Western Indology on *Rasa* :
A *Pūrvapakṣa*

Proceedings of Swadeshi Indology Conference Series

Editor
Dr. K. S. Kannan

There is perhaps no realm of Indian heritage that Western Indology does not feel tempted to tamper with and tarnish.

Among others, the field of Alaṅkāra-śāstra (poetics/rhetorics/ dramaturgy) is also a natural efflorescence of the Indian ethos, and the *Rasa* Theory therein is one of the greatest contributions of India to the understanding - of literature, seen or heard, and of its impact on the audience - the lay or scholarly connoisseurs; and of psychology itself in general.

In his *Rasa Reader*, Prof. Sheldon Pollock of Columbia University brings to bear a wealth of scholarship in order to subtly, and at places not so subtly, underrate and undermine Indian contribution to the comprehension of the role of human mind in the creation of, relish of, and response to, *belles lettres*.

Over half a dozen scholars, all Indian, have looked deep in this volume into many aspects of the predominantly negative role of Pollock, and scripted their own understanding of the tradition and its nuances.

WESTERN INDOLOGY ON *RASA*
– A PŪRVAPAKṢA

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Infinity Foundation India
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International Alphabet of Sanskrit Transliteration (IAST)

a	अ	ā	आ	i	इ	ī	ई
u	उ	ū	ऊ	ṛ	ऋ	ṝ	ॠ
lṛ	ऌ						
e	ए	ai	ऐ	o	ओ	au	औ
ṁ	ं	ḥ	ः				

k	क	kh	ख	g	ग	gh	घ	ṅ	ङ
c	च	ch	छ	j	ज	jh	झ	ñ	ञ
ṭ	ट	ṭh	ठ	ḍ	ड	ḍh	ढ	ṇ	ण
t	त	th	थ	d	द	dh	ध	n	न
p	प	ph	फ	b	ब	bh	भ	m	म

y	य	r	र	l	ल	v	व
ś	श	ṣ	ष	s	स	h	ह
kṣa	क्ष	jña	ज्ञ				

Shown in **bold** in this chart are letters that require diacritics, and the few that are confusibles (owing to popular spelling).

About Infinity Foundation India

**INFINITY
FOUNDATION
INDIA**

॥ इच्छन्ति देवाः सुन्वन्तं
न स्वप्नाय स्पृहयन्ति ॥

"The *deva*-s love the performer of *yajña*,
not the one who slumbers" — *Ṛgveda* 8.2.18

Infinity Foundation (IF), USA, has a 25-year track record of mapping the Kurukshetra in the field of Indology, and producing game-changing original research *using the Indian lens* to study India and the world.

One of the goals of **Infinity Foundation India (IFI)**, an offspring of IF, in organising Swadeshi Indology Conference Series is — to develop, fund, and groom scholars who can methodically respond to the Western worldview of Indology.

We are proud to say that within one year of the birth of the Swadeshi Indology Conference Series, we have conducted two high impact conferences with quality output for publications, as well as two impressive monographs. These monographs will be published and distributed in academia worldwide. They will be used in platforms for academic debate by our scholars.

We have begun to build a team of young scholars with *swadeshi drishti.* Our mission is to build a home team of 108 scholars who will form the basis for developing a civilizational grand narrative of India.

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Acknowledgements

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Series Editorial

It is a tragedy that many among even the conscientious Hindu scholars of Sanskrit and Hinduism still harp on Macaulay, and ignore others while accounting for the ills of the current Indian education system, and the consequent erosion of Hindu values in the Indian psyche. Of course, the machinating Macaulay brazenly declared that a single shelf of a good European library was worth the whole native literature of India, and sought accordingly to create "a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals and in intellect" by means of his education system – which the system did achieve.

An important example of what is being ignored by most Indian scholars is the current American Orientalism. They have failed to counter it on any significant scale.

It was Edward Said (1935-2003) an American professor at Columbia University who called the bluff of "the European interest in studying Eastern culture and civilization" (in his book *Orientalism* (1978)) by showing it to be an inherently political interest; he laid bare the subtile, hence virulent, Eurocentric prejudice aimed at twin ends – one, justifying the European colonial aspirations and two, insidiously endeavouring to distort and delude the intellectual objectivity of even those who could be deemed to be culturally considerate towards other civilisations. Much earlier, Dr. Ananda Coomaraswamy (1877–1947) had shown the resounding hollowness of the *leitmotif* of the "White Man's Burden."

But it was given to Rajiv Malhotra, a leading public intellectual in America, to expose the Western conspiracy on an unprecedented scale, unearthing the *modus operandi* behind the unrelenting and

unhindered program for nearly two centuries now of the sabotage of our ancient civilisation yet with hardly any note of compunction. One has only to look into Malhotra's seminal writings – *Breaking India* (2011), *Being Different* (2011), *Indra's Net* (2014), *The Battle for Sanskrit* (2016), and *The Academic Hinduphobia* (2016) – for fuller details.

This pentad – preceded by *Invading the Sacred* (2007) behind which, too, he was the main driving force – goes to show the intellectual penetration of the West, into even the remotest corners (spatial/temporal/thematic) of our hoary heritage. There is a mixed motive in the latest Occidental enterprise, ostensibly being carried out with pure academic concerns. For the American Orientalist doing his "South Asian Studies" (his new term for "Indology Studies"), Sanskrit is inherently oppressive – especially of Dalits, Muslims and women; and as an antidote, therefore, the goal of Sanskrit studies henceforth should be, according to him, to "exhume and exorcise the barbarism" of social hierarchies and oppression of women happening ever since the inception of Sanskrit – which language itself came, rather, from outside India. Another important agenda is to infuse/intensify animosities between/among votaries of Sanskrit and votaries of vernacular languages in india. A significant instrument towards this end is to influence mainstream media so that the populace is constantly fed ideas inimical to the Hindu heritage. The tools being deployed for this are the trained army of "intellectuals" – of leftist leanings and "secular" credentials.

Infinity Foundation (IF), the brainchild of Rajiv Malhotra, started 25 years ago in the US, spearheaded the movement of unmasking the "catholicity" (- and what a euphemistic word it is!) of Western academia. The profound insights provided by the ideas of "Digestion" and the "U-Turn Theory" propounded by him remain unparalleled.

It goes without saying that it is *ultimately the Hindus in India who ought to be the real caretakers of their own heritage*; and with this end in view, **Infinity Foundation India (IFI)** was started in India in 2016. IFI has been holding a series of Swadeshi Indology Conferences.

Held twice a year on an average, these conferences focus on select themes and even select Indologists of the West (sometimes of even the East), and seek to offer refutations of mischievous and misleading misreportages/misinterpretations bounteously brought out by these Indologists – by way of either raising red flags at, or giving intellectual

responses to, malfeasances inspired in fine by them. To employ Sanskrit terminology, the typical secessionist misrepresentations presented by the West are treated here as *pūrva-pakṣa*, and our own responses/rebuttals/rectifications as *uttara-pakṣa* or *siddhānta*.

The first two conferences focussed on the writings of Prof. Sheldon Pollock, the outstanding American Orientalist (also of Columbia University, ironically) and considered the most formidable and influential scholar of today. There can always be deeper/stronger responses than the ones that have been presented in these two conferences, or more insightful perspectives; future conferences, therefore, could also be open in general to papers on themes of prior conferences.

Vijayadaśamī   **Dr. K S Kannan**
Hemalamba Saṁvatsara   Academic Director
Date 30-09-2017   and
                                                      General Editor of the Series

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Volume Editorial

"artho'sti cen, na pada-śuddhir, athāsti sāpi
> *no rītir asti, yadi sā ghaṭanā kutastyā?,* |
sāpy asti cen, na nava-vakra-gatis, tad etad
> ***vyarthaṁ vinā rasam** – aho gahanaṁ kavitvam!* ||"

"A poem may have a good idea (*artha*), but the words therein may not be grammatically sound (*pada-śuddhi*). It may have even this, but it may lack style (*rīti*). Given even this, the work may not have a proper organisation of its contents (*ghaṭanā*). Assuming even that, it may not be equipped with new tropes (*vakra-gati*). Should that be there too, it would still be **a waste if the poem is devoid of *rasa***. Oh, how deep the art of poetry is!"

As has been indicated in the Series Editorial, and in the Volume Editorials of the earlier volumes, Western Indology has steadily endeavoured for two centuries (and with a great deal of success) to take full control of Indic studies. Alaṅkāra-śāstra (the discipline in Sanskrit that studies the very concept of literature in its origins as well as effects) has been flourishing in India easily for over two thousand years, and the *Rasa* Theory propounded by this *śāstra*, with greater and greater ramifications and clarifications through centuries, has much to contribute towards many issues in modern psychology and poetics. The fanatic votaries of Euro-centrism would of course continue either to trace everything good or great to Greece, or proclaim that these have little relevance to the present day, after all.

Prof. Sheldon Pollock has thus sought to show that the Theory of *Rasa* has lost its utility and is of no importance or relevance to the current complex developments in the fields of psychology/rhetorics. This

volume, with contributions from over half a dozen authors, is devoted to show that his contentions have no real foundation in facts.

A synoptic view of the various papers in the volume is quite in order here.

The paper by **Naresh Cuntoor (Ch. 1)** entitled *Rasa* **Theory: Changes and Growth** explores the history of the Theory of *Rasa* which has been studied for ages under the formalisms of Mīmāṁsā, Vedānta, and Bhakti traditions. The different formalisms sensitise us to different aspects of the theory. Pollock's perspectives on *Rasa* Theory are first provided, followed by an outline of related studies in cognitive and computational linguistics. Pollock's perception of the evolution of the *Rasa* Theory is based on the differentiation of literature seen and literature heard, and the application of the Theory, pertinent to the former, to the latter.

Even though Cuntoor remarks that "the final blow" to the existing notions of *rasa* expression, spoken of by Pollock as a valuable insight, it must be noted that T.N. Sreekantaiyya[*] (1953) has already stated this in more than one place in his immortal work (Sreekantaiyya 1953:23, 24ff, 34, 321). One may indeed make a comparative study of T. N. Sreekantaiyya (1953) and Pollock (2016).

Again, Pollock's statement that "Śrī Śaṅkuka was the first to argue from the spectator's point of view" is also a point noted by Sreekantaiyya (1953), who notes the issue as "the most important question". Further the key significance of *Citra-turaga-nyāya* as applicable to art in general itself was also noted by Sreekantaiyya (1953), (with a further note in the footnote that this is what shows the relationship between God's creation and the artist's creation) though Pollock is not keen to credit him with the idea. Cuntoor remarks that such an application across art disciplines is more striking than application across two forms of literature such as drama and poetry.

While discussing Bhaṭṭa Nāyaka, Pollock does not mention, Cuntoor notes, the Mīmāṁsā framework used in grammar by Bhaṭṭoji Dīkṣita. Pollock's accusation – that Abhinavagupta is an ungrateful disciple of Bhaṭṭa Nāyaka – is quite unfair; for, Abhinavagupta has clearly stated that he has "seldom attacked the schools of thought of the noble [scholars that preceded him], but on the other hand, they, the schools,

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[*]Sreekantaiyya, T.N. (1953). *Bhāratīya Kāvya Mīmāṁse.* Mysore: Mysore University.

have only been refined (*śodhita*)." *"tasmāt satām atra na dūṣitāni / matāni tāny eva tu śodhitāni".*

Cuntoor is careful not to "infer modern scientific notions from ancient knowledge, or assert that ancient Indians discovered everything before modern science", which is only proper and fair. His motivation is to see if we can "gain new insights into *Rasa* Theory using the perspectives of the modern notions of cognitive and computational models". Cuntoor raises the question, for example, as to whether the framework of multiple memory systems can be used to gain a better understanding of the types of *bhāva*-s. Also to be investigated is – whether *Rasa* Theory could provide new principles of perceptual organisation in the context of experiencing literature; whether the study of mirror neurons — in the context of imitation, self-identity and empathy — can have a bearing on ideas pertaining to Karuṇa-rasa. Pollock's unnatural contentions – of the unnaturalness of pity in man, and of his supposition of compassion as a Buddhist invention – need also be be scrutinised. Computational aesthetics, dealing with sentiment analysis and emotion recognition, can also be tried for recognising *rasa* in literature. The technique of reductionism may perhaps be tested to its limits in *Rasa* Theory, in particular. Cuntoor also refers to the absence of a detailed discussion in Pollock on *aucitya*, which constitutes, as Ānandavardhana says, the *parā upaniṣad* (supreme secret) of *rasa*.

The second paper written by **Ashay Naik (Ch. 2)** is entitled **Desacralization of the Indian *Rasa* Tradition**. Profanation verily may well be described as the singular agenda of Pollock, and he is accordingly on a fissiparous overdrive. Tradition linked *rasa*, the poetic relish, with the Upaniṣadic *rasa*; and presented *kāvya* as but an allotrope of the Veda inasmuch as *kāvya* being a *kāntā-sammita* (*à la* a beloved) is kindred in spirit to the Veda which is a *prabhu-sammita* (*à la* a king) – both thus seeking to subserve certain common purposes though their modus operandi may differ. But Pollock is frantic to drive a wedge between the Veda and the *kāvya*. Bitten as he is by the reductivity bug, Pollock can perceive *kāvya* only as a socio-political aesthetic, divested of its religio-spiritual dimensions – thus the very antithesis of the Hindu ethos. And so this "Last Sanskrit Pandit" (as his hagiographers hail him) aims his arrows against Abhinavagupta, attempting to sabotage his status in the realm of Indian aesthetics. It is not Pollock's failure that arouses our pity, but his audacity. Pitting

Bhoja or Bhaṭṭa Nāyaka against Abhinavagupta betrays Pollock as a strategist, but also ultimately betrays Pollock himself. *Praśasti*-s of his own patrons notwithstanding, Pollock dutifully if brazenly attacks the *praśasti*-writers. Desacralising *Rasa* Theory thus on the one hand, and pressing Indian aesthetics to subserve Christian propaganda on the other, are but two sides of the same coin.

Speaking of Veda-s as no poetry; portrayal of the *Rāmāyaṇa* as essentially political in character; attempting a dichotomy between the Veda and the *kāvya*; undermining the orality of the *Rāmāyaṇa* so as to suit a late dating of the text; postulating a consubstantiality of the *kāvya* and the *praśasti*; subtle sabotage of his own master Ingalls's admonition to the Western critics of Eastern poetry; valorising Bhoja and Bhaṭṭa Nāyaka at the cost of Abhinavagupta; reading ideas of social pragmatics into the most innocent of situations; concoction of a "theological *turn*" in literary theory; projecting discrepancies, with and breaches in, the tradition; positing the aim of *kāvya* as the creation of "*politically correct* subjects and subjectivities"; attributing the genesis of a "spiritualised Indian aesthetic" to royal depradations and kindred social contexts; speaking melodramatically of "an episteme that Abhinava successfully overthrew"; effectively tweaking truths subtly and ably, distorting meaning thereby localising *rasa* in the text, rather than in the reader; implying *that Western intervention is necessary to rewrite a true history of Indian aesthetics*; preferring to speak of *rasa* as a linguistic modality, rather than a psychological modality; valorising a sociological hermeneutics so as to render it amenable to Marxist pigeonholing and reinterpretation etc — are all but ploys of Pollock — assayed by Ashay — to usher in his own brand of Orientalism. Ashay also makes a reference to the sinister Christianisation of Bharatanāṭyam and Indian aesthetics — aimed at spreading the gospel of Jesus on the Indian soil where they need to harvest Hindu souls while the religion of the cross is being supplanted in the land of its own origin.

The long paper of **K Gopinath (Ch. 3)** having the caption **Towards a Computational Theory of *Rasa*,** takes on squarely the contention of Pollock – that Indian thinkers have neither attempted a robust theory for creativity, nor did they have a theory across *kalā*-s. Gopinath sketches a computationally inspired Theory of *Rasa* (which, he notes, is still in progress) throwing light on Indic insights in support of the theory, and buttressed by a few art forms. Pollock also complains

about the absence of a settled terminology pertaining to *kāvya, nāṭya* and *saṅgīta*, as also *citra, pusta* and architecture, and the other *kalā*-s. Gopinath shows at the outset that the rendering of the word *pratibhā* as creativity or genius is poor, and "flash of insight" would indeed be a better one, citing verses in support from *Vākyapadīya*; (the same is also demonstrated in the 1923 paper (on the very key word) of (another Gopinath viz.) Late Gopinath Kaviraj).

Prof. Gopinath adds Abhinavagupta's statement also to that effect. Gopinath adduces the testimonies of Mukund Lath, Kapila Vatsyayan, Dr. V Raghavan, Manomohan Ghosh and Sylvan Levi to show the common origin or common essence, or common terminology that encompasses these. The testimonies of *Viṣṇu Dharmottara Purāṇa* and Mallinātha (the famed commentator) are also brought to bear on these issues. The academic temerity of Pollock in boldly making false statements — as when he says God in India was generally not an artist – is countered by the mention of the musical associations of the divinities viz. Kṛṣṇa, Sarasvatī, Nārada, Hanumān and so on. (*Saṅgīta-ratnākara* has even categorical statements, in the very opening chapter, not noticed by Pollock; the most superficial glance at either Hindu sculpture or pages of Hindu mythology could have opened the purblind eyes of this Neo-oriental critic). After all, Pollock has himself translated the *Rāmāyaṇa*, and asserted Rāma's divinity, and yet fails to note that Rāma knew music too very well: surprising; or rather, nothing so surprising.

Coming to the written text versus the oral text argument, the obsession of the West with the former, and its futility, are set forth by Gopinath by invoking the statements of stalwarts such as Vasudha Narayanan, Coward, Kunjunni Raja and others.

An important factor, viz. the "intangibility" of *rasa*, as reflected, for example, in the very nomenclature of a particular type of *dhvani* as *asaṁlakṣya-krama* ("of imperceptible sequence") is missed by Pollock. Gopinath hits the nail on the head when he indicates the essential complexity involved in the signification of *rasa*: *rasa* can be seen abstractly as a certain mapping of a text, performance or artefact, from a creator/actor, through a medium onto a receiver; and the factor of semantics involved in addition to the affective part of *rasa* itself needs to be reckoned with, too. He draws an effective analogy from science — of the protein folding which is a complex function of a linear

DNA structure, whence the message may be a complex function of the linear atomic units, but possibly without a deterministic mapping. To draw a parallel from another domain of art, the *svara* to *rasa* mapping is non-trivial and may be probabilistic too. The *svara* arrangements and shapes are huge — like the innumerable proteins; and it may not be impossible to construct a finite automaton to characterise *rāga*-s. Though their ascending and descending scales are defined, there yet are factors that spell probabilistic conditions and subjective characterisations. One may look into Hidden Markov Models — with possibilities of hybridisation and crossover and transpositions — that can show the burgeoning possibilities. It is no coincidence that the temporo-parietal junction, the location of self-referential activity in the brain, is also the region involved in musical experience. It is certainly not the case that the neuro-correlates in such instances have all been worked out yet.

Pollock's claims of noncommonality across departments of arts are not well-substantiated; and substantiations to the contrary are available even if not very extensive and very detailed. Gopinath provides textual support, as from *Citrasūtra*, as to how there is an inextricable relationship between and amongst the different disciplines such as sculpture, painting, dance, and music — (instrumental as well as vocal on the one hand, and classical and popular on the other). Stella Kramrisch records also mappings between *rasa*-s and colours; and speaks of the common basis of architecture, sculpture and painting. Analogies obtain even in the philosophical ramifications across fields like Vyākaraṇa, Alaṅkāraśāstra and the Pratyabhijñā schools. All texts on *nāṭya* discuss the mind-body coordination and correlation. The traditional analogy of the seed and the tree with its flowers and fruits – indicates the relationship between the various limbs of dance. The multiplicity of inputs generates a richly textured and emotionally resonant experience which is larger than the sum of its parts, as Logan Beitmen elaborates. The intimate relation between *rasa*-s, *sthāyi-bhāva*-s and *sañcāri-bhāva*-s on the one hand; and the physical expression of emotions on the other – are worth noting. The objectivity in the taxonomy of the various *rasa*-s is borne out by the fact that they find corroboration from a totally unconnected domain viz. modern psychology which too has identified the same set as the basic emotions.

A computational cum cognitive analysis of rasa would involve the generative and recognitive aspects. The creator and the spectator have their tasks allocated to the design time and run-time respectively – the former involving the computationally, and the latter the cognitively, structured models (even though both normally happen unconsciously). If the cognitive and computational models are fairly well-developed, Pollock's charges can be shown to be laden with negative biases, despite his exhibition of erudition and advertised appreciation of a few aspects of Indic arts here and there.

The Indic tradition has always evinced a clear distinction between an actual emotion, and a same emotion experienced via *nāṭya*. Any system built on a finite set of rules necessarily involves iteration and recursion — alike applicable to microscopic and macroscopic entities. The model of the Indra's Net employed by the Atharvan seer (or the later Buddhist sage) – as set forth in Rajiv Malhotra's book bearing the same title – is a telling case in point. The very acts of recursion and reiteration after a quantitative threshold, impart upon the structure an unexpectable and inexplicable qualitative leap of sensation and perception.

Simulation of real emotions and iteration of particular patterns induce the dominant *rasa* and the subordinate *rasa* – mediated and spurred as they also are by memory traces and *dhvani* excitations that get richer and richer – and go in fine to trigger even affective impulses. *Sādhāraṇīkaraṇa*, the Generalization, that then takes effect subtly removes the self-interest of the spectator, which removal alone activates the *rasa*-spring. Patterns of iteration and recursion generate anticipation of substructures, and thereby conduce to greater enjoyment. While on the one hand the artist of each kind is expected to acquaint himself well with many other departments of art, he also has the choice to generate new patterns on the nonce (a not-easily-imagined blend of abundant constraints with yet more abundant freedom) – little to compare with the rigidity of Western Classical Music.

The art of the stage involves triple levels — the Third Person experience (of the viewer), the Second Person enactment (by the actor), and the First Person thought (by the author — and hence the schema here ought to be much more complex than what Pāṇini attempted which involves only double levels — the speaker's and the

hearer's). The actor and the spectator each loses his identity but in different ways. Given the complexities involved, mathematical modelling involving axiomatics may not constitute an apposite approach, and a computational model may be nearer to the real issues. Such a model may involve generative aspects and descriptive aspects, and a particular sensitivity to Indic sensibilities. The Indic perspective looks even into ontogenic aspects (as with the Piṇḍotpatti Prakaraṇa in *Saṅgīta Ratnākara* involving embryological studies), or the *sandhi* aspects in Pāṇini (involving the anatomical structures of the sound-producing organs), and the great leap from the "atomic" *svara*-s to a *rāga* endowed with a "personality" of its own.   An element of synaesthesis involves in the correlation of *rasa*-s and colours. Apart from *sthāyi-bhāva*-s and *rasa*-s, each eight in *Nāṭyaśāstra* with one-to-one mappings, there are eight *sāttvika-bhāva*-s and 33 *sañcāri-bhāva*-s with many-to-many mappings in between. Indian art revels in the profusion of the interplay of *vyañjanā*-s, rather than in the reductive, fixed-and-formed entities. None, else than Hindus, excelled in extreme digitisation, as also in extreme integration, (but note on the other hand that mindless proliferation of terminology is an illness that besets modern linguistics, as Dwight Bolinger once noted). The magnificent juxtaposition of linguistics and music on a phenomenological basis was provided by Māgha long ago (*anantā vāṅmayasyāho geyasyeva vicitratā! – Śiśupālavadha* 2.72).

Scientists are open to the suggestion that there is a connection between the brain's biomolecular processes and the basic structure of the universe. The primacy of the sentence (in grammar) though it is constituted of its own components of diverse patterns, and the primacy of *rasa* (in Sāhityaśāstra) though it issues out of certain combinations of its various constituent factors — in other words of the integrality of the higher despite apparent decomposability into numerous intermediary/terminal nodes — is an extraordinary contribution of the Hindu mind.   The top-down and bottom-up approaches have been looked into, and their optimisations have also been worked out — as in the two schools of Mīmāṁsā — in contexts as of Anvitābhidhāna-vāda and Abhihitānvaya-vāda.

In a given passage, there may be no element (noun or verb, adjective or adverb, or even a particle) that may not be suggestive; and even so, in a performance there may be no element (word or song, *mudrā* or aspect of dress etc.) that may not conduce to a particular *rasa*. The

gestalt of sense first generated by the components and subcomponents (words/phrases/clauses) of items in a sentence, and the *gestalt* of *dhvani* produced by the senses of the three types of meaning (viz. *abhidhā, lakṣaṇā*, and *vyañjanā*), are presumably analogous.

Rhythms and mathematical regularities occurring in performances in sounds/metrics/gestures etc. can create a vibrational sense for the audience. What came in handy for the Hindu poets/aesthetes is the early mastery (circa 5th century B.C.E) of the requisite mathematical notions as of the Pascal's triangle, binary computations and Fibonacci series – applicable to different realms. Even the concept of *anu-raṇana*, [re-]echoing, came to be exploited even in the nomenclature of *dhvani* types.

As to the general schema in regard to music (extensible perhaps to other arts), Rowell says well: "A hallmark of the early Indian way of thinking about music was to identify and name all possible permutations of the basic elements, but with the realisation that only certain authorised (and far more specific) melodic constructions can become the basis for actualised music ... It was the job of the theory to provide the widest selection of possibilities, but it remained for practice to select the most pleasing of these arrangements...".

Indian texts have also worked out many *rāga-svara* mappings, and *rasa-rāga* mappings and even *rasa-tāla* mappings. Amazing feats in various fora – in the realms of prosody (in metrical compositions in Sanskrit); in the *vikṛti*-s in Vedic chanting; in the various *bandha*-s in *citra-kāvya*-s; in the construction of cryptic mnemonic verses; in the *kaṭapayādi* encoding in *rāga*-nomeclature in music; in the pyramid-like or other structures erected on foundations of odd or fractional beats in percussion instruments; in the fractal constructions in architecture; in the astronomical rhythms captured in temple architecture; in the design formulae in Śrīcakra or *maṇḍala*-s etc – all betray complex mathematical patterns, progressions and symmetries that arouse a sense of wonderment at once in the mind of the lay as well as the accomplished artist and the mathematician as well. They also clearly indicate certain recurring motifs and techniques in various domains of art — quite contrary to the biased and unsubstantiated hence irrational proclamations of polymath-pundits of the likes of Pollock. Hindu temples, the point of convergence indeed of all Indic arts, verily depict an evolving cosmos of growing complexity

which is self-replicating, self-generating, self-similar, and dynamic; the procedures therein are recursive and generate visually complex shape from simple initial shapes through successive application of the production rules that are similar to rules for generating fractals.

Wonder may be the beginning point – for the Westerner, for all science; as for the Hindu, wonder is also the end-point of many investigations in art which also course through various sciences, (especially mathematics, "the Queen of Sciences"). Marvel then, at the beginnings and elements of Hindu culture, and marvel again at the many peaks and consummations of Indian art – from the very design of the alphabets to productions such as the *Gītagovinda* of Jayadeva or the icon of Naṭarāja, to cite but two examples — the multi-storeyed semantics of which must all be beyond the ken of these intellectually impoverished Pollockish nothing-morists.

The next chapter is from the pen of **Charu Uppal (Ch. 4)** and is entitled **Rasa: From *Nāṭyaśāstra* to Bollywood**. The paper goes to challenge Pollock's reading of the *Nāṭyaśāstra* as being rigid and frozen in time, and allowing little scope for novelty – which features, according to him, render the age-old work irrelevant to the present context (and by implication, to the future). She is also concerned to show that even pre-Christian Greek drama had a concept of *heiropraxis*.

Whereas Indian tradition has all along been a blend of the *laukika* and the *alaukika*, the mundane and the transcendent, Pollock attempts to divest it of the latter, and hence is utterly ineligible to be an authentic interpreter of the tradition, for all his vaunted scholarship. The inappropriateness of his application of the Marxist theory of aestheticization of power and the false picture he portrays – one of numbing the masses into obedience by deployment of oppressive Vedic ideas — is something that goes against the dictum of his own "preceptor" Daniel Ingalls. The very purpose of *Nāṭyaśāstra*, as of the *Mahābhārata*, is to make available to the common man the precious Vedic verities which are not easily accessible, often, even to scholars. Pollock invokes chronology and authorship issues to subserve his goals, dragging the dates of ancient texts as nigh as possible to our own, in tune with the Western agenda. Countering Gerow and Pollock, she cites V S Ramachandran who speaks of artistic universals. Uppal draws attention to the role played by *rasa* in Bollywood even to this day.

The paper by **Sreejit Datta (Ch. 5)** entitled **"From Rasa Seen to Rasa Heard": A Criticism**, takes a close look at Pollock's depiction of the evolution of the idea of *rasa.* Datta questions the very differentiation between "literature seen" and "literature heard" that Pollock starts with. He explores how literature as a Western category and *sāhitya* as an Indian category differ. Pollock's "Rasa Seen to Rasa Heard" is essentially an exercise, he says, in peddling Western Universalism. The very etymology seems to hint at something of the nature of their content: *Literature* from Latin *"litteratura"* is something written or something pertaining to learning; whereas *sāhitya* implies a blend or fusion indicative of an integrality. The *Nāṭyaśāstra* speaks of what the gods told Brahmā — that they want something which is at once *dṛśya as well as śravya.*

Datta also draws our attention to Pollock's reprehensible resort to the translation of all technical terms in Sanskrit into English, which is tantamount to epistemological domination of one culture by another as indicated by Vazquez. To translate *Dhvanyāloka* as "Light on Implicature" sounds atrocious. The very individuality of the original words is totally lost in the translations – dilution and disfigurement being the invariable consequences. Much earlier (1950), Manomohan Ghosh had been careful enough to provide the Sanskrit term also, and with a capitalisation of the first letter of the English rendering "lest these should be taken in their usual English sense". Recitation of the Veda-s, eminently the *śravya*, is also enjoined to be accompanied by *mudrā*-s (gestures); and the four *vṛtti*-s are related to the four Veda-s — all emphasising once again the link between the *dṛśya* and the *śravya* aspects. Kapila Vatsyayan also clarifies that the various arts are not to be referred to in isolation or in mutual exclusiveness. The sonic and deific forms of the *rāga*-s are set forth together by Somanātha in his *Rāga-vibodha* (17th century C.E.); the former being *śravya*, and the latter, *dṛśya.* To see schism where none exists, or create one where only subtle differences are shown – is all a part of the fissiparous agenda of the West.

* * *

The next two, in fact the last two, papers are authored by two eminent Sanskrit poets from Karnataka, who have also a deep knowledge of Indian poetics. We introduce in this context three verses that hold a mirror to some of the raucous Western critics/commentators (Pollock,

in particular who stoops to aspire to be a "lover" of Mother Sarasvatī, the Goddess of Speech).

> *ye sad-artham ajānanto*
> *vṛthā vacana-vistaraiḥ |*
> *dūṣayanti kaveḥ kāvyaṁ*
> *dhik tān paṇḍita-māninaḥ ||*

(Fie upon the self-styled scholars who vitiate a poet's composition through their verbiage without first comprehending the good sense in the original.)

The paper by **Shankar Rajaraman (Ch. 6)** is entitled **The West on Our Poems: A Critique** (in the context of Translation, Editing and Analysis). Western scholarship has its own shortcomings, and the nastiest of it all is, undoubtedly, its abundant prejudice: it considers it its duty to be spiteful of all other civilisations, and is eminently capable of overt and covert arm-twisting. Plus, its scholarship is not always sound and unquestionable. Shankar examines in this paper a score of cases of mistranslations and cases of faulty editing and misanalysis.

Rather than making a mere catalogue of Westerners' errors, Shankar has classified them — tracing them to their causes, making use of Rajiv Malhotra's four-tier model of critiquing Western Indology. He seeks to demonstrate how traditional scholarship in Sanskrit can equip one with sound analytical tools that help in detecting instances where there is inherent misunderstanding of texts. Western Indologists can be accused of not one or two errors. Shankar presents a classified list of their blunders such as — getting the narrative wrong; non-familiarity with Indian ethos; non-familiarity with complementary bodies of knowledge; getting the semantics wrong at all possible levels — of unitary words, compound-words, and phrases/sentences, and even failing to spot puns, (single or multiple, but as are nevertheless vital for the appreciation of the verse at hand) etc. Some of the Western translators have been blenders of these blunders — providing unintended, unexpected, and unlimited entertainment to discerning readers.

Literary narratives are characterised by features, one or more, of coherence, meaningfulness and emotional import, and these translators can err on all counts. Shankar illustrates mistranslations — all from the CSL (Clay Sanskrit Library) publication series — involving

big figures in Western Indology such as Sheldon Pollock (General Editor), Yigal Bronner, Wendy Doniger, David Shulman, and Gary Tubb. He has shown how Friedhelm Hardy has erred in missing out on the very *anvaya* of a verse from *Āryā-saptaśatī* of Govardhanācārya. James Mallinson's translation misses out on the sequence of events in a verse from *Pavana-dūta* of Dhoyī. Pollock has thoroughly mistranslated a verse from *Rasa-taraṅgiṇī* where he has confused trees with mountains; all the adjectival translations, therefore, have gone wrong, and so, Pollock's lack of cultural understanding shows itself clearly. He has made many silly mistakes including translating a *lyabantāvyaya* as if it were a *tumunnantāvyaya*!   In yet another verse from *Rasa-mañjarī*, Pollock has mistranslated the verb itself and advertises his ignorance of what Sanskrit poets are wont to represent in the given circumstances.

The Notes added to the translations are usually meant to help readers understand the verse and its cultural context the better. In spite of a Sanskrit commentary giving the correct explanation, Wendy Doniger boldly mistranslates the verse, and in effect, converts an altruistic king into a selfish one. One has to show utmost care while rendering the *nāndī* verse of a play as it is often intended to be suggestive. Wendy Doniger brazenly mistranslates the *nāndī* verse of the play *Priyadarśikā*, and in an attempt to show off her knowledge of mythology, renders the verse in a perverse manner. And the result: Wendy Doniger's fixations about sexual impulses can give rise to 'shameless' improprieties.

A verse from *Prabodha-candrodaya* of Kṛṣṇamiśra is wrongly rendered by Kapstein, ignorant as he is of the role of *sindūra* at the spot of the parting of the hair of a Hindu woman; wrong dissolution of a compound word also conduces to this. He has confused a pigment term to be a colour term, and missed the very force of a simile, and taken a noun as an adjective. Rendering the verse is made worse by his fictitious justification which only adds colour and flourish to the blunder and blemish. A little less elequence would have helped him, but he is bent upon advertising his ignorance.

In his translation of another verse, Mallinson falters on three counts — ignorance of the typical and significant sporting of the lotus by Goddess Lakṣmī; rendering a word by its popular sense in a context where it is used in a specific and special sense; and worse, seeing a pun where none exists! — and thereby laying bare his lack of knowledge of

the lexicon — of information that is available in the opening pages of *Amara-kośa* (not some rare *kośa*, to wit)!

Adding uncalled-for footnotes helps Pollock show off his ignorance — showing a visiting student as a royal priest — in the course of his translation of a verse cited in *Rasa-taraṅgiṇī* of Bhānudatta; where a very famous context of Kālidāsa's *Raghuvaṁśa* (the most famous poet) presents itself. What should be very familiar to a student of Kālidāsa, the celebrated poet, is not familiar to Wendy Doniger and her notes converts wine into water! She seems to be ignorant of poetic conventions available in even Apte's **Student's** *Sanskrit-English Dictionary* — not some recondite source!

Hardy renders, in his translation of a verse from *Āryā-saptaśatī*, the word *pradoṣa* as 'early morning'! — verily a blunder extraordinary (*pra-doṣa*)! In another verse he miscopies and misrenders *tūla as tula*; he is indeed *nistula* (unparalleled) in his carelessness! Mallinson makes a king out of a brahmin by misunderstanding a simple vocable. In his translation of a verse from *Anargha-rāghava*, Torzsok makes out a lamp as a star, thereby spoiling a wonderful poetical fancy figuring in a description of the evening twilight.

In his translation of Dhoyī's *Pavana-dūta*, Mallinson dissolves a Karmadhāraya compound as though it is a Tatpuruṣa compound, jeopardising thereby the meaning of the verse as a whole.

Bronner and Shulman effectively spoil the very essential idea of a verse of Vedānta Deśika by an atrocious mistranslation that destroys the very intention of the poet. Hardy mishandles a verse from *Āryā-saptaśatī* by mistranslating two words — thereby destroying a pun — springing from his insensitivity to grammatical subtleties in Sanskrit and his ignorance of Hindu mythology.

Numerous verses in Sanskrit abound in puns, and a careless translator misses them even when they are very much present, and what is worse, "sees" puns where they just are not — all due to lack of sensibility. Pollock has missed a beautiful pun of Bhānudatta where the very beauty of the poem depended upon the pun. Sanskrit poets carefully choose words that are open to pun, and the translation that leaves out the pun on some words (while taking some into account) in a verse would be considered an inane translation. Notes may be the place to explain puns that cannot be easily translated, but the ignorant

translator makes it clear to all discerning readers in his Notes that he is just unaware of the pun. And what is worse, the pun he has missed is a pun that is much in evidence even in the early chapters, the first few pages of *Kāvya-prakāśa* — for all his vaunted scholarship of Alaṅkāra-śāstra. Another mistranslation by Hardy is so well done as to make a verse of Govardhana totally unintelligible, and so, can bring infamy to the original.

As to editing: careless editors give themselves away quite often. Wendy Doniger gives a distorted text that does violence to grammar and prosody alike, while rendering a verse from *Ratnāvalī*. The most elementary principle – of concord between the subject of a sentence and its verb, most elementary and almost universal in character – is grossly violated by her. The very verse format can give clues to certain common mistakes, and a little sensitivity to prosody suffices to suspect something going amiss. Prolificity in writing is no compensation for infelicity in rendering.

Many a Western Sanskritist has no habit perhaps of reading Sanskrit texts aloud, and so is liable to miss out on the metrical felicities. Insensitive as they would be to sound and rhythm, such translators are liable to be insensitive to sense also, consequently. Insensate translators misread the original Sanskrit verse, and make bold to attribute boldness to the author of the original itself. Gary Tubb deems a "violation of meter" a "bold change"(!), and rushes to bring out the "poetic significance" of the imagined bold change by the poet!! On the contrary, nowhere have Sanskrit poeticians condoned any such violation, though so rare, of prosody. Pretending to be quite sensitive to *yati* (*caesura*), some translators have read texts too critically; but the fact is that quite on the other hand, *yati* is not quite an essential feature to certain meters.

Thus overdoing and underdoing their tasks as translators is by no means a small lacuna on the part of these Western scholars. The discretion to be humble is far better than the indiscretion of being supercilious.

It is a tragedy that incompetent scholars make bold to translate texts beyond their ken or without care and discipline. That a whole series is vitiated by unpardonable errors in translation reflects poorly upon the editor viz. Prof. Sheldon Pollock, hailed by his hagiographers as "The Last Pandit".

A poet himself, Shankar has drawn our attention to the very many pitfalls of translators — the Western translators in particular, that beam generally with confidence. The samples Shankar has provided show that these translators neither possess a minimum sensitivity nor display any remarkable sensibility. We do not know how many texts were ultimately spoilt by Westerners who tend to think that it is their prerogative to interpret any culture on Earth. And did not John Ruskin admonish: "Be sure that you go to the author to get at *his* meaning, not to find yours."?

Their ridiculousness makes one recall a poet's jibe:

> *yadi khaṁ karaṭo gatvā*
> *sindhor upari gāyati |*
> *tat kiṁ sa vetti gāmbhīryaṁ*
> *ratnāni ca tadāśaye ? ||*

(Loafing in the sky over the ocean, should a crow keep cawing, would he realise on that account, the depth of the ocean below, or cognise the gems therein?)

The last paper by **R. Ganesh (Ch. 7)** entitled ***Rasabrahma-samartha-nam***, counters some of the ideas of Pollock presented in the introductory portion of his *Rasa Reader.* Ganesh contrasts the views and approaches of some of the modern Sanskritists against those of Prof. Hiriyanna, Narasimha Bhatta and Dr. D.V. Gundappa (all hailing from Karnataka), and Dr. Ananda K. Coomaraswamy and V. S. Agrawala, the two celebrated authorities in the field of Indian art.

He contests at the outset the physicality of *rasa* which cannot be reduced to mere chemical reactions in the brain. He also speaks of the cyclicity/non-linearity of linguistic and metaphysical ideas, as against the linearity of science, and rejects the idea of Bharata's *magnum opus* as representative of a field but in its stage of infancy. The *Nāṭyaśāstra* is on par with the "epics", in terms of their naturalness yet beyond the pale of ordinary imagination. After the fashion of writers on Nyāya and Vyākaraṇa, he invokes the analogy of Ayurvedic prescriptions whose value/validity is not contestable despite advancements in anatomy/physiology/biochemistry; and asserts the validity of the *Rasa* Theory irrespective of the developments in modern psychological investigation.   Drawing on an analogy of universal experience as

applicable to Vedānta, one may rather deny Brahman, but not the experience of *rasa*, he says. He traces the genesis of *rasa* to early Vedic literature — ancient portions such as the Puruṣa-sūkta, Nāsadīya-sūkta and Skambha-sūkta, as also the Upaniṣadic portions such as the Theory of *Pañca-kośa* (Five Sheaths), and even the chapter on Vibhūti-yoga in the *Bhagavad-gītā*. Even as, in the depiction of M. Hiriyanna, all the *darśana*-s (schools of Indian philosophy) find their culmination in Vedānta, and are not contradictory to it, even so the *Rasa* Theory is in no contradiction with the different *darśana*-s.

His focus is on the Introduction in the *Rasa Reader*, as it is that section that teems with Pollock's key notions. He grieves Pollock's utter ignorance of musicological works. Speaking of the applicability of the *Rasa* Theory to other arts such as music and dance, he refers to the preponderance of "practicals" in these realms as an important reason for a lack of discussion in books on Indian rhetorics/aesthetics. Further, they pose a few problems unique to their own fields. Pollock limits the realm of *rasa* to literature — which is unfounded. All arts originate in the mental realm of the artist and culminate in the mental realm of the connoisseur. As Coomaraswamy states well: "The end of the work of art is the same as its beginning, for its function is ... to enable the *rasika* to identify himself in the same way with the archetype of which his work of art is an image".

Pollock has a complaint that the principle of *pratibhā* (creativity) has not been well formulated in Indian tradition. It is only logical that it is so, argues Ganesh, as *pratibhā* is essentially subjective and indescribable; and it is only in respect of its consequences that one can speak of *pratibhā*. To seek the genesis of the faculty that is at the root of all arts may well be an invitation to *anavasthā*, "endless regression" — akin to seeking the definition of Brahman.

Similarly, it has been shown here how relish of poetry is more valuable than its critical assessment. Pollock's charge on the absence of a comprehensive investigation of beauty is also baseless, as it is comparable to a similar investigation of Brahman. The objection raised by Pollock in regard to not counting *vātsalya* as a *rasa* is nothing new. What is more important is an investgation into *rasa* as such, rather than an examination of the number count of *rasa*-s.

As to the issue of the locus of *rasa* in regard to its being in the artist or in the creator, it has been shown how even the artist enjoys his own work

as a *sahṛdaya*, and the opening chapter of *Nāṭyaśāstra* testifies to the importance of the *sahṛdaya*. The argument of Pollock that Alaṅkāra-śāstra is later than *Nāṭyaśāstra* is easily answered by the fact that *nāṭya* is itself all-encompassing – covering all aspects in general of poetry, picture, and song. Pollock is only attempting to sow seeds of discord between *dṛśya-kāvya* and *śravya-kāvya*. The artist dons the role of a *sahṛdaya* in the process of fine-tuning the work, and in addition, has the roles of *kartṛ and bhoktṛ, jñātṛ and vimarśaka* (creator and consumer, connoisseur and critic). The enjoyment of the *sahṛdaya* is post-event in the case of the creation of *kāvya/citra/śilpa*, but concurrent/co-event in the case of the creation of *gīta/nṛtya/āśu-kavitā* (poetry *ex tempore*). While the poet exercises *kārayitrī pratibhā* as well as *bhāvayitrī pratibhā*, the *sahṛdaya* employs only the latter; it is thus that it is *bhāvayitrī pratibhā* that is more extensive in its role. While the function of the *kavi* is but once, that of the *sahṛdaya* can be multiple times. Viewed from the matrix of the *triguṇa*-s, the poet's act is impelled by *rajas*, while that of the *sahṛdaya* is permeated by *sattva* — and *sattva* is discernibly superior to *rajas*.

The charge of Pollock that Hindu poetry had its origins in Buddhism is answered by the fact that there is no Buddhist poetry as such, and that the Veda is already poetic. Further, all civilisations (including prehistoric ones) have had their share of song and dance and drawing. The wealth of literature even in early Hinduism is immense – comprising the Veda-s, the Vedāṅga-s, and so on; and in contrast, Buddhism has only *nivṛtti*-oriented literarture. It may be added here that Coomaraswamy had taken strong exception to the fact that a typical Westerner would exhibit a stronger affinity towards Buddhism rather than Hinduism, even though the former concerned itself predominantly with the life of the recluse, whileas Hinduism saw life in a bigger and fuller and natural compass. The indebtedness of Aśvaghoṣa to Vālmīki is not unknown either.

Pollock's argument that the Rasa Theory has been Vedānticised holds no water. Bharata traces the various *rasa*-s to the *Atharva-veda*, in which are contained the Skambha-sūkta and the Ucchiṣṭa-sūkta which are permeated by poetic content. Coomaraswamy has dwelt on these *sūkta*-s in significant detail. Pollock's diatribe against *aucitya* — after hailing its merits — bespeaks rather of the maxim of *alaṅkṛta-śiraś-cheda*.

Ganesh aptly describes Pollock as a riotous elephant in the forest of books. "No *rasa*, no humanity", asserts Ganesh. Pollock's posturing of humility is, Ganesh notes with a poet's touch of a telling simile, akin to fastening a tender flower in a garland of thorns. An exhaustive, or at least a more detailed, criticism of Pollock's *Rasa Reader* remains a desideratum, and will help to show how the handling of a lofty theme by this American Orientalist betrays an approach which is anything but healthy and wholesome.

A few final remarks may be made here. That Abhinavagupta was by no means a *guru-drohin* towards his senior Bhaṭṭa Nāyaka (whose ideas he refined, rather than repudiated (*matāni na dūṣitāni, kintu śodhitāni* by his own express declaration)) is just as true as Pollock is a *guru-drohin* towards his own preceptor, Prof. Daniel Ingalls (whose prime and sublime dictum it was that the path of the critic of poetry must begin with poetry and not with theories of society); too, there is little of *aucitya* in the cavalier manner with which Pollock treats the key ideas of Alaṅkāra-śāstra. Pollock is impartial in his cultivated contempt whether towards the Vedic of antiquity or towards the latterly evolved rhetorical tradition. Almost every paper has shown that a good many of the claims of Pollock are hollow and lack substance.

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It goes without saying that the authors of the papers here all hold themselves responsible for the ideas they have presented. Also note that square brackets [ ] have been introduced within verbatim quotes to add the explanations/remarks of the author of the paper.

* * *

One is reminded of a Sanskrit verse on the good and bad uses of a command over language.

> *"asthāne gamitā layaṁ hata-dhiyāṁ vāg-devatā kalpate*
> *dhikkārāya parābhavāya mahate tāpāya pāpāya vā |*
> *sthāne tu vyayitā satāṁ prabhavati prakhyātaye bhūtaye*
> *ceto-nirvṛtaye paropakṛtaye prānte śivāvāptaye ||"*

(Confer the divine faculty of speech indiscreetly upon the pervert: be sure to expect curses and humiliation, and agony and

sin, unlimited. Bestow it, on the other hand, sensibly upon the
noble: you may well look forward to fame and weal, bliss and
benevolence, and the attainment of beatitude in fine).

