaya mentions the prescribed hand actions for the Aṅga-s Guru, Laghu, Pluta, Druta and Anudruta as per contemporary practical music (SSU, 1, 89-91).
- In the Saṅgītasūryōdaya, we also have mention of Dhruvakā and Candragāmini as Mātrā-s for the Kṣipra Mārga (SSU, 1, 96). The latter Mātrā has not been mentioned in other texts and seems to be referring to Anudruta.

D. Aṅga

‘Aṅga’ as one of the Daśa-Prāṇa-s is first seen in Tāladīpikā among the Vijayanagara texts.

¹⁶ TD Page 3, Ślōka ‘Dhruvaścitrō...Kalā Dhruvē’

¹⁷ TD Page 4, Ślōka ‘Sapañcamē Kalām Bindum Ṣaṣṭhē Sārdham Kalām Jagau’

¹⁸ The Kalā-s for the Citratama and Aticitratama Mārga-s are not clear in the manuscript of the Tāla Kalābdhi

¹⁹ TD Page 2, Ślōka-s ‘Tatrādimasya.... Mārgavaśādiha’ and Page 3, Ślōka-s ‘Aṣṭau Mātrā...Patākā Patitā Smṛtā’

We see the following descriptions of Aṅga-s in the Vijayanagara treatises:

- In his commentary on the Saṅgītaratnākara, Kallinātha talks about varieties of Laghu-s : those which span 3, 4 and 5 Laghu Akṣara-s. Tālādīpikā describes the duration of a Laghu as equivalent to the time period of uttering 5 laghu akṣara-s²⁰. Tālakalābdhi discusses the views according to different treatises: Laghu of a span of 5 akṣara-s, Laghu of spans of 3 and 4 akṣara-s, Laghu of 3, 4, 5, 7 and 9 akṣara-s (TK, Page 34-35, 30b – 31b).
- Tālādīpikā²¹, Tālakalābdhi (TK, Page 30-35, 26b – 31b) and Saṅgītasūryodaya (SSU, 1, 49cd-57) describe Druta, Laghu, Guru, Pluta and Hamsapāda (Kākapāda).
- Virāma was mentioned by Tālādīpikā²², Tālakalābdhi (TK, Page 29, 26a), Nartananirṇaya (NN, Vol I, 1, 126) and Saṅgītasūryodaya (SSU, 1, 56) but not as an independent Aṅga. In the Rasakaumudī, it is mentioned along with Laghu and Druta. (RK, 4, 121)
- Anudruta has been mentioned in Tālakalābdhi (Page 31-32, 28a-29a) and Saṅgītasūryodaya (SSU, 1, 50). It is also seen in Nartananirṇaya and Rasakaumudī. Anudruta is said to encompass 1 Varṇa (syllable) in Tālakalābdhi, ¼ Mātra in Rasakaumudī (RK, 4, 120), and ‘Druta in fast tempo’ in Nartananirṇaya ((NN, Vol I, 1, 126d – 127ab).
- Druta is said to span 2 Varṇa-s in Tālakalābdhi (TK, Page 32, 29a) and ½ Mātra in Rasakaumudī (RK, 4, 120), Nartananirṇaya (NN, Vol I, 1, 123) and Saṅgītasūryodaya (SSU, 1, 51).

Important developments in the Aṅga Prāṇa seen in the above treatises are:

- Recognition of Aṅga as one of the Tāla Daśa Prāṇa-s in treatises, starting from the Tālādīpikā.
- Anudruta acquiring status as an independent Aṅga equivalent to half a Druta.

- Druta acquiring a constant value of 2 Laghu Akṣara-s.
- Laghu acquiring variable spans of 3, 4, 5, 7 and 9 Akṣara-s.

E. Graha

The treatises Tālādīpikā²³, Tālakalābdhi (TK, Page 39-42, 35a-36b) and Saṅgītasūryodaya (SSU 1, 143-146) describe the Graha-s Sama, Atīta and Anāgata in the same way as in the Saṅgītaratnākara i.e. with respect to the lag between the commencement of Tāla and commencement of Gīta/Vādyā/Nṛtya.