Cāndramāna Yugādi	**Dr. K. S. Kannan**
Śrīvilambi Saṁvatsara	Academic Director
(18th March 2018)	and
	General Editor of the Series

[Sanskrit Synopsis of a Sanskrit Paper]

।। सम्पादकीयम् ।।

"निरन्तर-**रसोद्गार**-गर्भ-सन्दर्भ-निर्भराः ।
गिरः कवीनाम् जीवन्ति न कथामात्रम् आश्रिताः ।।"

संस्कृतभाषया लिखितवतो विदुषो गणेशस्य लेखनस्य संक्षिप्तावलोकनम्

संप्रुटेऽस्मिन् प्रोफेसर् षेल्डन् पोल्लाकाख्यस्य विदुषो "रस रीडर्"(Rasa Reader)-अभि-धस्य पुस्तकस्य विमर्शनं विदुषा गणेशेन विहितमस्ति । विमर्शनमिदं तावदूनषष्टिपुटात्मक-पोल्लाक-प्रास्ताविकमात्रं लक्ष्यीकरोति ।

पाश्चात्त्येषु विपश्चित्सु नाम कतिचनैव कृतिनः काव्येषु शास्त्रेषु च भारतीयेषु लब्ध-प्रवेशाः; बहुलास्त्वाविल-मतय आविद्धबुद्धयो दुर्विदग्धास्स्वकीयेतरसकलजनपदकविजनशास्त्रकृत्-समुदायकुत्सनमात्रसमुत्सुकाः पौरोभाग्यमेवाहोभाग्यं मन्वाना दूषणैकधिषणा विराजन्ते । तादृक्षेषु कौटिकेषु कूटस्थानमलङ्कुर्वन् पोल्लाकाख्यो विद्वत्तल्लजो वरीवर्ति; प्रधानमल्ल-निबर्हणन्यायेन यदभिप्रायाद्रिपक्षविपक्षीकरणचणकुलिशायितशेमुषीका नैक इह विद्वांसो भारतीयाश्श्रीमद्राजीवमल्होत्रप्रणीत-ग्रन्थराश्यध्ययन-चलच्चित्रक(विडियो)स्तोमपरि-वीक्षणप्राप्तस्फूर्तिकाः ।

उपक्रम एव शोभनं क्रममाद्रियमाणो गणेशो हिरियण्ण-नरसिंहभट्ट-गुण्डप्प-प्रभृतीन् काण्णाटान् कांश्चन विदुषोऽन्यांश्चानन्दकुमारस्स्वाम्यग्रवालाद्यग्रगण्यान् मान्यान् भारतीय-कलाविषयकपरिशोधनकृततीर्थान् संस्मृत्य, प्रतीपमतेः पोल्लाकस्य विततानि विततथानि मतजातानि प्रकर्षेण दूषयितुं प्रतिष्ठमानो नरसिंहभट्टनिर्दिशितेन निशितेन नयेन प्रवक्तुमुचित-तमिमिति प्रतिजानीते ।

अलङ्कारशास्त्रप्रतिपादितभावतत्त्वमधुनातना वैज्ञानिकाः केचन मस्तिष्कमध्यसम्भवद्-विद्युत्-प्रचार(synapses) सञ्जायमानरासायनिकक्रिया(chemical reactions)मात्रप्रपञ्चमिति प्रचक्षते । तदाख्यानप्रत्याख्यानं विदधदयं विद्वानभ्युपगम्यापि तद्धादमस्मदनुभवविदूरभूत-स्यास्य वैतथ्ययाथातथ्याभ्यामस्पृष्टत्वं शास्त्राराद्धान्तस्य ख्यापयति । एवं हि नाम प्रवृद्ध-धिषणा अपि जनास्स्वयं क्लेशमनुभवन्तः परानपि क्लेशमनुभावयन्तीति विनिवेद्यति विद्वानेषः । भौतशास्त्रस्तोमसरणी रैखिकेति(linear) च भावशास्त्रसमूहसृतिश्चाक्रिकीति (cyclical) च विध एते विविच्चन्नौपम्यसारतां च पद्धत्योरमुयोरुपस्थापयन, भौतशास्त्र (physics)वर्तनीमतिवर्तते रससिद्धान्तपद्धतिरिति च दर्शयति । अत एव भरतान्मुने-र्वाचीना अपि भरतनिरूपितानि प्रमेयाणि विप्रतिपत्तिं विनैवोररीकर्तुं प्राभवन् । नहि भरतोदितनाट्यशास्त्रीयभाषासारल्यमेव हेतूकृत्य शास्त्रस्यैव शैशवावस्थाद्योतकत्वं तदिति मतमास्थातुमुचितं भवेत् । यतो हि तथात्व इतिहासपुराणादिष्वप्युक्तहेतुमेवाधारीकृत्य

तत्त्वदर्शनचुञ्चूनामस्तित्वरूपमलीकतमं मतं ततः प्रतीयेत । यथा हि नाम वैयाकरणैर्नैयायि-
कैश्चायुर्वेदीयौषधविषयको महानादर उपमात्वेनोपस्थाप्यते स्वस्वशास्त्रश्रद्धार्हतविषये, तथैव
नयेन तेनैव रससिद्धान्तस्यापि श्रद्धेयता नामाबाधिता वरीवर्तत इति वक्ति गणेशः । न
ह्याधुनिकवैज्ञानिकनिरूपितवर्ष्मरचनाशास्त्र(anatomy)जीवद्रासायनिकपरिवर्तनकशास्त्रा-
(biochemistry)दिभिर्विषयजातैरभिज्ञानादास्पदभूतैरायुर्वेदविहितमूलिकासेवनातस्स-
म्भवन्ती गदसमूहविनिवृत्तिर्व्याहन्येत ।

भारतीयजीवनक्रमे   तावल्लौकिकपारमार्थिकावपरस्परमिलितावनुपलभ्यौ   जातुचिद्रपीति
विद्रन्नपि पोल्लाको विग्रहैकमनस्कतया कथञ्चित्तौ पृथक्किकीर्षुः पृथग्जनमात्रादरणीयत्व एव
तृप्तिमृच्छतीति नातुच्छं विभावयन्ति विमत्सरा विद्रांसः ।

वैदिक्या हि पद्धतेस्सकलजनपदमर्दनैकपरायणतां प्रतिपिपादयिषोरस्य पोल्लाकस्य स्वेतर-
समस्तप्रकृतिनिकृतिमात्रप्रवणमस्तिष्कस्य चिन्तनवर्त्म न हि सुपथा सञ्चरमाणानां वैदिको-
त्त्यार्जवार्थिजिघृक्षूणामनुग्रहमर्हति ।

कलाशास्त्रस्य वेदान्तशास्त्रोपजीविततात्युपपत्तिपुरस्सरं गणेशेन गदिता । ब्रह्मानन्दविपृण्-
मात्रावभासो हि रसास्वाद इति निःसंशयमसकृच्च निगदितमभिरूपतमप्रतिभानवता
शास्त्रकृन्मतल्लिकेन चाभिनवगुप्तपादेन महाज्ञानिना सुधीभिस्समेभिस्सम्मानितश्च ।

रसवद्वस्तुप्राचुर्यं सतत्त्वार्थनिरूपणमपि वाङ्मये वैदिकेऽपि लोचनगोचरीभवति सूक्ततल्लजे
पौरुषे सूक्ते, सृष्टिमूलगवेषके पुनर्नासदीये, सर्वविभूतिसमीक्षके रुद्राध्याये, द्यावापृथिव्योस्स-
ङ्गमे हृदयञ्गमे स्कम्भसूक्ते, तत्र तत्र च स्थलेष्वन्येषु । एवमेवोपनिषत्स्वपि भारतीयैः
सौन्दर्यमीमांसा समुपेक्षितेति वितथमेव कथयता पोल्लाकेन तावत् पल्लवग्राहिपाण्डित्यमपि
सङ्गीतकलाशास्त्रग्रन्थविषयकमनासाद्यापि चुलुकीकृतशास्त्रराशिनेव यन्निःशङ्कमुद्गृह्णितं तन्न
मनीषिभिस्सद्धिर्षणैरीरीषदप्याद्रियते । उद्रिक्तसत्त्वायां चित्तवृत्तौ कलाविदः स्वजनिमाभुवती
कलाकृतिः खलु तन्मयीभवनरूपसहृदयचित्तसत्त्वोद्रेकसम्पादन एव साफल्यं समाप्नुत इति
करतलामलकीकृतकलातत्त्वानामनन्तश्रद्धुषो नापरोक्षम् । अथ प्रतिभातत्त्वविभावनं न सम्य-
ग्विहितं भारतीयैः कलातत्त्वविज्ञानिभिरिति ब्रुवाणेन पोल्लाकेन कलाप्रपञ्चनिर्माणमूलद्रव्य-
स्यापि मूलान्वेषणरूपेणानवस्थादोषभाज्यविष्कृतः प्रयत्ने बहुमानो निरर्थकः । कारणं हि
सूक्ष्मरूपेण सद्विभावनीयनानागुणलक्षणं सत्स्वयं च कार्यभावमापन्नं तावत् परिगणनातीत-
गुणलक्षणसमुल्लसितं विभाति बीजवृक्षनयनेति नैतेन विभावितं विदुषा पोल्लाकेन ।

वात्सल्यविषय उद्भावितमाक्षेपममुना सरलया सरण्या निराकरणार्हं संक्षेपेण निरूपयति
गणेशः । अलङ्कारशास्त्रं नाट्यशास्त्रापेक्षयाऽर्वाचीनं मन्यमानः पोल्लाको गीतवाद्यनृत्यमये
सङ्गीते सङ्गमं त्रितयस्य जानन्नपि न तत्त्वतो विभावितवानिव विभाति । प्रयोगत्वमनापन्नं
काव्यमनास्वाद्यमवशिष्यत इति काव्यं सर्वमपि सर्वान्तरङ्गभूते चित्तरङ्गस्थले नाट्यायत
एवेति वेदितुं नाटाव्यमानताऽपेक्ष्यते खलु । कारयित्र्या भावयित्र्याः प्रतिभाया उभय्या
आलयं यद्यपि भवति कविव्यपदेशभाक्, कविसहृदयावुभावपि भावयित्र्या ह्यवश्यमाकरौ
भवत इत्यतो भावयित्र्या एव प्रगाढत्वं विचक्षणानां प्रत्यक्षो विषयः। कवनसमये

जागरितरजःसंस्पर्शवतः कवेरपेक्षया स्वदनसमयसमुपजातसत्त्वोत्सोदयः सह्रदय एव परमामर्हणामर्हतीति तत्त्वार्थममुं पर्यनुयोक्तुं विदितवेदितव्यः को नाम प्रभवेत् ?

अथ च भारतीयकाव्यपरम्परा बौद्धमतप्रोद्धूतेति संभावनापि नाम पोल्ळाकस्यैव कौटिल्य-वैकल्यभ्रान्त्यादीनां सूचक इति सुष्ठु सूचयति श्रीमान् गणेशः । यतो हि निवृत्तिधर्ममात्रचुञ्चुभिरभिहितानि तत्त्वानि कथङ्कारं काव्यकारं विनयेयुः? तथापि पाश्चात्त्यैर्बौद्धमतविषये प्रदर्शितः पक्षपातो विवेकविह्रङ्गमस्य पक्षावेव विच्छिन्द्याद्वनु? अथघघोषोऽप्यधमर्णो निरवद्यपद्यनिर्माणचणस्य कवेर्वाल्मीकेरिति विषये विज्ञैः कैर्नाम विप्रतिपन्नम्?

काव्यतत्त्वं च वेदान्तीकृतं भारतीयैरिति भाषमाणेन पोल्ळाकेन भरतकृतनाट्यशास्त्र एवाकृत्रिमवाङ्मयाधारत्वं नाट्यस्य प्रतिपादितं सदपि विक्षिप्तचित्ततयाऽनालोडितमिव विभाति ।

पोल्ळाकं ग्रन्थारण्यगन्धेभं ब्रुवन् गणेशःस्वभावोक्तिरसिकत्वेनैव प्रत्यभिज्ञायते विमर्शन-विचक्षणैः । रससिद्धान्तमेव यातयामामित्याक्षिपतः पोल्ळाकस्य रसवैमुख्यमेव मुख्यं लक्षणमिति भाति । "अभिनिवेशवशीकृतचेतसां बहुविदामपि सम्भवति भ्रमः" – (किमु वक्तव्यं मन्देतरमात्सर्यमलीमसमानसानाम) इत्यभियुक्तैर्भणितस्याव्यभिचरितत्वैव प्रतिष्ठापिता स्वचरितैः पोल्ळाकेनेति प्रतिभाति ।

विनयवाग्भिर्ग्रन्थं समापयन् पोल्ळाकः स्रगाभासपरिपूर्त्यै कण्टकमालामध्ये नम्रताकुसुमग्रथनोत्सुको लक्ष्यत इति लक्षयन् स्वविमर्शमन्याद्दृशं समाप्तिमापयति शतावधानी गणेशः । विपक्षप्रतिक्षेपं गणेशस्येत्थं संक्षेपेण विनिवेद्य विरमाम इति शम्।।

*** *

"...रसादृते ।
प्रविशति हृदयम् न तद्विदां
मणिरिव कृत्रिम-राग-योजितः ॥"

<div style="display:flex; justify-content:space-between;">
चान्द्रमान-युगादिः **डा. के. एस्. कण्णन्**
</div>

चान्द्रमान-युगादिः   **डा. के. एस्. कण्णन्**
श्रीविलम्बि-संवत्सरः   शैक्षणिक-निर्देशकः
(१८ मार्च्-मासः २०१८)   प्रधान-सम्पादकश्च

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Chapter 1

Rasa Theory: Changes and Growth[*]

– *Naresh P. Cuntoor*

(nareshpc@gmail.com)

Abstract

This paper analyses Pollock's *Rasa* Theory which is seen through
a perspective of changes. The analysis focuses on three recurring
themes in Pollock's writings: change in *rasa* conceptualization from
literature-seen and literature-heard, changes in the framework to
describe *Rasa* Theory, and change in *rasa* localization. The paper
then discusses Pollock's tentative attempts at providing a scientific
perspective to *Rasa* Theory. To provide better contemporary scientific
context, the paper describes certain ideas of perceptual aesthetics
in modern computational and cognitive sciences. Active research
in reductionism, memory models and perceptual psychophysics
continue to sharpen our understanding of how the mind perceives and
recollects what is considered interesting or beautiful. If *Rasa* Theory
can be further understood in this context, its contribution may be
better appreciated.

Introduction

Rasa has been a significant area of interest over several centuries in Indian literary analysis. From Bharata to modern day Sanskrit scholars, the theory of *rasa* has been studied under the formalisms of Mīmāṁsā, Vedānta and Bhakti traditions. The formalisms have sharpened our understanding of the contribution of *rasa* theorists. As a result of the insight gained through analysis, we are often better-equipped to appreciate the poet's imagination. The primacy of *rasa* has been debated in the context of several concepts of literary analysis such as *alaṅkāra*, *dhvani* and *aucitya*. It is thus unsurprising that *rasa* has attracted attention of Prof. Sheldon Pollock, whose works in several Sanskrit-related topics have been influential.

This paper has two main objectives: to summarize Pollock's perspectives on *Rasa* Theory, and to outline areas of study in modern cognitive and computational aesthetics. The latter is motivated by his discussion of the science and history of *rasa* (in Pollock (2012)). Insofar as the first objective is concerned, only the main arguments related to Pollockian claims are discussed. Lengthy quotations are avoided for the sake of brevity (without, hopefully, sacrificing clarity).

At the outset, we have identified three broad themes for discussion: the evolution of *rasa*, the formalisms used to describe *rasa*, and the discussion of science and history of *rasa*. There are other themes that merit investigation as well. In particular, it may be interesting to discuss the aims of *rasa* and how the evolution of the types of *rasa*-s and *bhāva*-s may contribute to changes in aims of *rasa*. Further, the ways of depicting *rasa* and potential flaws in its depiction may merit closer study. Both these aspects are addressed in Pollock's writings. We chose to focus on three themes of *rasa* evolution, formalism and *rasa*-related science — in order to limit the scope of the paper.

The paper is organized into three sections. Section 1 discusses three types of changes and their impact on societal and cultural constructs. Section 2 describes the different frameworks under which *rasa* has been described, and their implications. Drawing from cognitive neuroscience, computational aesthetics, reductionism and Pollock's analysis, Section 3 discusses potential future work in the context of *Rasa* Theory. The paper concludes with questions that may merit response from traditional Sanskrit scholars to address Pollock's analysis.

Rasa through the Prism of Change

A recurring theme in Pollock's treatment of *rasa* is to identify revolutionary changes in the development of the theory. Revolutionary changes, real or hypothesized, are highlighted more strongly than gradual, evolutionary and natural changes. Some of these discussions are echoed in discussions of Sanskrit in Pollock (2006) as well. A few examples of the changes discussed are introduced below:

1. Fundamental differences between literature-seen and literature-heard, and their implications on *rasa*
2. Expression of *rasa* in the sense of *rasa*-laden statements to its full realization
3. Change in *rasa* localization

Changes from Drama to Poetry

One of the main elements of Pollock's *rasa* analysis is the identification of a "fundamental" difference between literature-seen and literature-heard (*dṛśya-kāvya* and *śravya-kāvya*). The distinction and its implication on *Rasa* Theory is developed in several steps as outlined below (Pollock 2012):

1. Sanskrit texts themselves recognize the two forms of literature (seen and heard).
2. The two forms are said to be fundamentally different so that they require different forms of analysis.
3. *Rasa* analysis in Sanskrit literature began with literature-seen.
4. *Rasa* analysis eventually evolved so that it could be applied to literature-heard.
5. The analytical evolution of *rasa* from literature-seen to literature-heard should have required significant development in *Rasa* Theory. The steps and characteristics of evolution have thus to be identified.

The key points used to substantiate the above set of arguments are described next, beginning with Pollock(2012)'s claim that the

two forms of literature are fundamentally different. This is a key assumption upon which Pollock's change-based perspective of the evolution of *Rasa* Theory has been built. The differences need to be fundamental and significant enough to merit a separate analysis of *Rasa* Theory for the two forms of literature. If the difference is merely superficial, then it would be difficult to assert the main claim of Pollock (2012) which is that the development of *Rasa* Theory required a substantial change — substantial enough to merit a change in *rasa* ontology and epistemology — to the theory.

Evidence for Fundamental Difference between Literary Forms

Three specific instances are offered as proof of fundamental difference between the two forms of literature. Firstly, Bhoja recognizes that *rasa* is present in both literature-seen and literature-heard (*Śṛṅgāra-prakāśa* 1.12). Moreover, Pollock (2012) opines that "...not only were the two genres categorically differentiated; they were often radically opposed..." To justify the claim, Bhoja's remarks in *Śṛṅgāra-prakāśa* (1.12) are presented. Here, Bhoja considers poets and *kāvya* to be more praiseworthy than actors and acting. Whereas actors can portray *rasa* right before one's eyes, poets allow the audience to experience the *kāvya* more fully.

Secondly, Pollock (2012) quotes an anonymous verse which has been "cited by Śrīdhara while restating Bhoja's view" to provide a stronger reason for treating *rasa* in literature-heard as superior to that of literature-seen, viz., the range of narrative power in literature-heard.   Thirdly, Abhinavagupta's diametrically opposite view in *Abhinavabhāratī*, which takes the side of actors over poets, is discussed. Being a commentary on the *Nāṭyaśāstra*, it is natural to expect a biased treatment of actors and acting. But Pollock (2012) does not explain why this bias should be discounted. Instead, it quotes Abhinavagupta explaining his justification for holding drama (in any of its ten forms) as the best literary form.

It is indeed interesting to understand how the difference in perspectives held by Bhoja and Abhinavagupta, even when seen in the context of their own literary biases, can provide insight into different forms of literature. That is not the context within which we encounter

the discussion of the two literary forms in Pollock (2012). At any rate, based on the three reasons described above, Pollock (2012) asserts the fundamental difference in the two forms of literature before turning to the development of *rasa.*

If there is a fundamental difference in the literary forms, then their *rasa* analysis must also be different. With its greater range of narrative capability, Pollock (2012) argues that literature-seen can support *rasa* development that literature-heard cannot. In particular, an increase in the number of *rasa*s is offered as a direct consequence of the extension of literature-seen *rasa* to literature-heard *rasa.* The dispute over the number of *rasa*-s is then described in the context of the hypothesized extension in *Rasa* Theory.

Before turning to the implications of differences in the two literary forms on *Rasa* Theory, it is instructive to read Bhoja's comments in context which is not provided in Pollock (2012). Bhoja considers *sāhitya* to be more praiseworthy than word and meaning, and then goes on to describe the relationship between the two. Seen in this context, Bhoja's comments may be seen as a discussion of difference between the visible and beyond-visible entities. Seen in context, it is difficult to arrive at Pollock (2012)'s conclusion that Bhoja recognized a fundamental difference between the two forms of literature.

Differences in Literary Forms and their Implication on *Rasa* Theory

The oldest extant text on dramaturgy in India, Bharata's *Nāṭyaśāstra* discusses virtually every component of dramatic performance including actors and audience, acting and theatrical devices, and language and suitability. Pollock (2016) describes Bharata's contribution and reminds the reader about long-standing questions that have occupied traditional scholars. The questions include the seemingly "disconnected components" of *bhāva*-s and related factors, the number of *rasa*-s, and the localization of *rasa.*

In context of his treatise, Bharata describes the types and characteristics of *rasa*-s. But he does not consider the question of whether *rasa* was the exclusive domain of drama. Having asserted that the distinction between literature-seen and literature-heard was "clearly

established from a relatively early date," Pollock (2012) goes on iden-tify Rudrabhaṭṭa (circa 10th c. C.E.) as the first and only in the tradition to infer the development of *rasa* from drama to poetry.

Between Bharata and Rudrabhaṭṭa, Pollock (2012) and Pollock (2016) discusses the role of poets and theorists such as Daṇḍin, Bhāmaha and Rudraṭa in the development of *rasa*. Pollock concludes that in the view of Bhāmaha and Daṇḍin, the representation of emotion is secondary to *alaṅkāra-s*. In this intervening period between Bharata and Rudrabhaṭṭa, Udbhaṭa is hailed as the most significant *Rasa* Theorist.

Changes in *Rasa* Expression

In Pollock (2016), Udbhaṭa's treatment of *rasa* is said to be a final blow to the existing notions of *rasa* expression. This is indeed a valuable insight to gain if it stands scrutiny. Next we shall describe the arguments presented in Pollock (2016) to highlight Udbhaṭa's role:

> Udbhaṭa's treatment of aesthetic emotion marks the final—and by now contradiction-riddled—stage where the conceptual framework of the older rhetorical analysis ... was stressed to the breaking point. And Udbhaṭa nearly broke it. He radically redefines the earlier notions of Bhāmaha and Daṇḍin, formulated when dramaturgical *rasa* theory had yet to be fully adapted to poetry, and masterfully assimilates them to ... the classical typology... Thus, the ornament known as the "*rasa*-laden" statement, earlier viewed as heightened or climactic emotion, now explicitly becomes the "full realization" of *rasa*, with the complete panoply of aesthetic elements (the foundational and stimulant factors, and the rest).   Pollock (2016:73)

Now let us see how the prior "contradiction-riddled" stage is described. The treatment of *rasa* by Bharata, Bhāmaha and Daṇḍin are presented as follows. Pollock (2016) quotes Bharat's view as "*rasa* arises from the conjunction of factors, reactions, and transitory emotions," and gives the taste analogy used to explain *rasa*. Then, Bharata discusses why only stable emotions become *rasa*s, and concludes that "Stable emotions become the master, and the transitory emotions become subservient..."

> [343] Here one might ask: If the *rasa*s arise from the forty-nine emotions connected with the subject matter of a literary work, when these emotions are manifested by the factors and the physical reactions in

combination with their common properties, why is it only the stable emotions that are said to become *rasa*s? Our answer is as follows: Just as human beings, despite the fact that they have common physical traits, similar hands and feet and torsos and frames, and common major and minor limbs, will become, some of them, kings by reason of their family...

<div align="right">Pollock (2016:64)</div>

Then, Bharata discusses the role of psychic sensitivity:

[373.3] Here one might ask whether the acting out of the other emotions is supposed to happen without psychic sensitivity, such that only these responses should be called psychophysical. My answer is as follows. Psychic sensitivity as defined here is something that arises from the mind; it is said to be the mind in a state of heightened awareness, since the psychic sensitivity arises when the mind is thus aware.

<div align="right">Pollock (2016:65)</div>

After quoting the above discussions of Bharata, Pollock (2016) mentions that Bhāmaha took "a radically different view." The difference seems to be that Bhāmaha "does not even treat *rasa* as a separate topic" in his work on poetics, or more precisely, ornamentation. The lack of treatment of *rasa* is said to be symptomatic of a lack of clear conceptualization of *rasa*. Had the significance of *rasa* expression been understood more clearly, the argument goes, the emotion tropes of Bhāmaha would have captured *rasa* more fully instead of discussing a list of ornaments. A similar criticism is made of Daṇḍin as well. However, Daṇḍin clearly recognizes *rasa*-s as described by Bharata.

This is said to be the contradiction-riddled stage which led to a clear break with Udbhaṭa. It would be interesting to get a clearer understanding of contradictions in *Rasa* Theory at the time of Udbhaṭa, and how they were resolved in Udbhaṭa's treatment.

Change in the Localization of *Rasa*

In describing Bhaṭṭa Nāyaka's contribution to *Rasa* Theory, Pollock (2009) begins by recounting the prevalent consensus of *rasa* as "a phenomenon pertaining to the characters, not the spectators. In this conception, *rasa* meant the emotional response in the hero or heroine." Pollock (2009) does not try to show a monotonic change from *rasa* as something that pertains to characters to something

that pertains to the audience. Instead it traces a checkered history of various theorists' description of *rasa* localization. I shall briefly recount that description next.

According to Bhaṭṭa Lollaṭa, *rasa* is something that "comes into being" in the characters. "Śrī Śaṅkuka was the first to argue from the spectators' point of view" to a certain extent when he propounded the *anumati-pakṣa*, which takes the position that *rasa* can only be inferred from the imitation of drama. Dhanañjaya and Dhanika however, state much more clearly that *rasa* belongs to the spectator experiencing the *rasa*, because he is alive and present, and not to the character. Bhaṭṭa Nāyaka then uses the framework of Mīmāṁsā to describe his *Rasa* Theory (Pollock 2009). Pollock (2009) makes a strong case for Bhaṭṭa Nāyaka's contribution in localizing *rasa* in the spectator, using his notion of *bhāvanā* as a literary phenomenon. This discussion relies mostly on the characterization of theorists who followed him because Bhaṭṭa Nāyaka's original writings are sparsely available.

While highlighting Bhaṭṭa Nāyaka's contribution however, several factors are not discussed, though they are mentioned elsewhere. I shall mention three factors. Firstly, the role of the audience is clearly recognized in the *Nāṭyaśāstra* itself which discusses the different types of audience in chapter 27. Had the focus of drama and *rasa* been on the characters themselves, it may be argued that the discussion of audience and their varying levels of comfort are superfluous. Secondly, Śaṅkuka's example of the painted horse which is mentioned in Pollock (2016:82) is described perhaps as the first instance of applying the notion of *rasa* across poetry and painting. It would seem that such an application across art disciplines is more striking than application across two forms of literature, drama and poetry. So the reader would be interested to understand the primacy of *rasa* extension of drama to poetry, over that of painting. Thirdly, let us consider the following position of Śaṅkuka:

> When the sage states, "Whether rasa precedes emotion or emotion rasa is a function of the nature of the case: in the course of a dramatic performance, while relishing the rasa in the actor, viewers apprehend the stable emotion in the character," he is affirming the first option. In the actual world depicted in the drama, however, it is as a result of the character's first seeing "emotion" that its essential form, namely rasa, arises.]   Pollock (2016:85)

Here Mammaṭa recounts Śaṅkuka's position as follows:

> Shri Śaṅkuka's position is as follows. The stable emotion is inferred to exist in the actor, whom we grasp by a mode of comprehension different from all four normal forms of apprehension.... This inference arises from a "conjunction"—that is, an inferential relationship—of three elements: (1) a cause, which is designated by the term "foundational and stimulant factor"; (2) an effect, which is designated by the term "reaction"; (3) an auxiliary cause, which is designated by the term "transitory emotion." The first is distinctly comprehended from the literary narration itself, such as in the following verse, where we have a foundational factor for the erotic rasa enjoyed. Pollock (2016:85)

In this section, it is clear that the viewers are responding to the dramatic performance as depicted by the actor. And Śaṅkuka gives a possible explanation of the relationship between *rasa* and the stable emotion. He closes by noting that "the erotic *rasa* is enjoyed." In other examples, other *rasa*-s are similarly discussed. From the context of the commentary, it seems that the *rasa* is enjoyed by the viewers. If that is not the case, a detailed discussion of Śaṅkuka's and others' arguments would merit a thorough examination before asserting a clean break between *rasa* in characters and *rasa* in viewers.

Consequence of Shifting *Rasa* Localization

One of the consequences of localizing *rasa* in the viewer rather than the character is that questions of manifestation or creation are rendered moot. However that still leaves the question of how *rasa* is recognized by the reader. In the context of Ānandavardhana, Pollock (2016) describes how its consideration is missing thus:

> More important, he never addresses the question of how the reader knows or experiences it. We are justified in inferring from this loud silence that for Ananda, none of these questions mattered, and that the phenomenon of *rasa* was basically unproblematic. He conceived of it as his predecessors had; the great insights that would transform aesthetic theory were a generation away. For all his remarkable insight into how literary meaning is engendered, Ananda plainly had no interest in how it was experienced, and in this he conformed to the formalistic analysis that he inherited. Pollock (2016:89)

This is a question that was considered by Mahima Bhaṭṭa as noted below.

> Mahima agrees that in the final analysis *rasa* is an "experience of rapture on the part of the responsive viewer/reader," but the only possible application of the term "manifestation" to that process, he argues, is a figurative one. What actually happens is that we infer *rasa* from the aesthetic elements; hence, though these elements do not "manifest" *rasa*, the use of "manifestation" in a figurative sense may be allowed as pointing toward the uniqueness of the final experience. It is toward establishing the limits of this figurative usage of "manifestation," in addition to denying its literal use in favor of inference, that Mahima Bhaṭṭa's efforts here are directed.   Pollock (2016:103)

Further, Pollock (2016) corrects Jagannātha's understanding of Bhaṭṭa Nāyaka's contribution as follows:

> Jagannātha argued that Bhaṭṭa Nāyaka's "experientialization" is no different from the doctrine of "manifestation," he was correct but had things reversed: "manifestation" became no different from "experientialization" once the original doctrine of Ānandavardhana, designed to explain the linguistic phenomenon of *rasa*, had been recoded by Abhinavagupta into something intended to approximate experientialization, thanks to his appropriation of Bhaṭṭa Nāyaka's own doctrines.   Pollock (2016:134)

It is interesting to note that considerations of stable emotions and *rasa* find clear resonance in current research in sentiment analysis and opinion mining (Liu, 2012). Building on the analysis of Pollock (2016), it is possible that further study based on computational techniques could shed further light on the contribution of the shift in *rasa* localization.

Rasa Seen Through Different Formalisms

Over time, *Rasa* Theory came to be expounded under the framework of different formalisms. Pollock delves in details of a few frameworks including Mīmāṁsā, Vedānta and the Bhakti movement.

Mīmāṁsā Framework

The Mīmāṁsā framework of *Rasa* Theory is largely credited to Bhaṭṭa Nāyaka's and Abhinavagupta's *rasa* theories (Pollock (2009), Pollock (2016)). The three elements of Mīmāṁsā Śāstra, viz., *sādhya*, *sādhana* and *itikartavyatā*, for analyzing a scriptural statement are described as follows: (1) what is to be produced by action, (2) whereby it is to be produced, and (3) how it is to be produced. Based on the available

fragments of Bhaṭṭa Nāyaka's work (and subsequent commentators' descriptions of Bhaṭṭa Nāyaka), Pollock (2009) surmises that he extended the Mīmāṁsā analytical framework to literature.

Pollock (2009) takes up the difficult task of analyzing Mīmāṁsā's influence on Bhaṭṭa Nāyaka. The difficulty arises because of two main reasons – Bhaṭṭa Nāyaka's writings are available in scattered fragments that do not lend themselves to forming a complete picture of his theory, and his personal philosophical allegiance is unknown. We do not know the type of Mīmāṁsā to which he subscribed. As mentioned in Pollock (2016:51), it is not clear whether Bhaṭṭa Nāyaka subscribed to the Kumārila school, Prabhākara school, or some other. Hence the terminologies invoked remain somewhat unclear.

Incidentally Pollock (2009) does not mention the Mīmāṁsā framework used in grammar by Bhaṭṭoji Dīkṣita which could perhaps more clearly explain its applicability in the *rasa* context.

The Revolutionary Bhaṭṭa Nāyaka

Now let us turn to Bhaṭṭa Nāyaka's contribution as discussed in Pollock (2009). Bhaṭṭa Nāyaka argues that *rasa* is neither something that comes into being nor is the content of perception (directly seen or inferred). Instead, Pollock (2009) surmises that Bhaṭṭa Nāyaka uses *bhāvanā* analysis to explain what literature produces, whereby and how. It relies on Dhanika's depiction of Bhaṭṭa Nāyaka's arguments because of the lack of availability of Bhaṭṭa Nāyaka's original material. Dhanika is said to have described Bhaṭṭa Nāyaka's argument thus: the purpose of the language of literature is to bring about pleasure. Quoting Dhanañjaya and Dhanika, the passage discusses *bhāvanā* as a literary phenomenon in experiencing *rasa* (Pollock 2009:152). Secondly, the passage discusses the relationship between *rasa* and aesthetic elements.

In the source material (*Daśarūpaka* 4.37), the discussion begins with whether *vākyārtha* (sentence-level meaning) can be construed even in the absence of explicitly stated *padārtha* (word-level meaning). Using examples of daily usage, Dhanañjaya explains that it is indeed possible to discern sentence-level meaning even when all the words are not articulated. This occurs because action-oriented intention can be conveyed even without enunciating all the words. He then applies this

analogy to *rasa*, and explains that *rasa*-s take the place of sentence-level meaning, and *vibhāva*-s and other elements assume the role of word-level meaning.

Pollock (2009) describes the above passage to motivate Bhaṭṭa Nāyaka's concept of *bhāvanā*. Modelled on the scriptural form of *bhāvanā*, there are three components: literary expression, a special type of reproduction, and its experientialization, i.e., *abhidhā*, *anyā bhāvanā* and *tadbhōgīkṛti*. Bhaṭṭa Nāyaka uses *abhidhā* in more expansive terms than its traditional usage (Pollock 2009:153). He brings out a crucial difference between literary expression in scriptural language and that in historical narrative. In the former, "the Veda more important for *how* it says that *what* it says", whereas in the latter, "*what* it says is more important that *how* it says." When both word and meaning become secondary, and the aesthetic process has primacy, we call it literature (Pollock 2009:154).

The literary expression is then conveyed through a special type of reproduction so that the audience can fully participate in the literary work. The special type or reproduction is referred to by several names – *bhāvakatva*, *anyā bhāvanā* and *sādhāraṇīkaraṇa*. This then leads to the third and final component of Bhaṭṭa Nāyaka's model, *bhoga* or the *rasa* experience. Also referred to as *bhōgīkṛttva* or [*tad*]*bhōgīkṛti*, it signifies a complete experience of the various emotions involved in the literary work. Pollock (2009) mentions the different types of experience described by Bhaṭṭa Nāyaka, Abhinavagupta and others.

Having thus described Bhaṭṭa Nāyaka's Mīmāṁsā-based formalism, Pollock (2009) then explores deeper connections of the formalism with Mīmāṁsā. More specifically, the discussion turns to the location of *rasa*, using Abhinavagupta's characterization of the subject. The new formalism of *bhāvanā* that we encounter is of an enhanced nature which is located in the agent, rather than the language (Pollock 2009:160). At this juncture Pollock (2009) surmises that Bhaṭṭa Nāyaka must have thought of the revolutionary idea of *sādhāraṇīkaraṇa* or commonalization of experience to explain how *rasa* is conveyed to the audience. It also chastises Abhinavagupta for being an "ungrateful disciple" of Bhaṭṭa Nāyaka. With the concept of *sādhāraṇīkaraṇa*, the problem of whether *rasa* is engendered, inferred or manifested in the character is rendered moot, because *rasa* now becomes the subjective experience of the reader (Pollock 2009:162).

Thus the expression-reproduction-experience triad of Mīmāṁsā provides a formalism to describe *rasa*, and explain its subjective nature.

Rasa through Vedānta and Bhakti

Pollock's explanation of *rasa* within the Vedānta framework seems rather sparse given its influence in current discourse. Three main sources are used to describe "Vedanticized *rasa*" in Pollock (2016) — Viśvanāthadeva, Jagannātha and Nāgeśa Bhaṭṭa. It is not clear why the Vedantic descriptions of earlier theorists like Śaṅkuka who used the analogy of a painted horse to describe the real/unreal/undecided states, are not included in the discussion, even though it is discussed in other contexts. Describing the contribution of Viśvanāthadeva, Pollock (2016) says: Viśvanāthadeva is the first to speak of aesthetic experience as a "removal of the veil of unknowing," followed by a state of pure, joyful awareness. This is the core idea Jagannātha picks up attributing it not to Viśvanāthadeva but to Abhinavagupta, though Abhinava's notion of "manifestation" never explicitly refers "to the consciousness of the viewer from which obscuration has been removed."

Explaining Nāgeśa Bhaṭṭa's view of *rasa* within the Vedānta framework, Pollock (2016) refers to the *mithyā* / undecidable state. The description of *rasa* within the Vedānta framework being very brief, does not contain a clear explanation of the impact of the Vedānta viewpoint compared to say, the Mīmāṁsā viewpoint of *rasa*. This would be especially useful to the reader because a large portion of the passage quoted from Viśvanāthadeva (2016:260-1) is drawn from, and consistent with the Mīmāṁsā viewpoint. It is only in the latter parts of the description that a distinction from the Mīmāṁsā viewpoint is hinted at to conclude that "*rasa* is defined as a sense of self, or ego, or passion, and ... makes literature beautiful." Further the self-illuminating nature of *rasa* is then mentioned drawing on the Vedantic notions of creation and knowledge.

Similarly in explaining Jagannātha's viewpoint, Pollock (2016) starts with an elaborate narration of Jagannātha's personal history, while not clearly explaining his unique contributions to *Rasa* Theory. Two broad themes in Jagannātha's treatment of *rasa* are outlined — the Vedānta framework and his refutation of the Bhakti tradition.

In an interesting formulation, Pollock (2016:82) sees a way to explain Śaṅkuka's contribution through the Mahāyāna Buddhism framework. This is stated in the context of the development in understanding the tragic *rasa*, as seen through Abhinavagupta's writings. The Buddhism framework and its *rasa* connection is mentioned in Pollock (2012) as well. In both places however, the Buddhism connection is mentioned in passing.

Next, let us briefly consider *rasa* in the Bhakti tradition. In the series of examples in Pollock (2016:71-73), the notion of *rasa* in the sense of Bhoja (*yō-bhāvanā-patham atītya ... svadate sa rasaḥ*) still holds. This is the same notion used in the Rūpa Gosvāmin Bhaktivedānta tradition as well —

> *vyatītya bhāvanā-vartma yaś camatkāra-bhāra-bhūḥ.*
> *hṛdi sattvōjjvale bāḍhaṁ svadate sa rasō mataḥ..*
>
> (*Śrī Bhakti-rasāmṛta-sindhu* 2.5.132)

("That which becomes even more intensely relished in the heart made bright with *hlādinī* and *saṁvit śaktis* (attainment of *bhāva*), after surpassing the stage of distinguishing the constituent *bhāvas*, and which becomes more astonishing in bliss than *bhāvas*, is *rasa*.")

In all formulations under which *rasa* has been studied, it would be of interest to know elements that are carried forward, those that change and the resulting implications. If one of the main implications of the Mīmāṁsā framework is that it allowed Bhaṭṭa Nayaka to explain the subjective nature of *rasa*, it would be of interest to know whether the Vedānta and Bhakti formalisms offered new insights into concepts in *rasa* or its contribution.

Scientific Approach to *Rasa*

In Pollock (2012), the science and history of emotions are discussed in an attempt to trace the evolution of *rasa*s. Its discussion and further speculative thought in this section is not an attempt to infer modern scientific notions from ancient knowledge or an effort to assert that ancient Indians discovered everything before modern science. Rather the motivation is to determine whether we can gain new insights into *Rasa* Theory using the perspective of modern notions of cognitive and computational aesthetics. As we have seen before, *rasa* has been

discussed using the framework of different formalisms. Continuing in this tradition, it would not be surprising to analyze concepts in *Rasa* Theory through the prism of modern theories in perception and cognition.

The discussion in Pollock (2012) deals primarily with the history rather than the science of how *rasa*-s are understood in the Indian tradition. In this sense, Pollock (2012) can be used as a starting point to examine the applicability of modern theories in the study of *rasa*. In this section, I will describe briefly some ideas in today's scientific understanding of aesthetics, and summarize the historical discussion in Pollock's *rasa* writings. Without attempting a comprehensive review of scientific advancements, I shall attempt to highlight some key ideas and their impact.

Computational Aesthetics is an active area of research in several fields such as cognitive neuroscience, computer vision and machine learning. The aims of the streams of research are different. Whereas neuroscience attempts to understand the cognitive and neural processes involved in sensing and perception, computational techniques in vision and learning are interested in sentiment analysis and prediction. The following set of broad themes in research may be considered relevant to the study of *rasa*:

1. Memory – types of memory, duration and recall.
2. Perceptual organization
3. Empathy
4. Sentiment analysis and emotion recognition
5. Abstraction and reductionism

Memory

One of the important breakthroughs in neuroscience occurred in the 1970s when Milner showed that humans have two memory systems — one that is accessible to conscious recollection and the other that is not. Before long, a consensus evolved in favor of multiple memory systems instead of a binary distinction (Squire 2004). Some of these ideas of long-term, short-term and long-short-term models of memory have shown resurgence in the field of neural networks

and machine learning (Hochreiter 1997). Memory forms a key component of human perception, storage, processing and recollection of information including what is considered interesting or beautiful.

Without attempting to present a comprehensive categorization of memory systems, we shall briefly mention some of the main types of memory systems to motivate cross-domain work in the future. Long-term memory can be of two types: declarative and nondeclarative. Declarative memory is representational in nature, and deals with facts and events; whereas nondeclarative memory occurs with the modifications that accompany tasks, habits and specialized performance systems (Squire 2004). Nondeclarative memory can be formed in various ways including procedural tasks (e.g., habits), perceptual learning, emotional or physical response, and non-associative learning. Non-associative learning refers to instances of relatively permanent change in response to stimulus because of repeated exposure.

The experimental basis for memory systems in cognitive sciences typically comes from a careful study of subjects who may have memory loss or other memory-related conditions. So the experimental setting may not readily provide a path for developing *Rasa* Theory where we are interested in normative subjects. The nature of memory systems, however, is still relevant for characterizing human understanding, response and recall.

In the context of *rasa*, nondeclarative memory systems may be of greater interest than declarative memory because *rasa* involves analysis that transcends facts and events. It may be interesting to see if discussions in *Rasa* Theory can shed light on how poets exploit differences in the types of memory. Can the distinction between persistent and transient states of *bhāva*-s be analyzed using the framework of multiple memory systems to gain a better understanding of the categorization of *bhāva*-s? If these questions, properly formulated, can be addressed using *Rasa* Theory, it would readily show that the concepts of *rasa* are not frozen in time or that its sphere of analysis is not confined to specific forms of literature.

Perceptual Organization

When presented with an image with incomplete details because of degradation, occlusion and other factors, our visual system and understanding allows us to perceive the underlying object. For example, in Figure 1(a), we are able to readily perceive a triangle even though there is no triangle drawn in the figure. In Figure 1(b) we are able to perceive a vase or two faces depending on our visual focus. These types of perceptual organization have been explained by Gestalt's principles in perceptual psychophysics (Goldstein 2009). Gestalt's laws describe principles of organization and grouping such as continuity, symmetry and good form to explain what is perceived as a whole object. They show that the mind understands visual stimuli as a whole rather than as a sum of parts, using perceptual principles. While Gestalt laws do not attempt to explain neural processes, they provide a sound basis for describing perceptual organization.

(a) Principle of reification[1]   (b) Principle of multistability
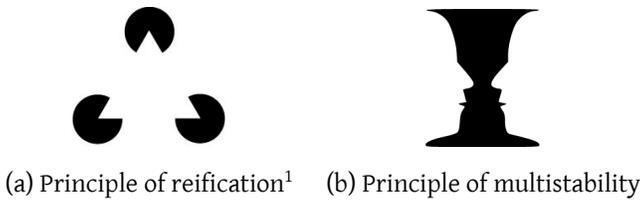
Figure 1: Illustrations of Gestalt laws

Gestalt laws of perceptual organization have also been applied to speech using principles such as auditory coherence and natural frequency (Remez 1994). The laws have been used to group speech signals and discern auditory patterns that stand out in an audio stream. Moreover they have been used to determine possible physical sources such as cochlear distortion that lead to perceptual grouping of speech.

In both speech and images, Gestalt laws have a hierarchical nature in which principles of perception appear as building blocks to gain a graduated understanding of how we understand the world around us. Further, Gestalt laws of perception also lend themselves to computational applications. With this background, it may be interesting to see if *Rasa* Theory could provide additional principles of perceptual

organization at different levels of experiencing literature – at the word and sound level, and at deeper levels of meaning and inference.

Empathy

The discovery of mirror neurons has revolutionized our understanding of action and speech (Ferrari 2009). They seem to be crucial in understanding how it is one's perception of action that leads to his actions. It provides the link between information-gathering and imitation that allows us to learn new tasks. Moreover, it is possible that it can have profound implications on our understanding of empathy (Iacoboni 2009). Going further, Anderson (2012) showed that the reaction of mating or fighting depends on the extent of stimulus, and that the same set of neurons is responsible for the activation of either of the two opposing behaviors. Supported by experimental evidence, the study of mirror neurons has profound implications in how we understand the genesis of imitation, self-identify and empathy.

Keeping the current scientific understanding in context, it is difficult to reconcile Pollock (2012)'s discussion of *rasa* in the context of *karuṇa rasa*. Quoting Johnson, Pollock (2012) says that "pity is not natural to man", and argues that Buddhists invented compassion. Before Buddhists, Pollock (2012)'s view is that the notion of pity in India did not extend to compassion and suffering in the sense promoted by the Buddha. Seen in the context of mirror neurons however, it is difficult to accept Johnson's word as the final word on our understanding of pity, which is closely related to empathy.

Modern scientific understanding of empathy does not require us to formulate a claim based on opinion of whether pity is natural or not. Instead we can formulate more sophisticated hypotheses regarding emotions such as empathy that can be tested by studying how people react. Analysis of the elements of *rasa* that can be formulated in the context of neural understanding of human behavior requires significant cross-domain collaboration. The questions may be of interest to both the scientific and Sanskrit communities because of their topical relevance.

Sentiment Analysis and Emotion Recognition

Computational Aesthetics has made tremendous progress in recent years as well (Joshi 2011). For a long time, the closest exploration

in image processing came in the form of the development of various image quality metrics to assess algorithms such as image sharpening and super-resolution.   Since then, various machine learning techniques have been proposed to predict how images are perceived, by training classifiers using large databases of images, and people's reaction to them. While some approaches may be inspired by research in cognitive neuroscience, the majority of techniques are being developed independently. Similar research is ongoing in the area of text processing as well. Automated essay grading is perhaps the most direct application of high-level textual analysis that is currently in the market. In these techniques, the subjective nature of analysis is inherent in the learning process. The algorithms use the subjective evaluation of data quality of a number of users to learn data models to predict similar labels for new images (or other sources of data).

It would be interesting to see if machine learning or other computational techniques can be applied to recognize instances of *rasa* in literature.

Abstraction and Reductionism

Bhoja's *Śṛṅgāraprakāśa* discusses several aspects of language theory at different levels — word, sentence, meaning, emotion and beyond. It is in this larger context that *rasa* finds description. Indeed, Bharata's *Nāṭyaśāstra* too, has such a larger context for dramatics. The levels of hierarchy are clearly recognized by several theorists including Bharata, Bhoja, Mahima Bhaṭṭa and others. A formal and complete description however, is not given explicitly in Pollock (2016). The absence of the contextual and hierarchical perspective is rather striking because it is an integral part of the modern scientific discourse in computational aesthetics or cognitive neuroscience.   And this discourse has been applied to the study of reductionism in art (Kandel 2016).   I shall briefly mention a few ways of how the contextual and hierarchical perspective can enhance the richness of aesthetics analysis based on the discussion in Kandel (2016).

Reductionism is concerned with exploring art in its basic, elemental form without relying on representative art. For centuries, representative art has been the norm across cultures as seen in cave paintings to sculptures to canvases on the wall. Artists in the 20th century

experimented with a certain form of reductionism by creating works of art and beauty using elemental forms such as lines, circles and color.

There is a different type of reductionism in science and mathematics where it is used as a tool of breaking complex problems into simpler forms for easier analysis and understanding. When reduced to simpler structures, the constituent elements of form and substance can be studied in detail, and implications to more complex structures can then be inferred. Once form and substance are understood, they too can be transcended in an artist's quest of aesthetic expression. Kandel (2016) illustrates this using dynamism and action in Jackson Pollock's paintings.

One may then ask whether a similar analysis is possible in literary analysis. For example, would *stotra* literature's reliance on certain meters and preference for archaic forms, even if they are grammatically incorrect, indicate a similar application of form and its transcendence in literature? Questions of form and content of *rasa* seem to be ignored in Pollock's estimation. For example, the relation between form and content of *rasa* does not seem to merit consideration:

> (D) (1.52) When one word is experienced as similar to another by reason of this or that sound, we have what is called "proximity of words," i.e., such as are comparable in form and the like. This conveys rasa, and can be combined with alliteration.

> (R) Words that have similar sounds and that are not placed far apart from each other produce rasa in poetry, because that is sweet. This is "word rasa," known as "proximity of similar words" or "sound similarity," and is much prized by southerners. Alliteration is word rasa too and is likewise prized by southerners.... Thus word rasa is shown to be of two sorts...proximity and alliteration, which can be used together but need not be. A poem lacking both, however, will lack rasa, and poets will not savor it. Pollock (2016:68)

Scientific and technological innovations are yielding new insights into human perception into aesthetics and how machines may predict our reaction to images and text. The above discussion is only a superficial glance at these ongoing developments. It would be interesting to see how *Rasa* Theory can be discussed in this context as well — just as *Rasa* Theory has been discussed under different frameworks of Mīmāṁsā, Vedānta, etc., in the past.

In the discussion of the history of *rasa*s, Pollock (2012) mentions the lack of explicit reasoning in *rasa*-related texts about why certain emotions are included in the list of *rasa*s whereas some are not. For example, while *rati*, which is the basis of *śṛṅgāra* is included in the *rasa* list, *sneha* which is the basis of *vātsalya* is not. Further, the notion of stability in emotions is discussed. Quoting Dhanañjaya, a notion of stability in the sense of emotions that are cannot be interrupted or expunged is discussed. Abhinavagupta's position on stability using the four aims of man as a basis is then criticized as not having any conceptual grounding in *Nāṭyaśāstra*. While criticizing Abhinavagupta's theory, Pollock (2012) seems to prefer a close interpretation of the original text (*Nāṭyaśāstra*, in this case), rather than superimposing a new theory, however elegant. The principle underlying the criticism is not uniformly applied, e.g., in the context of exaggerated differences between literature-seen and literature-heard.

Finally, quoting Ānandavardhana, the importance of *aucitya* is mentioned: "The one thing that can impair *rasa* is impropriety. Composing with customary propriety—that is *rasa*'s deep secret." (Pollock 2012:93). The discussion of propriety and *rasa* has received considerable elucidation by Ānandavardhana and Kṣemendra, among others. As with the discussion of form, the absence of a detailed discussion of propriety is surprising as well.

Conclusion

The contribution of Indian theorists to *Rasa* Theory has been described in detail by Pollock. In the process, several insights are seen. Among these, the role of Bhaṭṭa Nāyaka in changing the localization of *rasa*, and the difference between *Rasa* Theory in drama and poetry are noteworthy. An approach bias for change-based reasoning was shown to be a repeatedly occurring theme amongst several — especially revolutionary and radical changes. This approach runs the risk of incomplete explanation of phenomena. Pollock has brought out several aspects of *rasa* that deserve closer analysis to understand the contributions of traditional *Rasa* Theorists and poets. Moreover, his analysis motivates many questions that are worth exploring to provide historical and scientific context to concepts in *Rasa* Theory. In this concluding section, we list a few questions for future work.

1. What are the types of differences between *dṛśya-kāvya*-s and *śravya-kāvya*-s recognized in the texts and by traditional scholars?

2. What are the differences in *dhvani*, *alaṅkāra* and other poetic elements as seen in *dṛśya-kāvya*-s and *śravya-kāvya*-s?

3. If we consider a set of *dṛśya-kāvya*-s and *śravya-kāvya*-s which span a range of *rasa*-s, what are the differences in *rasa* expressed in the two forms of literature?