A new feature seen in this Prāṇa is the description in Tālakalābdhi classifying Atīta and Anāgata as Viśama and giving various other possibilities for it (TK, Page 42-44, 36b-37b):

- If the Atīta or Anāgata (lag between Tāla and Gīta) is by a few Mātra-s, then it is Atīta or Anāgata as the case may be. If the lag is big, it is called Viśama.
- Compared to Nṛtta and Gīta Tāla being less, more or the same in the beginning or the end leads to several possibilities of Viśama

F. Jāti

For this Prāṇa, we can see three distinct approaches in the treatises:

- As in the Saṅgītaratnākara: Jāti-s are distinguished on the basis of Kalā-s (Guru-s) and the Jāti-s- Tryaṣra, Caturaṣra and Saṅkīrṇa defined for Mārga Tāla-s. Khaṇḍa Tāla-s arise out of break-up of Mārga Tāla-s and are classified among Dēśī Tāla-s. This is seen in the Tālādīpikā²⁴.
- Jāti are defined for Dēśī Tāla-s and are distinguished by the number of Mātrā-s (Laghu-s) and not Guru-s. This is seen in Nartananirṇaya (NN, Vol I, 1, 119-120).
- Jāti are defined for Dēśī Tāla-s and in terms of Laghu Akṣara-s or Varṇa-s (syllables) which are equated to Anudruta. 3, 4, 5, 7 and 9 Varṇa-s are the possible spans of the Varṇa-s for the Tryaṣra, Caturaṣra, Khaṇḍa, Miśra and Saṅkīrṇa

²⁰ TD Page 3, Ślōka ‘Pañcānām Laghuvarṇānām.... Laghvādīparikalpanā’

²¹ TD Page 17, Ślōka-s ‘Drutam, Bindum.... Ōmkāra Ityapi’

²² TD Page 5, Ślōka ‘Virāmāpara Paryāya... Nāivṛṣyatē’

²³ TD Page 15-16, Ślōka-s ‘Samōtīto.... Uparipāṇiranāgatah’

²⁴ TD Page 6, Ślōka ‘Caturaṣra Tryaṣra....Cācapuṭābhidhah’ and Page 14, Ślōka-s ‘Ādau Pañcakala.....Khaṇḍābhidāścayāh’

Jāti-s respectively. This is seen in Tālakalābdhī (TK, Page 47-52, 39a-42a), Saṅgītasūryōdaya (SSU, 1, 149-153) and Rasakaumudī (RK, 4,126).

We see from the above that the definition of Jāti Prāṇa gradually evolved from the Mārga definition, from being in terms of Kalā-s to Mātrā-s and then to sub-units of a Mātra.

G. Kalā

Tāladīpikā²⁵, Tālakalābdhī (TK, Page 63-81, 49a-64a) and Saṅgītasūryōdaya (SSU, 1, 107-131) mention the Ēkakala, Dvikala and Catuṣkala forms of the 5 Mārga Tāla-s, just as they are defined in the Saṅgītaratnākara. In the Tāladīpikā, Druta and Ardhadruta were mentioned as Kalā-s for the Citratama and Aticitratama Mārga-s respectively.

For the Citratama and Aticitratama Mārga-s, Kalā can no longer be equated to Guru, but seems to be equivalent to 'Kriyā'.

H. Laya

Tāladīpikā²⁶, Tālakalābdhī (TK, Page 98-105, 74b-78a) and Saṅgītasūryōdaya (SSU, 1, 132-134) define Laya and mention three types of Laya – Vilamba, Madhya and Druta and their applicability in the Mārga-s Citra, Vārtika, and Dakṣiṇa just like in the Saṅgītaratnākara. Tālakalābdhī states that the three Laya-s are applicable for Caturaṣra Jāti Tāla-s. Druta is not applicable for Tryaṣra and Khaṇḍa Jāti Tāla-s.

In the commentary for Saṅgītaratnākara, Kallinātha explains that in the three Mārga-s, the number of Kalā-s double successively, i.e. number of Kalā-s in Vārtika is double the number of Kalā-s in Citra and so on. Correspondingly, the number of rest periods (Laya) also doubles and thereby the total Laya increases²⁷. The same interpretation has been given by Acutyarāya in Tāla Kalābdhī (TK, Page 102, 76b).

²⁵ TD Page 6-9 Ślōka-s 'Yathākṣarah Prāgdvikalāh.... Śamārabhya Gurutryayam'

²⁶ TD Page 15 Ślōka 'Ghātvānantara Viśrānti...dvigu nātmātra Sammatah'

²⁷ This view seems contrary to the definition of Mārga in the SR wherein the Kalā duration is said to double in the successive Mārga-s and not the number of Kalā-s (SR, 5, 10-11).