4. What role did the audience have in the composition and transmission of literary texts and dramas? To what extent can we infer how poets changed their approach to suit the audience?

5. In literary analysis of *rasa*, *dhvani* and related notions, are there shared examples used in exposition of ideas by analytical texts? Have *rasa*-related ideas been applied to the discussion of stock examples across different analytical frameworks?

6. To what extent has framework formalism contributed to the development of *rasa*? Or have formalisms played a secondary role in analysis, while poetry, drama and everyday usage influenced the development of notions of *rasa*?

7. To what extent has *rasa* influenced the development of philosophical formalisms? Has the analysis of *rasa* necessitated the development of ideas in Mīmāṃsā, Vedānta or other schools?

The *Rasa* Theory approach thus provides a good basis for further exploration. In addition to the above historical analysis, it may be interesting to pursue a computational theory approach of *rasa* theory because the hierarchical description of *rasa* and its constituents lend themselves to such a systematic analysis.

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Notes

[1]Lehar (2003:52).

Chapter 2

Desacralization of the Indian *Rasa* Tradition[*]

– *Ashay Naik*

(ashaydnaik@gmail.com)

Abstract

This essay explores the strategies employed by Prof. Sheldon Pollock to distort the self-understanding of the Indian *kāvya-śāstra* tradition by diminishing the importance of religious aesthetics, which forms its core part, and directing the attention of readers toward a socio-political aesthetic. He is also keen on separating Veda-s from *kāvya*. While the tradition itself appears to have been more interested in *kāvya* as the source of an aesthetic experience akin to the religious, Pollock is more interested in reading it as an expression of social power.

His principal target in this endeavour is Abhinavagupta. While the *kāvya-śāstra* tradition reveres him as a central figure for his masterful delineation of the process of *rasa* arising in the reader, Pollock seeks to reduce his significance in a variety of ways. He criticizes the *rasa-dhvani* school for their inattentiveness towards the sociality which

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allegedly forms the basis of their interpretation. He tries to show that Abhinavagupta's theory of 'readerly' *rasa* arose merely out of an attempt to save the *Rasa-dhvani* Theory from the critique of Bhaṭṭa Nāyaka. Most importantly, he tries to use Bhoja as a foil against Abhinavagupta, as a better exponent of *rasa* who was faithful to the tradition and duly recognized the social importance of *kāvya*.

This essay aims to critique Pollock's desacralization of *kāvya* by showing the connection between Veda and *kāvya*, elaborating on Abhinavagupta's religious aesthetics and showing how Bhoja's aesthetics was itself religious and contributed to the religious aesthetics of Rūpa Gosvāmin. It concludes by noting that while the indigenous *rasa* tradition is thus under pressure of being secularized, it is being appropriated by other sacred traditions, such as Indian Christianity, for the aesthetic articulation of their religious discourse.

Introduction

But the path of the critic of poetry must begin with poetry, not with theories of society.

– An Anthology of Sanskrit Court Poetry, Daniel H. H. Ingalls Sr.

Religious aesthetics is an important dimension of the Indian intellectual tradition concerning *rasa* — the aesthetic delight one experiences when one reads literature or witnesses a drama. That *kāvya* entails some kind of a divine experience is evident primarily from its connection with the Veda-s and other forms of literature such as the *Rāmāyaṇa*, which are considered sacred even if categorized as *laukika* (worldly). *Rasa* as a theological category was first elaborated by the 10th century Kashmiri scholar, Abhinavagupta, and thereafter became integral to the *kāvya-śāstra* or *sāhitya-śāstra* tradition. Pollock, on the other hand, follows the view that literature is a means of expressing and naturalizing socio-political dominance. The Indian understanding of *kāvya* in terms of a religious aesthetic contradicts his project of depicting it as a socio-political aesthetic. Furthermore, given the current post-colonial circumstances, he would like to avoid the charge of Orientalism by showing that such a depiction is free of any Eurocentric, Christo-centric bias and is compatible with the Indian understanding as such.

This essay explains how Pollock seeks to achieve his goal of desacralizing *kāvya*. **Firstly**, it shows how Pollock tries to delink *kāvya* from the Veda-s and mark its beginning from the *Rāmāyaṇa*, which he reads as a political text. He also reduces *kāvya* to *praśasti*, the eulogies inscribed by Indian kings to articulate their political will. **Secondly**, the essay notes how Pollock forces a sociological interpretation on the religious aesthetic of Abhinavagupta and the language philosophy of his predecessor, Ānandavardhana. The last two sections explain how, in order to indigenize his views, Pollock props up *kāvya-śāstra* scholars Bhoja and Bhaṭṭa Nāyaka, whose views he interprets as compatible with his own agenda, and as superior to Abhinavagupta, but whom the *kāvya-śāstra* tradition has unfairly neglected. The essay concludes by pointing out that Pollock is not alone in his attempt at desacralizing *kāvya*. Other scholars of Indian origin also share his concern.

Meanwhile, the religious aesthetic of *rasa* is being appropriated by Indian Christians to spread the gospel of Christ.

Politicizing *Kāvya* in Relation to the Veda-s, the *Rāmāyaṇa* and *Praśasti*-s

The relation between the Veda-s and *kāvya* is complex. The determination of whether *kāvya* originates in the Veda-s depends entirely on one's conceptualization of *kāvya*. Inasmuch as *kāvya* is understood as metrical compositions characterized by beauty expressed through figures of speech, one can trace its beginning to the Veda-s. However, if *kāvya* is conceptualized as *kāntā-sammita-śabda* (word of the beloved), where the expressed sense of the word is different from the intended sense, then it would have to be regarded as a literary genre distinct from the Veda-s, as the latter is understood as *prabhu-sammita-śabda* (word of the lord), where the word directly expresses the sense as a command. The former understanding i.e. of *kāvya* as metrical composition characterized by beauty, is what is generally prevalent in contemporary scholarship while the latter view i.e. of *kāvya* as *kāntā-sammita-śabda* (word of the beloved), was held by some of the scholars of the *kāvya-śāstra* tradition. Pollock (2006:3) refers to the former as *pāramārthika-sat* (absolute truth of philosophical reason) and the latter as *vyāvahārika-sat* (certitudes people have at different stages of their history that provide the grounds for their beliefs and actions). He privileges the latter over

the former for the ostentatious reason that "we cannot understand the past until we grasp how those who made it understood what they were making, and why" (Pollock 2006:3) but it is evident that the real cause is the opportunity it affords for suggesting a breach between the Veda-s and *kāvya*. Furthermore, the *kāvya-śāstra* tradition has also declared Vālmīki as the *ādi-kavi* (first poet) and the *Rāmāyaṇa* as the *ādi-kāvya* (first *kāvya*).

Pollock exploits both these facts to accomplish a desacralization of *kāvya* and its re-interpretation as a political aesthetic. Firstly, he uses the traditional discourse on the different kinds of *śabda* (word) to separate *kāvya* from the sacred Veda-s. Secondly, he depicts the *Rāmāyaṇa* as a political text, and by following the tradition in regarding it as the first *kāvya*, establishes the political nature of *kāvya*. However, his argument does not hold water, and it is apparent that Pollock has simply manipulated the tradition to suit his purpose. Distinguishing *kāvya* and the Veda-s on the basis of *śabda* does not mean that they are saying different things or addressing separate concerns. It simply means that they employ different forms of expression: what the Veda-s articulate as a direct command, *kāvya* conveys by means of rhetorical speech. It does not follow therefrom that tradition viewed the former as belonging to a sacred realm and the latter to a secular realm.

For Pollock the beginning of *kāvya* means

> "the first occurrence of a confluence of conceptual and material factors that were themselves altogether new. These include new specific norms, both formal and substantive, of expressive, workly [*sic*] discourse; a new reflexive awareness of textuality; a production of new genre categories; and the application of a new storage technology, namely, writing"

> (Pollock 2006:77)

Now, when the tradition declares the *Rāmāyaṇa* to be the *ādi-kāvya*, it does not make the claim that the aforementioned "conceptual and material factors" specified by Pollock came into being. This is his own assumption — his own *pāramārthika-sat* as it were — which he has superimposed on the *vyāvahārika-sat* of the tradition.

To be fair, Pollock does refer to the traditional basis on which the *Rāmāyaṇa* is revered as an *ādikāvya* but he does not take it seriously. It is the *śoka* (piteous cry) uttered by Vālmīki in the form of a *śloka* (verse) when he observes a hunter shoot a bird in the forest. That tradition has

fully endorsed this view is obvious from the ninth century *Dhvanyāloka* of Ānandavardhana:

> It is just this [*rasa*] that is the soul of poetry. And so it was that, long ago, grief [*śoka*], arising in the first poet [*ādikavi*] from the separation of the pair of curlews, became verse [*śloka*]"   (Ingalls 1990:113)

For one who claims to be serious about *vyāvahārika-sat*, this explanation should be more than sufficient. But not for Pollock since this explanation is completely disconnected from any kind of politics. And so expediently he turns to *pāramārthika-sat*:

> But this may not be the only kind of newness toward which the prelude is pointing. The *Rāmāyaṇa*'s highly self-conscious assertion of primacy may very likely be alluding to the fact that it was the first *kāvya* to be composed in Sanskrit rather than some other form of language available in South Asia.   (Pollock 2006:78)

There is no basis for this assumption, and Pollock offers none. Likewise, Pollock has issues with the *vyāvahārika-sat* i.e. the certitudes of the tradition that *śloka* was Vālmīki's invention when the *pāramārthika-sat* is that the meter "antedates the work by a millennium or more" (Pollock 2006:78). And so he reads "Vālmīki's primacy in terms of metrics ... as a kind of synecdoche for the formal innovations of the work as a whole, and these are indeed substantial" (Pollock 2006:78). But if *pāramārthika-sat* is acceptable then that too agrees with the tradition in this case:

> In Piṅgala's *śāstra* this [i.e. *śloka*] form is totally absent. In the Vedic literature, this word has been used in different senses. *Nirukta* reads it as the synonym of the speech, of the *anuṣṭubh*. In the *Ṛgveda*, it is a call, or voice of the God, sound or noise. Later it is used in the sense of strophe. In *Rāmāyaṇa*, it is a verse born out of sorrow, which has been echoed in Ānandavardhana's *ślokaḥ śokatvamāgataḥ*"   (Mitra 1989:45)

The problem is that Pollock has not bothered to interrogate the history of Sanskrit metrics in order to ascertain the novelty of the *śloka* in the *Rāmāyaṇa*, as a form connected with aesthetic emotion, because he is too fixated with studying *kāvya* politically. It is also for this reason that he dismisses the orality of the text as fictitious. The very fact that the text claims to have been composed mentally by Vālmīki, then transmitted orally to Rāma's sons, who then recited it before Rāma, appears to him "nostalgia for the oral and a desire to continue to share in its authenticity and authority" (Pollock 2006:78).

The original literacy of the text is vital for Pollock's narrative because then the date of its composition, and accordingly the commencement of *kāvya* (the text being the *ādi-kāvya*) can be located in the early first millennium when, according to Pollock, Sanskrit writing makes its first appearance. On the other hand, had it been orally composed, then it could have been composed even a few centuries earlier, in which case, the date of origin for *kāvya* would contradict Pollock's narrative. Thus, we see that with regards to both the Veda-s and the *Rāmāyaṇa*, Pollock is merely exploiting the traditional understanding to bestow legitimacy on his view of *kāvya* as a political aesthetic.

Therefore, of the variety of forms in which *kāvya* expressed itself, Pollock is obsessed with only one of them — the *praśasti*. Inasmuch as *kāvya* and *praśasti* are seen as products of the same cultural milieu, there is no issue. But it appears that Pollock assigns to *praśasti* a significance far beyond the position it obtained in the *kāvya-śāstra* tradition, which was nearly zero. His reduction of *kāvya* to *praśasti* is best expressed in the following passage:

> The *praśasti* itself was intimately related to, even a subset of, a new form of language use that was coming into being in the same period and would *eventually be given the name kāvya.*

> Pollock (2006:75) [*italics mine*]

However, in the *kāvya-śāstra* tradition, there is very little reflection on *praśasti* as such and no direction that it could be composed only in Sanskrit, as was the case, for example, with the *mahākāvya*. For Pollock, *praśasti* in the inscriptions and *kāvya* in the court, appear to be two sides of the same coin, but it is not at all clear if the *kāvya-śāstra* tradition attached as much importance to the former. True, the linguistic and aesthetic analysis of *kāvya* would have influenced the composition of *praśasti*-s, but the way Pollock presents the issue it would seem that it worked the other way around, as if the study of *kāvya* was motivated by its application in, what would have been considered to be its final and sole product, the *praśasti*. The point of such a projection is, of course, to show that *kāvya* was all about politics, but this view is not borne out by the tradition itself which conceives of other purposes for *kāvya* — namely, the production of *alaukika ramaṇīyatā, āhlāda* and *saundarya*, what could be understood as pure aesthetic delight or blissful beauty.

Social Aesthetics of *Kāvya*

Social aesthetics refers to a reflection on the social and moral instruction that literature does or should provide, the manner in which the instruction is communicated so as to be effective, and so on. Pollock's essay *The Social Aesthetic and Sanskrit Literary Theory* begins with the observation that Indology, for the most part, has not paid much attention to this aspect of Sanskrit literary theory, and instead "tends to cleave to the intellectual agenda set by the tradition itself" (2001:197). To an extent, this essay is a critique of the position held by Daniel H. H. Ingalls Sr. on the hermeneutics of Sanskrit literary texts, whose antipathy for their sociological analysis appears to have been visceral.

In *An Anthology of Sanskrit Court Poetry*, Ingalls berates Western scholars who used contemporary European and American standards in their assessment of Sanskrit poetry, and ignored the views of the Sanskrit literary theorists on the subject. But he reserves his most severe judgment for the Indian Marxist, D. D. Kosambi, whose "theory of Sanskrit poetry is an application to India of Engels' and Plekhanov's theories of the class origins of literature" (Ingalls 1965:50). Pollock states that "thoughtful students of Sanskrit know that careful reading of the literature of others presupposes careful listening to others' theory", and mentions Ingalls as "pre-eminent among those" (Pollock 2001:198-99). Having said that, the point of Pollock's essay is to tear down that view. What is striking is the diabolical way in which he goes about it. He does not reject Ingalls' prioritization of native theories in the study of native literature. Rather, he tries to prove that the native theories themselves aim to prioritize the sociological in their reflection on literature.

In Pollock's view, there was a time when the social aesthetic occupied center-stage in *sāhitya-śāstra*. He provides details from the *Śṛṅgāra-Prakāśa* by Bhoja, an 11th century scholar, to argue this point. But, he adds, in the 9th and 10th centuries there occurred an intellectual revolution in Sanskrit poetics, with two Kashmiri scholars, Ānandavardhana and Abhinavagupta, whose meditations on *dhvani* (linguistic suggestion) and readerly *rasa* (emotive experience of the reader), gave more prominence to language-philosophy and emotive experience in the study of literature.

Now usually when we speak of *sāhitya-śāstra*, we refer to a period lasting more than a millennium from Bharata in the early centuries of the common era to Jagannātha Paṇḍitarāja in the mid-17th century, and it is from Pollock's essay, that we learn that social aesthetic features in the works of most scholars in this period. But after the Kashmiri revolution, it allegedly declined in importance, and language-philosophy and emotive experience became a primary concern in literary analysis. This appears to be the case with traditional pundits up to our time and following their cue, Indologists also paid more attention to these two aspects in Sanskrit literary theory, rather than the social aesthetic contained in it.

This is Pollock's complaint and the main aim of his essay is to assess whether "we can historically recuperate the social in Sanskrit literary theory" (Pollock 2001:199). By "recuperating" the social, Pollock does not mean that the social aesthetic has been lost and is in need of a rediscovery, but rather that its former importance needs to be reclaimed, and he cites Bhoja's work as an example of the centrality that it once enjoyed in Sanskrit literary theory. But that is not all. Pollock claims that the social aesthetic is also integral to language-philosophy and emotive experience but that it has remained obscured from the view of their proponents, fully in case of the former and partially in case of the latter. So his "recuperation" of the social also stands for the recovery of the alleged significance of the social in these two areas. The rest of this section demonstrates how Pollock strives to desacralize *kāvya* by reducing it to an aesthetic for the maintenance of social power.

In his treatise on *dhvani* (linguistic suggestion) called *Dhvanyāloka*, Ānandavardhana provides some examples to explain this concept. These examples are *gāthā*-s (one-verse poems) drawn from *Gāhā Sattasaī*, an anthology of such poems written in Mahārāṣṭrī Prākṛta. Some of them are quite enigmatic in nature as the following illustration shows:

> *You're free to go wandering, holy man.*
> *The little dog was killed today*
> *by the fierce lion making its lair*
> *in the thicket on the banks of the Godā river.*

Ānandavardhana has quoted this poem as an example of *dhvani* where the literal sense is that of an invitation but the suggested sense, i.e. the *dhvani*, is of a prohibition. In this case, limiting ourselves to the words in the poem, we can infer that someone is dissuading, albeit suggestively, a holy man from visiting a riverside thicket. Presumably, the holy man was doing so because he could not go to some other place as it had been overrun by a dog. The speaker is advising him that the dog has now been killed by a lion who has actually invaded the thicket. The literal meaning is therefore "you are free to go wandering" but the suggested meaning is "do not go to the thicket." Now the *Dhvanyāloka* is a treatise on *dhvani* and by its emphasis on linguistic analysis it attempts to bring *kāvya-śāstra* in league with the other highly reputed disciplines of ancient Indian thought such as Vyākaraṇa, Mimāṁsa and Nyāya — all of which are meditations on language-philosophy.

What exactly do we mean by language-philosophy? In the case of this example, it could take the form of reflecting over the linguistic use of command (*vidhi*) and prohibition (*niṣedha*). Thus, there are various kinds of *vidhi*-s: *pravartana*, where you are explicitly told to do something; *atisarga*, where you are not directly commanded but an obstacle that is preventing you from doing something you were already committed to do is removed, and so on. Thus, the holy man has not been commanded to wander but the dog that was obstructing his wanderings has been removed. Further, what Ānandavardhana would like us to note is that in the very womb of that *vidhi* there is concealed a *niṣedha*; what makes that *vidhi* possible, also makes possible that *niṣedha* without having it to be stated in so many words.

This is a glimpse of the kind of stuff that interested Sanskrit literary theoreticians. As would be obvious, nowhere in the foregoing did I need to mention the identity of the speaker or the purpose of the prohibition offered as an invitation. Neither of the two prevent us from reflecting upon *dhvani* as an artifice of language.

But it so happens that in his commentary on the *Dhvanyāloka*, before diving into such intricacies of language-philosophy as explained above, Abhinavagupta has suggested that the verse is uttered by a woman to protect the privacy of her rendezvous with her secret lover. Other commentators have repeated that story or something similar, but nobody has explained how they obtained this ancillary information. This is probably because these facts are peripheral and

ultimately not relevant to a discussion on language-philosophy and to their primary task as commentators on the *Dhvanyāloka*. But this lacuna bothers Pollock very much.

In his view, the language-philosophy cannot help us understand that the *gāthā* is about a woman trying to protect her privacy. Rather,

> "what we need is a social pragmatics which can explain to us that thickets by riverbanks are rendezvous spots for unmarried couples who cannot otherwise be together and the protection of their privacy means that people cannot be literally commanded to avoid them as it would reveal the liaison. Hence, the suggestion is necessary and the speaker must be a woman because the gender relations that constitute the social world of Prakrit poetry demand that it is always the woman, never the man, who organizes adultery. Only when we know such social-literary facts does the real suggestion [i.e. *dhvani*] behind the poems become available, that the women speakers are sophisticated and clever, and ardent to preserve a place of lovemaking" (Pollock 2001:207-208)

In my view, the fundamental problem with Pollock's objection is that he has not understood *dhvani* at all — or that his understanding of *dhvani* is different from Ānandavardhana *et al.* He transforms *dhvani* from a linguistic phenomenon to a social suggestion and then complains that the social basis of the concept has not been discussed by Indian scholars. In fact, he has titled this section of his essay as "Social Suggestion" and as we can see from the foregoing passage, in his view, the "real" suggestion of the poem is purely social and alludes to the loose and devious character of women.

However, such a conception of *dhvani* appears to be Pollock's own innovation and would explain why Abhinavagupta *et al* have not wasted any time explaining the social narrative in which they contextualized the poem. In fact, any social narrative could have been proposed to explain the same poem. For example, the speaker could be a man who buried some treasure in the thicket and was afraid someone might stumble upon it.

Thus, *dhvani* is a linguistic suggestion and Indian scholars approach it independent of the sociality of its occurrence. The problem with Pollock's view, however, is that it is fixated on the specific social situation described by the commentators and makes its explanation a precondition for the understanding of the *dhvani*.

Furthermore, if indeed a reflection on the social was necessary for understanding *dhvani*, then surely someone among the several reputed commentators of the *Dhvanyāloka* would have undertaken that task. If nobody did, then one might ponder over the possibility of one's own misunderstanding. Instead, Pollock offers an explanation for the alleged lapse, and points out its dire consequences:

> "when both readerly expectation and theoretical concern are focused on the linguistic mechanisms of meaning, the social conditions of aesthetic suggestion escape observation let alone interrogation. The conditions for understanding this literature [i.e. Prakrit poetry] are the permanence, predictability, the common-sense of the social world, and by the very writing and reading of this and all other poetry – and this seems to be a crucial social effect — these conditions are made all the more permanent, predictable, and commonsensical"

(Pollock 2001:208)

Apart from its heavy-handedness, this is a bizarre conclusion. Let us say someone did explain the "social pragmatics" as Pollock has done. How would that change anything? What "interrogation" of the social situation is expected here? While it appears that it is the literary scholars who are charged, the one who is actually standing in the docks is language-philosophy itself because that is the distraction that made them absent-minded about the social.

While it appears to be a description of an alleged blunder by scholars of the Sanskrit literary tradition, it is actually a prescription directed at us, that we should undertake social introspection rather than language-philosophy in the process of analyzing Sanskrit literary texts. In other words, he is suggesting that we should no longer cleave to the intellectual agenda of the currently dominant tradition as it is deficient; and instead seek to revive the moribund tradition in which the social was the principal theme.

Moving from language-philosophy to aesthetic emotion, we may note that prior to Abhinavagupta, it was understood that *rasa* was produced by the affective state of the character in the text. But Abhinavagupta held that *rasa* was produced by the reader's experience of the text and this became the dominant view. The question of how a text produces *rasa* thus transformed into a question of how the reader experiences *rasa* and "the answer was found to lie in a close analogy with religious experience" (Pollock 2001:198). This is what Pollock

refs to as the theological turn in literary theory, and alleges that it "partially" constrained the social ground of literary theorization.

The second section of the essay, entitled "False feelings" that supposedly deals with this issue is the most convoluted, and I will briefly summarize my understanding of it. Now corresponding to *rasa* is the complementary concept of *rasābhāsa*, which refers to an invalid emotive experience. So, for example, if a hero in a text behaves heroically i.e. according to the social convention of heroism, then it produces a heroic *rasa*; and when he behaves un-heroically i.e. according to the social convention of un-heroic behavior, then it produces a heroic *rasābhāsa*.

As one can see, the normative discourse is fundamental to notions of *rasa* and *rasābhāsa* and Pollock points out how scholars reflected on it throughout the tradition. The concept of *rasābhāsa* underwent a change along two dimensions. Initially, it was seen as a necessary part of narrative complexity but eventually it was treated as censurable, to be eschewed in good literature. The notion of readerly *rasa* raised the issue of how a reader's emotive experience could be invalid. Abhinavagupta's response was that the *rasābhāsa* occurs as an after-thought and not at the moment of experience itself.

All this has been explained in excruciating detail in Pollock's essay but what is not clear at all is how was the social ground of literary theorization "partially" constrained by the theological turn? The essay itself makes evident that reflection on the social-moral aesthetic flourished throughout the tradition. So what is the problem? In my view, neither the theological nor the linguistic emphasis occlude any social-moral aesthetic. It is just that they make us focus our attention on theology or language-philosophy in literary criticism rather than on the social-moral aesthetic. Unfortunately, Pollock cannot say outright that we should concentrate on the latter aspect of the tradition and ignore the former because that would be contrary to the priorities of the tradition. So he wants to make the point that even the former are grounded in sociality but the sociological basis remained invisible to the tradition.

In the history of the *kāvya-śāstra* tradition, Ānandavardhana and Abhi-navagupta are regarded as the most eminent scholars. Abhinavagupta was the first scholar who wrote prolifically on *rasa* as a religious aes-thetic, in his commentary on the work of Ānandavardhana. Pollock,

on the other hand, is interested in studying *kāvya* as a socio-political aesthetic. However, in the contemporary post-colonial milieu, this cannot be straightforwardly done. The tradition cannot be openly subverted anymore. Therefore, Pollock's strategy is to diminish the significance of these scholars by exposing the alleged limitations of their analyses. Alternately, he tries to valorize scholars from the *kāvya-śāstra* tradition whose works are more amenable to his project.

Valorizing Bhoja

In the great *kāvya-śāstra* tradition of India, there are two scholars who attract Pollock's greatest admiration: firstly, Bhoja, the author of *Sarasvatī-kaṇṭhābharaṇa* and *Śṛṅgāra-prakāśa*, and secondly, Bhaṭṭa Nāyaka, the author of *Hṛdayadarpaṇa*. In both cases, he laments that the tradition has been most neglectful of these two scholars, and he writes with the aim of restoring to them their deserved greatness.

One can read in this attempt a way of taking control of the tradition. A rift is suggested by depicting some scholars as having been unjustly ignored by the tradition. By valorising them and, conversely, by downgrading the importance of those scholars, such as Abhinavagupta, whom the tradition itself has considered as significant, one can give a new direction to the tradition.

Evidently, Pollock revels in projecting discrepancies and breaches within the tradition rather than emphasizing continuity and coherence. For example, he (Pollock 1998:119-120) picks up on Sivaprasad Bhattacharyya's remark that "Bhoja's discourse on rasa is the most detailed and provocative we have, and the most unusual, differing often essentially from both Bharata and those who follow him" but argues that Bhattacharyya has not "acknowledged or ... recognized the depth of this disagreement", and adds further:

> As for those who followed Bhoja in time, what neither Bhattacharyya nor anyone else has clearly spelled out is just how fundamental the differences between them are   (Pollock 1998:119-120).

The *kāvya-śāstra* tradition is thus projected as lacking in sufficient critical thinking — a lacuna that Pollock and scholars trained by him will allegedly fill.

Bhoja is held up as the proper representative of the Indian *kāvya-śāstra* tradition and pitted against the Kashmiri scholars, Ānandavardhana and Abhinavagupta, whose works shaped the course of the tradition from the 10th century onwards. Pollock attempts to diminish their significance thus:

> The more one works through [Bhoja's] complex analysis, and the stunning range of examples that he seems so effortlessly, and always so appositely, to adduce in support of his argument, the stronger is the impression one gets that, while Kashmiri speculation on the philosophical and theological aesthetics of reader-response is all very fine, it may be Bhoja *who best tells us how literature was made to work in premodern India*   Pollock (1998:140) [*italics mine*].

Why is Bhoja so important to Pollock and why is he so eager to make him the focal point of our understanding of the *kāvya-śāstra* tradition instead of the Kashmiri scholars whose priority has been established by the tradition itself?

The reason is that it is the "social effects" of *kāvya*, instead of its language-philosophical or religious-aesthetic dimension, which matters to Pollock. The overall purpose of his interpretation of *kāvya* appears to be a demonstration of how it served to assert political will and maintain an oppressive social structure. Furthermore, in the contemporary post-colonial milieu, it needs to be shown that such a view was self-consciously held by the Indians themselves rather than an interpretation superimposed by a Western lens. Thus, Pollock does not fail to point out that Bhoja, considered himself "a great king appointed by his elders to protect all that has been inherited, and who in this [first] verse [of the *Śṛṅgāra-prakāśa*] beseeches God that there should be no violation against the established order (*sthita*) and practices of estates and stages of life while he is engaged in the composition of this book" (Pollock 1998:140).

While the focal point of the *kāvya-śāstra* tradition is generally on the beauty (*saundarya*) of *kāvya* and how it produces aesthetic delight (*āhlāda*) in the reader, Bhoja can be exploited to show (whether he intended it or not) that the purpose of *kāvya* is the maintenance of socio-political order:

> The whole point of the [*Śṛṅgāra-prakāśa*], for its part, is to discipline and correct the reading of Sanskrit literature, and by creating readers who thereby come to understand what they should and should not do in the

peculiar lifeworld constituted by this literature, *it aims to create politically correct subjects and subjectivities.*   Pollock (1998:141) [*italics mine*]

According to Pollock, *kāvya* was the product of a courtly-civic ethos which allegedly collapsed in Kashmir from the eleventh-twelfth century onwards. This factor, he claims, brought about the shift from a socio-political aesthetic, which was the norm, to a religio-philosophical aesthetic, which was an aberration:

> This was a world rocked by royal depredations, impiety, madness, and suicide, where poets were forced to seek patronage outside the Valley … or if they remained, began to ridicule the very idea of writing for the court. And it was a world that would eventually, after the twelfth century, permanently terminate Sanskrit literary creativity in Kashmir. One may well ask whether it was this erosion that contributed to the production of the more inward-looking, even spiritualized Indian aesthetic, one that, despite the fact that historically *it constitutes a serious deviation in the tradition*, has succeeded in banishing all other forms from memory   Pollock (1998:141) [*italics mine*]

This thesis has been elaborated in the essay *The Death of Sanskrit* and has been effectively critiqued and demolished by Manogna Sastry in *Pollock's Paper on the Death of Sanskrit* (submitted for the first conference of the Swadeshi Indology series).

To understand the larger context of Pollock's attempt at valorisation of Bhoja and the corresponding diminution of the Kashmir tradition, we must take note that *rasa* as the affective dimension of the literary text can be expressed internally or externally. In the former case, *rasa* is embedded in the text and manifested by the character through his or her actions. In the latter case, it lies in the reader and is manifested by the awakening of the latent mental traces (*vāsanā*). According to Pollock, the *kāvya-śāstra* tradition, including Bhoja, understood *rasa* as internal to the text and this understanding persisted until Abhinavagupta decisively transferred the locus externally to the reader.

Pollock seeks to valorize the former and diminish the importance of the latter precisely because the former scenario lends itself to a socio-political interpretation which becomes impossible in the latter case wherein *rasa* is concerned with the spiritual development of the reader. Pollock's complaint is that subsequent to this shift the earlier tradition was altogether forgotten and "the presuppositions derived

from the justly admired Kashmiri tradition, especially as promulgated by its most sophisticated representative, Abhinavagupta, ...   are often taken to represent *rasa*-doctrine *tout court* and transhistorically" (Pollock 1998:125-126).

He concedes that "there is little point denying that the Kashmiri innovation produced an analysis of literary experience more engaging both to medieval and contemporary readers" but he importunes that the earlier tradition was "a no less serious order of analysis, which awards conceptual primacy to the textual organization of aesthetic effects rather than to those effects themselves" (Pollock 1998:138). Eventually, he concludes:

> *If ... there is a glaring fault to be found in the Indian tradition ... it may rather be that of the Kashmiri thinkers.* For what they left out in their analysis of reader response was the possibility of difference — the problem that preoccupied Kant, how a judgement of taste is rationally justified, cannot be asked if all *sahṛdayas* qua *sahṛdayas* respond the same, as they appear to do for Abhinava — and all the troublesome issues, such as authorial intention and the conflict of interpretations, that hang on such difference   Pollock (1998:139) [*italics mine*]

Bhoja, on the other hand, suggested that not only words and sentences but a literary text as a whole is endowed with an ultimate meaning that is a command. For example, in case of the *Rāmāyaṇa* it is to exhort the reader to be like Rāma and not like Rāvaṇa. To this end he approved of historical narratives being revised to achieve the desired effect. For example, in Bhavabhūti's *Mahāvīracarita*, Vāli is slain by Rāma after a provocation.

Bhoja classified passion into four types as drives towards the various *puruṣārtha*-s — *dharma, artha, kāma* and *mokṣa* — and indicated that the hero *inter alia* should be depicted according to his type of passion: dignified in case of *dharma*, energetic in case of *artha*, romantic in case of *kāma*, and serene in case of *mokṣa*.

The hero is, above all, a moral agent, and Bhoja's response to the controversy regarding the depiction of the virtuous enemy is worth noting. This was a matter of debate in literary theory because if the villain is described as a man of great character, then what message would his eventual destruction send to the audience? On the other hand, if the villain was a man of a flawed character, then that would be the cause of his destruction, and not the manly efforts of the hero.

Bhoja's solution to the conundrum was that he must be shown as both flawed and virtuous — the flaws do become the cause of his destruction but they do not become relevant in the actual combat with the hero. There the virtues of the villain dominate and reflect the glory of the hero in defeating him.

Thus, Pollock concludes, "the greatness of the hero is not just an aesthetic condition, but a social and a moral one" (2001:222). As we can see, Bhoja is dear to Pollock because in explicitly forging the connection between the social-moral and the literal, he "illustrates just how self-consciously literary theory could recapitulate social theory" (2001:223) — a development which was unfortunately arrested by the linguistic turn of Ānandavardhana and the theological emphasis on readerly *rasa* by Abhinavagupta.

What is troublesome here is the manner in which Pollock has divided the tradition of Sanskrit literary theory into two fundamentally opposed camps, one in which the social-moral aesthetic enjoyed a privileged status, and the other in which it remained subordinate. The impression is then created that not only does the former represent the original thinking of the tradition but that the latter suffered from a pathology of self-deception in that even here the social-moral aesthetic formed the ground but it became occluded.

The paradigmatic nature of the gulf between them is driven home using such melodramatic language as "the episteme that Abhinava successfully overthrew" (Pollock 2001:211) or "a new mentality produced in large part by the remarkable achievements of literary theory in Kashmir" (Pollock 2001:198) and so on.

What overthrow? What new mentality? While Ānandavardhana and Abhinavagupta are certainly the heroes of the tradition of Sanskrit literary theory, it does not appear that anyone within the tradition itself would have spoken about the significance of their works in such a way. For example, consider how Pollock explains the revolutionary nature of *Dhvani* theory:

> Ānandavardhana makes a claim for scientific innovation that, viewed from a purely intellectual-historical perspective, is perhaps without precedent in India. He declares he intends to analyse a feature of literary speech that all sensitive readers grasp but that no one before him, because of its subtlety and complexity, has yet been able to theorize.
>
> Pollock (2001:200)

Yet what Ānandavardhana has himself stated in the opening *śloka* of his work is that:

> Some have said that the soul of poetry, which has been handed down from the past by wise men as "suggestion" (*dhvani*), does not exist; others, that it is an associated meaning (*bhākta*); while some have said that its nature lies outside the scope of speech: of this [suggestion] we shall here state the true nature in order to delight the hearts of sensitive readers.   (Ingalls 1990:47)

Just compare these two paragraphs and note for yourself the difference in the suggestion that is implicit between them. This is the problem with Pollock's literary style. *He is not uttering a lie but he tweaks the truth so subtly as to completely distort its meaning.*

Thus, there is something deeply problematic about the way in which Pollock has divided the tradition of Sanskrit literary theory into two contesting streams, a classification that is not recognized within the tradition itself.   It is analogous to the manner in which Western scholars divided the languages of India into two contesting Indo-Aryan and Dravidian families, while traditional linguistics had organized them into Prākṛta-s of different regions and Sanskrit. We are yet suffering from the repercussions of that Western intervention.

Since we are dealing with an isolated and specialized topic, the mischief is likely to be contained in case of the division Pollock has fabricated in the tradition of Sanskrit literary theory, but it partakes of the same nature. Here, Bhoja is portrayed as the final upholder of a dying tradition which affirmed the central significance of a social-moral aesthetic in literary theory. And we are left with the impression that it should not have died out because it was honest to the social agenda of literature (which was, of course, the perpetuation of caste and gender oppression), and so in recovering it, we would be correcting a great historical wrong in the tradition of Sanskrit literary theory.

Yet, the delicious irony — in this persistent effort of raising the estimation of Bhoja and diminishing that of Abhinavagupta and Ānandavardhana — is that Bhoja's interpretation of *rasa* was no less religious in nature than that of Abhinavagupta. Neal Delmonico, author of an important book on Rūpa Gosvāmin, notes that while Gosvāmin's understanding of *rasa* as sacred rapture is usually ascribed to the tradition of Abhinavagupta, there were important differences

between them. On the other hand, it appears that Gosvāmin derived his religious aesthetics from Bhoja. As Delmonico explains:

> A little more digging has revealed that a healthy variety of viewpoints on rasa existed throughout the period between Abhinavagupta and Rūpa and among those viewpoints Bhoja's was an important contender. Bhoja's work inspired and influenced a number of later writers, mostly in South India, and was incorporated into parts of a Purāṇa (the *Agni Purāṇa*), the area of the dissemination of which was centred in eastern India (Bengal and Orissa). It is suggestive to note that, although Abhinavagupta's notion of *rasa* eventually became the dominant one among literati throughout India, Bhoja's view bears a fairly strong resemblance to more popular views of aesthetics still extant in India.
>
> <div align="right">Delmonico (2016:viii)</div>

Thus, it is not only possible to view Bhoja's *Rasa* Theory as the precursor to an important tradition of religious aesthetic, such as developed by Śrī Rūpa Gosvāmin, it is also evident that differences between the aesthetic views of Abhinavagupta and Bhoja can be understood sympathetically, without pitting them against each other, as Pollock does.

It is not that Pollock is unaware of this research. He refers to Delmonico's work but only as far as it "correctly acknowledges, in a couple of places, Bhoja's focus on the literary character as the locus of rasa" (Pollock 1989:118). But he regrets that Delmonico "does not apply this in his exegesis of the work", and that "in the rest of his analysis I cannot follow him" (Pollock 1989:118). Thus, Pollock wilfully ignores any research that contradicts his thesis.

Valorizing Bhaṭṭa Nāyaka

The transformation in *Rasa* Theory — which shifted the locus of *rasa* from the text to the reader, which Pollock seeks to problematize as part of his project of desacralization of *kāvya* — begins with Ānandavardhana in the 9th century. Abhinavagupta, in his commentary on Ānandavardhana's *Dhvanyāloka*, critically examined the *rasa* theories of other thinkers, chiefly that of Bhaṭṭa Nāyaka, and then proposed his own view of readerly *rasa*. As Pollock himself admits, subsequent scholars in the *kāvya-śāstra* tradition, like Jagannātha Paṇḍitarāja, did not find any essential difference

between the views of Bhaṭṭa Nāyaka and Abhinavagupta, only a change in language. But it was a significant change since the aim of Bhaṭṭa Nāyaka's critique was to demolish the *Rasa-dhvani* Theory of Ānandavardhana, which Abhinavagupta saved by means of his counter-critique.

Pollock is, as explained above, interested in projecting two rival schools within the *kāvya-śāstra* tradition, one which interpreted *rasa* as internal to the text, and the other which located *rasa* in the reader. The former is amenable to Marxist literary theories, and Pollock seeks to make it the dominant view. Bhaṭṭa Nāyaka's role in this project is a bit complex. Ānandavardhana's *Rasa-dhvani* Theory accords with the former position which Bhaṭṭa Nāyaka tried to demolish, and in doing so, established the latter position by transferring the locus of *rasa* to the reader.

So one would expect Pollock to support Ānandavardhana and criticize Bhaṭṭa Nāyaka. But what happened is that Abhinavagupta reinterpreted Bhaṭṭa Nāyaka's argument in a way that affirmed Ānandavardhana's view. In effect, then, Abhinavagupta made Ānandavardhana's *Rasa-dhvani* Theory support the latter position though it was not its original aim. This is how Pollock has interpreted this slice of *kāvya-śāstra* history; and Bhaṭṭa Nāyaka, though he supports the latter position which is contrary to Pollock's interest, becomes his friend as with his aid, two birds can be killed with one stone: Abhinavagupta, whose aesthetic theory bestowed upon literary *rasa* a spiritual dimension; and Ānandavardhana, whose *Rasa-dhvani* Theory unintentionally became the source for the shift in the locus of *rasa*.

No wonder then that merely on the basis of its few surviving fragments, Pollock hails the *Hṛdayadarpaṇa* of Bhaṭṭa Nāyaka as a "masterpiece" (Pollock 2012:233), thus suggesting that the *kāvya-śāstra* tradition failed to understand itself and recognize the merit of its scholars. The implication is that Western intervention is necessary to write the proper history of the *kāvya-śāstra* tradition and restore its true genius.

The purpose of the critique of Bhaṭṭa Nāyaka, an adherent of the Mīmāṁsā school, was to demolish the *Dhvani* Theory of Ānandavardhana, which depended on the *vyañjanā-śakti* (suggestive power) of language, and make the *abhidhā-śakti* (denotative power)

of language the essential factor in the production of *rasa*. As Pollock explains, up to the time of Bhaṭṭa Nāyaka, it was held that *rasa* became manifest in the character of the drama and was relished by the spectator. However, the interpretation of *rasa* using Mīmāṁsā theory of language led Bhaṭṭa Nāyaka to propose that *rasa* was produced (*bhāvanā*) in the spectator himself. Abhinavagupta reinterpreted this process in favour of Ānandavardhana's *Dhvani* Theory by proposing that the spectator experienced *rasa* on account of his own latent predispositions, and that is how later tradition understood it. On this account, Pollock refers to him as Bhaṭṭa Nāyaka's "most ardent if most reluctant if not ungrateful disciple" (2010:157).

We need not go into the tortuous arguments employed by Pollock for demonstrating that it was Bhaṭṭa Nāyaka who pioneered the hermeneutic shift from text to reader and that it involved a production (*bhāvanā*) and not a manifestation (*vyakti*) of *rasa* in the reader, though later tradition was to conflate the two due to the reformulation of Abhinavagupta.

What we need to understand is where Pollock is going with this thesis. The production of *rasa* in the character (for Ānandavardhana) or in the spectator (for Bhaṭṭa Nāyaka) was in either case a matter of *śabda-vṛtti* (linguistic modality) internal to the text; and was transformed into a *cid-vṛtti* (psychological modality), external to the text and manifested in the spectator, due to the reinterpretation of Abhinavagupta. This *cid-vṛtti* is the basis for a religious aesthetic and that is what Pollock is trying to deny here by questioning the legitimacy of what Abhinavagupta has done.

Furthermore, he takes the later scholars of the *kāvya-śāstra* tradition to task in a later writing (Pollock 2012), for never having questioned it themselves. He thus puts the credibility of the subsequent *kāvya-śāstra* tradition at stake — in order to suggest that Abhinavagupta's religious aesthetic was born out of an attempt at "turning his opponent's [i.e. Bhaṭṭa Nāyaka's] weapons directly against him" (Pollock 2012:240).

In this essay, we are not really concerned with the actual views of Bhoja or Bhaṭṭa Nāyaka but Pollock's interpretation of their views, and its pernicious implication with regards to the religious aesthetics of the Indian *kāvya-śāstra* tradition. The locus of *rasa* can be understood as internal to the text or as lying externally in the reader's response to the text. Religious aesthetics in the Indian context arose when *rasa* was

understood as a psychological modality in the reader, and this is the interpretation whose significance Pollock seeks to diminish as it is not amenable to an understanding of *kāvya* as a socio-political aesthetic.

For this purpose, *rasa* needs to be understood as a linguistic modality and hence Pollock valorizes the two *kāvya-śāstra* scholars whose works can be interpreted in this way. In the case of Bhoja, *rasa* is internal to the text and located in the character; in case of Bhaṭṭa Nāyaka it is external to the text and produced in the reader, but it is still a matter of linguistic modality.

Conclusion

There was a time when Indology used to be a record of the Western experience of Indian texts and traditions, viewed through the lens of what are now pejoratively termed as Christocentric or Eurocentric categories. The scientific objectivity that it claimed for itself is condescendingly dismissed now as Orientalism, the Western imagination of India. The new intellectual orthodoxy of the post-modern, post-colonial world idealizes *emic* studies and seeks to understand native culture from the perspective of the native. The contemporary Western scholar is interested in studying the cultural artefacts of a tradition in the manner in which they were received by the tradition. Now in the case of Sanskrit literature this process would be influenced by Sanskrit literary theory.

However, the aspect of the production and reception of text that is of interest to Western scholars, especially of the Marxist strain, is social knowledge but it appears that the Sanskrit literary theory itself is more interested in language philosophy and emotive experience. So the question arises: what was the significance of the social-moral aesthetic in literature? How effective was the "social effect" of texts? If it was not a major concern for the Indians themselves, then the Western analysis of the social reception of texts by the contemporary audience is just Orientalism of a different kind.

That is, of course, what it really is but one needs to provide some kind of a cloak for it so it can pass muster. This is what I think Pollock seeks to accomplish by the recuperation of the socio-political in Sanskrit literary theory. Now as he himself shows the social was always evident in it from Bharata to Jagannātha Paṇḍitarāja. The problem, however,

is that its importance was eclipsed by the emphasis on language-philosophy and emotive experience. Therefore, one might argue that such was the priority of the Indians and as good post-modern, post-colonial citizens we should respect that priority, and interpret their literature in the manner in which they perceived as fit to be interpreted.

It is here that Pollock's writings turn nasty. They strive to make the point that language-philosophy and emotive experience were themselves grounded in a socio-polity, but the scholars who prioritized them remained oblivious to that socio-political ground. In other words, Pollock's writings are challenging the very legitimacy of the significance that Indians have historically attached to language-philosophy and emotive experience in the case of literary criticism. At the same time, they are also valorising a sociological hermeneutics, which is a Western priority but can now be postulated as a long-suppressed priority of the Indians as well.

It is thus paving the way for a new kind of literary criticism, a new form of knowledge production, in which Sanskrit literary texts can be interpreted not in terms of their linguistic content or the emotive states they affect, but as promoting social causes, namely the sustenance of caste and gender hierarchies, and this whole study can remain free of the charge of Orientalism because — and this is the *pièce de résistance* — it can be presented as a hermeneutics sanctioned by Indians themselves.

In conclusion, we may note that Pollock is not alone in desacralizing *kāvya* and seeking to eliminate the religious dimension of *rasa*. Indian-born Saam Trivedi, Associate Professor of Philosophy at Brooklyn College, in his article *Evaluating Indian Aesthetics* published online by the American Society for Aesthetics, declares that:

> I will set aside later commentators on Bharata (such as the tenth and eleventh century CE Kashmir Shaivite Abhinavagupta), for there is reason to think that many of these later writers may have given a religious and cosmological twist to what is at core an aesthetic theory and can be understood as such, quite apart from religion; here I disagree with writers such as Susan Schwartz who suggests that the goal of Indian aesthetics is to facilitate religious transformation.   Trivedi (2013)

For an essay aimed at explaining the contemporary relevance of Indian *rasa*, this is an unfortunate choice. In this, the author follows the work

of V. K. Chari who states:

> Some recent exponents, notably, A. K. Coomaraswamy, K. C. Pandey, and
> J. L. Masson, have given needlessly metaphysicized accounts of Indian
> aesthetics. Following such accounts, many people in the West have the
> impression that Indian art and art theories have to be studied only in
> their religious, transcendental setting. But … Sanskrit criticism — at
> any rate, the mainstream of it — had nothing to do with religion or
> metaphysics.   Chari (1993:6)

While some Indian scholars, presumably of dharmic persuasion, are
thus keen to exclude the religious dimension in their understanding of
rasa, on the other hand, it is being appropriated by Indian Christians
as a vehicle for spreading the gospel of Jesus.

In *Tasting the Divine: The Aesthetics of Religious Emotion in Indian
Christianity*, Michelle Voss Roberts notes how Christian Bharat Nāṭyam
dance organisations, *Nava Sadhana Kala Kendra* in Varanasi and *National
Biblical Catechetical and Liturgical Centre* (NBCLC) in Bangalore, have
incorporated *rasa* in their evangelization and inculturation project.
She explains how Abhinavagupta described the religious significance
of *rasa*:

> Abhinavagupta's *Locana*, a commentary on Ānandavardhana's *Dhvanyā-
> loka*, develops an analogy between aesthetic relish (*rasāsvāda*) and the
> experience of brahman (*brahmāsvāda*). Like the experience of *brahman,
> rasa* is a transcendent, universalizable, and blissful state of mind. It is
> unlike mundane emotions and experiences (*alaukika*). Abhinavagupta
> calls *rasa* a taste of the union of one's own nature with the divine
> (*Locana* 2.4). In the moment of aesthetic bliss, one forgets oneself. Total
> immersion brings a temporary suspension of subject-object distinction,
> worldly concern, and sense of ordinary time and space.   Roberts
> (2012:578)

Rūpa Gosvāmin further developed on this idea such that *rasa* came to
"resemble the bliss of the Absolute, it is that very power of bliss, the
hlādinī-śakti of Kṛṣṇa himself, which manifests in the devotee" (Roberts
2012:579). Roberts points out that "later Indian Christians presuppose
these two changes [of Abhinavagupta and Rūpa Gosvāmin] as they
construct their devotional love for Christ" and through the dance
drama form of Bharat Nāṭyam, which has rasa as its basis, "NBCLC and
Nava Sadhana … foster a Christian bhakti *rasa*" (Roberts 2012:579).

We thus find that, on the one hand, through the works of Pollock and other scholars, the Indian *rasa* tradition is under pressure of desacralization, while, on the other hand, it is being appropriated by other sacred traditions for the spread of their religious discourse.

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Chapter 3

Towards a Computational Theory of *Rasa**

A framework for *pratibhā* and *kalā* in general

– *K. Gopinath*

(kgopinath2@gmail.com)

Abstract

Prof. Sheldon Pollock opines that Indian thinkers have neither attempted a robust theory for creativity nor did they have theory across *kalā*-s. We argue here against this opinion by sketching a computationally inspired theory of *rasa* (a work in progress), and attempt to uncover Indic insights over the ages in support of the theory. Finally, we illustrate it with examples from certain art forms.

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1   Introduction

In his Introduction to his *A Rasa Reader*, Pollock makes a far-reaching remark:

> "As for questions of creativity and genius (*pratibhā*), Indian thinkers certainly were interested in them, but they never thought it necessary to develop a robust theory to account for their nature or impact on the work."
>
> (Pollock 2016:2).

Furthermore,

> "There were separate cultural domains of poetry (*kāvya*), drama (*nāṭya*), music (*saṁgīta*, consisting of vocal and instrumental music and dance), and less carefully thematized practices, with terminology also less settled, including painting (*citra*), sculpture (often *pusta*), architecture

(for which there was no common term at all), and the crafts (*kalā*), which could include many of the preceding when that was deemed necessary."

(Pollock 2016:2)

The first quote raises issues of "lack" of robust theories in regard to *pratibhā*, the second one laments that there "were" (note past tense) disparate *kalā*-s, each incomplete in some way, implying that there was nothing common at all amongst them or possibly amongst their theories also.

The surprising aspect here is the certainty with which these opinions are stated ("never thought it necessary", "for which there was no common term at all", "there were separate cultural domains", etc). In addition, there seems to be a problematic translation of the word *pratibhā* by Pollock as "creativity and genius" when used without any qualification. Though definitely related to that sense, *pratibhā* is probably more correctly translated as "flash of insight", in the context of *rasa*, *sphoṭa* and related areas (for example, *Vākyapadīya* (2.143, 152)) (Pillai 1971):

"When the word-meanings in a sentence are described (from out of the sentence) and (thus) understood, a different flash of insight [*pratibhā*] is produced (out of it). That (flash of insight) presented by the word-meanings is described as the meaning of the sentence." (2.143)

"That flash of insight [*pratibhā*] is considered to be of 6 kinds, as obtained (1) by nature (2) by action (3) by practice (4) by meditation (5) by invisible causes and (6) handed down by the wise." (2.152)

Also, (Kaviraj 1966) says:

The word *Pratibhā*, which literally means a flash of light, a revelation, is found in literature in the sense of wisdom characterised by immediacy and freshness. It might be called the supersensuous and supra-rational apperception, grasping truth directly, and would, therefore, seem to have the same value, both as a faculty and as an act in Indian Philosophy, as Intuition has in some of the Western systems. From a general survey of the literature concerned and a careful analysis of its contents it would appear that the word is used in two distinct but allied 'senses':

 (i) To indicate any kind of knowledge which is not sense-born nor of the nature of an inference. But as such knowledge may range over a wide variety of subjects, it is possible to distinguish it again as lower and higher. The phenomena of ordinary clairvoyance and telepathy are

instances of the former, while the latter kind is represented in the supreme wisdom of the saint.

(ii) In the latter sense, however, the use of the term is restricted to the *Āgamic* literature, where it stands for the Highest Divinity, understood as Principle of Intelligence and conceived as female. In other words, *Pratibhā*, otherwise known as *ParāSaṁvit* or *CitīShakti*, means in the *Āgama*, especially in the *Tripurā* and *Trika* sections of it, the power of self-revelation or self-illumination of the Supreme Spirit, with which it is essentially and eternally Identical. The employment of the word in the sense of '*guru*' (as in Abhinavagupta, *Tantrasāra,* p. 120) comes under this second head.

Furthermore, Abhinavagupta says in his comments on *Dhvanyāloka* 1.4 that both the poet and the audience possess *pratibhā*! This can be meaningful only if its meaning is something like intuition rather than genius[1].

However, for the purposes of this paper, we will use the specific meaning Pollock has used, namely, "creativity and genius", though it seems to be somewhat non-standard or maybe even inappropriate in the context of *rasa*. While various approaches have been attempted in the Indic tradition for understanding *pratibhā* (in the sense used by Pollock) or to study the **commonality** across *kalā*-s [2] that would actually point to a perspective different from Pollock's, we take some initial steps towards a "computationally" inspired approach[3] to *rasa* that we believe robustly responds to the two questions. (Also, in this paper, we argue about only the above Pollockian perspective in detail.)

Such an approach may have been not explicitly "theorized" at length as such but if one looks at the profuse and specific examples in the Indian tradition regarding *rasa* in all its forms, one can discern some answers to the posed questions. Also note that, as *rasa* is a "many splendoured thing", we do not claim that the computational model we sketch, for example, in §4 (for a simple modelling of emotions in *Nāṭyaśāstra*) will capture *rasa* in its totality (see below where we discuss Bhartṛhari's paradox as a cautionary argument); it is to be taken as a first (hesitant) step! Note that reading a computational thinking (see Appendix 2 for a brief introduction) into Indic models for *kalā*-s is quite appropriate as detailed layered taxonomies/ontologies are proposed along with extensive discussion of the interactions between them.

Further, with respect to the notion of *kalā*-s being separate cultural domains, (Vatsyayan 1997:41) says contrarily:

> "[In Indian arts] the imagery of the Upanishads and the elaborate ritual of the Brahmanas is the ground plan for each of the arts, be it architecture, sculpture, painting, music, dance or drama. The artist repeats and chisels this imagery by giving it concrete shape through stone, sound, line or movement."

Furthermore, V. Raghavan informs us that "the Brāhmanas [have a word] *śilpa*, the common term for art in the sense of a perfect or refined form or replica, and the whole world is described as a brilliant piece of divine art or handiwork" (Raghavan 1963:261).

Similarly, Manmohan Ghosh says that it is "the doctrine of suggestion that lies at the basis of Hindu plays and indeed of all other arts of India." (Ghosh 1957:8); Mallinātha, for example, says (*Kirātārjunīya* 10.42) *abhinayo rasabhāvādi-vyañjaka-ceṣṭā-viśeṣaḥ.* (Translation: *abhinaya* is notable for its enaction of suggestion with *rasa* and *bhāva*). Continuing, Ghosh says, "Hindu theorists … believe that the highest enjoyment is not possible without giving the greatest possible scope to imagination, and are therefore in favour of avoiding realism." (See also the theory of "peak shift" of V.S. Ramachandran *et al.* discussed briefly below). This is unlike in many other traditions and clearly a demarcator or classifier of Indic tastes; note the Western (or the imitated Indian) concern of how well an actor plays a character "realistically" in contemporary movies. This "anti-realist" commonality across Indian art forms, have been noticed by some Western commentators like Sylvain Levi: "Indian genius produced a new art which the word *rasa* summarizes and symbolizes, and which condenses it in one brief formula: the poet does not express but he suggests". To argue this position further, in the following §1.3, we use *Viṣṇudharmottara* (a c. 5th century C.E. text) as an introductory example that plainly argues for a unified understanding of many of the *kalā*-s, specifically relating painting and other art forms. *Viṣṇudharmottara* specifically says that *rasa* is the common principle underlying dance, drama, painting and sculpture (Toshkhani 2003).

Also, Pollock opines that "literary evaluation itself was not framed as a philosophical problem". (Pollock 2016:2)

The exact intention here is difficult to decipher. Possibly, given the various styles of literary evaluation in the Western academy (such as old-style philological analysis, "New Criticism", critical philology,

Freudian psychoanalysis, etc.), is it the case that such perspectives (or "lenses") are not available in the Indian tradition?; or is the philosophical question — what "lens" to use? The statement itself is baffling: what, then, is one to make of *Alaṅkāraśāstra*, or theories of *sphoṭa*, *dhvani*, etc with many excursions into the nature of ultimate reality and related areas?[4] One quick look, say, at Potter (1990) would suggest to most that there were certainly many thinkers (such as Ānandavardhana, Abhinavagupta and Mallinātha) in India who deeply thought about literary texts in terms of analysis and evaluation, each with their own theories.

And, says Pollock:

> "Furthermore, almost everything outside the literary realm, let alone the cultural realm, remained outside classical Indian aesthetic analysis (including nature: though Shiva was a dancer, God in India was generally not an artist)."   (Pollock 2016:2)

This quote is sweeping in its characterization of the domain of Indian aesthetic analysis as problematic in its exclusion of other than literary areas. If this is true, what does one make of *Nāṭyaśāstra*? It seems even incoherent as it jumps from "nature" to "Śiva the dancer" without any logic. It is also seems woefully uninformed (with respect to "God" as artist[5] especially if not qualified diachronically): for example, Kṛṣṇa has been always portrayed with a flute, Sarasvatī with *vīṇā*, Nārada with *tambūra*, and Śiva with a *ḍamaru*; and Naṭarāja is synonymous with dance[6]. The *Rāmāyaṇa* has many descriptions of music; Rāma is said to be an expert in *Gāndharva* music:

> *gāndharve ca bhuvi śreṣṭho babhūva bharatāgrajaḥ |*
> *kalyāṇābhijanaḥ sādhur adīnātmā mahā-matiḥ ||*

> Bharata's elder brother (Rāma) became the world's best *gāndharva* musician.   (*Rāmāyaṇa* 2.2.35)

Lava and Kuśa, Rāma's sons, are mentioned by Vālmīki in the *Rāmāyaṇa* as expert musicians who were familiar with *mūrchanā* and *tristhāna* as also with the rhythmic patterns (*laya*, *yati*) in three-speeds. In his haste to tar Indic thinking, Pollock seems to have overlooked the fact that the Indic civilization is one of the few that has given extraordinary importance to art forms like music, dance or poetry in the sacred spaces; for example, *nāda* is equated to Brahman (consider the expression "*nāda-brahma*", the vibrational source of the universe).

1.1   An Initial Riposte

As the first two statements of Pollock are surprisingly categorical (leaving no room for nuances or ambiguity), our *pūrvapakṣa* will be very brief; most of our discussion will therefore focus on substantiating our position.

First, we discuss the text vs "oral" argument. It is clear that Pollock almost exclusively looks at the textual material even in the *rasa* context, and thus ignores one of the main strengths of the Indian tradition of orality, embodied knowing, and/or "practice" (and all of which have connections with *mano-dharma*). In her 2002 American Academy of Religion (AAR) invited talk on "Embodied Cosmologies" (Narayanan 2002), Vasudha Narayanan has argued that a shift is needed in the emphasis from textuality to performance[7] in the Eurocentric study of religion, and instead study, for example, *rasa* as an "embodied" practice[8]; this mirrors "embodied knowing" in systems such as Yoga that are largely absent in the Eurocentric thinking/Abrahamic religions. *Nātyaśāstra*, for example, combines both the body (e.g., gestures) and the mind (e.g., *bhāva*-s, *rasa*, and the mental empathy between the actor and the viewer) for a deep analysis of communication in art forms such as dance. Coward and Raja say, "Writing, the focus of attention for the modern West, is seen by *vyākaraṇa* as a coded recording of the oral, and which can never perfectly represent all the nuances of the spoken word, and is always secondary" (Coward and Raja 1990:36–37). Orality has also been discussed by others (e.g., (Kapoor 2000) or (Malhotra 2016), and we will therefore not pursue this argument further. We will however discuss the latter aspect ("practice") in §5.4 in specific areas such music and architecture, though it is widely prevalent in all *kalā*-s if looked at with the right "eyes".

Secondly, *rasa* is often an "intangible" sense[9]; it cannot be theorized "too much". Note that Ānandavardhana calls *rasa-dhvani* as *asaṁlakṣya-krama*, a suggestion whose process is not analyzable. Taking musical experience as an example for *rasa*, Mukund Lath (2016) discusses the seemingly "simple" *svara* and the intricacies of its meaning and "unboundedness" due to its reflexivity (even without going into complex aspects such as *gamaka*):

> Music can also be seen to have a natural proclivity for reflexivity: for *svara*, the foundational unit of music, is a naturally abstract symbol.

Consider in this context the very nature of *svara*. Words—despite the different meaning-worlds they create in the different realms of knowledge, feeling, and action—are characterized by a *vācya-vācakā-bhāva*, a separable word-meaning relation, a relation that makes translation possible, because the same *vācya* can have different *vācakas*. But *svara*-s simply do not have a *vācya*. A *svara* is meaningful—that is, it has a *vyañjanā*—by itself. It may be called a self-sustained, *svayampratiṣṭha* symbol. It does not have a sound-meaning duality like language: *svara* as sound does not look for a meaning outside itself. But its *svayampratiṣṭha* nature also implies that *svara* is inherently abstract in character. It thus can be used as a basis for a powerful language of pure *vyañjanā*: its abstract character also enabling it to be a medium for its own distinct kind of reflexivity. There are many such languages— painting, theater and dance among others. But the language of *svara* may perhaps be said to form the richest and most self-contained— or *svayampratiṣṭha* of them, and thus an apt medium for pure, "self-contained," reflexivity. As a language it allows us, paradoxically it might seem, to inhabit the world of feeling and yet remain a witness to it. Through *svara* we can reflect on a world of pure feeling while remaining in the feeling consciousness, withdrawn from the context of the ordinary world of human living or *vyavahāra*. *Svara*, in other words, permits us to self-reflexively explore the felt world as a world of meaning, to investigate its independent vastness and its immense possibilities with an introspective, imaginative and creative eye. It richly reveals to us that like the thinking consciousness, the felt-consciousness is also a reflexive consciousness.   (Lath 2016:96)

The act of theorizing assumes that *rasa*'s broad contours can be fixed; a taxonomical approach is certainly in this direction given a specific domain, but crucially with overlapping categories in practice. However, attempts to capture *rasa* in all its essences gets us into paradoxes like Bhartṛhari's (5th century C.E.) paradox such as "Can one name the "unnameable"?", and attendant philosophical difficulties with respect to signification. Our brief discussion on this topic here follows and summarises Hans and Radhika Herzberger (Herzberger and Herzberger 1981) (see also (Houben 1995)).

Consider a relation between words and meaning: "From words that are uttered, [and] the speaker's idea, an external object and the form of the word itself are understood. Their relation is fixed" (*Vākyapadīya* 3.1).

> While this is a highly comprehensive description, it is yet nameless. But are these names: "their relation", "the relation between word/meaning"? Can the signifier-signified relation be named?

> "Of the relation, there is no signifying expression (*vācakam abhidānam*) on the basis of a property belonging to it".

> However, suppose I say "The significance relation is unnameable!" Any statement of any instance of the unnameability thesis is bound to use some name or expression to identify that which it declares to be unnameable. So any statement of any such principle seems bound to conflict with linguistic practice at some point. Similarly, there are paradoxes with inherence: "the inherence relation is unnameable"; also "unsignifiable" (*avācyam*).

As *rasa* can be seen abstractly as a certain mapping of a text, performance or artefact from a creator/actor through a medium onto a receiver, and semantics is involved in addition to the affective part of *rasa* itself, one can argue that signification of *rasa* is also not possible in general[10]. Therefore the Indic tradition has carefully argued both for a taxonomical/layered approach and for a "holistic" approach that does not just revel in intellectual "deconstruction". Hence, *rasa* has been identified with the "ultimate" (technically, *brahmānanda-sahodara*) due to the unavoidability of paradoxes in a "logical" description. As it cannot be fully captured, especially in a text, it cannot be explicated linearly. No wonder Indian thinkers did not attempt to completely capture the ungraspable in the textual medium. However the richness of *rasa* is still to be expressed or to be experienced in different *kalā*-s such as architecture, food, music, dance and *kāvya* to bring out deep feelings (including identification with the *para*). While we do not discuss the following aspect in this paper, the computational sense also offers a possible unification for describing the enjoyment of *alaṅkāra*-s and *rasa*-s in a unified way, especially with respect to interesting ideas such as *vakrokti* that seem to straddle both.

1.2   Outline of the Paper

The Indic contribution to the study of aesthetics is significant[11]: seminal ideas such as *bhāva* (loosely, "emotions"), *rasa*, *sthāyibhāva* ("stable emotions") and *sādhāraṇīkaraṇa* (often translated as "universalization" or sometimes loosely as "generalization"; both senses used in

this paper) have been propounded and applied in the context of and across various art forms; and many of these have mathematical/computational aspects to it. *Sādhāraṇīkaraṇa* removes the specificities in an observation that are observer-dependent so as to be "universal" as far as possible[12]. Here we are referring to portraying ideal rather than physical likeness. Note that generalization, a related term, refers to arriving at commonalities across several observations, a "bottom up" approach.

Historically, theorization of *rasa* has proceeded through many steps, taken by many thinkers over the centuries. *Rasa* has been held to be experienced — through *anusandhāna* ("recollection") or direct perception (Bhaṭṭa Lollaṭa, a *Mīmāṁsaka*), by inference (Śaṅkuka); by a process of *sādhāraṇīkaraṇa* ("generalization")[13] (Bhaṭṭa Nāyaka); through *vyañjanā* ("suggestion") (Ānandavardhana/Abhinavagupta); and so on. Each of these has a direct computational analog: lookup, logical inference, abstraction and hierarchy/category formation, and layered description with even possibly "epigenetic" or "transcendental" properties.

Such thinking also interacted with a philosophical outlook such as Sāṅkhya: it is opined here that aesthetic and mystic experience both spring from the same source — given that when enjoying *rasa*, both *rajas* and *tamas* disappear with only *sattva* remaining; the bliss experienced is independent of outside factors (as one reposes onto one's own self) as the mystic experience is *out* of the world, while that of aesthetic <u>in</u> the world.

A related area of research currently is "Affective Computing"; at the "physics" level, it concentrates on the mechanics of how to make emotions register through sensors (e.g., skin galvanic conduction) or how to recognize emotions. Another related area of current research in this field with practical applications is that of microexpressions: the emphasis here is the "involuntary, fleeting facial movements that reveal true emotions—[that] hold valuable information for scenarios ranging from security interviews and interrogations to media analysis" (Satya 2017). *Nāṭyaśāstra* has something to say here (for example, we discuss in this paper the varieties of eye glances) but from a *rasa* perspective.

Recent work in the area of affective computing use models such as appraisal-derivation (Stacy 2010) that are similar in spirit to how

Bharata surmised *rasa*-s are produced (see for example, journal articles in IEEE Transactions on Affective Computing). Two critical statements in *Nāṭyaśāstra* are "*vibhāvānubhāva-vyabhicāri-saṁyogād rasa-niṣpattiḥ*" (Chapter 6) and "*ebhyaś ca sāmānya-guṇa-yogena rasā niṣpadyante*" (Chap 7). The first one is close to but not quite an equational relation as *niṣpattiḥ* is not defined. We suggest that *sādhāraṇīkaraṇa* is the final but implicit domain-independent operation on *vibhāva*-s (usually translated as "antecedent events"), *anubhāva*-s ("consequent responses") and *vyabhicāribhāva*-s ("transitory emotions") in whatever way they are combined, before this final operation, in a domain-specific way. A domain could be some art form; this could be a base art form by itself or multiple ones together such as film or *nāṭya*. Similarly, *sādhāraṇīkaraṇa* seems to be implicated in the relation between *bhāva*-s and *rasa* as in the second statement (which actually refers to "commonization"), i.e., *rasa* is the end result of *sādhāraṇīkaraṇa.*

Sādhāraṇīkaraṇa is best understood as dimensionality reduction[14] in the most general mathematical sense: due to the limited number of *rasa*-s available, the mapping is from the many *bhāva*-s and contexts (for example, *vibhāva*-s) to one of the *rasa*-s using some function. While this reduction, often called "data-fusion", can use many techniques (a serious subject of enquiry, for example, in machine learning or in "big data"), one simple technique is that of projection where some dimensions of the issue at hand are projected out or ignored (for example, the femaleness of a character); a slightly more complex one is regression. Depending on which dimension(s) are projected out, we get different values but they are not arbitrary as they are all related. Note that if regression is the model, depending on whether regularization is involved or not, it can be idealization ("top-down") or generalization ("bottom-up"). We will not discuss this or more complex approaches further. Note that *Sādhāraṇīkaraṇa* can effect inference, hierarchy formation and other operations (listed earlier) in the most general setting, and therefore the wide diversity of opinions across thinkers on the nature of *rasa*.

In order to relate these ideas to current thinking in computational linguistics processing, consider first a recent paper (Hovy 2015) by E. Hovy (from Carnegie Mellon University) on how to model sentiments of a text[15] in a computer science/linguistics perspective ("sentiment analysis"); it is instructive to be aware of what is currently

close to "state of art" in a computational sense. Hovy's paper is a reaction to a statistical processing of large amounts of data without a serious linguistic model; here he is proposing an alternate model based on some domain understanding. This model says there are opinions and feelings/emotions, with 2 types of the former ("Judgement" and "Belief" opinions). Each opinion has at the minimum a quadruple as its internal structure, namely: Topic, Holder, Claim and Valence. Hovy defines "Judgment" opinions as those that either express or not that the "Holder" will follow goals to try to own/control/obtain the "Topic". "Belief" opinions, on the other hand, express whether or not the "Holder" will assume the "Topic" is true/certain/etc. in later communication and reasoning. Valence for Judgement opinions can be positive, negative, mixed; neutral; or unstated. For belief opinions, valence can be believed, disbelieved, unsure; neutral; or unstated. Other possible components mentioned are: strength of an opinion, facets of a topic, conditions on opinions, and reasoning/warrant for opinion. The "big data" problem is dimensionality reduction when large number of sentences are "translated" into objects in a multidimensional space (with quadruples, etc reflecting features such as Topic and others in the model), or answering queries based on these features in data. While we do not further discuss this paper[16], a discerning reader may be able to see the difference in perspective and emphasis.

Vasuvalingam critiques Shulman and Pollock as implying that *sādhāraṇīkaraṇa* is highly subjective (Vasuvalingam 2017). The latter view is a serious misreading as the mathematical operation could be, say, projection, so depending on what is generalized we get a lattice of values that are mathematically related. Furthermore, *sādhāraṇīkaraṇa* model of dimensionality reduction seems to be general enough that questions posed by *Rasa* Theorists — such as whether simulation, inference and hierarchical relationships are involved, or where the *rasa* is produced — can be handled in the same general way.

In the Indic model, each art form has its atomic units[17] that are grouped consciously into higher level structures with a useful and insightful vocabulary. This is in contrast to the sometimes *ad hoc* theories in current art disciplines without a common vocabulary or insights. The two-fold layered notions of *rasa* and *bhāva*-s[18] are a significant insight that is also now present in more abstract forms in recent proposals to understand *qualia* (e.g., Orpwood's theory

(Orpwood 2013) that we discuss in some detail in §3.1) or in the discipline of affective science mentioned above. *Bhāva*-s result from composition of suitable "atomic" units (bottom up) in some art form, including possibly some cognitive inputs (top-down) too. But if a *bhāva* is not "recurrent" or "*sthāyi*" (viz. in a attractor state), it does not give rise to a consistent message[19]. When it does, we have a *rasa* as the informational message that is conveyed to the *sahṛdaya* [20]. Furthermore, analogous to protein folding that is a complex function of a linear DNA structure, the message may be a complex function of the (linear) atomic units but possibly without a deterministic mapping.

Taking music as an example, the *svara*-s when sung in the context of a specific *rāga* give rise to a *rasa* but the mapping is non-trivial and may be probabilistic too. The number of possibilities of *svara* arrangements and "shapes" (due to *gamaka*) are huge and the *rāga*-s (just like innumerable proteins) have to be carefully crafted or delineated by inspired singers and composers to reveal one or more moods. Furthermore, given the *ārohaṇa* and *avarohoṇa* of a *rāga* (ie. the permitted ascending and descending notes), one can construct a "finite automaton" that characterizes it; to handle features such as, for example, *saṁvādi* or *vivādi svara*-s requires us to add the probabilistic condition that these *svara*-s be visited often or rarely. Some general (subjective) observations can also be made: *auḍava/ṣāḍava vakra rāga*-s (with sharper transitions between *svara*-s as they use 5 or 6 instead of 7 *svara*-s in the *ārohaṇa* or *avarohaṇa*) tend to elicit powerful emotions (with easily cognizable *svara-sañcāra*-s/*prayoga*-s or "*pakaḍ*-s" or signatures) whereas *sampūrṇa rāga*-s tend to induce deeper meditative states.

The *sañcāra*-s/*prayoga*-s /*pakaḍ*-s or the reemphasized musical phrases may be seen as conserved parts of *rāga* elaborations either by the same singer/artist or even across many. Such a view naturally fits a "profile" **HMM** (Hidden Markov Model) perspective[21] on the various musical traces of a *rāga*. The biologically inspired HMM models can also be useful in exploring such ideas as hybridization and crossover (especially as the *ārohaṇa* or *avarohaṇa* can each by itself be same across two different *rāga*-s; both can even also be same except that the *vādi* and *saṁvādi* can be different) and even transposition ("*mūrchanā*-s/*grahabheda*").

Identifying *sadhāranīkaraṇa* as the operation for realizing a state (specifically, a *rasa*) close to "*brahmānanda*" ("transcendence") is very inspired as, Janata and others,[22] for example, have identified the temporo-parietal junction (**TPJ**) region as the location of self-referential activity — how we maintain our sense of self, feel, think, infer what others are thinking — in the region of the brain (based on research in a new field called Social Neuroscience) that is also involved in musical experience (or possibly other arts too) (Janata 2014).   Due to the higher level structures theorized in the Indic thinking, there is a possibility of correspondence with and searching for neuro-correlates; there is definite need for research, and the Indic insights and vocabulary may provide a platform for framing newer questions.

Note the hierarchy of levels (7 in total) of description for emotion processes and their mapping into lower-dimensional space in figure 1 (based on figure 1.1.2 in (Scherer 2010)). The layers in the figure are:

1. Appraisal criteria checking (with Criteria-specific outcomes),

2. Componential patterning (with Outcome-specific responses),

3. Integration to unique feeling (Integration and synchronization),

4. *Qualia* emotions (Semantic feature rules; Specific to individuals),

5. Labelled emotions (Semantic field rules; Specific to language/ culture),

6. Modal (basic) emotions (Semantic dimension rules; Universal),

7. Affective dimensions (Universal).

Here the processing after the top layer is similar to the processing of *vibhāva*-s, the next one to *anubhāva*-s, next is the lower subjective "*niṣpattiḥ*" processing, 4th one is possibly related to the projections, 5th related to one sublayer of *sādhāranīkaraṇa* especially with respect to *sthāyibhāva*-s, last one being the mapping of *bhāva*-s to *rasa*. We give the same diagram below, redrawn with our annotations non-italicised. Note the sequential processing in the original diagram for the model; this may not be a necessary feature.
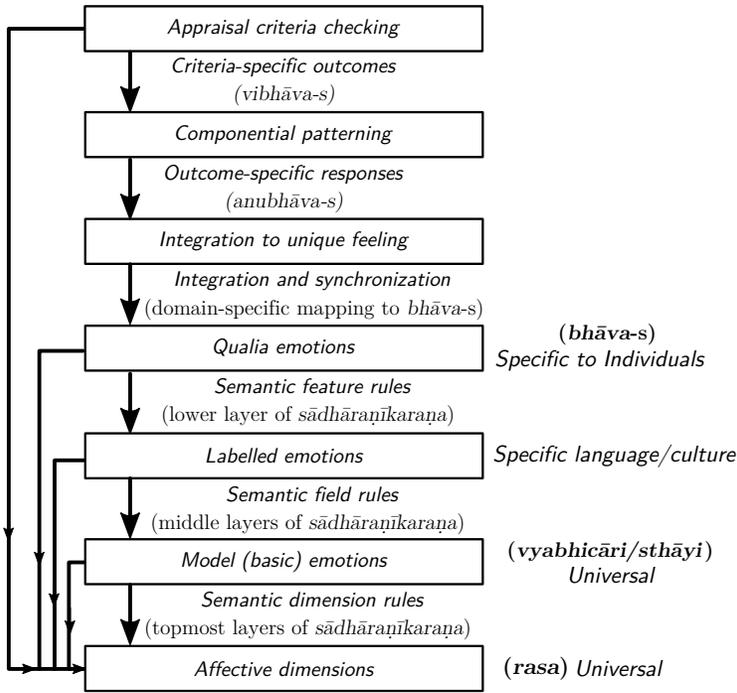
Figure 1: The hierarchy of levels of description for emotion processes and their mapping into lower-dimensional space.
(*annotated and adapted from* figure 1.1.2 in Scherer (2010) *Original text in italics*).

The same model (simplified) with emotion processing in a closed loop (figure 2) when redrawn from figure 1.2.2 of (Stacy 2010) with our annotations (non-italicised) is as follows:

We therefore start by discussing commonalities across some art forms to rebut Pollock's claim that there is nothing common (§1.3). We follow with a brief summary of *Rasa* Theory (§2) as needed for our purposes. We then give a high level outline of a theory for *rasa* (§3). We then briefly discuss current theories of mind relevant to *rasa* (§3.1). We next present an outline of our thesis towards a contemporaneous computational theory of *rasa* (§4). Afterwards, we discuss structuring models in various Indic art forms (§4.1) followed by a computer
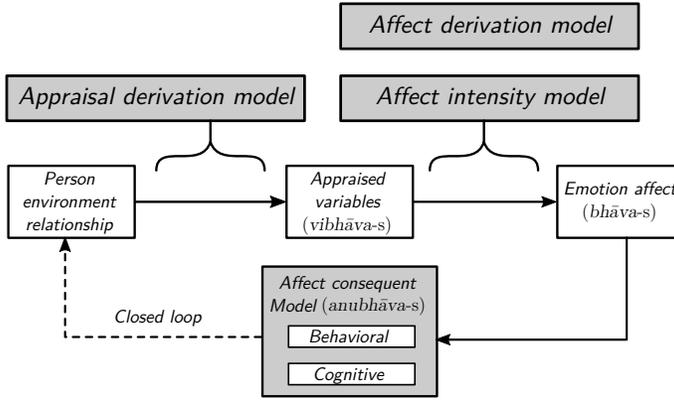
Figure 2: A component model view of computational appraisal models (*annotated and adapted from* Marsella *et al.* (2010) *Original text in italics*)

systems model for *nāṭya* (§4.2), and end by giving some examples from music in §4.3. Next we discuss computational thinking specifically in the context of poetry (§5.1), music (§5.2), architecture (§5.3), and briefly in some other selected areas (§5.4). We finally end with some conclusions (§6). As to the wellsprings of Indic thinking, we then briefly discuss computational thinking as an important source: first in general (Appendix 1), followed by computational thinking in the Indic tradition (Appendix 2).

As this paper is very much a work in progress, we hope that future progress in this area find a computational perspective useful.

1.3   Commonalities across Painting and other Arts as per *Citra-sūtra*

The *Citra-sūtra*, a subtreatise of *Viṣṇudharmottara-purāṇa* on painting and making images, discusses (in Chapter 43) *rasa*-s in painting based on *Nāṭyaśāstra*. It begins with king Vajra seeking knowledge from sage Mārkaṇḍeya on the art of making images for worship so that the images manifest the deities. Mārkaṇḍeya says that without knowledge of painting, it is not possible. When he is in turn asked about painting, he says without knowing the dance art form, it is not possible as both

art forms require the world to be represented. To learn dance, music, both instrumental and vocal, need to be mastered; then, mastery is also required of classical, vernacular and popular music. Thus painting is needed to understand *nāṭya*; without knowledge of *nāṭya*, one can scarcely understand the technique of painting[23].

Furthermore, he says that

> "He who does not know properly the rules of *Chitra* (painting) can scarcely discern the essentials of the images (*śilpa*)."

Also,

> "The observation of nature and of the rules of dancing are indicated as the ultimate resources of the painter. This does not mean that the positions of dancers have to be painted. None of the nine positions of the treatise on painting in the *Viṣṇudharmottara* coincides with any of the 101 positions explicitly described in Bharata's *Nāṭyaśāstra*. What is meant by the derivation of painting from dancing is that movement is common to both these expressive forms; it asserts itself in purity through dancing, it guides the hand of the artist, who knows how to paint figures, as if breathing, the wind as blowing, the fire as blazing, and the streamers as fluttering. 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. Imagination, observation and the expressive force of rhythm are meant by the legends of the origin of painting, to be its essential features."   (Kramrisch 1928:9–10)

A basic review of the commonality across the various *kalā*-s is also given by Sreenivasa Rao:

> "The Shilpa (sculpture) and Chitra (painting) are closely related to Nāṭya (dance)[...]. The rules of the iconography (prathima lakṣana) appear to have been derived from the Natya-sastra. The Indian sculptures are often the frozen versions or representations of the gestures and poses of dance (cāris and karaṇas) described in Natya-sastra. The Shilpa and Citra (just as the Natya) are based on a system of medians (sutras), measures (mānas), postures of symmetry (bhaṅgas) and asymmetry (abhaṅga, dvibhaṅga and tribhaṅga); and on the sthanas (positions of standing, sitting, and reclining). The concept of perfect symmetry is present in Shilpa and Citra as in Nrittya; and that is indicated by the term Sama." Furthermore, "The Indian art that rendered religious themes shared a common pool of symbols and avoided imitation of the physical and ephemeral world of the senses. For instance, in all the Hindu, Jaina and Buddhist themes, alike, the Chakra – the revolving wheel of time symbolizes the cyclical rhythms of all existence; the Padma – or the

lotus embodies creation – that springs from the bosom of the earth; the Ananta (represented as a snake) symbolizes water – the most important life-giving force from which all life emerges, evolves and then resolves; the Swastika – represents the four-fold aspects of creation, motion and a sense of stability; the Purnakalasha the overflowing pot symbolizes creativity and prosperity; the Kalpalata and Kalpavriksha – the wish-fulfillment creeper symbolize imagination and creativity; and, Mriga – or deer – symbolizes desire and beauty.

Similarly there were a common set of gestures (mudra) by position of fingers, hands, limbs; and by stance of images in paintings and in sculptures. These varied mudras made explicit the virtues such as wisdom, strength, generosity, kindness and caring etc. The objects depicted in Indian art evoked an imagery or represented an idea that sprang from the mind. That might perhaps explain the relative absence of portraiture and even when it was attempted the emphasis was on the ideal person behind the human lineaments rather than on the physical likeness.

Another feature is the absence of the sculptures and other representations of rulers or rich patrons. And, hardly any sculpture or painting bears the signature or the name of its creator. That might again symbolize a move from particular to the universal. But, it surely baffled generations of historians."

There is already a hint of *sādhāranīkaraṇa* of the *Rasa* Theory here; we will discuss this in detail later. Additionally, while Pollock concentrates on *praśasti* to emphasize feudal relations, here we have a different perspective.

Furthermore,

"Indian figurative art is therefore not mere portraiture of the specific; but is a symbol pointing to a larger principle. It is akin to the finger pointing to the moon. For instance the image or the painting of the Buddha could be seen as that of the Buddha the historical prince Siddhartha Gotama and Sakyamuni. But, it is more than that. The Buddha figure is the embodiment of all the compassion, pathos and grace in absolute. Often, certain symbols surrounding the Buddha-image are meant to amplify its message. For instance, the idea of reverence and holiness could be represented sometimes by the surrounding vegetation, flora, fauna, yakshis, gandharvas, and apsaras each playing a specific role in building a totality; or it may be the single austere simple statement of the still centre of peace and enlightenment suggested through the symbols of the Buddha such as the Bodhi tree, seat, umbrella, sandals,

footprints etc.   The Buddha image is, thus, at once particular and universal. The spirit and soul of the Buddha is contained in the body of the particular but impersonalized form; the serene mood of compassion it portrays is everlasting and universal."   Rao (2012)

This again hints at *sādhāranīkaraṇa* as an important overarching principle. The sacred dimension is also an important common part across various *kalā*-s. To quote from Stella Kramrisch (1928:3):

"Vajra said: The Supreme Deity has been described as devoid of form, smell and emotion and destitute of sound and touch so how this form can be (made) of Him? Mārkaṇḍeya replied: Prakṛti and Vikṛti (come into existence) through the (variation in) the form of the Supreme Soul. That form of Him(which is) scarcely to be perceived is called Prakṛti. The whole universe should be known as the Vikrti (i.e., modification) of Him, when endowed with form. Worship and meditation (of the Supreme Being) are possible (only when He is) endowed with form. The best position of the (Supreme) Soul (however) is to be imagined without form. For seeing worlds (He) possesses eyes closed in meditation...

This concession being made, life in its entirety becomes fit for artistic representation, and the realm of imagination is as close within the reach of the artists, as nature that surrounds him, for tradition guides him in the one case and observation checks and inspires him in the other.

Interestingly, the cross-*kalā* aspects are also very much on the table for discussion:

Colour symbolism underlies not only the painting of statues which, according to their *sāttvika, rājasika* and *tāmasika* aspects, had to be painted white, red or dark, but was respectively selected for *rasa*-Citras, the pictures of emotions, which, according to the Śilparatna, formed a group by themselves, distinct from the realistic paintings that were resembling what is actually seen in nature and looked like a reflex in a mirror. Each *rasa* (emotion) had to be painted in its expressive colour, the *śṛṅgāra* (erotic) was of *śyāma* hue, the laugh-exciting (hāsa) of white colour, the pathetic (karuṇa) of grey colour, the furious (rudra) of red colour, the heroic (vīra) of yellowish white colour, tho fearful (bhayānaka) of black colour, the supernatural and amazing of yellow colour and the repulsive (loathsome, vībhatsa) of blue colour.

Kramrisch (1928:19) (*italics and diacritics as in the original*)

Kramrisch says further (1928:206b):

The temple builder and the image maker were working on the same foundation of a magical suggestiveness of form-connections. But the

rules valid for both, apply to painting too, as far as they can be applied there. ... This common basis of architecture, sculpture and painting – it was shown that it primarily underlies dancing at times – is responsible for a fusion of the various disciplines of sculpture and painting, for a desperate attempt of visualizing what perhaps is beyond visualisation.

The *Citra-sūtra* concludes with an interesting observation (1928:62):

"In this treatise only the suggestions are given, oh king, for this subject can never be described in detail even in a hundred years. Whatever has not been said here should be inferred by other means..."

This observation may be alluding, among many others, to the need for many *guru-śiṣya paramparā*-s to explore multiple possibilities given the basic structures; this sociological aspect is also common across various *kalā*-s due to the importance of *mano-dharma* in the Indic tradition.

Considering either Indic philosophy of grammar or *Rasa* Theory, there are surprising similarities. In the Indic tradition, the intent (or inner idea, *sphoṭa*) is said to be the primary cause and then comes elaboration. In the context of *vāk*, it is elaborated as *parā*, *paśyantī* (that which is seen by "seers"), *madhyamā* ("inner articulation") and *vaikharī* ("actually spoken"). In *Rasa*/linguistic theory, we have *sphoṭa* that corresponds to the first two, *dhvani* that corresponds to the last two. What is interesting is that the commonality arises from the same source or perspective such as, for example, Kāśmīra Śaiva thinking on the nature of reality. Furthermore, Mukund Lath (2016:103) in the context of thought and music says

"...The idea of *paśyantī vāk* (and the word "*vāk*" here, can be plainly taken to indicate both music and word-based language: both being sound-based) suggests a level of meaning-consciousness that lies beyond the ordinary levels of language usage, beyond, in other words, of *vaikharī* (uttered, expressed language) and *madhyamā* (the unuttered flow of language that keeps endlessly moving in our consciousness). We are in the field of *paśyantī* when we are seeking to articulate an unexpressed thought—or a *rāga*. We look for the right word or *svara*, which is not there but which we reach through our meaning-seeking reflexive consciousness. But what is the criterion of discrimination? The criterion is the unexpressed, disembodied idea itself, for there can be no other. And this search therefore leads us beyond *paśyantī* into *parā*: for the sought idea—or *rāga*—is not a singularly existing "metaphysical" entity, it lies in an ineffable field of an ever creative possibility. This is the *parā*, the source, the seed or the nucleus of meaningfulness. We have no grasp

of it, except, in whatever measure, through our inward-turning reflexive consciousness, which forever and insistently tries to reach out to it."

The above discussion hopefully convinces the reader that lack of commonality is not a defensible proposition and it is incomprehensible that Pollock even makes the charge. We discuss this aspect in a more technical way below by looking at the "atomic" units of the various art forms and how they are grouped bottom up for discussing higher level structures and also the opposite top down view where appropriate.

2   A Brief Introduction to *Rasa*

Rasa can be defined as ecstasy derived from seeing or hearing an art form such as *dṛśya-kāvya* (e.g., *nāṭya*) or *śravya-kāvya* (e.g., *Rāmāyaṇa*). *Bharatārṇava* of Nandikeśvara in particular says (Gairola 2013:225)

> *aṅgenālambayed gītaṁ hastenārtha-pradarśanam |*
> *cakṣurbhyāṁ bhāvayed bhāvaṁ pādābhyāṁ tāla-nirṇayaḥ ||*

"The song is supported by the body;
The hands show the meaning;
The eyes express the moods;
The *tāla* by the feet."

> *yato hastas tato dṛṣṭir yato dṛṣṭis tato manaḥ |*
> *yato manas tato bhāvo yato bhāvas tato rasaḥ ||*

"Where the hand is, the eyes follow; where the eyes go, the mind follows; where the mind is, there the *bhāva* is; where there is *bhāva*, there the *rasa* is".

The *anukartṛ* (actor) uses his body (e.g., *grīvā*, *bhrū*) and *cāri*, *karaṇa* (body postures) to emote the *bhāva*-s. The above *śloka*-s give a vivid connection between the mind and body coordination so central in a general theory of *rasa*. A reader or spectator may identify himself/herself with the characters depicted so completely that he/she may weep real tears but it is that of exquisite joy! To explain such a phenomenon, a theory of *rasa* is needed; this is addressed at length in the Indian tradition.

In Chapter 6 of *Nāṭyaśāstra* (6.33-6.34), Bharata says that *bhāva*-s produce *rasa* and not vice versa (Rastogi 2016)!   However, just immediately afterwards (6.35-37), while Bharata first says *bhāva*-s cause the many *rasa*-s through *abhinaya*, he then says neither is *rasa* without *bhāva*-s nor vice versa.   Furthermore, in their mutual dependence, both their fullnesses result from *abhinaya*; their relationship is like that between a seed and its plant and each causes the other to happen! *Bhāva*-s and *rasa*-s cause one another to come into existence (*bhāvayanti*). These statements can be reconciled if we keep in mind the idea that while at the beginning *bhāva*-s cause *rasa*-s to be produced, subsequently, they can have a codependency.

Additionally, a *rasa* is not a single "essence," as it is not a single, pure substance but a combination of many sensory inputs; these produce "a richly textured, emotionally resonant experience larger than the sum of its parts" (Beitmen 2014).   Furthermore, *rasa* is an additive property.   Bharata describes *rasa* using the metaphor of a mixture: *rasa* is like the agreeable taste of a well made dish with spices, with the aesthetic experience being the savoring of this dish. Different *bhāva*-s (emotional states) such as *hāsya* and *śṛṅgāra* are like ingredients in the dish; although they are mixed, *sahṛdaya*-s can distinguish each emotion while at the same time enjoying their creative combination. Bharata's *rasa* model is therefore the aesthetics of a mixture of emotions and not pure essences (Beitman 2014:30–31). Moreover, Bharata declares that the various *rasa*-s (the "moods" experienced by the audience members) and the *bhāva*-s (the "states of being" portrayed by the actors) "cause one another to originate (*bhāvayanti*)".

Bharata has listed 56 *bhāva*-s and 8 *rasa*-s. For example, *rati bhāva* and its corresponding *śṛṅgāra rasa*; similarly *utsāha bhāva/vīra rasa; śoka/karuṇa; hāsa/hāsya; vismaya/adbutha.* These are *kāyika* or *āṅgika bhāvas.* Examples of *anaṅgi rasa*-s are *bhaya/bhayānaka, krodha/raudra, jugupsā/bībhatsa*; interestingly, some of these are said to be implicated in psychological disorders. Some *bhāvas* are *sāttvika* such as *romāñcaka, stambha, vaivarṇya*; these depict the physical expression of the emotions in the mind.

There are primary or stable *bhāva-s (sthāyibhāva-s)* and secondary or transitory ones (*sañcāribhāva-s*). *sthāyibhāva-s* are stable emotions that can become *rasa*-s; *Śrī Bhakti-rasāmṛta-sindhu* (2.5.1) gives the following

definition:

> *aviruddhān viruddhāṁś ca bhāvān yo vaśatāṁ nayan |*
> *su-rājeva virājeta sa sthāyi bhāva ucyate ||*

"That *bhāva* which, controlling other favorable *bhāva*-s such as *hāsya*, and contradictory *bhāva*-s such as *krodha*, presides in the manner of an efficient ruler, is called the *sthāyibhāva*." The *sthāyibhāva*-s are caused to happen by the actor (*bhāvayanti iti bhāvāḥ*) so that the related *rasa* is produced in the spectator (*bhavanti iti bhāvāḥ*); these require, in a good performance, that there is correspondence between the cognitive[24]/mental states of both the actor and spectator. It is interesting that *Nāṭyaśāstra* also discusses certain physical states of the spectator in the context of *rasa* including sounds (claps, counting *tāla*, *aho*!, etc) and movements (hands, head, etc); this is another instance where the Indic world differs in that total silence is not expected from the audience!

Viṣṇu-dharmottara says it in its own way:

> *rasānāṁ samavetānāṁ yasya rūpaṁ bhaved bahu |*
> *sa mantavyo rasaḥ sthāyī śeṣaḥ sañcāriṇo mataḥ ||*

When *rasa*-s come together, the *rasa* whose nature is prominent is the *sthāyibhāva*, and the other *rasa*-s are *sañcāribhāva*-s.

Rasa is not *ādhyātmika* but at the same time it is not *laukika*. Abhinavagupta extended the original 8 *rasa*s of Bharata by adding *śānta rasa*. *Rasānanda* or *kāvyānanda/kalānanda* is held to be different from *brahmānanda* but more like *śānta rasa*; here *ānanda* is defined as that *sukha* that is not *duḥkha-sparśi-sukha* (that which is untouched by sorrow). Later, *śānta rasa* (Abhinavagupta) and *bhakti rasa* (Rūpa Gosvāmin/Madhusūdana Sarasvati) have been held to be close to the state of *mokṣa*. But Bharata's *rasa* is in the domain of *dharma* (*trivarga*) and not *mokṣa*[25]![26]

Bharata says: "*vibhāvānubhāva-vyabhicāri-saṁyogad rasa-niṣpattiḥ*" which is typically translated as follows[27]: *rasa* is said to be produced (*rasa-niṣpattiḥ*) by a combination of the *vibhāva* (determinants), *anubhāva* (consequents), and *vyabhicāribhāva* (*sañcāri* or transitory states or fleeting emotions). Some *vibhāva*-s are *ālambana* (supporting), some are *uddīpana* (intensifying; usually environmental ones).

Avadhāni Shankar Rajaraman says:

> From an Indian aesthetic viewpoint, narratives can be understood in terms of the emplotment of *vibhāva*-s (antecedent events), *anubhāva*-s (consequent responses including verbal and non-verbal behaviours), and *vyabhicāri-bhava*-s (transient states such as *garva*, *asūyā*, *śrama*, *vyādhi*, *viṣāda*). Put simply, Sanskrit poets integrate *vibhāva*-s, *anubhāva*-s, and *vyabhicāri-bhava*-s in a coherent and meaningful manner within a narrative. The effect of emplotment on the reader is that his/her *sthāyi-bhāva*-s (sustained egocentric mental states such as *rati*, *utsāha* (perseverence), *śoka* (sorrow)) are transformed into *rasa*-s – their pleasurable, aesthetic counterparts. According to the *Nāṭya-śāstra* of Bharatamuni (1992), dramatic narrative (*nāṭya*) must refer to the actual world for its depiction of antecedent events and consequent responses. *Vibhāva*-s and *anubhāva*-s thus have their real world correspondences in the form of *kāraṇa*-s and *kārya*-s. To know *vibhāva*-s and *anubhāva*-s is to know their corresponding real world *kāraṇa*-s and *kārya*-s (stimuli and responses). *Vibhāva*-s and *anubhāva*-s are therefore described by Bharatamuni (Dvivedi 1996:153) as *loka-svabhāvānugata* (compatible with what holds true in the actual world), *loka-prasiddha* (well-established in the actual world), *loka-svabhāva- saṁsiddha* (determined by what holds true in the actual world), and *loka-yātrānugāmi* (in agreement with the world of interactions). The word *loka* (world) used here refers, no doubt, to a cultural world within which *nāṭya* is made meaningful.

> (Shankar 2018:224)

After Bharata, many thinkers such as Daṇḍin, Bhaṭṭa Nāyaka, Ānandavardhana, Abhinavagupta and others discussed the use and application of the theory of *rasa* to literary texts but with their own innovations. For example, Ānandavardhana introduced a new thinking into *kāvya* that a poet ought to strive to evoke a single *rasa*; this predominant *rasa* he called *aṅgi-rasa*. Even if other *rasa*-s are necessary, those should be treated as mere auxiliary to the main *rasa*. Furthermore, a plot also must have a *aṅgi-rasa* with good *kāvya* avoiding those aspects not directly relevant to the development of the main theme and *rasa* (such as events, descriptions, figures of speech, etc.). Bharata did not have this requirement: there could be different *rasa*-s as needed in a dramatic production. Other authors developed this idea further; even here, it seems that each act in a dramatic performance would have a principal *rasa*.

As an example, we now give one *rasa* based analysis in a *kāvya*, again from Shankar (Shankar 2018:228):

...[V]erse no. 1.1, the *nāndī-padya*, of Harṣa's *Priyadarśikā*... depicts the marriage between Śiva and Pārvatī, describing a series of emotional states that the latter is going through in that situation. Pārvatī, the bride, longs to have a look at the face of Śiva, the groom. But her eyes are agitated by the smoke from the sacrificial fire. The cool rays of the moon on Śiva's head come to her rescue and comfort her reddened eyes. Just as she is about to catch a glimpse of Śiva's face, she beholds Brahmā, the officiating priest, in their vicinity, and out of modesty bends her face down (how could she, in spite of her eagerness, directly look at the groom when another male is standing close by?). She can now see Śiva reflected in her bright toe-nails. But instead of being happy that she could manage to look at least at the reflected image of her husband, Pārvatī is filled with jealousy because along with Śiva is also reflected Gaṅgā, her co-wife, whom he holds in his matted locks. Going through these emotional states, Pārvatī suddenly feels the touch of Śiva's hand on hers during the ritual of *pāṇi-grahaṇa* and is covered by goosebumps. [The] poet has carefully brought together the descriptions of several bodily and behavioral responses (agitated eyes, bending the face down, goosebumps) and mental states (eagerness, bashfulness, jealousy) to strengthen his depiction of Pārvatī's love for Śiva (In *Nāṭyaśāstric* terms, the *sthāyi-bhāva* in this verse is *rati*, which being augmented by *vyabhicāri-bhāva*-s such as *autsukya*, *vrīḍā* and *asūyā*, and *anubhāva*-s such as agitated eyes, bending the face down, goosebumps, etc., is elevated to the state of the *rasa* viz. *śṛṅgāra* in the reader.)

Another example we can give is that of Lalleśvarī (Lal Ded) of Kāśmīr. In one of her *vāk*-s, she says (Hoskote 2011:134):

So many times I've drunk the wine of the Sindhu river.

So many roles I've played on this stage.

So many pieces of human flesh I've eaten.

But I'm still the same Lalla, nothing's changed.

On a first reading, *bhayānaka* (terrifying) or *bībhatsa* (disgusting) *rasa*-s are likely. A deeper explanation is interesting: Lalla's *ātman* has used/consumed so many bodies in her past lives!