I. Yati

We find the following information concerning Yati in the Vijayanagara treatises:

- In the Tāladīpikā²⁸, Tālakalābdhī (TK, Page 106-108, 78b-79a), Saṅgītasūryōdaya (SSU, 1, 137-141) and Nartananirṇaya (NN, Vol I, 1, 253), Yati is defined in the same way as in the Saṅgītaratnākara. The Yati-s Sama, Srōtōgata and Gōpuccha are mentioned in all these works.
- Some more Yati-s have been defined in Tālakalābdhī, Rasakaumudī and Nartananirṇaya:
 - Tālakalābdhī mentions Yavamadhya, Vēdimadhya and Viṣama (TK, Page 109, 79b) and Nartananirṇaya mentions Kharjūrikā, Pipīlikā and Mṛdaṅga (NN, Vol I, 1, 254).
 - The Rasakaumudī defines Laya in terms of Sūkṣma (small) and Sthūla (big). For Sama, Laya is constant. For Srōtōgata, Laya is Sthūla in the beginning and Sūkṣma later. The opposite of Srōtōgata is Gōpuccha. For Pipīlikā Yati, the Laya is Sūkṣmā in the middle and Sthūlā in the beginning and end. Mṛdaṅga Yati is the opposite of Pipīlikā (RK, 4, 135-137)

Thus we can see new Yati-s being defined in the Vijayanagara period.

J. Prastāra

Prastāra and related concepts as outlined in the Saṅgītaratnākara have been described in the Vijayanagara treatises.

- In Tāladīpikā²⁹, the Saṅkhyā and Pātāla-s and Mēru-s for Druta, Laghu, Guru and Pluta are given.
- In Tālakalābdhī (Page 109-193, 80a-130 b), Saṅkhyā, Naṣṭa and Uddiṣṭa and various Mēru-s are described. For these, Anudruta and Virāma have also been considered.
- Similarly, in the Saṅgītasūryōdaya, the Anudruta and Virāma have been taken into consideration while delineating the various concepts related to Prastāra such as Naṣṭa, Uddiṣṭa, various Mēru-s etc. (SSU, 1, 156-427).

²⁸ TD Page 15, Ślōka-s 'Sāyatiryō....Madhyavilambitah'

²⁹ TD Page 47-55, Ślōka-s 'Sīmānannayati....Prastāra Mēru Pātālādīpikām'

We note the appearance of the Anudruta and Virāma in the various concepts related to Prastāra in the above treatises.

V. SUMMARY

The following developments can be seen in the Tāla-Daśa-Prāṇa-s in the musicological works pertaining to the Vijayanagara Court:

- The standardization of Kāla in terms of smaller units such as Lava, Kāśṭha seems to have gained importance. This seems to be due to the Anudruta acquiring the status of an independent Aṅga.
- Mārga-s Citratara, Citratama and Aticitratama, which were suitable for Dēśī music, and which involved smaller Kalā-s like Druta and Anudruta, appear to be more prominent.
- In the earlier Mārga tradition (as given in the Saṅgītratnākara), for a given set of Guru, Laghu, Pluta etc., different Kriya-s could be used. But in the Vijayanagara period, specific Kriyā-s are seen for each of the Aṅga-s Laghu, Guru, Pluta etc..
- ‘Aṅga’ was recognized as one of the Daśa-Prāṇa-s. Anudruta acquired a status as an independent Aṅga equivalent to half a Druta, and also equivalent to 1 Laghu Akṣara. Druta was stabilized with a constant value of 2 Laghu Akṣara-s. Laghu became variable and could now span of 3, 4, 5, 7 and 9 Akṣara-s.
- Atīta and Anāgata were classified as Viṣama Graha and various possibilities were described for it.
- The Jāti Prāṇa was initially defined in terms of Kalā-s. The definition was modified to be in terms of Mātra-s, and then Laghu Akṣara-s or Varṇa-s, which were sub-units of a Mātra.
- For Citratama and Aticitratama, Kalā was defined to be Druta and Ardhadruta respectively. Thus, Kalā was no longer equivalent to Guru in this context but more aligned to Kriyā.
- For the Mārga-s Citra-Vārtika-Dakṣiṇa, the earlier definition of the duration of the Kriyā-s doubling for subsequent Mārga-s changed to the number of repetitions of Kriya doubling for

subsequent Mārga-a, thereby resulting in increase in the Laya.

- Newer Yati-s like Yavamadhya, Vēdimadhya and Viṣama were now defined.
- Anudruta and Virāma were used in the concepts related to Prastāra.

VI. CONCLUSION

An examination of the Tāla-Daśa-Prāṇa concept as defined in the Vijayanagara treatises reveals its path of evolution. The initial definitions of the Prāṇa-s are mostly in line with the descriptions in the pre-Vijayanagara treatises. However, towards the end of the Vijayanagara period, the definitions reflect seminal changes in the Dēśī Tāla system such as the emergence of the Anudruta, the Laghu span becoming variable, usage of Mārga-s with shorter Kalā-s, Jāti being defined in terms of Varṇa rather than Kalā and specific Kriyā-s being associated with Aṅga-s. The documentation of these changes signifies the accordance of musicological sanctity to prevailing trends in popular music that eventually led to the complete modification of the Tāla system of Karṇāṭaka music.