One cannot fail to notice that *rasa* is often discussed taxonomically in the Indic tradition (for example, 56 *bhāva*-s or 9 *rasa*-s); interestingly many of these distinctions are surprisingly well founded (the list of *bhāva*-s/*rasa*-s says Patrick Hogan "coincides remarkably well with the lists of "basic emotions" developed by cognitive psychologists

in recent years (see, for example, Ekman[28]; Oatley and Johnson-Laird; and Johnson-Laird and Oatley)" (Hogan 2003a:40). The Indic taxonomical impulse is due to its inclusive orientation so as not to exclude anything; Hogan makes an interesting observation on Indian ontology and epistemology that is worth quoting here:

> "While all cultures are diverse, India has reveled in its differences. Ancient sages sparred with one another on every question from the meaning of the universe and the nature of soul to the precise number of the varieties of the simile. One may draw a broad distinction between exclusionary cultures and incorporative cultures. Exclusionary cultures tend to identify a "correct" set of practices and to eliminate others. Incorporative cultures tend to accept all varieties of idea and habit, finding a singular place for them — often in a hierarchical structure. Ancient, classical and medieval India are among the most incorporative cultures of which I am aware. Thus, historically, India has been culturally multiple not only in lived culture, but in official culture. Indeed, some of the greatest intellectual achievements of ancient India come from an attempt to systematize that diversity. The theories of *rasa* and *dharma* are two primary instances of that systematization."   (Hogan 2003a:39)

3   A High Level Theory for *Rasa*

In this paper, we argue for a computational cum cognitive basis for *rasa* as an important component underlying *rasa*'s theoretical foundations in the Indic tradition and that such a model, we believe, addresses well the issues raised by Pollock above to understand the wellsprings of *pratibhā* as well as the commonality across *kalā*-s. For *rasa*, there is a generation aspect as well as a recognition aspect. For the generative part, the computational cum cognitive aspect is at two levels: at a cognitive level when the art form is performed and at a design level when the art form is created. Also it should be noted that our argument is not only that the *rasa* felt by a spectator ("at run-time") has to be partly cognitively structured and therefore supporting cognitive models may be necessary, but also that the creator ("at design-time") needs to understand how to create structures that create the right *rasa* in the spectator, or the right *bhāva* that needs to be emoted by the actor or artist; and here is where the computational aspect comes in. This is a crucial point that needs to be kept in mind while reading this paper as we are arguing for a non-standard, possibly unfamiliar, perspective.

For the recognition part, either the simpler iterative structures are sensed and fused with earlier (emoted) sensations ("*anubhāva*-s") by the layman or the more complex probabilistic structures are recognized "emotionally" by the *sahṛdaya*-s again given earlier *anubhāva*-s. This aspect is more closely connected with the affective component of *rasa*, the embodied sense.

Positing a recursive nature of reality (see Vatsyayan (1997), Chapter 4, for a discussion with respect to *Nāṭyaśāstra*), a computational/cognitive style of thinking seems to have been the basis of much activity in diverse Indic disciplines. The theory of *rasa*, in terms of affecting a *bhāva* in the artists/creators or *rasa* in the spectators, or constructing the art form in the first place, in turn has had a computational perspective.

This is with respect to the wellsprings of *pratibhā* as well as to understand the commonality across many *kalā*-s (domains); hence if our argument is sound or well attested by examples in the Indic tradition, Pollock's imputations above can then be said to be colored by his somewhat consistent negative thinking with respect to Indic models notwithstanding his erudition or overt appreciation in some instances.

Our main argument for the cognitive component is as follows. As the Indic tradition fundamentally makes a distinction between an actual emotion of being, say, in love or in pain or feel separation ("*bhāva*"), and what is experienced through *nāṭya* or music or art, one can say (at the start) that the latter ("*rasa*") is a simulation of the earlier one ("*bhāva*"). As we continue with the performance, each such simulation (using "memory traces" of earlier *bhāva*-s) has to be stitched together in a larger structure that represents/recalls cognitive states (along with affective states). The notion of "*dhvani*" builds these ideas further. *Dhvani* is a non-signifiable (or non-translatable?) "suggestion" of a word, phrase, sentence, (more generally) topic, or a situation constructed linguistically or in some specific art form (but which is quite different from the various *alaṅkāra*-s considered in poetics). However, one cannot list all the *dhvani*-s or "suggestions", even all the pertinent ones, of a given text or performance. Abhinavagupta also says that some memory traces may not be in the foreground consciousness but which may still have an affective component. What is even more interesting is the

relevant ideas such as *sādhāraṇīkaraṇa* ("generalization") that have a computational flavour as we have discussed.

Our main argument for the computational aspect is as follows. The Indic mind, starting from the Vedic and Upaniṣadic times, conceived of the universe in terms of a recursive structure so that the "very small" and the "very large" could be attempted to be grasped at the same time (see Kak (2005), Malhotra (2014))[29]. Mathematically (and computationally), iteration and (more generally) recursion (or its equivalents) are necessary to capture the (Turing-complete) potential of a system built on a finite set of rules. This same Indic intuition has been helpful in developing powerful models across many disciplines that deal with *rasa*. Furthermore, this recursive nature has some surprising or epiphenomenal properties, seemingly not present in the finite set of rules or that are not directly obvious and hence creates a sense of *rasa* that is exhilarating and worth striving for. (For a brief introduction to computational thinking and its specific Indic aspect, refer to Appendixes 1 and 2). We give some examples of such thinking in some art forms in Section 5.

Starting from Bhaṭṭa Nāyaka, Abhinavagupta and others, it is argued that *rasa* or the aesthetic pleasure results from "generalization": the removal of non-essential aspects or the self-interest "which is part of the link between the affect and the representational content in memory traces". Using what could be called a computational model (viz. computable functions or state machines with inputs and outputs), *rasa* is said to be "produced" (*rasa-niṣpattih*) by a combination of the *vibhāva* (determinants), *anubhāva* (consequents), and *vyabhicāri-bhāva* (transitory states or fleeting emotions).

By a process of abstraction (called *sādhāraṇīkaraṇa* "generalization"), particulars are dropped; this is useful as it is said that common everyday constraints (e.g., time, place, person's emotional moods, etc) limit the experience of *rasa*. This abstraction allows us to go to the core of the experience itself (a related example in Vedānta is the removal of the "*avidyā*" clouding our thinking). An analogous method in programming languages is "program slicing" where a program is "simplified" in a consistent way to remove a variable.

Furthermore, prototypes have been proposed by later commentators on *rasa* as a prelude to generalization: for example, male or female as a category instead of a specific character; similarly certain behaviours

or situations. The related technique in programming terms is subtyping where a more general type ("generalization") is used as a formal parameter and any derived type can be passed as an actual. Finally, if the sets of *rasa*-s is finite (as in *Nāṭyaśāstra*), these *rasa*-s can be considered as the corresponding "equivalent classes" or clusters after the operation of *sādhāraṇīkaraṇa* or generalization.

There are also other mathematical operators in the *Rasa* Theory; the *rajas* and *tamas* elements of ordinary experience need to be projected out (using, say, "projection operators") to understand the depths of *rasa*. When this happens, the subjective aspects also disappear and the *ātman* enjoys the *rasa* just as a yogi's experiences the *paramātman* (though different qualitatively, it is said).

Bharata discusses, among many others, the question of how to determine the number of experiential states. Are they finite? Also, the question of what is the mapping between the actor's experiential states to that of the spectator? Interestingly, these states are not held to be the same ("not a one-one mapping") as they are given different names.

Since one of the primary insights in the Indic tradition is the necessity or importance of a primary *rasa* along with other secondary *rasa*-s all through an artistic performance, iterative (or recursive) structures are a necessary aspect of a creative work of art so that the repetition or recursion reinforces the main *rasa* (connections with Orpwood's theory for *qualia* can be recalled here). In addition, the notion of "*dhvani*" requires (Bayesian) updating of cognitive receptive structures (as well as the corresponding affective ones) that are revisited either because real emotions with its intermediate structures are being simulated, or the iterative aspect reinduces a dominant *sthāyibhāva* and its corresponding *rasa*.

While the Indic tradition insists that *rasa* is not a cognitive state (there being no subject or object when one experiences a *rasa*, or equivalently, there is lack of discursive or relational elements; this is also the same intuition that is present in the *Trayī* as discussed with respect to *rasa*), it is still useful to have a cognitive model for the various *bhāva*-s or its simulations as it senses/transits from one "memory trace" to another as cognitive states with associated affective states.

Furthermore, self-referential cognitive structures may themselves be able to capture some aspects of *rasa* (especially those that intersect with *alaṅkāra*-s) as discussed in the Indic tradition (e.g., in the *Trayī*), but we do not pursue this here further except to make a note of Kuntaka's *vakrokti*. This insightful theory posits multiple levels in any linguistic structure and suggests that the tension (*paraspara-spardhā*) between phonetic and semantic levels is mirrored in form and content; a certain "crookedness" in this relation is what makes for an interesting experience or *rasa*. A simpler form is "*nindā-stuti*" and also irony as we discussed with respect to sentiment analysis. Note that, in a computational setting, a similar model has been attempted by Hofstadter in the 80's at a popular level, where he discusses "strange loops" in certain logical, pictorial, genetic, computer or musical systems (Hofstadter 1979). We will discuss later Tymoczko's orbifields briefly (Tymoczko 2006) and sketch a similar topological model for emotions based on *Nāṭyaśāstra*.

Note that there are notions similar to *ākāṅkṣā* ("expectation") and *yogyatā* ("appropriateness") that are also applicable here; if an aesthetically pleasing (or *rasa*-filled) iterative or recursive structure is being enacted, the *rasika* can anticipate certain substructures and that increases the enjoyment.

The two level theory of *bhāva* and *rasa*, or the related theory of Orpwood, is conceptually clear, and is helpful for further thinking in the domain of *rasa*. Without such a theory, it is not that easy to express some insights in a straightforward manner. For example, consider Hogan's explanation:

> "Specifically, the *dhvani* of a text may now be understood as the schemas, prototypes, and exempla primed or placed in a buffer between long term memory and rehearsal memory. The exempla include not only representational content, but affective force. When an exemplum is sustained in the buffer, its affective force should lead to precisely the sorts of effect hypothesized by Abhinavagupta when he explained *rasa* in terms of memory traces. Specifically, we have every reason to expect that the affective force of an exemplum would bleed into consciousness without our being aware of its associated representational content, which is to say, the perceptual or propositional aspect of the exemplum. Or, rather, we have every reason to expect this when a set of affectively and representationally related exempla (e.g., sorrowful exempla of love

in separation) are maintained in the buffer through repeated priming due to the patterned *dhvani* of a text." (Hogan 2003b:62)

While this description may be insightful, one can see the lack of levels in the description a handicap.

The Indic sense of *rasa* in addition stresses *mano-dharma* of the artist/actor while following these recursive rules. For example, it is said that an expert *śilpin* (architect) had to know other fields of knowledge such as *chandas*, music, mathematics, and astronomy. "The various arts and sciences had to be known for the one and the same purpose, so that he could apply them in his work which was to be an image and reconstitution of the universe" (Kramrisch 1976:8ff). But this is not enough, though. A "perfect" *śilpin/sthāpati* needs to have "immediate intuition, a readiness (*pratyutpanna*) of judgement (*prajñā*) in contingencies" so that, at the end of the construction, "is himself struck with wonder, and exclaims "Oh, how was it that I built it?"[30]" (Kramrisch 1976:8). This quote is a fine expression of the dynamics between formal recursive structures (to be discussed below) and *mano-dharma* that is the hallmark of the Indic sense of *rasa*. We can find similar examples of a musician — inspired by *rasika*-s and/or other musicians on the stage — to produce music which while already embedded in a formal structure, allows/inspires him to experiment and produce new interesting music.

Since cognitive structures are mental or internal representational models, and hence can be part of a computational model, we will from now on in this paper rephrase our model as a computational model of *rasa*, instead of hyphenating the name as computation cum cognition model of *rasa*. This is possible as we are, at this stage of theorizing — just as Abhinavagupta and many others (including Hogan whom we just referred to) assume that the affective states are correlated, at least at a macro-level, with the cognitive structures.

3.1 Current Theories of Mind Related to *Rasa* and Synergistic Models

As a contrast to the *Rasa* Theory, we first give a brief summary of some theories of mind that could be related to *rasa* and that could be synergistic from our point of view. In current consciousness studies, affective states are said to have *qualia* (Dennett 1992). We

can investigate if *rasa* is a quale. Four properties are often ascribed to qualia; for example, the following are listed in Daniel Dennett's critique of *qualia* (Dennett 1988):

1. *ineffable*: is non-communicable except through direct experience.
2. *intrinsic*: has non-relational properties that do not change depending on its relation to other things.
3. *private*: any interpersonal comparison of a quale is not feasible.
4. *directly or immediately apprehensible in consciousness*: to experience a quale is to know that one experiences it, and to know all about that quale.

While property 1 seems defensible, the whole notion of *bhāva* and *rasa* is the attempt to explain or make possible the communication of *rasa* from an enactor or a creator of an artistic work to the enactee. Property 2 also has some problematic aspects: Abhinavagupta talks of seven obstacles that prevents someone from experiencing *rasa*; this is obviously relational. Property 3 is also problematic: *sādhāranīkaraṇa* is an attempt to remove the subjectivity. Finally, property 4 is also a problem; there being no subject or object when one experiences a *rasa* (especially, as *brahmānanda-sahodara*), or equivalently, there are no discursive or relational elements.

We next briefly discuss axiomatic Tononi & Koch's Integrated Information Theory 3.0 (**IITv3**) model (Oizumi 2014:2) for consciousness to see if ideas of *rasa* and consciousness are related in this model; IITv3 includes the following central axioms that are "taken to be immediately evident"[31]

1: Existence: Consciousness exists — it is an undeniable aspect of reality. Paraphrasing Descartes, "I experience therefore I am".
2: Composition: Consciousness is compositional (structured): each experience consists of multiple aspects in various combinations. Within the same experience, one can see, for example, left and right, red and blue, a triangle and a square, a red triangle on the left, a blue square on the right, and so on.
3: Information: Consciousness is informative: each experience differs in its particular way from other possible experiences.

Thus, an experience of pure darkness is what it is by differing, in its particular way, from an immense number of other possible experiences. A small subset of these possible experiences includes, for example, all the frames of all possible movies.

4: Integration: Consciousness is integrated: each experience is (strongly) irreducible to non-interdependent components... Seeing a red triangle is irreducible to seeing a triangle but no red color, plus a red patch but no triangle.

5: Exclusion: Consciousness is exclusive: each experience excludes all others — at any given time there is only one experience having its full content, rather than a superposition of multiple partial experiences; each experience has definite borders — certain things can be experienced and others cannot; each experience has a particular spatial and temporal grain — it flows at a particular speed, and it has a certain resolution such that some distinctions are possible and finer or coarser distinctions are not."

With respect to 1), even if I say, "I experience *rasa*, therefore it exists", consciousness is a necessary first step. With respect to 2), Bharata also has an additive model as we have discussed earlier. With respect to 3), the number of *rasa*-s are said to be finite in the Indic tradition; these may be viewed as equivalence classes out of the many possibilities. With respect to 4), *bhāva*-s are many while *rasa*-s are fewer being the result of *sādhāranīkaraṇa*. With respect to 5), *rasa* as *brahmānanda-sahodara* is quite different from the consciousness quale as it is close to being universal, and hence inclusive. Thus Indic thinking on *rasa* as a quale is somewhat at variance with the IIT model. In complex domains, it is not clear if axiomatic approaches are effective; if they do, usually it is to synthesize multiple "successful" approaches crying out for a cleaner description. Note that even "simple" software systems display behaviours that cannot be captured "axiomatically". This is not unexpected as useful axiomatization of even arithmetic for computation is non-trivial.

Our thinking is closest to that of Roger Orpwood who suggests that *qualia* are created through the neurobiological mechanism of re-entrant feedback in cortical systems (Orpwood 2013); this model interestingly corresponds in some of its details to the computational perspective we advance for a model of *rasa* (for example, in our

modelling of *rasa*, the *bhāva*-s are akin to information structures and *rasa* to an information message in Orpwood's theory for *qualia*). We give the abstract of the paper (Orpwood 2013) for completeness.

OrchOR ("orchestrated objective reduction") is another interesting layered theory, developed by Stuart Hameroff and Roger Penrose, based on quantum processes starting from the intracellular microtubule level (Hameroff 2014). This will be mentioned only briefly here as it makes use of musical metaphors to explain or motivate how consciousness arises (ie. rather than explain how *rasa* or aesthetics arises)! OrchOR suggests that there is a connection between the brain's biomolecular processes and the basic structure of the universe and is based on developments in quantum biology, neuroscience, physics and cosmology. For example, it introduces a novel suggestion of "beat frequencies" of faster microtubule vibrations as a possible source of the observed electro-encephalographic (**"EEG"**) correlates of consciousness.

4   Outline of a contemporaneous Indic Theory for *Rasa*

Here we give a *contemporaneous* outline of a theory of *rasa* but which is directly inspired by the deep insights of the early Indic thinkers. The reader is cautioned that much more needs to be investigated for a fuller and a deeper theory but we present it in its current form to further discussion. Such a *contemporaneous* account may be useful in making sense of the diverse perspectives and approaches over the centuries; while there is no claim of diachronic development, we highlight any interesting insights of the early thinkers.

In general, for fruitful communication, both generative models used by the composer/enactor/speaker and comprehension models of the receiver/spectator/hearer are necessary. While Pāṇini focussed on the first (generative) aspect in his study of grammar, a theory of *rasa* not only needs discussion of both aspects, but also a "cyber-physical-system" (CPS) context necessarily due to its embodied focus, as text is not the only concern. The theorization for *rasa* has to be necessarily complex as it involves multiple individuals, multiple bodies and a rich and complex communication language. The latter is needed to convey not only the richness and fullness of lived life, but also enact imaginary

or creative ideas not necessarily congruent to reality (e.g., *Meghadūta*); anything that obviously falls short is not seriously interesting! Either highly abstract models to capture generality and/or detailed models are necessary. As an example of the latter, Sangeetha Menon discusses *abhinaya* through the medium of the eyes in *Nāṭyaśāstra* along with the nuances of mental states and physical representations (as many as 36 types of eye-glances such as *kānta, dīna, lajjita, glāna* and *mukula* while there are 21 types of "*śirobheda*" of the head!) (Menon 2011:263). These are attempts at inducing a 3rd person ("viewer") experience — through a 2nd person ("enactor") enactment — of what is a 1st person experience or thinking ("author")!

Furthermore, the spectator has to detach himself from his identity while experiencing the *rasa*-s by observing the *bhāva*-s emoted by the actor and following the plot; but this requires control of his body (without getting physically jumpy, for example)! In the case of the actor, there is also the "loss" of his identity, closer "assumption" of the character of the play and with a sufficient control of the body that the character's body can be emulated to a level that helps in the play rather than distract[32]. Menon says

> "The actor has to play the twin role of 'being the character portrayed' and also the narrator of the story. It is this twin and contradictory role played by the actor which enables the spectator to have the experience of *rasa* which also involves an interesting contradiction. Unless the spectator can be one with the mental state of the character portrayed s/he will not be able to appreciate the story and the specific nuance. At the same time unless a continuous detachment is maintained s/he will not be able to integrate the experience of that nuance in relation to his/her self-identity". (Menon 2011:267)

Such requirements may be satisfiable through many differently conceived models, and hence there are many arguments in the texts on which model is likely to be true. Using a computational model, one can attempt to show how some of the "contradictions" listed above can be "avoided" or sidestepped[33]. However, such a solution may also need to make some deep philosophical assumptions[34] as we are not yet in a position to locate or find neuro-correlates experimentally. Furthermore, such a model may possibly also be used to explain some of the pathologies of communication seen (such as autism).

If we are working towards a computational model of *rasa*, we need to clearly clarify why we are not calling it a mathematical

model. While computer science has often been called "constructive mathematics", current mathematics has a strong bias towards clear definitions/deep generalizations, theorems/lemmas, and proofs, and therefore may not reveal its strengths in disciplines with strong phenomenological aspects (e.g., current understandings in neuroscience) and even in quantum physics (for example, particle physics phenomenology), or the subject matter of *rasa* itself here. In phenomenological explanations, provisional models are built and checked for correspondence with experimental results; interestingly, the Indic thinking is closer to this way of thinking (see Appendix 2 for details). While the models built are necessarily intended to reveal some aspect of reality, they can be changed and newer models investigated as they do not claim to represent reality completely. This mirrors the extensive debate between axiomatism and computational perspectives (see Appendix 1).

Since a critical aspect of *rasa* is that it requires a performative aspect (such as dance, music, painting, reading/hearing text, viewing (or replaying in one's mind) some piece of art), there is a generative aspect and a communicative aspect. Considering the communicative aspect first, there can be two aspects: cognitive and affective. Cognitive aspects can be modelled computationally with sufficient detail (if not feasible with just simple mathematical structures), and interactions between objects that have ontological status can be distilled into code[35]. The generative aspect is necessarily constructive and therefore there is an element of design. Even if the subject matter is not understood well enough, deep insights can be laid down as provisional "constraints" in the system, and passed down from teacher to students.

We discuss a few examples such as the mathematical basis of Indian cuisines using a multi-dimensional space for the flavours, or in the context of music in two different traditions. For Western classical Music, Dmitri Tymoczko[36] distills some of these insights into a mathematical model, and explains why, for example, Chopin is enjoyed by many whereas *avant garde* music is only appreciated by a few (see below). Similarly, Indian Music is well known for its *guru-śiṣya paramparā*, or its many different "*gharāna*-s", to transmit across generations some "unformalized" deep understandings — such as how to render microtones (*gamaka*-s) so critical to its imagination.

Why Computational?

What then constitutes a computational (or equivalently a constructive mathematical) model for *rasa*?

(i) "Generative" modelling helps in searching for domain-specific patterns that produce *rasa*: the simpler mathematical/combinatorial (e.g., enumerating *tāla*-s (e.g., Piṅgala) or *rāga*-s (e.g., Venkaṭamakhin's *melakarta* scheme)) vs (inescapably) computational (in Western classical music, e.g., searching for what chord changes are useful or pleasing? In Indian music, e.g., how to induce a mood, context-sensitive rules about how to decide *vādi*- and *vivādi-svara*-s, transitions between *svara*-s in the context of a *rāga*). In the context of text, it could be simple or deeply "linearized" structures, sometimes with multiple levels of recursion (*Pañcatantra/Hitopedeśa/Daśakumāra Carita*, and even with multiple entries/exits of the author Vyāsa/Vālmikī himself[37] as in the *Mahābhārata/Rāmāyaṇa*, along with multiple (recursive) reciting levels), or "chorded" stories where multiple events/narratives run concurrently but presented linearly textually by interleaving them (which is quite common nowadays: e.g., *"The Joke"* by Milan Kundera) or, even more impressively, as *citra-kāvya* (e.g., *Rāghava-pāṇḍavīya* of the twelfth-century poet Kavirāja that tells the story of *Rāmāyaṇa* and the *Mahābhārata* simultaneously through ingenious *śleṣa*). Or plain stream of consciousness writings such as by Joyce. Interestingly, the *alaṅkāra*-s (similes, for example) used in *kāvya*-s typically have a stylized representation in *nāṭya*. For Indic architecture, (§5.3 where we discuss some of the mathematical structures involved); note that even here *śleṣa* may have been deliberately attempted, as in Mahābalipuram where certain aspects of the (said by some to be possibly world's largest narrative) sculpture panel favour Arjuna's penance for the boon of *Pāśupata astra*; and others to Bhagīratha's penance to bring down Gaṅgā. In this paper, §5 discusses further the generative aspect in four art forms.

(ii) Descriptive (e.g., how to recognize *rāga*-s/*rasa*-s with statistical, machine learning models; in Indian music, *svara-sthāna*-s vs reality of *svara*-s[38]), taxonomy of *rasa* (ontological models), or even "diachronic" models of *rasa*. In this paper we discuss the taxonomy aspect as necessary.

(iii) How does the affective part arise in the first place? How different is it from, for example, the cognitive part? ie. can one explain the affective part as an epiphenomenon? Can *rasa* also be modelled in a computational theory of mind? This is a complex subject and we have discussed it in §4.1 primarily but also touch upon it in many other sections.

(iv) Computational help in modelling *rasa* itself ("architecture", atomic units, levels of description, interconnections amongst units and across levels, epi-phenomenal aspects, etc.), correspondence with neuro-correlates by experiments typically attempted in computational neuroscience. The first part is discussed in this section (§3) and the next (§4); the second part is discussed in brief, descriptively if at all.

A fruitful model should be able to predict or explain some aspects that were not possible without such a model; however this might be ambitious as of now. A computational model may also be congruent to Indic sensibilities. As discussed before, there is a strong "anti-realist" position in Indic thinking, with *vyañjanā* (suggestion) as the basis of art. From a computational perspective too, one can argue that "perfection" is a chimera especially in complex domains (such as perfect shapes and the like in Greek thinking and later); and what is useful is a "sufficient" model that conveys what needs to be conveyed/suggested and which can be approached or approximated through a process of iteration[39]. In this connection, we observe that much of Indic thinking in sciences was informed by a "computational positivism" perspective. (see Appendix 1 and 2) and it is useful to think of this perspective in art forms too as Indic thinking typically looked for connections across disciplines.

In our tradition, taking music as an example, production of sounds has a long history (viz. Pāṇini and *sandhi*), and also discussed, for example, as *pindotpatti* by Śārṅgadeva. Locality properties are involved in *sandhi* as they reflect the anatomical structures of the speech-producing organs; similarly, production of *svara*-s have certain constraints with respect to what *svara*-s have been rendered before (as we do not have harmony with multiple voice leadings; but even here locality is important as we discuss below). The constraints can be coded in multiple ways; in Indian music, it was formalized partly as *ārohaṇa* and *avarohaṇa* in the system of *rāga*-s that emphasized melody and

microtones. Indian music specially deals with the space between tones (viz, microtones). Even though there are many unifying principles behind a *rāga*, ultimately each individual defines a *rāga* for himself even after adhering to an accepted framework: how *śruti*-s are handled is very individualistic within the narrow spectrum of freedom available. The difference between a pure note and a *śruti* is a "dance" between form and formlessness, or certainty and ambiguity. Instead of *svara* being taken strictly as an interval (suitable for beginners?), *svara* is seen by experienced musicians as a range that depends on the context of, especially, the *rāga*, ie, it is seen as a melodic idea rather than as an independent entity. With *gamaka*, for example, a *svara* might cross multiple nominal *svarasthāna*-s; furthermore there are instances where 2 equivalent *svarasthāna*-s (e.g., *ri*2 and *ga*1) are disambiguated depending on the context of the *rāga*.

To further explicate the computational aspects in art forms, an instructive example is the recent discovery of the basis of diversity of recipes in Indian cooking (Jain 2015) where the researchers have found that "in contrast to positive food pairing reported in some Western cuisines, Indian cuisine has a strong signature of negative food pairing; the more the extent of flavor sharing between any two ingredients, the lesser their co-occurrence" with "spices, individually and as a category, form[ing] the basis of ingredient composition". Using flavour as the "determinant", they considered various molecules involved in a flavour. Using an averaged measure of the shared flavours (in terms of molecules) across all the ingredients, it has been found that this measure in Indian cuisine is significantly lesser than expected by chance. What this means is that if ingredients are categorized by flavours in a multi-dimensional space, the ingredients are chosen that are not local in terms of distance in that space (e.g., curds and pickles); contrarily, Western cuisine prefers locality (for eg, milk and bread). For aesthetics, the question is then: is there a multi-dimensional space for entities in each art form (or their combinations) in terms of ontologically relevant features, along with a preference model for composition of entities in terms of distance (e.g., near: local, far: non-local, intermediate: semi-local)? We give such a model for Bharata's *rasa* model based on the description in *Nāṭyaśāstra* below. It is interesting or curious that Bharata uses mixing of ingredients in cooking to explain *rasa*-s!

Furthermore, recent work in understanding the basis of Western music also points in a similar direction. In contrast to Indian music, Western Music deals mainly with polyphony, counterpoint and key changes; it was discovered post 16th century that chord progression had to have some locality constraints for it to be pleasing. Dmitri Tymoczko postulates, for example, some high level desirable principles such as local transformations (e.g., transposition: C Major chord to F major chord), or inversion (e.g., C major to F minor) (Tymoczko 2006). Using these, he constructs topological objects called orbifolds: those movements in this structure that are local ("nearby") are generally pleasing. He surmises that Western Music composers such as Mozart/Chopin intuited these resulting in music that has survived till today (in one popular composition, for example, Tymoczko shows that Chopin systematically traverses, one by one, all the "local" paths from a "top" chord in the orbifold space) but later composers experimented without such constraints with mixed results. Basically, exploiting such topological spaces may be difficult or even non-intuitive if local constraints are violated. For example, R Jourdain, a composer and pianist, says with respect to developments in harmonic music:

> [post Debussy/Strauss 1850's] "The brain's powers of harmonic discrimination had been pushed to their limits, as had the powers of short-term memory that maintained tonal centers long after they had faded from the aural stage. Music became harder and harder to appreciate. In view of some critics, it had become altogether inappreciable."
>
> (Jourdain 2008:98)

> "Today, concert audiences obediently sit through music by Schoenberg and his followers, but few enjoy it. Although there is much that is interesting in this music, people do not find it harmonious. It hurts their ears." (Jourdain 2008:100)[40]

> "The key to absolute pitch is early training – very early training [4 years or younger!]... Those who learn it later... report mixed results... skill tends to ebb away once practice ceases..." (Jourdain 2008:114)

Modelling Emotions as per *Nāṭyaśāstra*

As an example, let us now consider the modelling[41] of *rasa*-s as per *Nāṭyaśāstra*. There are 8 *rasa*-s (obviously we do not include

the *śānta-rasa* here), 8 *sthāyibhāva*-s, 33 *sañcāribhāva*-s and 8 *sāttvika-bhāva*-s. As discussed earlier, *vibhāva*-s and *anubhāva*-s together with *sancāri bhāva*-s are conventionally said to give rise to *rasa*; alternately, *sthāyibhāva*-s are said to give rise to *rasa*.

According to this text, the 8 *rasa*-s (and its corresponding *sthāyibhāva*) have a relationship of transformation through a specific type of action as given below (along with the colour changes):

1. *śṛṅgāra* (*śyāma*) → (mimicry) *hāsya* (*sita*)

   light green → white

2. *raudra* (*rakta*) → (result act) *karuṇa* (*kapota*)

   red → ash

3. *bībhatsa* (*gaura*) → (results in seeing) *bhayānaka* (*kṛṣṇa*)

   light orange → black

4. *vīra* (*nīla*) → (result act) *adbhuta* (*pīta*)

   blue → yellow

For example, the first one says that *śṛṅgāra* (its *sthāyibhāva* being *śyāma*) through mimicry becomes *hāsya* whose corresponding *sthāybhāva* being *sita*; colourwise, it is a change of the associated *rasa* colour of light green (or black) to white. Independently, the text says that *śṛṅgāra* and *karuṇa* (pathetic) seem related (especially in the context of lovers) but one is of optimism vs despair of the other.

Next, the consequents for each *rasa* are listed in *Nāṭyaśāstra* as:

śṛṅgāra: defined negatively as without fear, indolence, cruelty or disgust

hāsya: indolence, dissimulation, drowsiness, sleep, dreaming, insomnia, envy

karuṇa: indifference, languor, anxiety, yearning, excitement, delusion, fainting, sadness, dejection, illness, inactivity, insanity, epilepsy, fear, indolence, death, paralysis, tremor, change of color, weeping, loss of voice

raudra: presence of mind, determination, energy, horripilation, trembling indignation, restlessness, fury, perspiration

vīra: contentment, judgement, pride, agitation, energy, ferocity, indignation, remembrance, horripilation

bhayānaka: paralysis, perspiration, choking voice, horripilation, trembling, loss of voice, change of color, fear, stupefaction, dejection, agitation, restlessness, inactivity, fear, epilepsy, death

bībhatsa: epilepsy, delusion, agitation, fainting, sickness, death

adbhuta: weeping, paralysis, perspiration, choking voice, horripilation, agitation, hurry, inactivity, death

Given the above, one can list each such *bhāva* as a vector of mental and physical "basic" states (voluntary or involuntary) and also come with some metric of distance between emotions. Since crying, taken as an example, seems to result due to extreme happiness or extreme sadness[42], without the *vibhāva*-s, we cannot discriminate them due to the identical mapping of the emotions to the same *anubhāva*. Taking such cases (as well as a neurological mapping of emotions if also available[43] as per current understanding), the vector can be suitably modified to reflect nearness or identity of some states. Furthermore, from a composer's perspective, *vibhāva*-s and *anubhāva*-s need to be sequenced appropriately to avoid confusion (similar to *vivādi svara*-s).

Also, Abhinavagupta using Sāṅkhya psychology ("sublime": *sattva*, "restless": *rajas*, "stupid": *tamas*) says

> "aesthetic emotion is of the nature of *viśrānti* (serenity) of the heart/spirit — a condition in which restlessness attendant upon mundane activity is stilled by the play of artistic presentation ... [while] sorrow is the outcome of the restless disposition of passion but, thanks to artistic presentation, the sublime disposition of purity dominates over it and sublimates the tragic situation."   (Raghavan 1963:264)

Such insights can further be added to our model by additional transitions that can be marked as local in the context of aesthetic emotion: the notion of *sādhāraṇīkaraṇa* but now with a Sāṅkhya perspective. Such additional rules may induce "twists" or even loops in the abstract space — just as in Tymoczko's model where, for example, the chord frequencies form an unordered set rather than an ordered sequence.

The resulting topological structure can possibly be used to see how natural it is for transitions between emotions. One can surmise that "localized" transitions are more realistic in a performance — just as in

music with localized changes (e.g., in the context of *ārohaṇa/avarohaṇa* in Indic music but avoiding dissonant *svara*-s judiciously even if near; and chord progressions in Western music); also, what are forbidden or discouraged transitions (which sometimes could be actually close in the abstract space). With non-local transitions, discordant emotions or *rasa*-s are likely to be primary.

If we consider music, we can discern 2 major styles: fix pitches as in Western music and look for localized chord progressions and voice leadings (equivalent to locality in orbifold space); or, work with relative pitches as in Indian music and look for local movements (constrained by *ārohaṇa/avarohaṇa*) using complex melodic ideas such as highly ornamented *svara*-s that are not just plain *svara-sthāna*-s fixed in relation to the tonic.

Note the difference with the earlier *mūrchanā*-s that also used transpositions but in a non-tempered scale[44]. Note further that even in Indian music, when melody is accompanied by a (tonal) rhythmic instrument such as *mṛdaṅga* or *tabla* (see §5.4), structures similar to orbifolds can be used for description[45]. Due to the notion of improvisation, however, these cannot be fixed structures; even then, certain structures will be conserved across[46] — for example, *gharāna*-s — so that meaningful communication is possible. Contrast this with Western music that is based on a fixed notation, and hence valorises "inspired" reproduction but with minimal or no "probability" aspects; variety now comes with new compositions. Again, we can see that Indian thinking/art revels in "suggestion" (*vyañjanā*) and not completely fixed and formed entities.

Having discussed what a computational model can entail, we next discuss atomic units in communication, followed by the grouping of such units, the semantics of such groupings, the possible generative model for the linguistic objects, cognitive states as well as affective states given the need for comprehension by a general audience as well as by *sahṛdaya*-s, the transmission of the these combined units from the creator of the art work, to the enactor and then to the spectator/audience; and the recognition model of the received symbols by the enactor from the composer/creator and by the audience/spectator from enactor.

4.1   The "Atomic Units" in Various Art Forms and Higher-level Structures

Each major *kalā* in the Indic tradition has a reasonably well developed structural model. Pāṇini's astounding success on codifying Sanskrit grammar is likely to be the inspiration; for example, in the area of linguistic analysis, after Pāṇini, there has been original progress in the various layers or domains of phonetics, phonology, morphology, syntax, semantics, and pragmatics. Such a layered system was possibly inaugurated by Pāṇini with his *Māheśvara sūtra*-s that is based on sound phonological principles while his grammar discusses formation of words using recursive rules. Using Pāṇini's example and deep insights, later *śāstrakāra*-s investigated higher layers such as semantics (in "*ārthika grantha*-s" such as *Vākyapadīya*, *Vaiyākaraṇa-laghumanjūṣa*, *vaiyākaraṇa-bhūṣaṇa*(-*sāra*)) and *rasa* (such as the use of ideas in *Vākyapadīya*, to *rasa* in *Dhvanyāloka*). What is interesting is also philosophical discussions on whether lower layer units combine to give higher layer structures, whether higher level intention structures lower level units, or whether there are epiphenomenal aspects (anticipating the much later developments in computer science, for example, of the concepts of synthetic and inherited attibutes of attribute grammars[47]).

Ānandavardhana and Kuntaka discuss how literary texts signify things other than the word meanings, somewhat comparable to the discussion of *abhihitānvaya* vs (*abhihita*: "fixed" *anvaya*: connection *abhidhāna*: saying) in Mīmāṁsā and related areas. Computationally, this is the difference between the semantics of processing linguistic structures strictly bottom up or "topdown" (or in a "loopy" way); this is now at the *rasa* level instead of at the linguistic level. As V.S.Apte (1957) says (in the entry on *abhidhā* in his "Practical dictionary" (available online):

> The *abhihitānvayavādin*-s (the Bhāṭṭas or the followers of Kumārilabhaṭṭa who hold the doctrine) hold that words by themselves can express their own independent meanings which are afterwards combined into a sentence expressing one connected idea; that, in other words, it is the logical connection between the words of a sentence, and not the sense of the words themselves, that suggests the import or purport of that sentence; they thus believe in a *tātparyārtha* as distinguished from *vākyārtha*. The *anvitābhidhānavādin*-s (the *Mīmāṁsaka*-s, the followers of

Prabhākara) hold that words only express a meaning (*abhidhāna*) as parts of a sentence and grammatically connected with one another (*anvita*); that they, in fact, only imply an action or something connected with an action; e. g. *ghaṭam* in *ghaṭam ānaya* [trans. "Bring the jar".] means not merely 'jar', but 'jar' as connected with the action of 'bringing' expressed by the verb.

If we consider dance forms, both *Nāṭyadarpaṇa* and *Nāṭyaśāstra* (of Nandikeśvara and Bharata respectively) describe various *mudrā-s* (hand gestures) to convey different ideas; from a finite set of these, the grammar of the *mudrā-s*s generates a vast set of suggestive ideas that in principle covers almost all the aspects of human life and the "universe". Hence *mudrā-s* form the basis or 'basic units' of an expressive language; they also give a unique poetic sensibility while performing *abhinaya*.

Thus, if one does even a cursory study of the various *kalā*-s (art forms), it becomes clear that Indian theoreticians thought of each *kalā* as a multi-layered system. The basic units at the lowest layer for poetry/*chandas*/*kāvya* are *gaṇa-s*; for music: *svara*-s (for *rāga*) and *gaṇa-s* (for *tāla*); for dance: *mudrā-s*, *svara*-s, *gaṇa-s*; and for sculpture: "frozen" *mudrā-s* and so on. Even here, there are interesting complexities: for example, taking the case of poetry, there are three aspects or powers of words in the Indian linguistic philosophy. First, the *abhidhā* (denotation) of a word, lexical meaning in ordinary language, followed by the *lakṣanā* or *gauṇī* (the secondary sense or the metaphorical one). The third one is the *tātparya* (intention) by which the separate word-meanings/*abhidhā* are connected together to generate a contextual *vākya*-meaning. Later *dhvani* (suggestive meaning) is given as fourth power; Abhinavagupta, who wrote *Locana*, a detailed commentary on the *Dhvanyāloka* says: "*caturthyāṁ tu kakṣāyāṁ dhvanana-vyāpāraḥ*" (*Locana* on *Dhvanyāloka* 1.4). This suggested meaning is also known as *vyaṅgya*.

In *sphoṭavāda*, each *pada*/word is not taken into account separately after splitting a *vākya*/sentence. *Sphoṭa* is perceived only after the sound of the last word is combined with the sensory impressions produced by the earlier words. Similarly, *dhvani* "echoes" the suggested meaning by integrating all other forms of meanings – *abhidhā*, *lakṣaṇā* or *tātparya*. Just as there is a *krama* (sequence) through which a word indicates its meaning, there is also a *krama* through which the *dhvani* is revealed. In grammar, the sequence is from

sound to word, from word to *sphoṭa* and from *sphoṭa* to meaning. In poetic creations, the *krama*[48] is from *abhidhā* to *lakṣaṇā* and then to *vyañjanā/dhvani*.

Higher level structures based on these may have newer interesting aspects such as *tātparya* (this may include a speaker's intention) and intelligibility due to presence or absence of *saṃskāra* in the hearer. Furthermore, the creative impulse, the design time aspect here, is most acutely felt; even how one or more *kalā*-s relate the same event or are composed to represent the same set of events. A substantial amount of creativity or genius is involved here and there is an interesting computational aspect in the Indic tradition here.

So the basic theoretical question is how the atomic units are created, grouped, enacted, etc. to produce *rasa* in the *prekṣaka*. A reasonable model therefore first considers the real physical world (or even a virtual world) where events/experiences are located; a performance needs to convey a carefully selected subset of events (either in the real world or virtual) to a well-prepared audience / person (*sahṛdaya*) by a certain mapping (call it a syntactic x semantic x *rasa* : mapping) that abstracts it. While the events are unbounded in number, only a few limited symbols are available for communication in a practical sense. Hence, sequences of symbols (atomic units) are necessary.

The next question that arises is: Is every event/experience in the real world communicable? How does one increase the efficacy of the communication? In *Nāṭyaśāstra*, an early question posed is how to make art accessible to the common man in the form of entertainment (through enactment-watching) whereas Ānandavardhana is concerned with communicating with a *sahṛdaya* (through speaking-listening). In both cases, a computational perspective is useful. The simpler one uses iteration to drive home the *rasa* ("the take-away") but the more sophisticated approach uses probabilistic models to (attempt to) define categories of experience for the *sahṛdaya*. We first discuss the simpler iteration perspective.

In many art forms, repetition is used to create an effect. Consider the Mantrapuṣpa ("*yo'pāṁ puṣpaṁ veda...*"). The mantras here have a certain regular structure and the chanting creates a certain "vibrational" sense or cadence for the hearer; this seems to be true for all good "simple" music. Similarly, in *alāpana*-s, we may have an iterative structure in some of the simpler expressions. In rhythmic

compositions, in *mṛdaṅga chollukaṭṭu-*s, *tabla bols*, etc., tapering or other "mathematical" structures (but with an element of iteration) are often used. Such iterative structures help a layman to grasp the essence of the art form that is being communicated. The vibrational regularities are enough for a general audience to follow; it is noteworthy that a *śloka* (*śiśur vetti paśur vetti vetti gāna-rasaṁ phaṇī...*) talks about how even an infant, *paśu* or snake can know the *rasa* of music and sway to music! This is further augmented by drums that accentuate the mathematical regularities of the *chandas* (see below for a discussion) of the poetry/music; the Indian percussion instruments such as *mṛdaṅga* and *tabla* being surprisingly (and uniquely!) tonal (see last §5.4) also help in great measure.

With respect to the communication mode useful for the *sahṛdaya*, a more sophisticated approach is needed, and is very much seen in the Indic tradition. Here the musical idea or *rasa* that is to be communicated can be subtle; hence, instead of straightforward repetition of an idea, a probabilistic revisiting of structures that emphasizes or induces the dominant mood or *rasa* needs to be attempted (for example, in Indic music *sañcāra-*s/*pakaḍ-*s, or *Alpatva/Bahulatva*: the *svara* used sparingly/frequently in the *rāga*) along with some "throwaway" hints (e.g., the (theoretical) hints in Karnatic *rāga-*s could be *mandra/tāra*: the lowest/highest *svara* that can be played in the *rāga*, also possibly not currently well understood terms such as *nyāsa*: the *svara* on which the *rāga* can be concluded, *apanyāsa/vinyāsa/saṁyāsa*, etc.[49]). The *mano-dharma* notion in Indian art forms also fits nicely with this perspective, as variation is permissible based on (personal) moods and circumstances; this also ties in congruently with the notion of "*sva-dharma*" at a philosophical/individual level.

The simplest model is a frequency based generative model (called a "frequentist" model in elementary probability theory) and discussed in musical texts such as *Saṅgīta-ratnākara* of Śārṅgadeva. Not only does he give traces of *svara-*s to illustrate, for example, a *rāga gauḍa-kaiśika-madhyama* (see figure 4) but he also says (figure 3)

"let us write down the infrequent or copious nature of the *svara-*s" in the *rāga* and lists *sa* as 36 times, *ri* 12, *ga* 20, *ma* 8, *pa* 8, *dha* 16, *ni* 12, times out of a total of 112 *svara-*s.

अत्र स्वरसंख्या ऽल्पत्ववबहुत्वपरिज्ञानाय लिख्यते । षड्जाः षट्त्रिंशत् ;
ऋषभा द्वादश ; गांधारा विंशतिः; मध्यमा अष्टौ ; पञ्चमा अष्टौ ;
धैवताः षोडश ; निषादा द्वादशेति मिलिता द्वादशोत्तरं शतम् । अयं

Figure 3: Frequencies of *svara*-s in a particular *rāga*

Given that Bhāskara had already written down multinomial theorem c.1150 C.E., it is not clear if anyone took the next step of using a device such as (informally at least) a multinomial distribution[50] to generate the *svara*-s as a first small step!

An even more sophisticated but related model is available in an outline from Ānandavardhana based on Bhartṛhari's insights. Here, *sphoṭa* is the suggester and *dhvani* the suggestion with *dhvani* elaborating *sphoṭa.* Using an aural point of view, *Sphoṭa* is said to arise from *sparśa* (contact), and produces a succession of sound waves, the *dhvani*, which is aurally perceptible. Just as there can be echoes for a well struck sound reaching us in a temporal sequence, there can be "echoes" of meaning at various levels, revealing the meaning sequentially (for example, *krameṇa pratibhāty ātmā yo 'syānusvāna-sannibhaḥ* in *Dhvanyāloka* 2.20). . For example, Sreenivasa Rao (2017) says:

> The approach adopted by Bhartṛhari in explaining the process of true cognition is significantly different from that of the other Schools. Bhartṛhari argues that perception need not always be an 'all–or–nothing process'. It could very well be a graded one. There could be vagueness

७   गौडकैशिकमध्यम

सा सा सघस सघसा सघस रिमागामामा मम धमधरिधयधय धनिधनि
धमाधमा गधरि धनिध (षड्ज) ससध धससससधसरिसा सघधससससतरिगरिमरि
गसगसधसस (मध्यम) मममधमध (ऋषभ) रिरिरिधरिधयधनियधयसपधमामा ।
रीरीरिरिगरिगगधा सासाधयसधधरिधरि । ममधारि रिधानि धनिमधमा ।
गधारिधानिधा (षड्ज) ससधधसससस । रिगरिमरिगसगसा धसासं (मध्यम)
मममधमध (ऋषभ) रिरिरिधरिधयधनियधयसपधमामा । रीरीरिरिगरिगरिगगधा-
सासायधसधसधयधरिधरिममधारिरिधानियधनिमधमा । गधारिधानि धाध (षड्ज)
ससधधसससस । रिगरिगरिगरिगस गसानिनिनिसनिससससससससससससधसध-
सारिमममममधाधाध गसगसा । धाधाधमपधमामा—इत्याळपः ।

Figure 4: Traces of *svara*-s of a *rāga*

initially; but, the perception could improve as one tries to gain clarity of the object. That is to say; the process of revelation could start from the indeterminate stage and progress, in steps, to the determinate stage. At each successive step, it gains increasing clarity. It begins from complete ignorance, passes through partial knowledge and ends up in a complete knowledge.

Thus, the position of Bhartṛhari is that the overcoming of error is a perceptual process by progressing through degrees of positive approximations. Even invalid cognitions can sometimes lead to valid knowledge (say, as in trial-and-error). Initial errors or vagueness could gradually and positively be overcome by an increasingly clearer cognition of the word form or *Sphoṭa*. That is to say; the true cognition, established by direct perception, could take place, initially, through a series of possible errors; but, finally leading to the truth.

Bhartṛhari and Ānandavardhana are arguing for what is now called a "Bayesian model" for the evolution of "meaning". In the initial stages, the meaning is the "prior" given by the *abhidhā* of the *pada*-s; as other information trickles in, the meaning changes with an associated probability distribution. The background, *kāla*, *deśa*, etc. of the hearer or the experiences (*anubhava*) of the *sahṛdaya* decides the specific distribution finally used.

A mathematical structure with a probabilistic generative model such as a "Latent Dirichlet Allocation" (**LDA**), also called "graphical models", may be needed as a starting point (as it is only a "bag-of-words" model, and *ārohaṇa* and *avarohaṇa*, for example, cannot be handled directly) and interestingly, research literature supports this view, at least in the *rāga* domain. Here, *svara*-s are like words, musical phrases (e.g., *sañcāra*-s in Karnatic or *pakaḍ*-s in Hindustani music) like sentences, and *rāga*-s topics[51]. Furthermore, each *gamaka* (ornamentation) can be seen to be a time series but distributed in a range of adjacent *svara*-s. Recent research in machine learning has shown how some context sensitive aspects can be attempted to be included in extended LDA-based models. In the case of *Rasa* Theory, a model would have to incorporate how *bhava*-s are characterized as *sthāyi*, *sañcāri*-/*vyabhicari*-, and *sāttvika*, as well as how *ālambana/uddīpana vibhāva*-s produce the *bhāva*-s that finally become *anubhāva*-s. Given the extensive and detailed psychosomatic modelling in texts like *Nāṭyaśāstra*, it is not easy to come up with good validated models that correspond to the

insights therein. We however believe such a modelling perspective is possible, using some approximations, across many *kalā*-s using more detailed graphical models. Interestingly, in the domain of art and sculpture, VS Ramachandran and Hirstein have theorized about a "peak shift" for understanding the stylized portrayal of human (female) forms which, though anatomically difficult, are aesthetically pleasing (Ramachandran 1999); this may be seen, in a basic model, as a change in the constants in a generative model[52].

A composer of an art form uses a sequence of atoms (*svara*-s, *mudrā*-s, *gaṇa*-s, etc) to express some *bhāva/rasa.* It is likely that, across art forms, only a few limited *bhāva*-s are available, but with *sahṛdaya*-s it can be large. The mapping, too, is not completely definable (as per Bhartṛhari's paradoxes). The actor (or the director) has to understand what these sequences of atomic units mean, or are perceived to be; or it could even be indeterminate (just as with a series of *svara*-s). It is possible that there are multiple meanings, and the actor has to emote a suitable one, or leave it open ended (as in the case of the meaning of *svara*-s in a musical phrase).

Now supposing that we understand the basic units of each art form, the next step is to help understand *bhāva/rasa* as a phenomenon in the context of a composer, an enactor and a *rasika*/audience. It is clear that there is some element of simulation (vide Śaṅkuka and keeping also views of other thinkers against this perspective); neurologically, the mirror neurons[53] are likely to be implicated. There seems to be also a large mirror neuronal complex that seems to be at work with respect to enactment and spectating — just as in the AG (Attribute Grammar) formalism of synthesized and inherited attributes, neuronal outputs can be synthesized or inherited!

The second part is the communication itself through an actor, reader, music performer, etc. The theoretical question here is whether these intermediaries experience the *rasa*s themselves! Whether these are real or virtual? Some of the questions are: does the enactor feel the *rasa*, or does only the *rasika* feel it? Abhinavagupta argued for the former, while later scholars such as Rūpa Gosvāmin did for the latter. Again, from a neuroscience perspective, depending on the inhibitor circuits with respect to mirror neuronal complex, both seem in principle feasible (just as Bharata left both possibilities open).

The effect of some sequence of atomic units can be postulated as a combination of a cognitive state + affective state. Affective states are not cognitive, hence more likely related to non-representational aspects in the nervous system, especially evolved for quick involuntary responses such as "fight or flight" responses (mediated by the sympathetic nervous system) or "feed and breed" responses when body is at rest (mediated by the parasympathetic nervous system) but these are whole-body responses (unlike "local" inflammations or infections). With respect to *rasa*, the parasympathetic system is likely to be more pertinent.

To proceed further, we postulate a plausible neurobiological model here; our model is not dissimilar to more detailed models in neuroscience research literature (for example, Roger Orpwood's theory discussed earlier). To aid in a quick emotional response, neurotransmitters (such as acetylcholine in the parasympathetic system) or other neuro-chemicals are generated by the nervous system that in turn is accepted by various types of receptors present in various organs such as the heart, stomach, etc, for producing an affective physical response. Since the number of such neuro-chemicals combinations are limited (contrast with the extremely large number of self and alien molecules to be recognized in the immunity system (in billions) and the corresponding matching molecules to be produced), one can postulate that the *bhāva*-s generated, even if many, are most likely common across art forms.

If only sub-critical sets or quantities of neurotransmitters/neuro-chemicals are produced, there will be no clearly identifiable state. If *bhāva*-s are sustained repeatedly ("*sthāyi*"), a specific *rasa* will result (connections with Orpwood's theory for *qualia* can be recalled here). Initially, the *rasa* response can be said to be very dependent on *vibhāva*-s, but if positive feedback loops are present, the response can become independent of the initial excitation. Depending on the specific components of the *bhāva*-s, different *rasa*-s may be possible. Furthermore, given the *anubhāva*-s in the model, we have a Bayesian model, possibly a mixture model.

These *bhāva*-s, though in principle infinite in number as Bharata mentions, only a few "high level" *bhāva*-s are learnable in any cultural setting and this could be a differentiating marker across cultures. Interesting questions that arise are: Can we show that the *bhāva*-s

produced in music are the "same" as those produced in drama, poetry, etc., especially in a neuroscience perspective? That is, are the connectome excitation patterns the same across the brain?

Are all the art forms potent in producing all the *bhāva*-s? While this seems to be unlikely (for example, consider *tālavādya*-s such as *mṛdaṅga* or even simpler non-tonal ones), one can pose a Turing-like question: Is there a universality notion (i.e. is the art form complete in some sense)? Similarly, is there a mapping, say, of some *svara*-s to *mudrā*-s? We have already mentioned the mapping between colour and *bhāva*/emotions earlier in the *Viṣṇudharmottara* (and this phenomenon is also known through synaesthetes). Some studies have shown that a sudden transition from low to high pitch often indicates pathos across many cultures; however, while some gestures may be common across cultures, there may be some with possibly opposite semantics!

Another question is whether "*rasa*" is accessible to all. While there are many possible responses to this question, the Indic tradition affirms it with respect to *bhakti rasa*. In his development of *bhakti rasa*, Rūpa Gosvāmin says that enjoying *rasa nitya* is possible if one views life in terms of drama, using the language of *rasa* and redirecting it toward the development and expression of *bhakti*.

Going by our brief discussion of Bhartṛhari's paradox, it should be clear that the mapping from a specific enactment of an art form to the *rasa* in general is "non-computable"; ie. it is not clear *a priori* what output is to be expected for a particular event. This is where different civilizational impulses can be seen: *mano-dharma* in the Indic case but realism or carefully constructed "scores" that had to be reproduced precisely and accurately in the European one.

4.2 A Computer Systems Model for Communication Across Multiple Roles and Multiple Persons

This section can be skipped by those who are not exposed to computer systems notions of virtual machines and the like. In computer science, we have the notion of a "virtual" machine (**VM**) that is emulated or simulated by a more "physical" machine, as there can be many levels at which this emulation or simulation notion can happen. The inputs and

outputs of these virtual machines can be demultiplexed or multiplexed as necessary.

In an art form, there is the self of the spectator/reader (**"3S"**), the self of the composer/creator (**"1S"**) and the self of the enactor" (**"2S"**); the 1,2,3 refer to first person, 2nd person and 3rd person respectively with S standing for the self. Let us take a simpler case first. Crucially, the ability to empathise with someone depends on a person ("1S") being able to imagine the state of someone else ("3S"); if there is considerable depth of feeling, there could be corresponding changes in the emotional state also. For this to happen, it is critical that both the self of the person ("1S") and that of the sympathised ("3S") be operative at the "same" time (or "timeshared" frequently enough, from a scheduling point of view). In a computational sense, one can imagine a type-II virtualization scheme where the "1S" machine, **1SM**, runs a new virtual machine for the "3S" machine, **3SM**, and sets it up in such a way that some of the inputs to 1SM, "seized" as necessary, are "tunnelled" to 3SM. The outputs of the 3SM virtual machine have to be carefully steered; if the outputs are "tunnelled" out of the 1SM then we have perfect isolation between 1SM and 3SM. But tunnelled out to whom or where to? There could be some output devices "seized" by 3SM. In which case, the drivers of 1SM will be used for output to these devices. Or, alternatively, 3SM delegates the output function to 1SM system, and 1SM simulates the output function.

If this is not possible to answer, one solution is for the 1SM to directly indicate the output (ie. use 1SM's drivers to communicate with the external world). But this means that 1SM cannot indicate externally the state of 3SM.

Some of the questions posed in the Indic tradition:

(i) Can the enactor feel the *rasa*? If the outputs of the VM are tunnelled out or faithfully emulated, then the enactor ("2S") need not sense anything. Otherwise, one can argue that there will be some "leakage" of the *rasa* into the enactor. Abhinavagupta argues for the first case. However, it is well known that leakage of state from one VM to another is possible due to non-virtualizable features ("sensitive instructions") or due to non-isolation from a performance perspective.

(v) Since we are dealing with a CPS, and the enactor ("2S") has to signal the emotions through *mudrā*-s and the like, the outputs

of the 3SM have to be again transcoded and presented to the audience through the 1SM's physical gestures. Here it can be *lokadharmin*[54] or *nāṭyadharmin*. The first one is suitable for a general audience but the latter most likely only for *sahṛdaya*-s.

(vi) Should the identification of the enactor and the character be complete for "realism"? In the Indic tradition, the attempt is not so much at realism as to bring out the *rasa*. The attempt is more to trigger the desired cognitive/affective states in the *sahṛdaya*-s symbolically through *mudrā*-s and the like. Hence the gestures are stylized and the grammar of gestures generates the desired states.

(vii) Can the self be "unitary"? This problem is similar to the issues in the sleep states in the Indic tradition. Vedānta postulates a basal self across the sleep states to answer the question why we "know" that we slept deeply but at the same time we "did not know anything" during that time. Here, we have multiple VMs and therefore the basal self (or the "host OS") is responsible for switching between various emotions or even across multiple characters.

There is also an interesting problem in the context of a CPS + *rasa*: do we need in general a self-reproducing machine? Note that each emulated living entity will have a corporeal aspect that has to be used to communicate interactions with the real world; this means, the simulated VM needs to have a physical body too (for eg, an elephant, bird, *devi*, etc) and realized at run time. In the most general case, given the person/living entity to be conveyed, we need the physical emulation/realization using the body of the enactor. For ease, many *mudrā*-s have been instead developed to represent the various entities (e.g., parrots).

4.3   *Rasa* in Music: an Example

Let us consider music first. We first discuss the cognitive part. In the earliest phase, Vedic chanting in *Sāma Veda* used 3 *svara*-s and it was extended later in music to 5, 7, 12, 22, ... *svara*-s; these numbers Kak points out, may be related to Meru-prastāra. There were obviously deep connections with *chandas*/poetry and redundancy/checksums as anti-entropy measures with various styles of chanting such as *pada*,

krama, jaṭā, mālā, śikhā, rekhā, dhvaja, danda, ratha, ghana. Phonological combinations (*sandhi*) have been devised taking into account what is realizable given our human anatomy with respect to speech; they result in lesser effort and so can be said to be euphonic. If iterative or recursive structures are devised, "vibrational" sensations can in principle be auditorily excited. Historically, for example, Mataṅga discusses *Ṣaḍja-grāma* and *Madhyama-grāma* as two basic *Grāma*-s (groups or clusters); *grāma*-s are collection of *svara*-s in consecutive order. From these arise *mūrcchanā*, *tāna*, *jāti* and *rāga*. *Mūrchānā*-s are a set of systematic rotations of the *saptaka* with an *ārohaṇa* and *avarohaṇa* (so 7 for each *grāma*). These are described by Bharata earlier also but something deeper in structure was felt to be needed; this sense later resulted in the innovation of the *rāga* paradigm[55]. From iterative structures, the musical ideas turned to probabilistic ones[56].

A simplistic description for a *rāga* is as follows: choose an alphabet of *svara*-s, use well established *sañcāra*-s or *prayoga*-s ("signatures") of the *rāga*, and follow rules of *ārohaṇa* and *avarohaṇa* to generate yet more possible strings of *svara*-s as music. In actuality, there are many more critical features such as *aṁśa* (prominent or *jīva svara*-s), *alpatva* (*svara*-s that need to be present fewer in number), *bahulatva* (copious), *ṣāḍava/auḍava*: 6 note/5 note *sañcāra*-s, *antara mārga*: the introduction of note or *chāyā* of another *rāga*. Furthermore, only when the "*jīva svara*-s" are rightly used, we can induce life into a *rāga*.

RN Iyengar has suggested that a *rāga* is actually a *svara* time series, evolving in the space of *ārohaṇa-avarohaṇa* (scale) with the property of '*alpatva-bahulatva*' (Iyengar 2017). Furthermore, "The scale can be nearly equated with the sample space of Probability Theory". He also points out that Śārṅgadeva actually gives many traces (sequences) of *svara*-s for one *rāga* as an illustration; this has been discussed earlier.

Fundamentally, a *rāga* is not a static concept (due to notion of *manodharma-saṅgīta*) and has a stochastic aspect. Iyengar and others have pointed out that the time series of *svara*-s can be modelled as a AR(1) process (**AR**: autoregressive (stochastic) process) with the following 1st order simple model: $\Phi(n) = k * \Phi(n-1)+$ noise, where $\Phi(n)$ is the *svara* at time unit n and k is a constant; many simple songs taught to beginners ("*pillāri gītam*-s") have been shown to have this AR(1) property! More complex songs need many more terms as a AR(p) process that depends not only on on the $(n-1)$ instant, but on

$(n - 2), \ldots (n - p)$ instants. These can be shown experimentally by computing autocorrelation functions (**ACF**).

Furthermore, Iyengar says that the ACF of a *varṇam* has a fractal-like structure and he conjectures that *kīrtana*-s in any *rāga* will be a more complex time series, exhibiting finer self similar structures embedded in the sample space. He posits that *rāga ālāpana* is actually a chaotic process with the *ārohaṇa-avarohaṇa* providing the boundary of the "strange attractor". As all of this is heard and experienced, *rāga* can be said to be a mathematically based stochastic process that generates *rasa*!

In addition, using machine learning algorithms that use generative models (such as "LDA"), some researchers have shown higher rates of correct classification of *rāga*-s. (Of course, other models like "profile" HMMs (**pHMM**) could also be profitably explored; a pHMM has a profile that could apply to the parent *rāga* with *janya rāga*-s being generated using the pHMM structures). These also imply deep down that a *rāga* has a substantial and inescapable stochastic structure that also can be discerned but which is sufficiently mathematically tractable. This is historically interesting: almost one millennium earlier, there has been the groundbreaking generative model of Pāṇini in his *Aṣṭādhyāyī* except that stochastic processes do not play a role in his system and his grammar is closer to a term writing system such as the Post Correspondence system formalized mathematically in 1920's. For *rāga*-s, we also have a generative system but with a probabilistic core!

Next to briefly discuss the affective aspect of Indic music, the word *rāga* itself is defined as "*rañjayati iti rāgaḥ*". There have been attempts at theorization at 2 levels of structure: at the level of *svara*-s and at the level of *rāga*-s themselves. *Viṣṇudharmottara-purāṇa* (III.18, 2–3) gives the following scheme: "for *hāsya* and *śṛṅgāra, madhyama and pañcama* are used; for *vīra, raudra* and *adbhuta, ṣaḍja* and *ṛṣabha* are used; for *karuṇa, niṣāda* and *gāndhāra* are used; for *bībhatsa* and *bhayānaka, dhaivata* is used and for *śānta, madhyama* is used. Similarly for different *rasas* different *laya*-s are used." (Trans. Priyabala Shah). Some theorists assign *rasa* or *bhāva* to *rāga*-s on the basis of their *vādi* (dominant note) in the following way: infinity or space if the *vādi* is *sa*; illumination if the *vādi* is *ri*; devotion if the *vādi* is *ga*; erotic if the *vādi* is *ma*; joy or contentment if the *vādi* is *pa*; valour and disgust if

the *vādi* is *dha*; and encouragement if the *vādi* is *ni*[57]. Alternatively, *pa* (*pañcama*) is said to be for *śṛṅgāra*; for example, *Gītagovinda* 1.39 refers to a song being sung in *pañcama rāga* to evoke *śṛṅgāra*.

There is a long tradition in assigning *rāga*-s for evoking emotions in Hindustani and Karnatic systems. For example, *Śubhapantuvarāli* is said to indicate penitential emotions whereas *Aṭhāna* that of *vīra rasa* and so on. Starting with probabilistic emphasis on the *vādi* notes, specific *rāga*-s also indicate the emotions using musical phrases observing *ārohaṇa* and *avarohaṇa*, with specific phrases (the *sañcāra*-s/*pakaḍ*-s in Karnatic/Hindustani music, for example) being the signatures. Since there is no written score, each phrase can be elaborated multiple times possibly with different ornamentation; there is thus probabilistic emphasis on different phrases as well as ornamentation ("*gamaka*") giving rise to a richly textured music that can evoke deep emotions. Even *tāla*-s are expected to contribute to the *rasa*; for example, *pratimaṇṭha tāla* is said to enhance *śṛṅgāra* (Narayanan 2016).

The Indic seers (take, for example, Abhinavagupta) intuited music's capacity to help us approach the transcendental plane and this has been borne by recent studies; for example, Janata and others, as discussed before, have identified the temporo-parietal junction (TPJ) region that is the location of self-referential activity as the locus of music also. Music is a highly personal experience while making us also feel a part of the whole "universe" in an abstract way; interestingly, the notion of *sādhāranīkaraṇa* is useful in the latter as it posits universals across all.

5   Computational Thinking and its Relevance for *Rasa*

While one running thread in Indian aesthetics or *rasa* is the taxonomical approach, it was married, often enough, to a computational base. While the taxonomy part has been widely recognized (for example, the *vyabhicāribhāva*, the transitory state of mind or body, said to be 34 in number such as *asūyā, nirveda, glāni, śaṅkā* etc), the computational aspect has not been appreciated as much and one can say that this served possibly as a possibly unique or distinguishing part of the tradition. Furthermore, detailed psycho-physical (taxonomical) models in, for example, *Nāṭyaśāstra* are helpful in a computational model as

we have discussed in §4 for modelling emotions. We now give some examples of computational thinking and its relevance for *rasa* in a few art forms, mostly from a generative perspective; the interested reader can find some background on computational thinking and the specific Indic context as two appendixes (APPENDIX 1 and 2). Note that when we discuss *rasa* here it is, at a more general level and not only in the context of Bharata's formulation.

5.1   The Computational Basis of *Rasa* in Poetry

The Veda-s are alternately called "*chandas*", thus there is close connection between poetry and visions of reality ("*rtam*"). The study of poetry therefore assumed an important part of the intellectual tradition, for example, *Nirukta*, *śikṣā*, etc. Continuing in this tradition, Piṅgala enumerated the number of *tāla*-s through cryptic *sūtra*-s in *Chandaḥ-śāstra*. The motivation doubtless was that if we need to understand music, it helps to know, if feasible, how many possibilities exist for a specific entity in a system that need to be examined individually for tractability or practicalness[58]. The idea here may have been to possibly look at all possible ways of structuring syllables, long or short, given a specified amount of time and in the process invented Piṅgala sequence (**P**), now inadvertently called Fibonacci series (0,1,1,2,3,5,8,13,...)[59]. Piṅgala or his disciples also noted that in this sequence the next term is given by the sum of the 2 earlier terms (starting from the 3rd term). Elaborating explicitly (Knuth 1997), Gopāla (before 1135 C.E.) and Hemacandra (around 1150 C.E.) give the number of *tāla* (rhythmic patterns) for M *mātrā* (beats) ("P(M)") with *anudruta* (1-beat) and *druta* (2-beat) algorithmically as *tāla* (M) = *tāla* ($M - 1$) + *tāla* ($M - 2$), or P(M) = P($M - 1$) + P($M - 2$)[60].

Investigating *chandas* further, the concept of *gaṇa*-s were introduced. These are groups of 3 syllables, *anudruta*/short/*laghu* ("U") or *druta*/long/*guru* ("|"); hence 8 possible *gaṇa*-s (inaugurating the start of binary notation, now commonplace). From a coding perspective, each specific *gaṇa* can be considered as the "summary" or checksum/hash of 3 syllables[61] and hence the sequences of these summaries can be used as a way to detect corruption if the poetic structure is violated. These are described in Alaṅkāraśāstra, for example, the Śārdūlavikrīḍita with "msjsttg" structure, redolent of the forest as it recalls a tiger cub's playfulness (with *virāma* in the 12th

syllable and then another 7 syllables away). Since *alaṅkāra śāstra* and its connection with *rasa* has been discussed in the tradition widely, we focus on other aspects, specifically the computational as it relates to *rasa*. The choice of meters widely used could be connected with the locality principle we discussed in the context of music; the locality could be in terms of pitches[62] as the poem is recited or in terms of sequenced "chords" of *gaṇa*-s (but different from Western Music chords!)

Because *rasa* is now married to function, there is a robustness in the transmission of *śloka*-s written to various types of *chandas* that is not possible in other traditions except in a rudimentary way. Advancing the robustness further, in the Vedic domain, the generative aspect interestingly has been further married to a functional notion, that of resistance to local decay or destruction (reliability in short) either when chanted orally or when written on fragile materials; this again depends on a computational basis. Chanting styles (*vikṛti*-s) were invented that introduced controlled amounts of redundancy such as *krama, jaṭā, mālā, śikhā, rekhā, dhvaja, daṇḍa, ratha, ghana*, with the *ghana* being the most complex (the sequence of syllables a1 a2 a3 a4, for example, being chanted, 3 syllables at a time but sliding with one syllable at a time, as a1 a2, a2 a1, a1 a2 a3, a3 a2 a1, a1 a2 a3; a2 a3, a3 a2, a2 a3 a4, a4 a3 a2, a2 a3 a4, an expansion by a factor of 11 with a corresponding increase in robustness with respect to local decay). The repetition in these codes has a hypnotic effect when chanted as those who have heard *ghana pāṭha* can testify. The Indic imagination therefore approvingly quotes *āśrama*-s and such where such recitations would continue "nonstop".

Kashyap and Bell have investigated the robustness of such chanting styles using coding theory and formulate *Krama-māla* style of chanting as a "rate $1/4$ linear block code over a finite Galois field"; they show that with this code a text of 4n symbols can be corrected even with as many as 2(n-1) errors under some assumptions (Kashyap 1998). While requiring the preservation of the order of words, the errors to be detected are the add/delete of a syllable/word in a word/sentence or avoiding "long jumps". To explain the latter, consider a set of syllables A (in verse x) that is similar to a set B (in verse y) and we are chanting of ...AC... ; ...BD... Now we can mistakenly chant say ...AD... or ...BC..., ie "jump" across due to similarity between A and B. Specific styles of chanting such as *avichakra ratha* handle these by appropriate coding.

Kashyap and Bell give the following interesting example as it involves the very first mantra in *Ṛgveda*:

Ṛgveda 1.1.1 ... C *ratnadhātamam* (A)

Ṛgveda 1.20.1 ... E *ratnadhātamaḥ* (B) D

Chanting is coded so that A chained to C and B to E to prevent jump from C to B and E to A. If there is incorrect chanting, this code can point out the error.

Using such computational coding ideas, *Veda*-s have been transmitted mostly orally across at least 3500-5000 years without differing versions but including exact pronunciation (with, it is said, only one doubtful reading in *Ṛgveda* at *Ṛgveda* 7.44.3 after a lapse of as much as 7000 years)! UNESCO proclaimed the tradition of Vedic chant a "Masterpiece of the Oral and Intangible Heritage of Humanity" on November 7, 2003. (Of course, such clever mathematical ideas cannot survive wholesale destructions of cultures that spawn them as happened with the Indic ones, especially in Kāśmīr.)

Continuing in the same strain, surprise or wonder as a generative component of *rasa* could be channelled computationally for linguistic problems that need techniques such as backtracking; e.g., Knight's Tour problem considered by Rudraṭa and also by Vedānta Deśika and many others. The earliest known reference to the Knight's Tour problem called the *"turaga-pada-bandha"* dates back to the 9th century C.E. by Rudraṭa in his *Kāvyālaṅkāra*.

Rudraṭa had simplified the complexity of the puzzle by adopting only 4 syllables and this also leads to the interesting result of knight's move verse being the same as the original verse[63]. Note that finding whether a Knight's Tour exists, without worrying about a poem as part of the jumps, is itself a non-trivial combinatorial problem and uses what is called the backtracking technique in computer programming. The problem considered by Rudraṭa[64], Vedānta Deśika and many others in the Indic tradition is much harder as the Knight's Tour should also produce a poem in addition. Vedānta Deśika had at least two such instances (4x8 "board") in his *Pādukā-sahasra*, supposedly composed "in one *yāma* of a night" (ie. one fourth of a night) as part of a challenge. Many examples of *Citra-kāvya*-s abound not only in Sanskrit but also in languages such as Telugu.

Note that Leonhard Euler was one of the first European mathematicians to investigate the (simpler) knight's Tour was but for the 8x8 board with H. C. von Warnsdorf in 1823 giving the first procedure for completing the Knight's Tour.

The theory of *Śleṣa* was developed extensively too, in ways that is difficult in other cultural and linguistic systems (see (Bonner 2010)). We do not discuss this further as its computational aspects are not clear or formalizable as of now.

What is remarkable is that going in depth to understand the wellsprings of poetry or *chandas*, Indic people realised that a surprising combinatorial or algorithmic base, and the whole world benefitted from these deep insights in combinatorics. But the Indic people's creativity was mostly cut short post 1200 C.E. while other cultures benefitted from the transmissions of these ideas from India.

5.2   The Computational Basis of *Rasa* in Music

Next we move to music; this will be discussed in brief as some of these aspects have been discussed or are reasonably well known. First there is the notion of *svara* and *śruti*. While the notion of interval, octave and fixed frequency seem to have been central in (later) Western music, the *svara* seems to be a realized sound on the background of a "fluid" set of *śruti*-s with all of these being only relative. The the notion of 3, 7, 22 *svara*-s is argued by Subhash Kak to be based plausibly on mathematical principles (Kak 2004), as the numbers 3, 7, 12, 22 are important in Indic music and arise as a result of various Meru prastāra-s that generate these numbers[65]. The 7 and 22 *svara* system is pre-*Naṭyaśāstra* (before 400 C.E.). Vinod Vidwans argues further that Bharata has an interesting (but little understood) generative metamodel which has but a few rules for specifying *vādi*, *saṁvādi*, *vivādi svara*-s given a *svara* (Vidwans 2016). However, the mathematical closure of these rules gives all the 22 *svara*-s (*śruti*-s) in the system; this is part of his *śruti-nidarśanam* ("demonstrating microtones").

Venkaṭamakhin gives a systematic classification of *Melakarta rāga*-s based on *svara*-s. In the figure 5 below[66], 2 types of *ma* (left half and right half), 2 types of *ri* and 3 types of *ga* (12 sectors overall), 6 combinations of *da* and *ni* (each sector) give rise to $2*2*3*6 = 72$ *melakarta*-s. This became widely accepted in the Karnatic tradition

but a more intuitive model was retained in the Hindustani system. This system is not only based on simple combinatorics but also uses ingenious encoding of the names of the *rāga*-s itself to reveal its cardinal number in the *melakarta* scheme using *kaṭapayādi* encoding; we do not give details here due to lack of space.
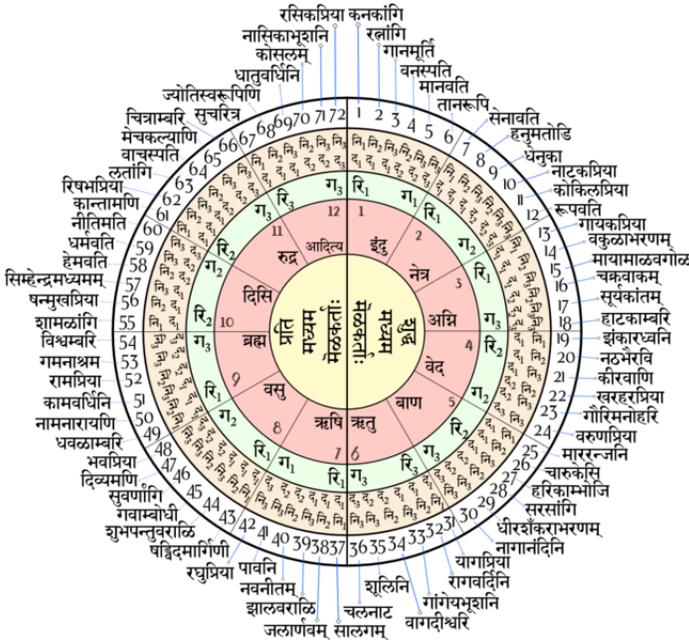
Figure 5: Venkaṭamakhin's Mela-karta scheme

Next we briefly discuss *tāla* which is widely known to have a mathematical content.   In the distinctive style of percussion instruments such as *mṛdaṅga*, we have *korapu* or *yati*-s where phrases/duration have to be in arithmetic progression (increasing or decreasing). In addition, simple "diophantine" (another misnomer!) equations need to be solved to check feasibility of a *yati*. For example, there is the notion of *gati* that fixes how many syllables can go into a time unit of *tāla*. This notion is independent of the specific *tāla* itself. While *caturaśra gati* (4) is usually common, one can also attempt *triśra gati* (3), *khaṇḍa gati* (5), etc. Now if one is playing an iterative structure with a *yati* also woven in but now with a *triśra* instead of *caturaśra*,

the feasibility of this fitting into a given set of time units depends on solving some integer linear equation; if there is no solution, one has to creatively modify the structures by adding *virāma*-s or *eḍupu*-s (silent time units) to balance the equation but without destroying the aesthetic sense. Often, multiple solutions are possible, and they provide the variety seen. Some are quite tricky: for example, *sampūrṇa khaṇḍa naḍe* has 10 *akṣara*-s/8 units of *tāla*.

For a simpler example, consider 16 time units for a regular *tāla* like *ādi tāla*. If *caturaśra gati* is used, each *akṣara* could be $1/4$ th of a time unit. If a *moharā* or *muktāyi* (both are reasonably complex pieces that are repeated 3 times to exactly match multiple complete durations of a cycle of *tāla* ("*āvartana*")) is now attempted to be played in a different *gati* (say, *tiśra* where each *akṣara* is now $1/3$ rd of a time unit), some *tālas* need adjustments; note that due to the "Vernier" principle, the time keeping has to be sufficiently exact otherwise, unresolved differences of $1/3 - 1/4$ time units ($1/12$ th time unit) or its multiples will wreck the experience. In the most difficult case, $1/7 - 1/9 = 2/63$ time unit accuracy is needed!

There are many *tāla*-s (such as *Dhruva, Maṭhya, Jhampa, Aṭṭa, Eka*) and many variations with respect to time units and also *gati*. It is difficult to remember the many sequences but experienced musicians remember high level patterns but calculate some details on the fly! If they do not have sufficient time to calculate, then they play known simpler patterns till they can calculate the details right! A similar system obtains in the Hindustani (northern) system where for example *tabla* is used; it is not uncommon to see somewhat unusual beats of 10 and half being played for half an hour!

"*Pañcavādyam*" a traditional temple art instrumental ensemble (*timila, maddalam, ilathalam* and *iḍakka* – percussion; *kombu* – wind instrument) of Kerala. The performance is led by the *timila* and the "sense of sacred" is generated by the pyramid-like rhythm structure with a constantly increasing tempo coupled with a proportional decrease in the number of beats in cycles.

5.3   The Computational Basis of *Rasa* Architecture

Starting from the earliest times (5000 years and earlier?), the sense of the sacred was attempted to be given by geometry. The *śyena* geometry and its construction in the Vedic rites is a good example.

Due to such examples and internal consistencies, A. Seidenberg argues for precedence of Vedic thought over Babylonians with respect to geometry (Seidenberg 1978).

Once the recursive structure of language (Pāṇini) and the number system have been mastered, it is an easy step to think of term rewriting rules (aXb→pYq) or of mathematical series given by some (arithmetic/geometric) progression. The Indic thinking (Hindu, Buddhist, Jaina), having gone past the stage of building perishable structures, started experimenting with stone to build long standing structures. For example, the superstructures of the *Nāgara* temples have a distinctive curvilinear form composed of a series of motifs with the surface geometry resulting from intricate mathematical and geometric expression based on stereotomic techniques (Kramrisch 1946:177), (Meister 1979). A computational style thinking in such architectural ventures seems to have been common by 7-8 century C.E. already as we see in the majestic Ellora[67]; it seems to have reached its peak by 12 century C.E. (for example, Kandāriya temple in Khajuraho).

Trivedi discusses the use of recursive structures in Indic (especially Hindu/Jain) temples to depict an "evolving cosmos of growing complexity, which is self-replicating, self-generating, self-similar and dynamic" (Trivedi 1989:249). Furthermore, "the procedures are recursive and generate visually complex shapes from simple initial shapes through successive application of production rules that are similar to rules for generating fractals." The techniques identified are

(i) **Fractalization**. A very simple example is going from n sides for a pillar to 2n sides next and repeat till we approach the shape of a circle; this can be seen in many temples where pillars with 4, 8, 16 sides and circles can be seen in the same enclosure. Similarly, Koch-like fractals are generated but on initial shapes more complex than a simple line. For example, for Koch fractal, the shape ——– is first transformed to —-/\—- and each small segment is similarly transformed; if this procedure is repeated, the resulting shape is similar to the plans of some Hindu temples that display the "snowflake curves characteristic of fractal figures" (see figures 2 and 3 in (Trivedi 1989)). The architectural texts discuss these techniques explicitly and also develop a vocabulary to describe the process (see figure 17 in (Trivedi 1989)). The self-iteration can be *dvi-aṅga* (adding 2 more

segments *karṇa* and *bhadra* where 1 existed), *tri-aṅga* (adding one more segment *pratiratha* to the *dvi-aṅga*), *caturaṅga* (adding segment *nandikā* to *tri-aṅga*), *pañcāṅga* (adding *koṇikā*), etc.

(ii) **Self-similar Iteration in a Decreasing Scale**. Rules such as *triguṇa sūtra* and *ṣaḍguṇa sūtra* are given in *Samarāṅgaṇasūtradhara* that give the method of iteration (Kramrisch 1926:209). Discussing the geometry of temples, Sambit Datta says "The surface of the superstructure is composed of a series of carved motifs that exhibit a progressively diminishing sequence of self-similar forms. While no guide exists in the canonical literature on how these sequences are handled, two clues are available in the mathematical and cosmological texts. First, the notion of *shunyata* [*śūnyatā*] (nothingness) and the infinitesimally small occupies a central place in the syncretic Upanishadic cosmology. Second, the preoccupation with and knowledge of *shredhikshetras* [*śreḍhī-kṣetra*-s] (mathematical series) are evident in Vedic mathematical texts." (Dutta 2010:479). Furthermore, Datta (2010:477) "developed a mathematical procedure to generate the curvature based on textual descriptions. This procedure is dependent on the height of the superstructure, the number of vertical units chosen for each offset and the choice of an integer (one of 3,4,5,7) for controlling the degree of curvature." Assuming a reduction by $1/4$ th to control the curvature, the geometric series is given by $H/4$, $3/4.H/4$, $3/4.3/4.H/4$, ... where H is the height of superstructure.

(iii) **Repetition, Superimposition, and Juxtaposition.**

Note that working with series of pillars with 4, 8, 16, ... sides as it approaches a circle or the more complex fractal series in temple architecture may have provided the practical examples and also the intuition to Indian mathematicians on how to understand infinite sequences, with brilliant results such as Mādhava's series for pi (misnamed later as "Gregory" series) in the 13th century C.E., faster convergent series for pi in the Kerala school of mathematics from the 14 century C.E., etc.

Temples also incorporate astronomical aspects (for example at Konārak); this requires architectural planning with mathematical precision. Boner says

> ...the temple must, in its space-directions, be established in relation to the motion of the heavenly bodies. But in as much as it incorporates in a single synthesis the unequal courses of the Sun, the Moon and the planets, it also symbolizes all recurrent time sequences: the day, the month, the year and the wider cycles marked by the recurrence of a complete cycle of eclipses, when the sun and the moon are readjusted in their original positions, a new cycle of creation begins.
>
> <div align="right">(Boner 1966:XXXIII)</div>

An excellent example of this deep and all-encompassing vision can be seen in Angkor Wat where the dimensions reflect the *yuga* durations, the entrances correspond to the positions of the Sun, the Moon and the planets during equinoxes, etc. (Stencel *et al* 1976) In a sense, a temple is a mathematically constrained object carefully engineered with multiple objectives: human, divine and celestial. To effect astronomical recurrences in a temple, a computational iterative basis can only be surmised as only kinematic aspects were known. It is interesting also to note that such considerations are present in the mathematical realization of *maṇḍala*-s used in worship; Huet discusses the mathematical complexity of a *Śrīcakra* (Huet 2002). While a constraint system has been developed to model the Śrīcakra, similar models may have been inspired by the practical abstractions needed by a temple architect, especially to work out the recurrent astronomical time sequences.

5.4   The Computational Basis of *Rasa* in Varied "Crafts"

Aesthetic designed repeated structures (sometimes with subtle changes) are seen widely in Indic crafts such as *rangoli* ("space-filling curves"), cloth-making as well as in civil works such as wells. A *rangoli* is given below (figure 6) drawn recently by a person who has most likely never heard of fractals, yet it resembles them in a significant way. Due to space constraints[68], we do not discuss these further except to point out the innovations in the engineering of the musical "*rasa*" in *mṛdaṅga, vīṇā* etc.

The construction of instruments such as *mṛdaṅga, vīṇā* and *tambūra* in the past has showed an amazing intuitive feel for effecting aesthetically unusual features not found in other instruments elsewhere. Only in the last few decades, by experimental/computational modelling,

Figure 6: Rangoli pattern drawn by an artist

has this been understood. For example, *mṛdaṅga* and *tabla* are un-usual and different from almost any other types of drums in other parts of the world: it has a harmonic character which only stretched/-stringed instruments usually have. The composite nature of the skins as well as "*karaṇi*" (circular black part made of a metallic paste) play an important part. CV Raman and Kumar discovered only 4 signifi-cant overtones (Raman 1920); for example, f, 2f, 3f, 4f and 5f tones are present but other harmonics and all non-harmonics suppressed to a great extent. Other drums or stretched membranes elsewhere (in-cluding *kañjīra*!) sound harsh as they abound in non-harmonics. In-terestingly, there is similar surprise with *vīṇā/sitār/tambūra* where the strings/curved bridge design along with a cotton thread between them for finer control is used to get overtone rich sounds (Raman 1921). It is not clear how our ancestors/artisans intuited them; even more sur-prising is the black patch on the *baayan* (left side) of the *tabla* pair; it is off-center! B S Ramakrishna discusses them in detail along with exper-iments to explain the unusual harmonic nature of *mṛdaṅga* and *tabla* (including the off-center patch of the *baayan*) (Ramakrishna 1994). Fur-thermore, Gauthier, Leger *et al.* remark

> "Raman also concluded that the first nine modes of vibration having the lowest frequencies give a harmonic sequence of only five tones which means that some of these modes are degenerate, i.e. have approximately the same frequency. It is worth recalling that the theory of ordinary drumheads does not predict even approximate degeneracies of any of the modes or any harmonic relationships between them."

> *...* [T]he following questions related to the evolution of the table and mṛdanga arise: How did Indian artisans and musicians discover, more than 2000 years ago, an optimal configuration for these drums among an infinite number of possible configurations?"   (Gaudet 2006:389)

6   Conclusions

In the above discussion, we hope to have convinced the reader that Pollock may have been off the mark when he made a categorical statement that Indian thinkers did not try to understand the well-springs of *pratibhā*. We argue that this may be located in a computational model for *rasa*; existing implicitly perhaps but all the same noticeable if seen with the right perspective. We have only sketched an outline here. Similarly, the charge of lack of anything common across the *kalā*-s may also seen to be blunted by our showing that a computational thinking across these domains also permeated their endeavours.

1   APPENDIX

Brief background on Computational Thinking

Two fundamental aspects of computer science, as Bhate and Kak put it, are the creation of new computing algorithms and machines that have powerful computational and cognitive abilities (Bhate 1993): this includes development of new techniques of representing and manipulating knowledge, inference and deduction. Also, in a long term perspective, it is the development of techniques that make the elucidation of the computational structure of nature and the mind easier.

Consider an extremely simple but early attempt at quantifying levels of happiness in *Taittirīya Upaniṣad* (2.7.1-4) where it gives 10 levels of "*ānanda*" starting from one, and increasing in geometric progression (1 to 10^20) in steps of 100x[69]. While such gradations are difficult to describe or may be even defend, it gives an idea of the enormousness of the *sādhanā* needed to reach *Brahman*, as 1 is said to be the happiness of a healthy youth in the prime of life. One can even argue that such quantification early on helped in understanding the iterative/recursive nature of the number system with time.

As another simple example, consider Suśruta: he is interested in how many ways one can combine different tastes ("*ruci*") and in the process enumerates one of the earliest known example of combinatorics in *Caraka Saṁhitā*, a text that is atleast 2000+ years old. The specific question: if medicine can be sweet, sour, salty, peppery, bitter or astringent, how many possibilities are there

if we mix any 2 qualities? It is listed as 15 possibilities ($^6C_2$).

Similarly, if we mix any 3 qualities? 20 possibilities ($^6C_3$);

any 4 qualities? 15 possibilities ($^6C_4$);

any 5 qualities? 6 possibilities ($^6C_5$) and

any 6 qualities? only 1 possibility ($^6C_6$).

Taking next a well known example, the recursive structure of the number system was first grasped by the Indic civilization in all its fullness (as well by only one other, the Mayan, as per recent understanding) and it then spread to others. In a sense, the journey towards computational thinking had begun; we will discuss what this means briefly below. The other most successful recursive example is that of Pāṇini's innovative generative grammar for Vedic and later Sanskrit, which has been described as the "one of the greatest monuments of human intelligence" (Bloomfield 1933:11). We do not discuss this further as it has been discussed extensively.

For a visual and more easily accessible example, consider the Kandāriyā Mahādeva temple (part of Khajuraho temple) that is best explainable as constructed on the basis of a set of recursive rules. Visually, the structure is striking but at the root of it is a set of recursive rules, as (Trivedi 1989) and (Dutta 2010) show.

If we look at computational thinking in early India, we see very good examples with respect to:

  (i) Grammarians e.g., Pāṇini, Kātyāyana, Patañjali (Grammar $\sim$ computation, now established in computer science).

 (ii) Logicians e.g., Gautama, Udayana, Gaṅgeśa, Raghunātha Śiro-maṇi (Logic $\sim$ computation, also now established in computer science).

(iii) Connections with "cognitive science" or "inner sciences" like Yoga with respect to mind sciences (psychology, neuroscience).

> This is becoming very pronounced in the last decade in computer science and related fields.

In an influential paper, viz. Wing (2006:33), the two A's of "Computational Thinking" are given as

(i) Abstraction which operates in terms of multiple layers of abstraction simultaneously and that defines the relationships the between the layers

(ii) Automation which mechanizes abstraction layers and their relationships

Mechanization is possible due to precise and exacting notations and models; note that the Indic number system was the 1st non-trivial example which had this property. Also, this "machine" can be human or computer, virtual or physical. For example, Pāṇini's generative grammar was sufficiently internalized for the Sanskrit language that any literate person had to know it well to use/debate with these rules to decide on the correctness of some intricate question of semantics or word-formation.

Computational Thinking more broadly can be seen as Abstraction, Mechanization, Recursion and Bootstrapping; these give us the ability and audacity to scale. Interestingly, many of these were being handled in our tradition, but in this paper, we mostly discuss those connected with *rasa*.

2   APPENDIX

Brief Background on Computational Thinking in Indic Tradition

Let us briefly look at why a computational approach for *rasa* may be useful by looking at a different area, that for mathematics or astronomy. There is a need for a healthy dose of empiricism in complex domains of enquiry; this enabled, for example, the early Indian mathematicians to work on approximations (infinite series) that the Western ("European") mathematics could not comprehend or become comfortable with except past 17th century. Roddam

Narasimha discusses "computational positivism" as a distinguishing property of Indian approach to mathematics (Narasimha 2003); it was based not on, for example, some indefensible metaphysics, for example, of the Greeks (e.g., "circles are perfect shapes, all planets need to be explained as moving in circles, hence epicycles") but on diverse models that each needed to evaluated for suitability (*Siddhānta Śiromaṇi* of Bhāskara II: dṛg-gaṇitaikya).

We summarize some of his deep insights here. The basic position historically has mostly either been a deductive/ "logical" one of the Greeks, or the "Computational Positivism" of the Indics (note that other cultures may have some component of either but we will take Greek and Indic as exemplars). The latter attitude, often implicitly and occasionally explicitly, informed the classical Indian mathematical approach to astronomy. *Āryabhaṭīya*, for example, "provides short, effective, methods of calculation rather than a basic model from which everything can be deduced"; essentially, it describes algorithmic or computational astronomy. This is opposite of Euclidean method of going from well stated axioms through a process of purely logical deduction to theorems or conclusions. After *Āryabhaṭīya*, a profusion of diverse ideas in mathematics then ensued such as the development and flowering of trigonometry in India and innovative solving of intricate integer quadratic equations such as *Cakravāla* in an algorithmic way; these finally found their way to Europe through Persia and Arabia.

Positivism posits that facts are the only possible objects of knowledge and science the only valid knowledge; there is no need for metaphysics! 'Logical' positivism of the famous Vienna Circle (scientists, mathematicians and philosophers) in first half of 20th c. had the central tenet of verifiability: "a statement that cannot be verified is held to be automatically meaningless". There are in this perspective only two types of meaningful statements: the necessary truths of logic, mathematics and language, and empirical propositions about the rest of the world, with Wittgenstein positing that propositions of logic and mathematics are tautologies! However, Godel and Popper in the 1930's demolished this school of thought comprehensively in their own ways.

Computational Positivism, as argued by Roddam Narasimha (2003), is that computation and observation, when in agreement, constitute the

only form of valid knowledge; models, logic, metaphysics etc. are either secondary or not relevant. Models may not be unique (in the sense that different models may yield very similar results in a domain of interest).

The best example in India is that of the Kerala school of mathematics, a group of astronomers and mathematicians who, over a period of some three centuries, produced some very innovative and powerful mathematics applied to astronomy. The basic goal is that of *dṛg-gaṇitaikya*, the identity of the seen and the computed. There is an effort to find "best" algorithms or computational procedures that made the best predictions as determined by comparison with observation as, over a period of time, discrepancies between computation and observation tend to increase. Nīlakaṇṭha (1444-1545 C.E.) explicitly says "the best mathematicians have to sit together and decide how the algorithms have to be modified or revised to bring computation back into agreement with observations!". Hence this approach is closer to experimental mathematics and also close to how modern science views models and observations. Surprisingly, Kepler in his *Astronomia Nova* (1609 C.E.) displays a similar computational perspective in his analysis of the motion of Mars, so different from the largely ineffectual "axiomatic" thinking, dominant at that time, for that specific problem.

One way to understand what was happening in the Indic sphere with respect to *rasa* in the past is similar to what has been happening in the study of hard sciences post 1500 C.E. where mathematics has become central; note that now fields such as computational linguistics, computational neuroscience, etc. as well as computer-based music or architecture are flourishing. The Indic world had understood the recursive nature of number system and that of language by the 1st few centuries C.E. and hence such recursive structures gave an impetus to computational thinking in diverse fields. Other civilizations around that time had not sensed it by that time and only the transmission of Indic ideas into Arabia by 8th century C.E. and by 12th century C.E. into Europe put them on to such thinking.

Tragically, just as the Indic world was flowering with such ideas, its autonomy was lost with the annihilation of its intellectual class in Kāśmīra and other areas in North India coupled with a sense of the siege in the South, and the stream of innovative ideas based on such conceptions were mostly extinguished by the 16th-17th century C.E..

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Notes

[1] See also (Shulman 2008).

[2] For example, the concept of *rasa* itself, as originally discussed by Bharata, was a way of integrating different modalities of artistic experience necessary in a dramatic performance (argued as such by (Lath 1984): "For Bharata, rasa was a principle through which different, discrete fields of aesthetic activity, each with its own separate canons, goals and conceptual schemes of discourse, could be combined into a single composite, unified whole."). Later, specific theories were developed and extended to literary texts and other art forms over the centuries. Developments here suggest an analogy with how disparate computer systems were made interoperable through layering techniques such as the application layer ("intent"), transmission layer ("interconnect with whom/what type: whether sustained, intermittent, or reliable"), IPlayer ("interoperability" across modalities globally), data link layer ("local models of communication") and physical layer ("specific modality creation, processing"). Such layering models may help in exploring all interactions across all systematically at an interoperable layer ("IP" layer) if (approximate?) models are available in terms of some ontological entities appropriate for the various modalities. This can be used to explain current preferences in some art forms given some neuroscience based models of perception and also possibly find newer possibilities not yet explored.

[3] Note that we are not committing ourselves to any specific approach as such here; we will discuss some of the possibilities in the section 4 where we give an outline of the theory. Note also that we subsume cognitive aspects, being representational, ultimately also as computational. Some technical terms such as "finite automaton", "attractor", etc are used without explanation to limit the size of this article.

[4] P. Nagaraj (private comm.) comments that "V Raghavan and other scholars have dealt with this elaborately and brought out the philosophical aspects behind the tools for evaluation. For example, classifying *kāvya*-s as *vyaṅgya*, *guṇībhūtavyaṅgya* (from Apte: "charm of suggested sense is not more striking than that of the expressed one" with further 8 subdivisions discussed in *Sāhityadarpaṇa*) and *Citra-kāvya*-s and considered as *uttama*, *madhyama*, *adhama*. The philosophy of *vyaṅgya/dhvani* behind this formulation is deep, wide and intricate."

[5] Note that God itself is a Semitic concept. Even if its supposed equivalents in the Veda and Hinduism are considered, God is Viśvakarman, the sculptor of the universe; *kaviṁ purāṇam anuśāsitāram* (*Bhagavadgītā* 8.9) is one description of God.

[6] In addition, it is said that Brahmā is said to be associated with *mṛdaṅga*, and Hanumān is supposed to have competed musically with Nārada and actually won!

[7] Also, P. Nagaraj emphasizes performance approach to literature in his paper (Nagraj 1989); Sujit Mukherjee also has a similar perspective (Mukherjee 1981). In addition, Velcheru Narayana Rao (2012) argues that Purāṇa-s have dual authorship: the author of the text and the *paurāṇika* reading out with explanations during an oral performance.

[8] See for example, (Vazquez 2011).

[9] Note that we are not foreclosing other avenues of looking at it, such as an amalgamation of different kinds of feelings as well as interactions between performer(s) and spectators.

[10]Alternately, we can also assume the signification relation is nameable. To now discuss Bhartṛhari's paradox in the current computer science context in a very simplified way, assume that a table T is possible for specifying the meaning of every word, speech act, movement, etc, or in general any linguistic object broadly construed. Now consider the meaning of T itself! This is not part of the original table and could not have been listed before. Hence, the overall meaning relation is non-specifiable and non-computable. This argument is similar to that of Udayana's (10th century C.E.) with respect to *jāti*-s (universals): there can be no universal of which every universal is a member; also compare with the much later examples from Frege or Russell.

[11]Hogan (1996:3) remarks that such Indic insights are valuable in current research: "the theory of Abhinavagupta does not anticipate a currently developed sub-field within cognitive science, but rather might serve to guide the development of such a sub-field."

[12]*Asādhāraṇatā*, however, has been described as transcendence by some, and therefore not related.

[13]Note that the recent affective computing models also has a "universal" layer (see figure 1).

[14]Any reasonably complex system typically has many entities each with multiple dimensions; however, for some situations, only a few dimensions for each may be sufficient for the full explanatory power being sought. This is an important step in "big data" analysis. Typically matrix techniques such as **SVD** (singular value decomposition) or machine learning methods such as clustering or even support vector machines (**SVM**) are used but in this paper we just assume, for simplicity, multidimensional spaces with simple projection operations for dimensionality reduction. Given that (recurrent) *sthāyibhāva*-s are part of the *Nāṭyaśāstra* model as well as multiple modalities, deeper models based on asynchronous stochastic control-theoretic approximate algorithms (Tsitsiklis 1986) could also be appropriate but this is beyond the scope of this paper.