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REFERENCES

Books:

- [1] B.M. Sundaram, *Tāla Saṅgraha, Percussive Arts Centre, Bangalore, 1987*
- [2] Subhadra Chaudhary, translated by Hema Ramanathan, *Time Measure and Compositional types in Indian Music, Aditya Prakashan, 1997*
- [3] Akella Mallikarjuna Sarma, *Indian Genius in Tālaprastāra, Sai Sannidhi Sangita Publications, Hyderabad, 2001*
- [4] Akella Mallikarjuna Sarma, *Tālaprastāra of Nihśaṅka Śārṅgadēva's Saṅgītaratnākara, Sai Sannidhi Sangita Publications, Hyderabad, 2001*

- [5] Subhadra Chaudhary *Śārṅgadēvakṛt Saṅgītaratnākara* ('Sarasvatī' Vyākhyā aur Anuvādsahit) Triṭīya Khaṇḍa, Radha Publications, New Delhi, 2006.
- [6] ed. G.K. Shrigondekar, *Mānasōllāsa of King Sōmēśwara Vol III*, Oriental Institute, Baroda, 1961, Available: www.musicresearch.in
- [7] ed. D.K. Velankar, *Saṅgītacūḍāmaṇi by Kavicakravarti Jagadēkamalla*, Oriental Institute, Baroda, 1958, Available: musicresearchlibrary.net
- [8] ed. T. Ganapati Sastri, *Saṅgītasamayāsāra of Saṅgītakāra Śrī Pārśvadēva*, Published under the authority of Her Highness The Maharani Regent of Travancore, 1925, Available: www.musicresearch.in
- [9] ed. Kamtaprasada Tripathi, *Saṅgītasūryōdaya of Lakṣmīnārāyaṇa*, Indira Kala Saṅgīta Visvavidyalaya, Khairagarh, 1986
- [10] ed. S. Subrahmayya Sastri, *Saṅgītaratnākara of Śārṅgadēva with the Kalānidhi of Kallinātha and the Sudhākara of Simhabhūpāla Vol. III – Adhyāya-s 5 and 6*, The Adyar Library and Research Centre, Madras, 1986
- [11] ed. R. Sathyanarayana, *Nartananirṇaya of Paṇḍarīka Viṭṭhala, Volume I*, Indira Gandhi National Centre for the Arts, Delhi and Motilal Banarsidass Publishers Pvt. Ltd., Delhi, 1994
- [12] ed. A.N. Jani, *Rasakaumudī, A work on Indian Music*, by Śrīkaṇṭha, Oriental Institute, Baroda, 1959 Available: www.musicresearch.in

Manuscripts:

- [13] *Tāladīpikā*, MS No. R770, Government Oriental Manuscripts Library, Chennai
- [14] *Tālalakṣaṇam*, MS No. R7979, Government Oriental Manuscripts Library, Chennai
- [15] *Saṅgītmuktāvalī*, MS No. 6646-B, RBmf203-RSN-SangitaMuktavali-Devana-2.pdf Available: musicresearchlibrary.net

Reports:

- [16] Girija Eswaran, "Tāladaśaprāṇa in texts," part of the *Tāla Project undertaken as part of the Senior Fellowship (2002-2004) awarded by the Department of Culture and Ministry of Tourism, Government of India* Available: www.musicresearch.in
- [17] Girija Eswaran, "Tālalakṣaṇa from various texts on music with translation", *Project undertaken as part of the Senior Fellowship*

(2002-2004) awarded by the Department of Culture and Ministry of Tourism, Government of India Available: www.musicresearch.in

Journals :

- [18] R. Sathyanarayana. (2001). *Saṅgītasūryōdaya of Bhaṇḍaru Lakṣmīnārāyaṇa*, *Sangeet Natak Academy Journal* volume XXXVI, No. 2, pp. 30-38. Available: www.musicresearch.in
- [19] V. Premalatha (2009). 'Tālakalābdhi of Acyutarāya' – discovery of a new work on Tāla, *Journal of The Music Academy, Madras, Volume 80*

Conference Papers:

- [20] N. Ramanathan, (27-12-2003). *Tāla-Daśa-Prāṇa-s and the Musicological problems in the present-day Tāla system*, presented as a paper on, *Annual Conference of the Music Academy, Madras, held at the Music Academy, Chennai from 19-12-2003 to 01-01-2004*. Available: www.musicresearch.in

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