[15]Due to the pressing needs of Internet giants such as Amazon, Google and Facebook, current sentiment analysis often concentrates on whether a review of a product is positive, or how to extract the types of sentiments across some text, or sometimes to understand political trends. Aesthetic analysis is not important as of now!

[16]For example, an interesting twist in the sentiment analysis research is recognising irony: essentially, it can be modelled as parts of some sentences saying or implying the "opposite" of the rest. For a detailed analysis, see (Joshi 2018).

[17]For simplicity, we use the term "atomic" here but note that something as "basic" as, for example, a *svara* can be quite complex to grasp in its various manifestations. Furthermore, instead of the simpler notion of *svara*-s forming a *rāga* from the bottom up, the complementary top-down view of a *rāga* structuring *svara*-s is very much a reality in practice.

[18]Three layers if *abhinaya* is also included as the bottom layer.

[19]Equivalently, it gets attenuated and dies out whereas a *sthāyibhāva* does not.

[20]"a person of attuned heart" (a cultured person who is otherwise not preoccupied with irrelevant or distracting thoughts). Those spectators who are able to enjoy the art form are called *śreṣṭha prekṣaka*. However, as per Abhinavagupta's seven obstacles, some may not be able to enjoy the art form due to issues such as no *sambhāvyatā*, or *deśa-kāla-viśeṣāviṣṭha* or *vyatīta* or *vaikalya*, *saṃśaya* or *apradhāna*.

[21] For details, see `http://www.biology.wustl.edu/gcg/hmmanalysis.html`. HMMs are probabilistic state transition diagrams with "hidden states" that need to be inferred; profile HMMs provide a "summarized" HMM across closely related HMMs by providing insert/delete transitions to accommodate the variations.

[22] Also see Sachs *et al* (2016).

[23] It is humbling or sobering to realize that Śārṅgadeva has *pindotpatti* as the 2nd *prakarana* of the 1st *adhyāya* in his *Saṅgītaratnākara* as *nāda* is produced in the human body, hence the body has to be fully described first!

[24] In Indic thought, we have *manas* ("supervisor" of the 5 *karmendriya*-s and 5 *jñānendriya*-s), *citta* (store of sense impressions), *ahaṅkāra* (I-am-ness), *buddhi* (decision maker that may control *manas*, *citta* and *ahaṅkāra*). "Cognitive" here may be taken to be all of these aspects as they deal with the representational aspects. In a computer systems perspective, these are roughly the input-output (I/O) controller, persistent storage, thread of control, and the code/algorithms of the core kernel. Only the network aspect is not explicitly mentioned as it is possibly subsumed by the I/O controller.

[25] The Veda-s also discuss *soma-rasa*; only the *soma-rasa* is close to *śānta/bhakti rasa* and not to others. However, this has been mistranslated as spirituous by European Indologists; this is unfortunate as it is very different from *mada* (such as *ariṣṭa or āsava*) (Nagaraj 2016).

[26] We briefly list the usage of the word *rasa* in the *Trayī* which is different from what we have discussed so far. *Taittirīya Upaniṣad* (2.7.1) says

> *yad vai tat sukṛtaṁ |*
> *raso vai saḥ |*
> *rasaṁ hy evāyaṁ labdhvā"nandī bhavati ||*

 "That which is known as the self-creator is verily the source of joy [*rasa*]; for one becomes happy by coming in contact with that source of joy [*rasa*]" (Gambhirananda 2000:360).

Alternately, *raso vai saḥ* here has also been translated as "Truly, the Lord is *rasa*".

Kṛṣṇa in the *Gītā* (7.8) says he is the *rasa* in water, pointing out the subtlety of *rasa*: not easy to describe as it can only be experienced:

> *raso'ham apsu kaunteya, prabhāsmi śaśi-sūryayoḥ |*
> *praṇavaḥ sarva-vedeṣu, śabdaḥ khe, pauruṣaṁ nṛṣu ||*

 In the earlier thinking on *rasa*, like *asat* (*asad vā idam agra āsīt | tato vai sad ajāyata Taittirīya Upaniṣad* 2.7.1) or *dharma*, *rasa* is the seed, or alternatively the *yoni*, of everything, given its identification with the self-creator or the Lord.

[27] Note some similarity with Appraisal Theory in the technical area of affective computing (Marsella 2010): "In appraisal theory, emotion is argued to arise from patterns of individual judgement concerning the relationship between events and an individual's beliefs, desires, and intentions, sometimes referred to as the *person–environment relationship* (Lazarus 1991) [*vibhāva*-s]. These judgements, formalized through reference to devices such as *situational meaning structures* or *appraisal variables* (Frijda 1987), characterize aspects of the personal significance of events. Patterns of appraisal are associated with specific physiological and behavioural reactions [*anubhāva*-s].

In several versions of appraisal theory, appraisals also trigger cognitive responses [*sañcāribhāva*-s?], often referred to as *coping strategies*–e.g. planning, procrastination, or resignation—feeding back into a continual cycle of appraisal and reappraisal (Lazarus 1991:127)." But the notion of *rasa* is either not present or not clearly articulated.

[28]In 1972, Ekman had listed (1972:251) the following emotions: Anger, Disgust, Fear, Happiness, Sadness, and Surprise. However, in the 1990s Ekman expanded his list of basic emotions, including a range of positive and negative emotions not all of which are encoded in facial muscles. The newly included emotions are: Amusement Contempt, Contentment, Embarrassment, Excitement, Guilt, Pride in achievement, Relief, Satisfaction, Sensory pleasure, Shame. Ekman has been also working since the last 2 decades in the area of "microexpressions". (Ekman 1999:55).

[29]For example, in the Sāṅkhya system, the *pinda-brahmānda* concepts map the "microcosm" to the "macrocosm", and vice versa. In *Atharvaveda* and in Avataṁsaka Sūtra, the recursive nature of reality, for example, is thought of as an infinite net with a crystal at each crossing that simultaneously shines light and (recursively) reflects the lights from other lights.

[30]The Karkaraja II copper inscription, 812 C.E. found in Baroda narrates that a great edifice was built on a hill by Kṛṣṇarāja at Elapura (Ellora) and expresses this wonderment of its architect.

[31]see https://multisenserealism.com/2014/07/07/iit-3-0-central-axioms/. Accessed on 3rd January 2018.

[32]*Prahlāda-vijaya* was banned in India a few decades back (in the '30s) as an actor actually caused grievous harm while enacting ugra Narasiṁha. Similarly, in the 2010 movie *Black Swan*, the actress starts identifying with the swan so much so she slips into "madness" sprouting feathers, her arms become black wings as she finally loses herself and is transformed into the *Black Swan*. *Black Swan* can be also interpreted as a Western metaphor for achieving artistic perfection through realism (surprisingly of a phantasy!), with all the psychological and physical challenges one might encounter, i.e. "the film can be perceived as a poetic metaphor for the birth of an artist, that is, as a visual representation of Nina's psychic odyssey toward achieving artistic perfection and of the price to be paid for it." (Skorin-Kapov 2015:96).

[33]Interestingly, some interesting conundrums in computer science (such as scheduling in operating systems (**OS**), recovery of faults in distributed systems, assumption of state by a survivor of the state of the failed unit, etc) are surprisingly related to this same situation! For example, in highly available systems, failure in any part is masked typically by a replicated functioning component elsewhere. On failure of one part of a replicated set, its communications in flight at the time of failure may be redirected to the functioning part in some designs. Now this part has to have two personas: itself and that of the failed (emulated) one; each communication received has to be disambiguated and posted to the correct persona. Otherwise, the system will not work correctly. Similarly, there can be "mode confusion" in such systems when incorrectly tagged data arrives and is acted upon wrongly. In dance dramas, this mode confusion may also take place; not only at the actor level but also at the spectator level: a good example is the worship/popularity of actors enacting Indic heroes such as Rāma. The problem of scheduling in OS is related as when the same actor is expected to enact one emotion and then another; this can be cast as the problem of "scheduling new emotions". The philosophical issue is whether there is an "inner controller" that directs

the assumption of various emotions; this is feasible if there are independent multiple threads of execution (and not multiplexed). If multiplexed, it is not feasible as an independent inner controller cannot exist due to "*anavasthā*" (infinite regression)! The basic problem is that if the inner controller also needs to get control of the execution to do the scheduling (due to the multuplexing), we have not solved the problem as it is the same recursive problem to get the control. This issue is also similar to the problem of whether such an inner controller exists in deep sleep as argued by Yogin-s, Vedāntin-s, Naiyāyika-s, and Buddhists (for details, see (Thompson 2015)).

[34]For example, a reasonably complete theory of *rasa* is necessarily connected with the issue of consciousness. Current theories of consciousness are widely divergent; for example, "Computationalism" of Dennett (Dennett 1992) and "Integrated Information Theory" of Tononi *et al.* (Tononi 2016) start from opposite ends. While the first "explains away" consciousness as an epiphenomenon (and therefore *rasa* may also be completely explained in a "bottom up" fashion), the latter takes consciousness to be a starting point for explaining the connection between mind and body, just as in Vedantic thinking, or later thinkers in the West such as Rene Descartes using a different perspective. The latter Vedantic perspective is also closer to Indic thinking in the *rasa* domain as intent/suggestion/*sphoṭa* and *dhvani* are in the picture. We will later also briefly touch upon Orpwood's theory of reentrant feedback circuits for explaining *qualia* as it is closer to our modelling for *rasa*.

[35]Note that denotational semantics attempts to model a program as a set of mathematical objects using lattices, etc (e.g., Dana Scott) while concurrency may use topological models for insights (e.g., Herlihy).

[36]See, for example,Youtube video, `https://www.youtube.com/watch?v=XUyx31f-U3M`. Accessed on 3rd January 2018.

[37]There are also stories of complete virtual simulation such as in *Bhāgavata* where Brāhma is fooled by the boy Kṛṣṇa.

[38]See, for example, TM Krishna's talk, `https://www.youtube.com/watch?v=ue7 TypsHCV4`. Accessed on 3rd January 2018.

[39]with such a perspective, Zeno's paradox, irrationals, infinitesimals and the like are not "showstoppers" as it happened for quite some time in the Greek/European mathematical thinking

[40]Constrast this with the spontaneity and enjoyment of music by both the performer and *rasika* in Indic music systems as locality (as defined by *ārohaṇa/avarohaṇa* but not too close to avoid nearby dissonant *svara*-s) and various types of microtones (*gamaka*-s) are employed extensively. Even today, meditative music is usually associated with *rāga*-s; an informal poll of some acquaintances trained in the Western tradition of classical music also confirms the immediacy and accessibility of *rāga*-s; also George Harrison says:

> Indian music is brilliant and for me, anyway, (this is only personal) it's got everything in it. I still like electronics and all sorts of music if it's good but Indian music is just... an untouchable you can't say what it is, because it just is.

[41]Note that the Indic model has both the discrete and dimensional perspective as understood in the current theories in affective computing (Gratch 2009:3): "Theories

differ in which components are intrinsic to an emotion (e.g., cognitions, somatic processes, behavioral tendencies and responses), the relationship between components (e.g. do cognitions precede or follow somatic processes), and representational distinctions (e.g. is anger a prototype or a natural kind). For example, discrete emotion theories argue that emotions are best viewed as a set of discrete sensory-motor programs (Ekman 1992; LeDoux 1996; Öhman & Wiens 2004). Each of these programs consists of a coherent brain circuit that links eliciting cognitions and somatic responses into a single neural system. At the other extreme, dimensional theories (e.g., Russell 2003) argue emotions are simply cognitive labels we apply retrospectively to sensed physiological activation, which, rather than consisting of discrete motor programs, is characterized in terms of broad bipolar dimensions such as valence and arousal (e.g. I feel negative arousal in a context where I've been wronged, therefore I must be angry)."

[42]According to current research, the hypothalamus cannot distinguish between being happy or sad or overwhelmed or stressed as it gets a strong neural signal from the amygdala (which registers our emotional reactions) and that it, in turn, activates the autonomic nervous system responsible for the tears. Furthermore, there are different centres in the cortical brain that deal with these emotions; one can feel both at the same time (as in bittersweet memories).

[43]Now possible with techniques such as positron emission tomography (**PET**) or Functional Magnetic Resonance Imaging (**fMRI**). Many constraints have a neural basis (like color and pitch).

[44]The earlier music before *rāga* system was based on meter and close to *sāhitya*; one had to choose meter to express emotion (e.g., playfulness with *śārdūla-vikrīḍitam*).

[45]Kuntaka discusses *vakrokti*: this may be due to "loopiness" in the topological structure where levels have got get collapsed or become near (due to a Mobius twist, for example).

[46]vide our earlier remark of structures such as "profile HMMs"

[47]It is interesting that D E Knuth, a celebrated computer science researcher, says he was not aware of the possibility of inherited attributes in the analysis of computer languages till a researcher suggested it to him! (Knuth 1968)

[48]Ānandavardhana uses *saṁlakṣya-krama* for non-*rasadhvani*-s and *asaṁlakṣya-krama* for *rasa-dhvani*. Note also that the complete sequence from *abhidhā* to *lakṣaṇā* to *vyañjanā* is not essential. *Abhidhā* to *vyañjanā* is also possible.

[49]Due to this, the same sequence may be misunderstood as another category than intended. (It is said that some musicians would express a *rāga*, playfully or otherwise, only to confuse the accompanying artistes and make them commit a mistake on what the *rāga* is; the disambiguation of a *rāga* may depend on a critical aspect that may occur early on and may not be grasped as such).

[50]it models the probability of the total count after rolling a k-sided dice n times; here k is related to the number of different types of *svara*-s that can be used in a given *rāga* and n the length of the non-*sāhitya* part under discussion.

[51]Extensions can be attempted, possibly with just a different set of constants in the generative models for some, but more details for others, for structures such as *pallavi, anu-pallavi, chiṭṭa-svaram, muktāyi-svaram, caraṇam, rāga-mālikā*-s, *kīrtana*-s, etc.

[52]Furthermore, there could be a meaningful "quantum neural computing" model as (Kak

2008) has argued but we will not pursue it here.

[53]There are some nerve cells ("mirror neurons") in the frontal lobes thought to be involved in the production of complex movements but which also fire when the animal perceives the same movements performed by an experimenter (Pellegrino 1992).

[54]*Loka-dharmin* is realistic with a natural presentation of the world (similar to current movies) catering to the "common man", whereas *nāṭya-dharmin*, or stylized drama, uses gesture language and symbols, and more artistic but for *sahṛdaya*-s.

[55]We can take as an example a *rāga* that falls in the "*adbhuta-rasa*" (wonderment and awe) of the *nava-rasa*-s (nine emotions). Kumudakriyā, the *janya rāga* of Pantuvarāli (Kāmavardhinī), 51st *melakarta*, has been chosen by Muthuswami Dikshithar for his composition, "*Ardhanārīśvaram*". See `https://www.youtube.com/watch?v=b5yuBGJugFw` (Kuldeep Pai) or `https://www.youtube.com/watch?v=E1HA1XPFT-M` (Aruna Sairam) [Accessed on 3rd January 2018]. The scale of Kumudakriyā-Ascending is Sa Ri Ga Ma Dha Sa with descending being Sa Ni Dha Ma Ga Ri Sa... A *rasika* comments "Contemplation on the *prayoga*-s or phrases Sa Ni Dha Ri', Ri Ga Ma Dha Ri, etc. invoke a sense of fantasy, make-believe or illusion. Imagine suddenly walking into somebody who is split into a perfect half of a perfect man and a perfect woman! ... Absolutely dazzling and surreal! Kumudakriyā, a breathtaking *rāga* of fantasy, ..."

[56]See also, e.g., (Rowell 1992), for a comparable explanation: "What does this tell us about the relationship between theory and practice? A hallmark of the early Indian way of thinking about music was to identify and name all possible permutations of the basic elements, but with the realization that only certain authorized (and far more specific) melodic constructions can become the basis for actualized music, as, for example, in the form of an individual *rāga*. It was the job of the theory to provide the widest selection of possibilities, but it remained for practice to select the most pleasing of these arrangements. There is a reason for this: any purely mechanical set of permutations of a given system (of which the diatonic scale is an excellent example) will sooner or later exhaust the available possibilities and will admit no others. Such an outcome would violate a basic assumption of Indian culture, namely, that the number of available forms is, at least in theory, unlimited. The solution, which is as valid today as it was two thousand years ago, was to achieve the richness and profusion of forms that Indians demanded in their music by means of a musical system that could not be confined to any set of exclusive possibilities. On the contrary, they sought to devise a system that could accommodate any number of later additions, a system that was inclusive rather than exclusive. What the *mūrchana*-s and their derivatives provided was the simple notion that different octave segments (the *mūrchana*-s) and certain of their subsets (the *tāna*-s) could, when colored by the emphasis or understatement of certain tones, and also by distinctive ornaments and melodic pathways- form the structural basis for a unique melodic construction: a *jāti*, a *grāma rāga*, or a *rāga*."

[57]Discussed interestingly in the CBSE class XI Music text (Kapoor and Danino 2012).

[58]See (Rowell 1992) for a comparable explanation.

[59]Fibonacci wrote a book, about 1202, that discussed Indian mathematics, translated into Syriac/Arabic, as the basis; the name for the series was given only in c. 1870's by Lucas who proved $(2^{127} - 1)$ is prime using these numbers.

[60]The recursive or iterative property of the series can be seen as follows by case analysis, as either an *anudruta* coming first or the *druta*. First fix an *anudruta* as the 1st in the

sequence; the remaining $(M - 1)$ beats have P$(M - 1)$ distinct possibilities. Next, fix a *druta* as the 1st in the sequence; the remaining $(M - 2)$ beats have P$(M - 2)$ distinct possibilities. The sum therefore gives P(M).

[61] Interestingly, the process of coming up with a mnemonic for remembering the various *gaṇa*-s ("*yamātārājabhānasalagam*") threw up the earliest known example of what has later been called memory wheels (first noted in 1880's by those working on codes in telegraphy) or de Bruijn sequences (1944) (see (Knuth 2011)).

[62] In Telugu, *prāsa* is also present to a considerable degree: for example, use of same consonant at fixed positions.

[63] Namisādhu, the commentator, after explaining the meaning of the verse, gives a cryptic mnemonic verse in his commentary which reads as follows:

> *kaśakhenāgabhaṭāya tathakeveñarāghave |*
> *ṣajethāḍhepacemeṭhe doṇasachalaḍephaṅe ||*

The above verse gives the knight's moves if numbers are attached to the consonants as they appear in the *varnamāla* (see table below from G S S Murthy (private communication)):

क-1	श-30	झे-9	ना-20	ग-3	भ-24	टा-11	य-26
se	ṇaa	lii	lii	lii	ṇaa	ṇaa	lii
त-16	घ-19	बे-2	वे-29	ञ-10	रा-27	च-4	बे-२३
lii	ṇaa	ṇaa	ṇaa	lii	lii	lii	lii
प-31	ञे-8	था-17	हे-14	प-21	चे-6	मे-25	ठे-12
ṇaa	lii	ṇaa	lii	le	ṇaa	lii	ṇaa
दो-18	ण-15	स-32	छ-7	ल-28	डे-13	फ-22	हे-5
lii	lii	lii	ṇaa	ṇaa	ṇaa	ṇaa	lii

[64] Interestingly, Rudraṭa's thinking was a bit ahead of his times, as Dasgupta, Papadimitriou and Vazirani discuss in their book on "Algorithms" 2006, a graduate-level CS text by experts in the field: "Almost a millennium before Euler's fateful summer in East Prussia, a Kashmiri poet named Rudraṭa had asked this question: Can one visit all the squares of the chessboard, without repeating any square, in one long walk that ends at the starting square and at each step makes a legal knight move? ... Let us define the RUDRAṬA CYCLE search problem to be the following: given a graph, find a cycle that visits each vertex exactly once—or report that no such cycle exists. In the literature this problem is known as the Hamilton cycle problem, after the great Irish mathematician who rediscovered it in the 19th century. Define the RUDRAṬA PATH problem to be just like RUDRAṬA CYCLE, except that the goal is now to find a path that goes through each vertex exactly once." (Both problems are equivalent in terms of complexity as the Rudraṭa cycle problem is equivalent to the path problem or what is known in computer science as the Travelling Salesman Problem or TSP.). This text can be considered as a trend-setter in that, for this specific case, all traditional usage of the word Hamiltonian cycles or paths are eschewed and instead Rudraṭa cycles and paths are used. But they have not been consistent; for example, the Fibonacci series is called as such instead of Piṅgala or Gopāla series.

[65] *Prastāra*-s being either additive: $A(n)=A(n-1)+A(n-2)+A(n-3)$ or multiplicative: $M(n)=M(n-1)*M(n-2)+1$.

[66] From wikimedia (credits to Basavarajtalwar, 4 Nov 2009).

[67]"From The *Alas* inscription dated 770 C.E. tells us that the Kailasanath temple was commissioned in 757 C.E. (or 773 C.E.) by Kṛṣṇa I, an uncle of the founder of the Rāṣṭrakuta dynasty, Dantidurga.   The construction work took about 150 years to complete.   ...   While the entire temple complex looks like it is a cluster of temples and pillars and sprawling halls, it was actually carved out by *vertically* excavating some 200,000 tonnes (or 400,000 tonnes according to others) out of a *single*, mammoth rock. It cannot be emphasized enough that the real achievement is that the entire temple complex was *excavated, not constructed.*   Indeed, it does evoke a sense of awe when we try and fathom what it must have taken in terms of mathematics, engineering, building technology, craftsmanship, artistry, design, planning, and the entire project execution when we recall that this "project" was executed over 150 years and spanned at least six generations of experts in all of these fields." Indiafacts `http://www.indiafacts.co.in/ajanta-ellora-grandeur-cultural-amnesia-part-1` (Accessed on 27th July 2017)

[68]For details see Yanagisawa (2007), Waring (2012).

[69]Note curiously that the limit of happiness saturating or overflowing at 10^{20} (*Brahmā-nanda*) is just beyond the native integer capability of current 64-bit machines $(10^{18} < 2^{64} < 10^{20})$!

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Chapter 4

Rasa: From *Nāṭyaśāstra* to Bollywood

– *Charu Uppal*

(ucharu@gmail.com)

Abstract

Rasa, meaning gist, is the essence that one feels while experiencing an art piece, be it performative or static art. In the Indian context, and as applied to both the performer and the audience, *Rasa* is considered an *alaukika* (other worldly) experience. An integral part of aesthetics, both Indian and Greek (although European performing arts moved away from the original concept of Greek aesthetics), is improvisation on the rules that are suggested for a clear structure, which by definition is fluid and allows room for newness. Using Bharat Gupt's study of poetics and *Nāṭyaśāstra*, this paper will focus on the similarities in Indian and Greek aesthetics, also highlighting when and why the contemporary notion of aesthetics in European theatre moved away from the Greek, which was more similar to the Indian sensibility. There will also be a focus on the concept of *hieropraxis* (art as worship, pleasing both people and Gods), which was common, to Indian and Greek art forms. Finally, the paper will illustrate, through examples of Bollywood and interviews with *Bharatanātya* teachers (in Sweden), how improvisation, and newness is brought into various aspects of performance arts, thereby challenging Prof.

Sheldon Pollock's reading of the *Nāṭyaśāstra* as being rigid and frozen in time, and as devoid of bringing novelty, thereby making the work irrelevant to our times.

Performance arts and culture

Let *Nāṭya* (drama and dance) be the fifth Vedic scripture

Combined with an epic story,

tending to virtue, wealth, joy and spiritual freedom,

it must contain the significance of every scripture,

and forward every art.

— *Nāṭyaśāstra* 1.14–15

In loving the spiritual, you cannot despise the earthly.

— Joseph Campbell

Introduction

Although the story of Indra and the ants, (from the *Brahmavaivarta Purāṇa*) — where Lord Viṣṇu, in the form a young boy with blue skin, visits Indra and convinces him to question his ego driven involvement in the world – is quite well known, the story that follows is usually forgotten. Humbled by Viṣṇu's visit, Indira decides to renounce the world and become a yogi and meditate on the lotus feet of Viṣṇu. Indrāṇī, the beautiful wife of Indra, is upset by the news that Indra wishes to renounce the world, and goes to a priest for counsel. Understanding the dilemma of the queen, the priest says that he has a solution which would be pleasing both to Indra and Indrāṇī. As both approach Indra sitting on his throne, a symbol of power and authority, the priest says,

> Now, I wrote a book for you many years ago on the art of politics. You are in the position of the king of the gods. You are a manifestation of the mystery of Brahma in the field of time. This is a high privilege. Appreciate it, honor it, and deal with life as though you were what you really are. And besides, now I am going to write you a book on the art of love so that you and your wife will know that in the wonderful mystery of the two that are one, Brahma is radiantly present also.

> (Campbell *et al* 1991:79).

The story is meant to illustrate the recognition and acknowledgement in Hinduism that both *pāramārthika* and *vyāvahārika* are important for a smooth functioning of *saṁsāra.* In the story, Indra finds that in life,

> .....he can represent the eternal as a symbol...of the Brahman. So each of us is, in a way, the Indra of his own life. You can make a choice, either to throw it all off and go into the forest to meditate, or to stay in the world, both in the life of your job, which is the kingly job of politics and achievement, and in the love life with your wife and family.
>
> (Campbell *et al* 1991:79).

All arts are supposed to give us a reflection of the *pāramārthika* in the *vyāvahārika.* In Indic tradition, the ultimate purpose of art, other than merely entertaining its audiences, has always been to bridge the gap between the worldly (*vyāvahārika*) and the transcendent (*pāramārthika*)—by bringing together aspects of *laukika* (the worldly) in the arts such as it points towards ways of experiencing the *alaukika.*

Purpose of Art in Indic Tradition:

Called the fifth Veda (like the Purāṇa-*s* and the Itihāsa), the *Nāṭyaśāstra*[1]—was composed to make the knowledge of the Veda-s accessible to all factions of society, by evoking an experience in the audience that was commensurate with their own abilities of understanding art, and was beyond academic and formal knowledge. Though remembered more as a poet than a philosopher, Nobel Laureate Tagore, in his essays defied all definitions of art by combining and comparing poetry with philosophy. Tagore believed that art relieved the audience from the clutches of reality, and moved the viewer/spectator into the other-worldly, not unlike what is proposed in the *Nāṭyaśāstra.*

> The artist helps us to forget the bonds with the world, and reveals to us the invisible connections by which we are bound up with eternity. True art withdraws our thoughts from the mere machinery of life, and lifts our souls above the meanness of it. It releases the self from the restless activities of the world, and takes us out 'of the noisy sick-room of ourselves.   (Radhakrishnan 1918:122)[2]

Attributed to Bharata Muni, the *Nāṭyaśāstra* (NS) is a treatise on performing arts which, in over 6000 verses[3] and 36 chapters, provides guidelines on topics such as dramatic composition, how to structure a play and how to construct a stage, styles of acting, types of body

movements, costumes and make up, role and goals of an art director. The *Nāṭyaśāstra* even makes comments on musical scales, musical instruments and how to integrate music with art performance.

Some scholars think that the *Nāṭyaśāstra*, whose dates are still debated, may not be the oldest work of its kind, but definitely the one that has survived (Schwartz 2004). The *Nāṭyaśāstra* that has influenced various forms of arts in India, namely, dance, music and literary traditions in India, is also known for propounding the *Rasa* Theory, which stresses that although entertainment is a definite desired effect of performance arts, it is not the primary goal. This paper tries to establish how '*rasa*' the core principle that defines 'enjoyment or pleasure' received from experiencing an artistic performance (or even eating a palatable meal), is, by nature, ever-present awaiting its manifestation through participation in a special experience, and that it must not be seen through the limited words such as aesthetic(s) or performance or pleasure (Schwartz 2004, Cush *et al* 2012). In addition, the paper establishes that sacredness is not unique to Indian texts, and that even pre-Christian European drama had a strong element of sacredness to it.

Before we move further, it is important to establish what constitutes a *Śāstra—* in *Nāṭyaśāstra*. Though misunderstood to be a dictate, *Śāstra*-s are an instrument of discipline (*śāsana*) and have been open to amendments, additions and subtractions, and therefore not rigid in their recommendations. Contrary to how some Western Indologists have approached them, *Śāstra*-s are guidelines for managing and creating through a particular art form or activity (Gupt 2006)[4]. Therefore, *Śāstra* has a *lakṣya* – a purpose directed towards a discipline e.g. if one wants to learn about governance one approaches *Arthaśāstra*, and if one wants to write poetry, one would consult *Nāṭyaśāstra*. However, it is important that *Śāstra-s* be approached for their usefulness with *śraddhā*. A text approached by *śraddhā*[5] will be approached for the value it has because until there is a belief in its value, the text's essence will not reveal itself to the learner (Gupt 2006). Only those who have *śraddhā* and respect the texts have the *adhikāra* to read analyze and comment on the *Śāstra*-s. Furthermore, Bharata Muni gave instructions on who qualifies to be a critic. Other than the knowledge of dance, music, customs and acting, a critic according to Bharata Muni, must have an open mind, which Pollock shies from, as he approaches the concept of '*rasa'* with a pre-ascertained theory.

Using works of several scholars – but primarily Bharat Gupt, Rajiv Malhora and David Mason – this paper critiques Pollock's misinterpretation of *rasa*, which is frozen in time and does not allow any novel creations. Pollock, who also studies the *Śāstra*-s, *sans* a sacred attitude, cannot be considered an *adhikārin*, for he discards the *alaukika* and retains only the *laukika*. As Malhotra has argued, in Indic traditions *laukika* and *alaukika* are usually inseparable, as is also evident from the above story about Indra and Viṣṇu. Furthermore, the paper attempts at explaining the basic concept of *Rasa* Theory, how it cannot be located or created, but must surface from the vast ocean of human consciousness due to a confluence of several factors. In addition, using David Mason's work, the paper explains *rasa* as a conscious state. Finally, the paper establishes how modern mythology, namely India's film industry continues to reflect the concept of '*rasa*' in various ways.

Pollock's lens and interpretation of Indic art and '*Rasa*': Since the main aim of this paper is to challenge some of the assumptions and interpretations made by Pollock, we begin with his outlook on the concept of '*rasa*'. Anyone familiar with Pollock's writings knows that though he is a thorough scholar, with a vast knowledge of Indic traditions, he does not consider the context, and therefore does not see the whole, but only parts of Indian traditions[6]. His insistence on desacralizing and ignoring the religious aspect of Indian arts, as propounded by several scholars (Schwartz 2004, Malhotra 2011), actually disqualifies him of the *adhikāra* to comment on the *Śāstra*-s, which are prescribed to be studied in a sacred context. It is important to emphasize that theories and areas of study are lenses that are used as a guideline for viewing and interpreting the world. A very common example given is how many different interpretations can there be in a simple act of holding a door – especially, if a man is holding the door for a woman? While an architect might notice the design and size of the door, a mathematician might look at the angle the door is held at, a gender studies scholar may study the same situation as a man-woman power vs. politeness equation. In that sense, using the Marxist theory of 'aestheticization of power', Pollock arrives at a conclusion that *kāvya* was essentially produced by a nexus of *brāhmaṇa-kṣatriya* who, making use of 'embedded oppressive Vedic ideas to numb the masses into having a false sense of involvement with their rulers and, thereby, offering complete obedience'. (Malhotra 2016). For all the theories

of oppression that Pollock propounds, he does not acknowledge the power of *Nāṭyaśāstra*, in making the *Veda*-s available to all (Malhotra 2016)—including those who were not allowed to study them and those who due to their own limitations of understanding could not fathom them.

Furthermore, Malhotra (2016) argues that Pollock not only treats *Veda*-s and *Śāstra*-s as irrelevant and focuses on *Kāvya* as "the primary field of cultural production" but also tries to remove any sacred connection between *Veda*-s, *Nāṭyaśāstra* and the subsequent *kāvya*. Therefore, Pollock's prescription is simple – a social disruption in India, by rejecting the sacred, the spiritual, the transcendental, (Malhotra 2016) – all the qualities, that make Indian texts, universal— to free it from oppression that is inherent in its texts. Several scholars including Pollock's mentor Ingalls have warned against using Western lenses to study Indian texts, (Malhotra 2011, Malhotra 2016, Schwartz 2004), especially since in Western culture and literature, there has always been a distinction between religion and philosophy (Schwartz 2004:3) that renders the Western lens for reading of the Indic texts futile. Furthermore, while Pollock uses chronology and authorship to establish his points[7], it must be acknowledged it could be more than one author who wrote this treatise. As early as Abhinavgupta it was believed that the surviving text of *Nāṭyaśāstra* was not the work of a single Bharata, but that is was a coalition rendered by Bharata Muni by combining the separate sets of three schools, *Brāhma-mata*, *Sadāśiva-mata* and *Bharata-mata* (Gupt 2006). Furthermore, Śāradātanaya's comment that Bharata Muni only reduced a treatise with 12000 verses to 6000, implies that the sage credited with authorship of *Nāṭyaśāstra* –may have contributed only partially to the work. In fact, this is not unique to *Nāṭyaśāstra* but rather typical of the way in which all Indian *Śāstra*-s were compiled. Great minds like Pāṇini, Vātsyāyana, Manu or Kauṭilya reviewed a particular branch of learning, gave it shape and coherence, reconciled differences of opinion but still left room for later additions (Gupt 2006). The concept of authorship and copyright itself is Western, and therefore using authorship and even chronology as criteria in the case of ancient texts is not always a reliable method of analysis.

The following section analyses how theatre in both Indian and Greek context was considered both a ritual and worship.

Sacredness in Indian and Greek Drama: Although Gupt (2006) does not recommend examining genres across cultures, because each should be studied in the context of its own history and culture, he considers comparisons of different modes of performance to be very instructive for a better understanding, mainly because he does not consider written texts the same as plays with performances that involved bodily gestures and languages.   While sacredness is an accepted part of the Indian performance arts, not many know that even Greek theatre, before the advent of Christianity was instructive on the sacred—Heiropraxis.   And yet, contrary to common belief, ancient Greek, Indian and Egyptian drama very well preserved the difference between theatre activity and religious rites. (Gupt 2006).

> In ancient times festivals could be held on certain auspicious days only. Much has been written on the rhythms of these days only and their links with the seasonal and astronomical cycles. Whatever the logic, the purpose behind these fixations was always unambiguously to celebrate the visitation of something greater than man. Theatre was an integral part of this event. It was a substructure of the macro structure of the feast itself. It took the shape it did because it was enacted as one essential ceremony in a chain of many ceremonies.   (Gupt 2006:63)

Not solely a performance, ancient drama was actually both a prayer and a ritual, inviting and welcoming the gods, while sharing it with fellow human beings, whereas modern secular drama today is only used for its entertainment value.   Gupt (2006), like many other scholars, cautions against a Darwinian mind-set to understand drama.

> ...but again we must distinguish between ritual and drama by recognizing their ends. One is prayer, the other is pleasure. One is essentially a rite of passage, from the point of not having to having, from being here to there, whereas the other may be called a rite of message, from person to person from the artist to audience. Attempts to place ritual myth and drama in a chain of evolutionary growth are not a representation of actually history but a result of Darwinian mind-set. We need not look upon them as one leading to another.   (Gupt 2006:66)

> A ritual and drama have (*muthos*) the intersecting and coinciding ends, therefore some rituals turn into drama and others remain the same.   *Garba* dance which was a ritual is presently enjoyed merely as an entertainment, while the swing festival of *teej*, which was an entertainment for the rainy season is now celebrated as a ritual.
>
> (Gupt 2006:66).

In fact, while the theatre of the Greek was reserved mainly for big celebrations, the same in India was even performed for family celebrations. Gupt equates *Ramlila* with *Eidolon* where a common understanding was that the Gods were themselves present at the performance as Divine spectators, making theatre a sacred viewing (Gupt 2006). Obligatory theater going ended with the advent of Christianity that considered drama an unholy, even a satanic act (Gupt 2006). Following that, drama and several other art forms gradually faded from the cultural scene. The revival of theatre's link to the sacred happened after Europe came in contact with the traditions of Asia and Africa (Gupt 2006:64). In fact, the entire genre of performance studies was created only a few decades ago by Richard Schekhner, who was inspired by the Indian tradition in the 1950s (Gupt 2012). However, although ancient drama was not merely ritualistic or merely religious, it came to be associated with worship (as such) because it was performed only on religious occasions and often within the premises of religious institutions. (Gupt 2006).

The following section discusses the development of Indian drama, and the centrality of the sacred to Indian drama, the characteristics that make an ideal audience as listed by Bharata Muni, how Indian and Greek drama developed independent of each other, and why unlike the *Poetics*, the principles of *Nāṭyaśāstra* actually can be applied both to drama and poetry.

Indian drama: The history of theatrical shows on festive situations is not so well documented in India, as it is in Greece. Since there is no mention, even in the *Nāṭyaśāstra*, about any precedent from where theatre could have been developed, scholars have often made several guesses on the development of the *daśa-rūpaka*-s (ten genres of acting) (Gupt 2006). It is believed that the first Indian drama was puppetry and probably that is why the narrator is called a '*Sūtra-dhāra*'. However, Gupt (2006) argues that the proponents of the theory did not consider the possibility that this thread-bearer (*Sūtra-dhāra)* was so called because, like all architects, he carried a thread to measure the land for the theatre building—which was constructed anew each time a performance session was held (Gupt 2006:70).

> Like all architects he carried a thread to measure the land for the theater building which was constructed anew each time a performance session

was held. Besides the master director is called the *acarya* in the NS [*Nāṭyaśāstra*], and he was most likely not the same as *Sutradhara*.

(Gupt 2006:70)

Regardless, it is clear that there was more emphasis on symbolism through dance, which was an integral part of both Indian and Greek theatre, in Indian drama rather than dialogue (Gupt 2006:66-67). Nevertheless, influenced by the biases of European realistic theatre, the orientalists of late 19th and 20th centuries focused more on 'dialogue' as opposed to symbolism and body movements, and looked for evidence in Sanskrit literature to support their preferences, finally to be found in the *Saṁhitā*-s.

> These scholars therefore ransacked the Sanksrit literature for the earliest examples of dialogue and found them in the *Saṁhitā*-s of the *Ṛgveda*. Hence developed the theory of Vedic dialogues as precursors of Indian drama. As some examples of mime have been referred to in earlier Sanskrit texts, it was thought by one set of sanskritists that some sort of puppetry was the precedental form of Indian theatre. Similarly a group of scholars emphasized the secrets that the etymology of the word *sūtradhāra* may hold. This prologue speaker and director, it was argued was originally a string manipulator of the puppets who retained the nomenclature even when he became the play manager.

(Gupt 2006:70)

Furthermore, the misconception mainly championed by Keith, postulates that Indian drama could not have come into its own without the highly developed structures of the *Rāmāyaṇa* and the *Mahābhārata*, that were sung and narrated (Gupt 2006). While the dates of *Nāṭyaśāstra* are debated it has been established that it predates its Greek counterpart, the *Poetics* (Gupt 2006). Since *Poetics* was written after the best Greek works had been created, and *Nāṭyaśāstra* was compiled before any Indian plays were composed, the former is more 'empirical' and is concerned with 'literary excellence', where as *Nāṭyaśāstra* is more 'emancipatory' and pays attention to the 'formulating principles of performance.' (Gupt 2006:14-15).

While Pollock at several instances questions how a work written for drama could have been used to appraise a work of poetry[8] – the main reason that Bharata Muni does not differentiate between *daśa-rūpaka*-s (the ten dramatic genres) from the Purāṇa-s or poetry, is that the

Nāṭyaśāstra was written before any Indian plays were composed (Gupt 2006). Perhaps Pollock uses his understanding of Greek *Poetics* where there is a clear distinction between drama and poetry, to question how *Nāṭyaśāstra* can comment both on poetry and drama. Gupt (2006) even disagrees with the notion that poetry may have come to India via Alexander, because he states that other than the possibility of *mimesis* (which might have developed into *anukaraṇa*) there are no signs of influence of poetics on *Nāṭyaśāstra*, or vice-versa.

In the *Nāṭyaśāstra* (1.7-15), while commenting on the origin of drama, Bharata states that due to the lack of audio-visual entertainment at the time, coupled with over-indulgence in sensual pleasures that prevented people from contemplating higher values, he created drama as a positive distraction (as cited in Rangacharya 1966:66). Furthermore, it is important to acknowledge that, Bharata made the Indian performance arts deliberately and very conscientiously available to all. The ongoing accusations from Pollock that *Śāstra*-s were a conspiracy between Brahmins and the Kshatriyas can be countered by the fact that Bharata Muni, commented not only on the characters on the stage but also those in the auditorium—making the viewing egalitarian (Rangacharya 1966). One of the dilemmas of Bharata when he advanced *Rasa* Theory and defined dramatic representation was that though he believed in the equal availability of art to all, and the shows at the time had degraded to the level of '*grāmya*' (vulgar), which made him want to raise the level of performances. However, if the shows were to be above the level of '*grāmya*' they might become too elitist, and a playwright will be compelled to restrict his audience to those with a higher level of understanding of the arts. Bharata Muni resolved the conflict by suggesting that the shows should be open to all and use well-known stories, and even love stories so that 'drama would capture the hearts of people of different tastes' (Rangacharya 1966:74). While it seems that a combination of well-known stories and love stories is not likely to attract those with subtle tastes, Bharata Muni's theories on *sandhi*-s and *rasa*-s and enlightenment 'could tempt a high-brow audience' (Rangacharya 1966:74):

> A spectator is one who has no obvious faults, who is attached to drama, whose senses are not liable to distraction, who is clever in guessing (putting two and two together), who can enjoy (others') joys and

sympathize with (others') sorrows, who suffers with those who suffer, and who has all these nine qualities in himself.

<div align="right">(as cited in Rangacharya 1966:74)</div>

Bharata does not consider a person lacking imagination, is inebriated, is easily distracted or is not interested in drama and merely accompanying another spectator, an ideal audience. Therefore, a spectator according to Bharata must be able to 'lose himself in the characters on the stage, their joys and sorrows (Rangacharya 1966:74). Such detailed and well thought out definitions and explanations form the basis of *Rasa* Theory, which makes it relevant for the evaluation of art in all times.

Rasa and Rasa Theory: What is '*Rasa*'? '*Rasa*[9]' is the term that Dewey lamented did not exist in English, a word that combines both the 'artistic' and the 'aesthetic' (Thampi 1965). Primarily derived from a reference to cuisine and concept of taste, '*rasa*' can mean essence, gist, or flavor. Bharata Muni uses the word as an 'extract', since it is 'worthy of being tasted (Gupt 2006:261)[10] and considers it paramount, for without *rasa* no other purpose of an art is fulfilled (Rangacharya 1966).

How do we use a word used to describe a dish to critique a dance performance?

Just as a result of mixing of various spices and herbs to create a dish, a taste is produced in the one who consumes it, Bharata Muni says that *rasa* is produced by mixing of various *bhāva*-s (emotions) expressed in a performance in the consciousness of a spectator. The moment(s) between when a person consuming a meal, finishes his meal, sits in silence in contemplation of what he/she has experienced and before he/she expresses enjoyment – is *rasa* (Rangacharya 1966). The experience of *Rasa* is similar to a 'waking up' of a feeling that has always existed, that though belongs to the consumer of the meal alone, does not reside anywhere in any of the spices, and may not be experienced the same way by the one who made the meal or any other consumer of the meal. '*Rasa* is both a state of being of the spectator and a climatic state' (Baumer and Brandon 1993:211).

While the later authors have tried to complicate this aspect (Rangacharya 1966), in reality the concept of *rasa* is quite simple, something that tries to grasp the experience, resulting from subjective

combination of taste buds, individual taste (preference for certain foods/arts or the ability to taste/understand) and the skill of the cook/playwright. Simplistically, *rasa* can be explained by the delight a person shows while consuming a meal that combines all tastes—sweet, pungent, hot, sour etc., in addition to other gestures such as facial or verbal expressions, of praise (Rangacharya 1966:76) e.g. smacking lips, closing eyes or licking fingers. Does the person talk separately about each taste? Does one taste stand out the more? No, it is a combination of several factors, which though may be listed, cannot individually account for the final effect, which requires the consumer of the meal, and takes into account the preference for certain tastes.

While *rasa* is something that can be relished, enjoyed, appreciated like taste in food, or melody in music, and body's movement in a dance, *bhāva* is conveyed by more concrete movements—e.g. bodily gestures, words, acting, expression etc. *Rasa*, which is only one of the eleven elements that a *Nāṭya* (drama) consists of, is derived from ten other elements[11]. Similar to the experience of consuming a meal, '*rasa*' emerges in watching the union of various *bhāva*-s (Rangacharya 1966:260). It must be noted, that *rasa* is the final stage that follows many others and refers to the unity of aesthetic experience combining the following eight *bhāva*-s (emotions), and not the other way around.

Śṛṅgāra	Love
Hāsya	Humor
Karuṇa	Compassion
Raudra	Horror
Vīra	Heroic
Bhayānaka	Fear
Bībhatsa	Awesome
Adbhuta	Wonder

A ninth emotion, *śānta bhāva* — which is not recognized in drama — was probably added later, since according to Bharata, all art leads to contentment. Bharata Muni uses four words in analyzing the conception of *bhāva*-s—which can be considered stages that lead to *rasa*.

1. The external factor *vibhāva*, (the cause),
2. The immediate and involuntary reaction, *anubhāva*, which is subjective

3. Voluntary control of the reaction, *vyabhicāri-bhāva*

4. The interval between involuntary show of expression and voluntary blocking of expressions called *sthāyibhāva*—

"It is the *sthāyibhāva* that is arrived at after the first three stages creates a '*rasa*'" (Rangacharya 1966:79). That momentary rest, that the person eating the meal takes before expressing his delight, is the *sthāyibhāva*—the moment of total immersion in the experience or enjoyment or reaction is the master, the ruler, and earlier three *bhāva*-s are subservient, or 'servants' (Rangacharya 1966:79) only secondary, to *rasa*, although all the *bhāva*-s jointly contribute to the '*rasa*.' Since *sthāyibhāva* is the most dominant among the four, it is considered to constitute the *rasa*.

Just as mixing different tastes *rasa* is experienced, similarly mixing different *bhāva*-s—the *sthāyibhāva* is transformed into *rasa*. The success of a performance is determined by the extent of the appreciative spectators relishing a particular *rasa*. An artist's ability to create within the boundaries of these rules indicates his ability to create *rasa* (Schwartz 2004).

Nāṭyaśāstra states that the primary goal of an artistic performance is to transport the spectator in the audience into a parallel reality, which is beyond the physical, full of wonder, where he/she can experience the essence of his own consciousness, such that it leads him to reflect on spiritual and moral enquiry (Schwartz 2004).

Rasa Theory, though earlier associated only with drama, presently includes both poetry and drama (Rangacharya 1966:75), and expresses the primary goals of performing arts in India in all the major literary, philosophical, and aesthetic texts, and it provides the cornerstone of the oral traditions of transmission. It is also essential to the study production of any performance arts (Cush *et al* 2012), which in India always have a religious sensibility (Schwartz 2004). At this juncture, it is important to emphasize the *alaukika* aspect of *rasa*, as a main defining quality of performance, going beyond text, as it combines acting, dancing performance and induces a *religious* response (Schwartz 2004). Scholars have reiterated that religion, art and philosophy in India were so intertwined that it is possible to study its religions through its performance arts (Schwartz 2004), challenging the methods used by Pollock that desacralizes all the *śāstra*-s. Furthermore, for Abhinavgupta,

the aesthetic experience is... self luminous and self conscious, devoid of all duality and multiplicity... 'in art, the purified state of undifferentiated experience was *rasa* or *ananda'.*   Thus *rasa* becomes 'a state of consciousness' akin to the bliss of an enlightened soul.

<div align="right">(Schwartz 2004:17)</div>

Infact, the oft quoted 'follow your bliss' of Joseph Campbell, implies that our true selves are revealed to ourselves in following what brings our soul to the level of a divine experience. Kapila Vatsyayan states that "Indian art is not religious, neither is there a theology of aesthetics, but the two fields interpenetrate because they share the basic world-view in general that of *moksha* and liberation in particular." (as cited in Schwartz 2004:17).

While Pollock states that it is the viewer who makes the 'judgment'[12] on *rasa*, it is important to note that *'rasa'* is an experience, not a judgment, nor evaluation. Basically, Pollock believes that *rasa* need not be visible, but since it cannot be located it must not exist the way it was understood. It is not clear why Pollock finds it hard to understand, because even to a school-teacher, after having taught for several years, it is apparent that the essence of understanding of a class lecture often rests on the prior reading/ effort /work, attention, interest in class, and understanding level of each student, which is reflected accordingly in the 'aha moments' in the class. What if *rasa* is explained as a state of consciousness? The following section discusses the debates about the universality of *rasa*, and how recent scholars have tried to explain it in terms of a mental state that cannot be located but only experienced, although it is reflected in certain physical changes.

Rasa, as a conscious state: There have been several debates among scholars about the universality of *rasa* (Baumer and Brandon 1993). Can *rasa* be experienced only by Indians or only as response to an Indian drama? Some see *rasa* as 'culture bound',

Rasa cannot be a universal concept, for the *rasa* response depends upon specific and selected cultural conditions (Deutsch). *Rasa* is not a possible response when a spectator is witnessing a Western tragedy (Gerow). *Rasa* must be culture-bound, since most of the *Nātyaśāstra* is taken up with describing which particular theatrical and dramatic arrangement of elements if appropriate to stimulate one or another *rasa* experience;

the resulting Sanskrit play and its performance consequently are wholly different in kind from, say a Greek tragedy.

(Baumer and Brandon 1993:211-212)

For a non-Indian to experience *rasa*, a 'cultural conditioning' is a pre-requisite, as prescribed by *Nāṭyaśāstra.* However, other scholars consider *rasa* universal, equating it with 'aesthetic joy' (Raghvan and Shanta Gandhi, as cited in Baumer and Brandon 1993:212). Regardless, Baumer and Brandon (1993) highlight that *rasa* being associated with emotions rather than intellect is (wrongly) denigrated in the West, because there is an enormous difference in say emotions derived/experienced from soap opera and *rasa*—for, the process is crude in Western soap opera, it is marvelously refined and artistic in India (Baumer and Brandon 1993:212).

Gupt (2006) however, compares *rasa* to catharsis, which he says is not mere relief, but should be

regarded as restoration to a state of pleasure not generally experienced [while] the process of *rasa* emergence requires the removal of obstructions [...].Katharsis and *rasa,* with their separate points of emphasis, both begin with purification and end in delight.

(Gupt 2006:272-73)

It is this experience of catharsis that is so accepted in appraising Western art performances that can be likened to *rasa* in the Indian context, implying that a similar concept was elucidated in both the West and the East. In fact, Richard Schechner has developed a performance theory combining the East and West concepts called, '*rasa* aesthetics' which considers it from the point of view of changes, which occur in the nervous system.

However, Mason (2015) not only considers *rasa* to be alive and universal, but also disagrees with the new theory of '*rasa* aesthetics' as proposed by Richard Schekner, because he stresses that '*rasa*' and 'aesthetics' have little in common.

Rasa is a conscious state having its own unitary and subjective quality, as well as its own content determined by memory and knowledge. Based on precepts of neural Darwinism, as articulated by Edelman, we can articulate *rasa* as a state of consciousness that arises from the contingent interactivity of brain systems, intentionality and attention. There is no *rasa* for a person not paying attention.   (Mason 2015:103)

Here Mason (2015) places attention at the center, without which no *rasa* can be experienced, no matter how aesthetic a performance is, for human consciousness 'is a process, not a thing', and while *rasa* 'has a relationship with emotions, it is not dependent on them, nor brought out by them' (Mason 2015:101). Using cognitive theory and the universality of the ways human bodies interact with their environment, Mason counters Gerow's (like Pollock's) ideas that *rasa* belongs to the past, and concludes that there is such a thing as a universal human experience, despite the recent trend of relativizing that experience:

> New historicism among other critical approaches thinks of human experience as fundamentally and inextricably embedded in particular cultural circumstances, and there are certainly very good reasons, as postcolonial theory has insisted, to resist tendencies to conflate disparate experiences, since such conflations often empty the histories of particular peoples of the meaning they uniquely derive from their experience. Even so, cognitive theory of the recent couple of decades employs compelling neurological evidence to argue that some human experience derives fundamentally from the ways in which human bodies interact with their physical environments available in the world, and given the limits on the range of ways in which human bodies can interact with those environments, the notion that we can recognize some experience and some meaning across cultures and historical periods is not absurd. While acknowledging the significant influence of unique cultures on the development and appreciation of art, renowned neuroscientist V.S. Ramachandran argues that '10 percent' of art and art appreciation comes from 'artistic universals' (Ramachandran 2004:41).
>
> (Mason 2015:102).

These commonalities, say some scholars, arise from an experience that is grounded in the body, yet not located in it (Mason 2015)[13]. Using Edelman's theory on consciousness and cognitive theory, Mason (2015) illustrates how *qualia*, subjectivity of an object, is used by the brain to survey and understand its environment. Just as consciousness works with *qualia* to contextualize an object in its environment, '*rasa* accompanies the disclosure of *bhāva-s*' (Mason 2015:106). English words such as feeling and emotion (which even Johnson states are not the same (Mason 2015:106)) cannot be equated with *bhāva*, which is sensation itself. Despite its culinary origins, the concept of *rasa* is not to be likened to the physical mechanism of tasting, as Pollock and other modern scholars seem to do.

Rasa according to Gerow is an organizing principle – an 'emotional consciousness', where all 'elements of the play' are seen as one unit, contributing to the final experience (Mason 2015:107). For that reason Bharata Muni, stresses the characteristics of the *sumanas* (audience members) –as being 'of a like mind with the production' and *budha* (knowledgeable or conscious) (Mason 2015:107).   Aware that the performance itself is transitory, and that without the appropriate *characteristics* of the audience as listed in *Nāṭyaśāstra*, *rasa* cannot be created, since the 'audience member's very self is the site of *rasa*' (Mason 2015:107) A spectator cannot be given or asked to expect *rasa* because it requires spectator's involvement, through his understanding of the performance, and depends on:

> neural pathways that form and operate as a consequence of a particular audiences member's life experiences, but that respond to a new experiences in creative, astonishing and unpredictable ways.

> (Mason 2015:108)

This 'mode of reflection' resulting from the stimulus of the theatrical event that takes the spectator deep into a self-aware consciousness is '*rasa'*, and like consciousness it is not a result of experiences, but one with it.

Rasa **Continues into Bollywood:** *Rasa* as a method of performance has been an integral part of Indian cinema, giving it a distinct presence apart from Western cinema. In contrast to the Western method acting, where an actor must embody the character he plays, the *rasa* method emphasized conveying an emotion, as demonstrated in his films by the Oscar winning director Satyajit Ray, who influenced many directors in the West. *Rasa*, as a concept itself became the theme and was used as a part of the plot, in *Naya Din, Nayi Raat* where the nine main characters, all of which were played by Sanjeev Kumar, each represented a different *rasa*. *Rasa* should not be confused with genre which 'attempts to convey an emotion through characters, situations, or *mise-en-scene*' (Kumar 2014:5). But according to *Rasa* Theory, the performers must become 'the living embodiment of the *rasa* they are depicting' (Kumar 2014:5). Ganti (2013) argues that when scholars criticize Bollywood for not having a genre/plot/style that is because they are refusing to examine and explore Bollywood on its own terms, and are applying non-Bollywood concepts to its study. Bollywood defies any adherence to genre, mainly because it has borrowed much from *Nāṭyaśāstra* and

often applied the concept of *rasa* in bringing back audiences to the theatre. Using the example of supporting cast in Bollywood movies, Kumar (2014) explains how certain actors who had very limited screen time were not only used successfully but also helped create a stereotype, which has continued in Bollywood till this day in attracting audiences. So, using six actors who represented certain *rasa* e.g. Om Prakash (*śānta* – old man), Leela Misra (*karuṇa* – adorable aunt), Helen (*śṛṅgāra* – seductress), Kanhaiya Lal (*bībhatsa* – cunning money lender), Tun-Tun/Uma Devi (*hāsya* – clumsy maid), Lalita Pawar (*bhayānaka* – wicked mother-in-law), Kumar illustrates how each of these characters were popular because they 'represented the social network of the spectator' (Kumar 2014:7). They formed an aspect of everyday life of spectators and through their roles, were able to evoke a *rasa* in the audience by combining various *bhāva*-s.   The audiences returned repeatedly to watch these characters, despite their limited screen time. The mere presence of these actors, evoked a *rasa* from memory and knowledge of the spectators, which was one with their lived experience of knowing similar characters in real life, making the movie viewing experience seem like being a part of an extended family. Performances, whether of the traditional arts or of Bollywood, will evoke *rasa* in the audience as long as they find delight in it, and the *Rasa* Theory will remain relevant.

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Notes

[1] *Nāṭyaśāstra*— where words were extracted out of *Ṛgveda*, music from *Sāmaveda*, *abhinaya* out of *Yajurveda* and *rasa* out of *Atharvaveda* and combined them with muthoi or Itihāsa to complete the fifth Veda called Nāṭya Veda (*Nāṭyaśāstra*: 1:11-19 as cited in Gupt 2006:70).

[2] These sentences follow the above quoted lines 'It disengages the mind from its imprisonment in the web of customary associations and routine ideas. The secret of all art lies in self-forgetfulness. The poet or the artist sets free the poet or the artist in us. And this he can do only if his artistic creation is born of self-forgetful joy. The true artist lifts himself above the worldly passions and desires into the spiritual mood where he waits for the light. (Radhakrishnan 1918:122).

[3] The complete version contains 12000 verses. (as per Śāradātanaya)

[4] Lectures given at the Kalakshetra. 2012. `https://www.youtube.com/watch?v=bzVIrxjXIPo`

[5] *Śrāddha*, the ritual of acknowledging ancestors, is conducted because ancestors are considered worthy of respect and value.

[6] Pollock's self-assurance is evident in several of his writings, e.g. within the first two paragraphs of his article of 2012, '*Vyakti* and the History of *Rasa*', he lays out a problem, and establishes himself correct in his position, merely by stating, 'my account was correct'. He also self-cites himself in many of his papers proposing one idea and then taking them as if they were already proven valid merely by their publications.

[7] First, while in the *Abhinava-bhāratī* it is found at the end of Abhinava's review of the ideas of Bhaṭṭa Nāyaka, it is not self- evident that the verse is to be attributed to him. (Pollock 2012:242). It is of course entirely possible that a verse from Bhaṭṭa Nāyaka's work could have been circulating anonymously and found its way into the *Vyaktiviveka* (indeed, he may have taken it from the *Abhinava-bhāratī* itself, though I know of no evidence that he had access to this work). (Pollock 2012:242).

More tellingly, we might wonder why Abhinavagupta should quote the verse immediately after citing two other verses from the work of Bhaṭṭa Nāyaka if it were not by the same author. (Pollock 2012:242).

Regardless of whether or not we ascribe the verse to Bhaṭṭa Nāyaka (though I think we should), or accept as genuine the reading *saṁvedanākhyayā* given in the manuscripts of the *Abhinavabhāratī* (though I think we must), the verse would still appear to be the first instance of the migration of the idea of *vyakti* from its linguistic sense of manifestation of a latent meaning in the text, to its psychological sense, the revelation of a new consciousness in the viewer/reader. (Pollock 2012:244).

[8] What remains troubling in this tentative reconstruction of mine is that the Indian tradition seems to have only rarely gestured toward, and never fully acknowledged, the transmutation of *vyakti* from a linguistic into a psychological phenomenon. The most telling case, I believe, is that of Ruyyaka (c. 1150 C.E.). In his commentary on the *Vyaktiviveka* he sets out to justify precisely what Mahima Bhaṭṭa had sought to refute, namely, the applicability of *vyakti* to the notion of *rasa.*

[9] In Ayurvedic terminology, the word *rasa* was used to denote the vital juice that the digestive system extracts from food and which is later converted into blood, flesh, bones,

marrow, fat and sperm (*Suśruta Saṁhitā*, XIV, as cited in Gupt 2006:261).

[10] *Rasaḥ kaḥ padārthaḥ, ucyate āsvādyatvāt* (*Nāṭyaśāstra* 6:31) (as cited in Gupt 2006:261).

[11] *bhāva, abhinaya, dharma, vṛtti, pravṛtti-*s, *sidhi-*s, *svara, ātodya, gāna* and *raṅga.*

[12] In short, what Ānandavardhana wants to understand is the basic mechanism immanent in the text by which *rasa* is made manifest in the character, and why this mechanism cannot be comprised under the normal verbal modalities of literal or figurative signification (*abhidhā, lakṣaṇā*). Like all his predecessors he shows no interest whatever in *rasa* as an epistemological problem let alone in the subjective aspect of *rasa*, that is, the question of how the viewer/reader experiences it, though of course it is the viewer/reader who is always the one making the judgments about the successful or unsuccessful manifestation of *rasa* on the basis of his antecedent reactions. (Pollock 2012:235).

[13] Those universal elements that account for the infinitely unique and yet commonly understood phenomena of art derive from, according to philosopher Mark Johnson, a common human 'grounding of metaphors in bodily experience'. (Johnson 2007:259), as cited in Mason (2015:102).

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Chapter 5

"From Rasa Seen to Rasa Heard": A Criticism

– Sreejit Datta

(`sreejit.datta@gmail.com`)

Abstract

The paper will take a close look at Prof. Sheldon Pollock's depiction of the evolution of the idea of *rasa* in the context of the Sanskrit tradition. The "fundamental difference" between "literature seen" and "literature heard" that Pollock uses almost as an axiom in his essay "From Rasa Seen to Rasa Heard" (2012) will be disputed in this paper. In his essay, Pollock tries to show that this differentiation had already occurred by the beginning of the eleventh century or even earlier. However, the present exercise will problematize this position by drawing the reader's attention to the liminal nature of what has been known as "*sāhitya*" in pre-modern India. Pollock's axiomatic assertions are challenged on various grounds, including the non-scriptocentricity of *sāhitya*. The distinction(s) between the Western category 'literature' and the Indian category '*sāhitya*' underlines the epistemological differences existing between these two locations. The paper argues, with copious examples taken from both Pollock's essay as well as original Indian sources, that the cited (2012) article of Pollock is essentially an exercise in peddling Western universalism.

Introduction

Epistemological divergences in the development of the two divergent intellectual traditions viz. Western and Indian, despite all their intra-traditional heterogeneity, account for the differences in their conceptions of literature and the arts; and also about aesthetics (which the *Merriam-Webster Dictionary* defines as "a set of ideas or opinions about beauty or art; the study of beauty especially in art and literature; (1) a branch of philosophy dealing with the nature of beauty, art and taste and with the creation and appreciation of beauty; (2) a particular theory or conception of beauty or art: a particular taste for or approach to what is pleasing to the senses and especially sight"). Clearly, the term has been defined in both its general and particular senses in the English language, as far as the evidence of "the most trustworthy dictionary and thesaurus of American English" counts.

The present exercise intends to throw light on the large gaps existing between the Indian and Western ways of looking at the concept of aesthetics by offering a close reading of Pollock (2012) especially of the way he distinguishes *Dṛśya-kāvya* (which he translates as "Rasa Seen") and *Śravya-kāvya* (as "Rasa Heard") in order to create an axiomatic base upon which to build his arguments.

These arguments are later taken up and used as a framework to construct an "Intellectual History of Rasa" (this is how the introduction, to his book *A Rasa Reader* (2016) is subtitled) which he claims to have achieved in the said book. The idea of *rasa* can be fairly regarded as one of the grandest contributions of Indian intellectual advancement to the progressive intellectual movement of the world in general. He posits his own theory of the evolution of the idea of *rasa*, based on the aforementioned postulate that draws a clear distinction between the allegedly two different kinds of *rasa*. This paper takes exception to his postulate (and its derivatives), and problematizes his conclusions therein by drawing upon a fresh discussion of the (literary and performative) historiography of the idea of *rasa* over the past centuries, and pointing out the Aristotelian approach taken by him and his predecessors in their analyses of the aesthetic principles expounded in Sanskrit.

In order to do the same, I contend that there is a need to absolve the discourses on Sanskrit aesthetics of the sin of domestication of

technical terms from the Sanskrit tradition on the part of the Western scholar. To give a few clichéd (yet dangerously misleading) examples of the kind of domestication that the Western scholar of Sanskrit often resorts to, it would suffice to draw the readers' attention to their usage of the terms 'classical' and 'literature' while translating the Indic terms *mārga/śāstrīya* and *sāhitya*, in a manner which I believe is not inadvertent. There are evidentiary reasons to believe thus, as it has been a favourite design of the Orientalists of the past and the Neo-Orientalists of the present (whose cause he has championed) to label Sanskrit as a 'classical' language and hence jumping to the conclusion that the entire scholarship and canons written in that language to be 'classical' — dispensing it something of the stature of Classical Greek or Classical Latin.

Such a presumption blocks the view of every new entrant to the discourse who wishes to understand the matter and contribute to the debate. It is not only a gross injustice to the multitude of people who use the Sanskrit language on a daily basis for a plethora of purposes — both religious and secular, it is also discourteous to the Constitution of the Republic of India which has regarded Sanskrit as one of the scheduled languages as described and declared in its Eighth Schedule.

Thus, this paper seeks to address the implications (which, through their reiterations via various channels of dispensing such products of negative knowledge, turn into insinuations) of claiming the presence of apparent discontinuities and incoherence in the evolutionary course of the grand narrative of *rasa* by Pollock (2012). In a way, this may help in setting the records of the discourses in aesthetics prevailing in India since antiquity in Sanskrit straight, and dismantle the vicious propaganda around the alleged disharmony of Indian traditional ideas and indigenousness of Sanskrit and *saṃskṛti*.

Position of the *Pūrva-pakṣin* in the Discourse

Let me briefly lay out the methodology which I shall employ here to achieve the goals mentioned previously. The "fundamental difference" between literature seen and literature heard that Pollock uses almost as an axiom in his discussion will be disputed by referring back to the spearheading text, the "*Gomukha*" of *rasa-śāstra*, the fountainhead of Indian aesthetic theories viz. the *Nāṭyaśāstra* of Bharata Muni, among other authoritative traditional sources. Pollock

tries to show that this differentiation, and what is more, a radical opposition, between the allegedly diverse aspects of this "binary" leading to a contest for primacy, had already become "a running dispute" by the beginning of the eleventh century, and even much earlier than that (Pollock 2012:190). However, the present exercise problematizes this position by drawing the reader's attention not just to the *kārikas* from the *Nāṭyaśāstra* that delineate a direct equivalence between *Dṛśya-kāvya* and *Śravya-kāvya* as well as the observations of the *arvācīna ālaṅkārika*-s, but also to the liminal nature of what has been known as "*sāhitya*" in pre-modern India.

Apart from the obvious performative tendencies (by virtue of several essentially performatory techniques such as vocal intonation, emphasis, *mudrā* etc. employed by the reciter or *kathaka*) of what Pollock calls "literature heard", which cannot exist independently of a reciter-audience interface, and which is (and not was) by and large interactively lively, a major issue that can question this axiomatic basis, is the very idea of *sāhitya* (literally, fellowship / association / combination / society / harmony) — an idea that is radically different from literature (origin: Latin *litteratura* — writing, grammar, learning). *Sāhitya* is a term which, by its very definition, maintains the continuum, the fluidity between categories such as drama and poetry on the one hand, and a myriad performative forms on the other.

In other words, the contention highlighted by this paper is that the function of Indian aesthetic concepts like *kāvya*, *sāhitya* and *rasa* is unification of elements which are otherwise perceived as being different — unlike the Western concepts such as drama, poetry and literature, whose primary function is to classify creative works into watertight boxed categories. The latter has been one of the major goals of Aristotle's *Poetics* (the source text for all these Western concepts related to the discussion of aesthetics), and hence the Indian terms (whose semantic shift is a predominantly postcolonial phenomenon) should be treated according to their own distinct epistemological position: one has to be very careful especially in Anglophone discourses lest one may fall prey to Western universalism.

It is necessary to keep in mind the major difference between these two epistemologies when discussing these issues in a comparative frame-work — which is what Pollock has accomplished in his essay. This cru-cial difference has been blurred by Pollock's translation strategies in

particular, and his theoretical framework to interpret *rasa* in general; thus making his approach to *rasa* vulnerable to criticism and blameworthy of subtly imposing Western universalism upon the discourse on Indian aesthetics — an approach that would amount to bad comparativism.

Basic Empirical Evidences from the *Nāṭyaśāstra* etc.

> *mahendra-pramukhair devair uktaḥ kila pitāmahaḥ |*
> *krīḍanīyakam icchāmo dṛśyaṁ śravyaṁ ca yad bhavet ||*
> *na veda-vyavahāro'yaṁ saṁśrāvyaḥ śūdra-jātiṣu |*
> *tasmāt sṛjāparaṁ vedaṁ pañcamaṁ sārvavarṇikam ||*

> (*Nāṭyaśāstra* 1.11-12)

The above *śloka* from the first chapter describing the origins of the dramatic arts (or rather the *Nāṭya-veda*) when roughly translated into English reads:

"The Great Indra and the other gods said to the Grandsire (Bhagavān Brahmā): we wish such an entertainment that will be both for the eyes and the ears simultaneously (1.11). Since the *Veda-s* are not for the ears of the *śūdra*-s, therefore do create a Fifth *Veda* that will be for the perusal of all the (four) *varṇas* (1.12)".

Of special significance to the purpose of this exercise is the use of the words '*dṛśya*' and '*śravya*' in the last *pāda* of the first verse and the reappearance of the word '*saṁśrāvya*' in the first *pāda* of the next verse. Since Pollock is particularly anxious to draw a dividing line between *dṛśya* and *śravya* by distinguishing between his hypothesized types of *rasa* as "Rasa Seen" and "Rasa Heard", respectively, it becomes necessary to draw his attention to what the text has to say in this regard. By maintaining an irrefutable equivalence between the role of the '*dṛśya*' and the '*śravya*', the *Nāṭyaśāstra* clears its stance at the very outset of its discourse between the sages and Bharata on the dramatic art and the concepts pertaining to the field of aesthetics by drawing the equivalence between the twin aspects of "the Seen" and "the Heard". The next verse again emphasizes on the *śravya* aspect of the *Veda-s*, which are collection of hymns — poems and prose passages — with regard to the prohibition of the *śūdra*-s hearing them. If the

Nāṭya-text did really distinguish between the two types posited of *rasa*, then the prescription of the gods led by the Great Indra would not be inclusive of both kinds of the arts — *dṛśya* and *śravya*. Instead, I believe, they would be dismissive of the spectacular aspect that requires a lot more work in terms of depiction, as it includes the stage preparation, props, dresses, backdrop, painting and a lot of other branches of the dramatic art. It would be pertinent to mention here that the *Nāṭyaśāstra* would, from this juncture, move on to the descriptions and prescriptions regarding stagecraft, props, dresses and make-up in Chapters 2 (*prekṣā-gṛha-lakṣaṇa*), 3 (*raṅga-devatā-pūjā*) and 23 (*āhārya-abhinaya*) respectively.

Pollock's comments on the historicity of the *Nāṭyaśāstra* at this point, will be relevant to our discussion. In the preface to his book, he states:

> "The *Treatise on Drama* [i.e. the *Nāṭyaśāstra*; it is worth noting how Pollock tends to translate even the titles of well-known, Sanskrit works] was undoubtedly revised, possibly in Kashmir in the eighth century, but the work as a whole is as much as five centuries older. It therefore must come first, despite the likelihood that its earliest commentators knew nothing of some ideas it advances in the form we now have it."   (Pollock 2016)

By his own accounts, Pollock therefore places the *Nāṭyaśāstra* as in the third century C.E. and designates it to be the first treatise to be composed in India on the subject of aesthetics. This when contrasted to his claim made in his article that

> "[w]hatever other questions may be at issue here, it should be clear that by the beginning of the eleventh century and no doubt far earlier, drama, or literature seen, and poetry, or literature heard, constituted two fundamentally different and differentiated forms of literature, and indeed, that there already was a dispute about the extension of *rasa* analysis from the one sphere to the other"   (Pollock 2012:191)

reveals that Pollock either grants that during the long stretch of time from no earlier than the third century C.E. till no later than the eleventh century C.E. there was a general agreement among the Sanskrit critics in India about the equivalence of what he calls "Rasa Seen" and "Rasa Heard", or he ignores the period in his proposed effort to "reconstruct[ion] of the history of the extension of aesthetical analysis from the dramatic to the non-dramatic" (Pollock 2012:189). He himself observes (in footnote 1) on *Nāṭyaśāstra* 1.11, adding "[b]ut

note that *Nāṭyaśāstra* 1.11 speaks of drama itself as both *dṛśya* and *śravya*." (Pollock 2012:189)

Now, in order to problematize the timeline, provided by Pollock, during which the Sanskrit tradition allegedly differentiated between the two types of *rasa*-s, we need to mention certain sources which are considered no less canonical within the same tradition, but fall within that disputed timeline of the evolution of the tradition and contradicts Pollock's claims. The first such example is from Nandikeśvara's *Abhinaya-darpaṇa*, which is a product of a school of thought that predates the *Nāṭyaśāstra*. According to Ramakrishna Kavi, this formidable rival of Bharata came before Bharata in time. Some have even conjectured Nandikeśvara to be Bharata's guru. Swami Prajñānānanda has quoted Alain Danielou to mention that Indian and Western scholars have placed Nandikeśvara's school of thought between the fifth and second centuries B.C.E.; even though the final penning of this treatise was believed to have been completed only after that of the *Nāṭyaśāstra*. (Prajñānānanda 1961) See *Abhinaya-darpaṇa* 35–36:

> *āsyenālambayed gītaṁ hastenārthaṁ pradarśayet |*
> *cakṣurbhyāṁ darśayed bhāvaṁ pādābhyāṁ tālam ādiśet ||*
> *yato hastas tato dṛṣṭir yato dṛṣṭis tato manaḥ |*
> *yato manas tato bhāvo yato bhāvas tato rasaḥ ||*

These *śloka*-s neatly demonstrate the sequential causality, tracing the causal relationship in the form of a chain from *gīta* (songs which incorporate spoken words with tunes) to *rasa*. A rough translation: "the mouth is the seat of the song, hands should demonstrate the meaning, the eyes should reflect the *bhāva*, and the legs should indicate the *tāla*. The glance follows the hand; the mind follows the glance; the *bhāva* follows the mind; and the *rasa* follows the *bhāva*". Such a theorization of the idea of *rasa* seamlessly combines the *dṛśya* and the *śravya* aspects.

But this should not necessarily suggest that the elements of *dṛśya* and *śravya* can be separately treated while dealing with the idea of *rasa*. The emphasis is rather on their indivisibility. The emphasis is not on the duality (or even multiplicity) of *rasa*. In other words, the concept of *rasa* is not a synthetic one, forcing a fusion of *dṛśya* and *śravya*; it is rather an integrally unified concept. The dynamism

of the concept lies in the scope it has provided to aestheticians appearing after Nandikeśvara and Bharata; most of whom agree on the comparability of the experience ("*āsvādana*", relish) of *rasa* with experience of the Self or Brahman. It is for this reason that the experience of *rasa* has been termed "*Brahmāsvāda-sahodara*" — born of the same womb as the taste or experience of the *Brahman* — such as is in the auto-commentary of Śubhaṅkara on *Saṅgīta-dāmodara* 13.5. (Mukhopadhyaya 2009). A section from Gupteshwar Prasad's book on *Rasa* merits quotation in full in this context:

> "[Viśvanātha] assigns eight qualities to *Rasa*. It is *Akhanda, Sva-prakasa, Anandamaya, Cinmaya, Vedyantara-sparsa-sunya, Brahmasvada-sahodara, Lokottara-camatkara-prana* and *Svakaravad-abhinna*. *Rasa* is *Akhanda*. This means it is indivisible and is relished by all the *Sahrdayas* alike. Though *Rasa* is constituted of its component parts i.e. *Vibhava, Anubhava* and *Sancaribhava*, none of its parts can be separated from it. *Rasa* is self-effulgent or *Sva-prakasa* i.e., no device is necessary to bring it to light. *Rasa* is *Anandamaya*. This implies that the personal experience of the *Sahrdaya* takes the shape of *Rasa* which by its very nature is blissful. *Rasa* is *Cinmaya*. This means that it pervades or is permeated by consciousness. It affords us pleasure which is different from ordinary worldly pleasure. *Rasa* is *Vedantarasparsasunya* meaning while experiencing *Rasa*, no other knowledge (*vedya* or *jnana*) intrudes and interferes in the realization of the *Sahrdaya*. *Rasa* is *Brahmasvadasahodara*. This means that for the time being the *Sahrdaya* derives similar pleasure from poetry which the Yogi gets in the communion with Brahma with the difference that *Brahmasvada* is never followed by *Laukika Vikaras* whereas *Kavyasvada* may be followed by such *Vikaras*. *Rasa* is *Lokottara-camatkaraprana*. This refers to the enlargement of the heart which is the natural result of *Ahlada*. This is to say, though the *Ahlada* of Rasa is worldly, it is basically different from other worldly *Ahladas*. The expression *Svakaravadabhinna* means that *Rasa* is relished in an integral or *Abhinna* form. Visvanatha tells us that the *Pramata* or *Sahrdaya* enjoys *Rasa* only with *Sattvodreka* i.e. when his mind is completely purged of *Rajoguna* and *Tamoguna*....[t]he word *Camatkara* seems to have been borrowed by the Sanskrit literary critics from philosophy. In *Yogavasistha*, the word *Camatkara* is used in the sense of self-flashing of thought."

> (Prasad 1994:133) (*diacritical marks not in the original*)

It is indeed true, as is evident from the above excerpt, that the development of Indian aesthetic ideas in the Sanskrit tradition grew in parallel with the evolution of philosophical ideas; and each functioned as complementary to the other's growth. Two fine examples are the

application of the terms '*Brahmāsvāda-sahodara*' and '*camatkāra*' in critical exegeses, as are provided by Prasad. The *akhaṇḍatā* of *rasa* as explained by Viśvanātha Kaviraja in *Sāhitya Darpaṇa* has not been given its due place in the historicism-oriented analysis carried out by Pollock; neither does he acknowledge the connection with philosophy, metaphysics and the spiritual dimensions.   To this effect, his methodology betrays selectivism with translation strategies that erase implications valuable to dharmic traditions.

Further Meditations on the Antiquity of the Idea of *Rasa*

Let us also bring Upaniṣadic voices here.

> *yad vai tat sukṛtam | raso vai saḥ | rasaṁ hy evāyaṁ labdhvānandī bhavati |*   (*Taittirīyopaniṣad* 2.7)
>
> *ānando brahmeti vyajānāt | ānandād dhy eva khalv imāni bhūtani jāyante | ānandena jātāni jīvanti | ānandaṁ prayanty abhisaṁviśantīti |*   (*Taittirīyopaniṣad* 3.6)

In these two passages from the *Taittirīyopaniṣad*, mention has been made of *rasa* along with its function (i.e. production of *ānanda* in the individual's experience) in unequivocal terms. This *Upaniṣad* forms part of the *Kṛṣṇa Yajurveda*, the *Veda* which compiles the prose mantras. The mantras of the *Yajurveda* and its prose *saṁhitā* texts have been dated between 1200 B.C.E. — 800 B.C.E. by the most recent linguistic studies (even those that ardently support the Aryan Invasion Theory), which are also corroborated with archaeological tests of the Painted Gray Ware culture, a special style of pottery used by the elite people of the time (Witzel 2000).

The first fragment, from *Brahmānandavallī*, clearly declares that that '*sukṛtam*' (well-done/well-made, or self-made, *sva-kṛtam*) is nothing but *rasa*; it resides in every being in the form of essence. This word *rasa* is untranslatable; it can be approximately conveyed by such words in English as 'essence', 'sap', 'extract' 'sublimity', even 'aesthetics'. Next it says, "*ayaṁ hi rasam eva labdhvā ānandī bhavati*", i.e. the individual who realizes ('*labdhvā*', having attained the '*upalabdhi*' or realization) the existence of *rasa* (in her conscious being) becomes happy ('*ānandī*').

Therefore, the function of *rasa* is the production of elation. The *Upaniṣads* are metaphysical treatises dealing with the *pāramārthika* dimension of the human experience; and since *rasa* has been used not merely as a metaphorical idea but an inductive idea in it, one can assert with some confidence that *rasa* itself has a *pāramārthika* idea which is induced (much in the same way as mathematical induction does) by the testimonies of the *vyāvahārika* experience.

The second fragment takes a step further in this induction and concludes by saying that *ānanda* itself is realised as *Brahman*. "*Ānandāt hi eva*" — "from *ānanda* itself", it says, "*khalu imāni bhūtāni jāyante*" i.e. "is generated all that is". *Ānanda* nourishes them all (while they *are* in the physical plane); they depart into and finally merge into *ānanda* in the end. Therefore *ānanda* is proclaimed as the *Brahman* in this fragment, which is placed in the third *khaṇḍa* known as Bhṛguvallī, preceded by the proclamation "*raso vai sah*" in the second *khaṇḍa* of the same text. The placement of these two proclamations seem to be more than random, they visibly reveal a step-by-step building up of a logical sequence of arguments. The realization of *rasa* begets *ānanda*, and *ānanda* is *Brahman*; therefore *rasa* — the cause — is equated with *ānanda* — the effect — in a classic Left Hand Side/Right Hand Side style-equation:

Sukṛta (or *Svakṛta* or *Brahman*) = *Rasa*;

Realization of *Rasa* = Production of *Ānanda*

Ānanda = *Brahman* (*Sukṛta* or *Svakṛta*)

Therefore, Realisation of *Rasa* = Realisation of *Brahman*

Indeed, Viśvanātha (1400 C.E.) in his *Sāhitya Darpaṇa* testifies to this by using many of the attributes which reflect the idiom of the *Upaniṣads* in his attempt to define *rasa* (*akhaṇḍa*, *svaprakāśa*, *ānanda-cinmaya*, *vedyāntara-sparśaśūṇya*). He finally describes it as *brahmāsvāda-sahodara* (akin to the taste/experience/realization of the *Brahman*) and *lokottara* (transcendental, *pāramārthika*). (Sinha 1986:163)

There are important implications of the establishment of this causal relationship between *rasa*, *ānanda* and *Brahman*. Swami Vivekananda explains the indivisibility of the binary of cause-and-effect as follows:

"The idea of the cause we get from the idea of the effect, and if there is no effect, there will be no cause."

And,

"Nothing can be produced without a cause, and the effect is but the cause reproduced."

– Swami Vivekananda (See "Soul, Nature, and God")

The *Brahman* is *avāṅmanasa-gocara* (not accessible to either speech or mind; "*yato vaco nivartante | aprāpya manasā saha |*" i.e. "from It [*Brahman*] speeches and the mind return without getting anything" — *Taittirīyopaniṣad* 2.4) and hence its experience is independent of the function of the sense-organs. Now, if the experience of the *Brahman* has been equated with the experience of *rasa*, then it may be deduced that the experience of *rasa* is also independent of the functions of the senses.

Pollock hardly attaches any importance to these aspects of the *rasa* analysis carried out by most traditional luminaries of Indian aesthetics. He hardly addresses these issues and as a consequence, his analytical vision gets narrowed down, compelling him to conclude that "the concept of *rasa* was extended from literature seen to literature heard" or that at some point in the history of the Sanskrit tradition there occurred a "[shift in the] ontology of *rasa* where it moved from the seen to the heard." (Pollock 2012:191)

This approach negates even the slightest possibility of taking a dialectical method of finding the 'truth' about *rasa*, something which Pollock hints at by asserting the need to show that "the Sanskrit tradition differentiated between the two types of literature, or better yet, that it drew an opposition indicating that analysis applicable in one domain might not be automatically applicable in the other." (Pollock 2012:189)

Misuse of Translation: for Obliteration

Here arises a need to draw the reader's attention to the kind of problem that occurs as a consequence of Pollock's undifferentiated use of the term 'literature' in the context of Indic traditions. At this point I should also clarify that I am deliberately using the terms "Indic traditions" and "Sanskrit traditions" interchangeably. Such an approach, I believe, allows the freedom to equate the term with "Sanskrit traditions" — actually more so in a discourse

(conducted in the English language) on Sanskrit aesthetics, which is the fountainhead of not just literary but all artistic sensibilities in the Indian subcontinent and beyond — with some amount of impunity. But the translation (which, in the case of any effort to translate an Indic language into English or some other European language), mostly amounts to finding very roughly replaced semantic approximations.

It is not so in the case of translations undertaken between Indic languages (included Sanskrit), wherein both semantic as well as emotive aspects are preserved across languages to a degree far exceeding the Indic languages-to-English translations) of the Sanskrit word '*sāhitya*' into 'literature' in an academic discourse is a rather loosely done articulation.   This amounts to either a lack of care for the concept of '*sāhitya*', or a more devious, conscious attempt at what may be designated, following Michel de Certeau's work, "epistemological violence" or "epistemological pacification" (Highmore 2006:83). Vazquez has drawn our attention to this function of translation by reading translation as "erasure" and connected it with de Certeau's ideas of epistemological domination of one culture by another in the name of translating and interpreting it (Vazquez 2011:27).

Such theoretical frameworks become useful in situating what Pollock *et al* had been trying to do through a reductive approach of translation of each and every Sanskrit terminology pertaining to Alaṅkara-śāstra, in order to anglicize them – leading to a systematic erasure of the vast differences between the Indic and anglicized terms.   Modern translation studies recognizes two broad approaches to translating any text: domestication and foreignization.   The latter is generally observed to occur more often in translations which are targeted to a specialist readership, such as those target language texts which are meant for scholars and specialists rather than lay reading. Such translations are naturally heavily annotated. Eugene Nida, an American translation theorist who had specialized in the translation of the Holy Bible from its original/source language into modern-day English, is hailed as the representative of the argument for domestication in translations. On the other hand, another American translation theorist, Lawrence Venuti, who frequently translates from Italian and Catalan into English, has championed the cause of foreignization in translation strategies.

A careful reading of Pollock's works on *rasa* reveals that he resorts to translating almost every technical term pertaining to *alaṅkara-śāstra* and even the Sanskrit titles of technical treatises on *rasa/alaṅkāra-śāstra* into English — an endeavour which amounts to, to use a simile, translating '*yoga*' as 'addition' or 'connection' — the literal English translation of that Sanskrit word. Such an exercise obliterates by domesticating and expropriating a whole linguistic cosmology which is radically different from the Western cosmology. To give examples from his latest work: *A Rasa Reader*, Pollock translates Ānandavardhana's famous and path-breaking concept of "*dhvani*" as "implicature". In the endnotes, he informs the reader that the term "implicature" is borrowed from H.P. Grice and that it "seems to [him] both to capture at least the linguistic (if not the aesthetic) phenomenon Ānanda [i.e. Ānandavardhana] sought to describe, and to provide a neologism comparable to Ānanda's innovative use of *dhvani* (literally, "sound")" (Pollock 2016). This explanation does not seem to be enough of a justification for translating the term *dhvani* in the first place, keeping in mind the pivotal role played by the term *dhvani* in Ānandavardhana's intervention in *rasa-śāstra*. At best, Pollock's fascination for imitating Ānandavardhana's neologism and innovation in introducing conceptual terminology becomes apparent in his approach of translation. In that desperate attempt at imitating the great *rasika* from Kashmir, Pollock seems to have forgotten to provide a strong basis for his comparison of Ānandavardhana's key term *dhvani* with "implicature" beyond mere innovation and neologism (at this juncture, it will help if we remember that in Ānandavardhana's theorization the term *dhvani* is closely related to another key term from the *Dhvanyāloka*, which is *vyaṅgya*. Pollock uses "manifested" to translate *vyaṅgya*, again sans adequate explanation or annotation.

Also, no mention is made of the definition of *vyaṅgya* in Viśvanātha Kaviraja's *Sāhitya Darpaṇa*: "*vyaṅgyo* [*arthaḥ*] *vyañjanayā bodhyaḥ*" (*Sāhitya Darpaṇa* 2.3). As a result, in 'Pollockian' translation, Ānandavardhana's treatise *Dhvanyāloka* becomes *Light on Implicature*. In doing this, Pollock plainly ignores the other title that the work had acquired viz. *Sahṛdayāloka*, owing to Ānandavardhana's assertion that "a true poet and an ideal critic [or *sahṛdaya*, or *rasika*] share in common the gift of imagination (*pratibhā*)". (Krishnamoorthy 1983:34) He merely mentions the fact that the *Dhvanyāloka* was also known

as *Sahṛdayāloka*, which he again translates as "Light for the Lover of Literature". Then he goes on to adopt the title *Light on Implicature*, which makes the parallelism between *dhvani* — the essence and marker of true poetry and *sahṛdaya* — the ideal critic even further removed from its original context. He also translates "*vyaṅgya*" variously as "revealed", "implied", "suggested" and "manifested"; hardly ever alluding to the fact that "*vyaṅgya*" or "*vyañjaka*" are key terminologies in understanding Ānandavardhana's conceptual framework.

Therefore it becomes apparent that the term '*vyaṅgya*' connotes "revealed" or "manifested" and the other two translations that Pollock suggests ("implied" and "suggested") are not satisfactory. More such cases where his translations can lead to confusion exist in the book; e.g. Pollock translates *Kāvyaprakāśa* (the title of Mammaṭa's seminal text) as Light on Poetry and Ānandavardhana's *Dhvanyāloka* as "Light on Implicature". Such translations are not effective.

In the case of *A Rasa Reader*, he selectively provides footnotes/endnotes annotating the English translations of these words; but in most cases he simply uses the English replacement which he thinks suitable within quotation marks. Neither does he introduce the Sanskrit technical terms, which he translates into English, within parentheses beside his translations, as have other translators such as Manomohan Ghosh (translator of The *Nāṭyaśāstra*). Ghosh provides a translator's note in his introduction to the text, where he explains how he has used curved brackets to put the original Sanskrit technical term with his translations, repeatedly in certain cases. He also admits the untranslatability factor of certain technical terms and the two different approaches he adopts to address this issue: firstly, giving the terms in Romanised form with initial capital letters (such as *Vīthī*); and secondly, the closest English approximation of words with initial capital letters "lest these should be taken in their usual English sense" (Ghosh 1995:32).

This should provide a sound framework for explaining his approach towards translation, especially the one that is adopted in *A Rasa Reader*. No such explanation is present in Pollock's case. In *A Rasa Reader*, Pollock hardly uses any Sanskrit word (i.e. in the main text, though not the endnotes) which is already not a part of the English lexicon. Such an approach does not hold itself accountable to either the source text or the target text and their readers; it does not feel any obligation whatsoever to provide explanations on the methodology or strategies

employed in translating — and thus interpreting — texts which were composed in a world that differs linguistically and culturally from the translator's. The lack of a translator's note, which should precede any serious work of scholarship that resorts to translation heavily, speaks poorly of the author and his care for the texts which he is translating. It also amounts to being dishonest to the readership since they are kept completely in the dark so far as the different worldview of the source text is concerned. This is especially the case for a book like his *A Rasa Reader*, since according to its Preface, the book is intended both for general readers and students. The author of a book that has such lofty promises of providing general readers, students, comparitivists and specialist scholars an idea of the "intellectual history of *Rasa*" through translations of and commentaries on original Sanskrit works, cannot simply excuse himself of supplying an explanation of his methodology.

Hence the book, like Pollock's other works on *rasa*, turns out to be only one interpretation without a sufficient framework that helps the reader. Translating Sanskrit texts and its key technical-conceptual terms thus has helped him divorce *kāvya* from *śāstra* by disregarding the spiritual aspects of *kāvya* in a wholesale manner (so they might be read using the same theoretical and critical tools which are used to read European and North American secular literature). This agenda viz. 'secularizing' Indian *sāhitya*, of Pollock and other Neo-Orientalists has been discussed in detail by Rajiv Malhotra in *The Battle for Sanskrit* under the chapter "Politicizing Indian Literature". (Malhotra 2016)

One may raise the question that even the national academy of letters in India, the Sahitya Akademi, centres its activities around written literature and uses the term *sāhitya* to denote written works of literature exclusively. In reply to this, it must be underlined that the semantic shift of the term *sāhitya* is a 'post'-colonial phenomenon. I have consciously avoided the word postcolonial and supplanted the same with 'post'-colonial, by which I wish to imply the period when direct contact between Britain and the Indian subcontinent had already began by virtue of the arrival of British merchants in the coast of Gujarat in early seventeenth century and onwards. This is juxtaposed with the clichéd 'postcolonial' which usually denotes the period after the colonizers had left the colony i.e. when the colony had attained its independence (to which end, "post-independence" is a more suitable term). The Sanskrit term *sāhitya* signifies association, fellow-

ship, society, togetherness, comradeship variously or all of these at the
same time. Several Modern Indo-Aryan languages such as Assamese,
Bengali, Bhojpuri, Hindi, Marathi, Nepali, Oriya, Rajasthani and some
Dravidian languages like Malayalam uses the same word to denote both
oral and written literatures in the present context (some might dis-
agree with my use of the adjective 'oral' before 'literature' and might
want to use the term 'orature' instead).

The *Saṅgīta-dāmodara* and the *Nāṭyaśāstra*

Now let us turn to what the *Saṅgīta-dāmodara* of Śubhaṅkara has to
say on topics related to *rasa*. (Śubhaṅkara has been placed, by various
accounts, in early sixteenth century C.E. (by Professor Dinesh Chandra
Bhattacharya who discovered and published Śubhaṅkara's *kulapañjī*).
Others have located him in as early as mid-thirteenth century C.E.; but
nobody has placed him either before thirteenth century or later than
sixteenth century C.E.). Śubhaṅkara mentions the later additions to
the types of *rasa*-s — the *prema rasa* and the *vātsalya rasa* — and he
definitely mentions the *śānta rasa*. In the fifth and the last chapter (or
stavaka, as the text refers to them) of the *Saṅgīta-dāmodara*, Śubhaṅkara
gives us a definition of *nāṭya* as follows:

> *rasa-bhāva-samutpannāvasthānukaraṇaṁ tu yat |*
> *layamāna-samārabdhaṁ tan nāṭyam iti kīrtitam ||*

> (*Saṅgīta-dāmodara* 5.12)

To translate: "that which is constructed by the measured *laya* and
comprising the imitation of the states issuing from *rasa* and *bhāva*."
Here the emphasis is on the states that arise from (the experience
of) *rasa* and *bhāva*. One can hardly exclude "literature to be heard"
(to borrow Pollock's own terms) from the states that arise out of
(the perusal of) *rasa* and *bhāva* and the factors that cause such
circumstances in which those states can arise.

Neither in this definition nor in the *ślokas* that follow has the
distinction between the *dṛśya* and *śravya* aspects of *rasa* been made.
Nor is there any mention of the duality of the experience of *rasa*.
The experience of *rasa*, which this text equates to the manifestation
of *sthāyi-bhāva* (by referring back to Bharata), is held by Śubhaṅkara

to be undifferentiated, unadulterated and almost equivalent to the *āsvādana* or the taste, the experience of *Brahma-jñāna* (or the Supreme Knowledge of the Self). The frequent references made to Bharata and the *Nāṭyaśāstra* also speak volumes about a continuity, rather than breaks and shifts, between the third and the thirteenth/sixteenth centuries C.E.. This is particularly significant in the light of the presence of arguments in the text in favour of the *Nāṭyaśāstra*'s dictums. Sometimes Śubhaṅkara negates his own logic (as well as those of others) by drawing upon the definitions and prescriptions given by the *Nāṭyaśāstra*.

In Ch. 22 (*vṛttivikalpa*) of the *Nāṭyaśāstra* the various *vṛtti-s* and their origins are explained. The opening *śloka* of this chapter goes like this:

> *samutthānaṁ tu vṛttīnāṁ vyākhyāsyāmy anupūrvaśaḥ |*
> *yathā vastūdbhavaṁ caiva kāvyānāṁ ca vikalpanam ||*
>
> (*Nāṭyaśāstra* 22.1)

Significantly, the *Nāṭyaśāstra* keeps it only as *kāvya*, and does not specify whether it is talking about the *dṛśya-kāvya* or the *śravya-kāvya*. One can see similar usage of terminologies in the *śloka*-s from the previous chapter as well; such as:

> *cekrīḍitādyaiḥ śabdais tu kāvya-bandhā bhavanti ye |*
> *veśyā iva na śobhante kamaṇḍalu-dharair dvijaiḥ ||*
>
> (*Nāṭyaśāstra* 21.128)

Even though the larger discourse is on the dramatic arts in general, Bharata tells the sages with regard to the origin of the concept of *vṛtti* that it was Bhagavān Brahmā who was the first to conceive the idea of the four *vṛtti*-s — the first of which comes forth from the *vākya*, the spoken word or sentence. The corresponding *śloka* goes thus:

> *kim idaṁ bhāratī vṛttir vāgbhir eva pravartate |*
> *uttarottara-saṁvṛddhā nanv imau nidhanaṁ naya ||*
>
> (*Nāṭyaśāstra* 22.7)

Here Bhagavān Brahmā is expounding the concept of *Bhāratī vṛtti*, the first of the four *vṛtti*-s. The *Nāṭyaśāstra* narrates that during the battle

between Bhagavān Viṣṇu and the twin *asura*-s Madhu and Kaiṭabha, the *asuras* had hurled insults at the Great God. Hearing such verbal insults and offensives, Brahmā asked the Lord if this is what is known as the *Bhāratī vṛtti*, that which comes forth from the spoken words and thrives therefrom. Brahmā then implored the Lord to kill the *asura*-s. The Great Madhu-sūdana replied in the following manner:

> *pitāmaha-vacaḥ śrutvā provāca madhusūdanaḥ |*
> *bāḍhaṁ kārya-kriyā-hetor bhāratīyaṁ vinirmitā ||*
> *bhāṣato vākya-bhūyiṣṭhā bhāratīyaṁ bhaviṣyati |*
> *aham etau nihanmy adya ity uktvā vacanaṁ hariḥ ||*
> *śuddhair avikṛtair aṅgaiḥ sāṁgahārais tadā bhṛśam |*
> *yodhayāmāsa tau daityau yuddha-mārga-viśāradau ||*
> *bhūmi-saṁsthāna-saṁyogaiḥ pada-nyāsais tadā hareḥ |*
> *atibhāro'bhavad bhūmer bhāratī tatra nirmitā ||*

<div align="right">(Nāṭyaśāstra 22.8-11)</div>

Hearing what the Grandsire had to say, Madhusūdana replied — "Yes, this *vṛtti* known as *Bhāratī* has been created for the purpose of the fulfillment of the work. This *vṛtti*, coming forth from the speeches of these two, will henceforth be known as *Bhāratī*, in which speech shall be preeminent. I shall kill these today". Speaking thus, Hari fought the two *asura*-s, experts in battle, with pristine and perfect gestures and *aṅgahāra*-s. At that time the earth was laden with a great burden caused by the pacing of Hari on the ground and the *Bhāratī vṛtti* was created there.

These four *śloka*-s tell us something important about the role of speeches, words and sentences in the dramatic arts. The *śloka*-s speak of the preeminence of the spoken word in the drama, which is evident from what the creator (Hari) of the *vṛtti*-s (sometimes translated into English as style) related to Brahmā during the course of their conversation. Apart from that, the creation tale around the origins of the four *vṛtti*-s itself hints at the inseparable nature of the *dṛśya-kāvya* and the *śravya-kāvya* as it includes scenes from a battle (that which took place between Bhagavān Viṣṇu and the twin *asura*-s); a battle in which Hari fought with "with pristine and perfect gestures and *aṅgahāras*". *Aṅga-hāra*-s are defined by the *Nāṭyaśāstra* in its fourth chapter ("Tāṇḍava-lakṣaṇa") in the *śloka*-s 30-34 to be a systematic arrangement of rhythmic movements of the limbs for the

depiction of various meaningful gestures and situations in a dramatic performance. It is hard to believe that the concurrence of the spoken word (for the ears of the audience) and the necessity to maintain purity and perfection of gestures and *aṅgahāra*-s (which are for their eyes) is coincidental. On the contrary, it must be an indication to the simultaneity and indivisibility of the production and enjoyment of aesthetic pleasure at the time of a performance. Even if the performance is dominated by purely verbal art that mainly appeals to the ears, the spectacular aspect cannot be divorced entirely from it. For, it is a common knowledge that even during the recitals of the *Veda*-s, *mudra*-s (gestures of the hands and fingers) play an important role, and the tradition has maintained special provision for the imparting of training in this art through the *Vedāṅga*-s. Even the *Nāṭyaśāstra* does not forget to link the origins of the *vṛtti*-s with the *Veda* recitals:

> *ṛgvedād bhāratī vṛttir yajurvedāt tu sāttvatī |*
> *kaiśikī sāmavedāc ca śeṣā cātharvaṇāt tathā ||*

<div align="right">(Nāṭyaśāstra 22.24)</div>

This can be roughly translated into English as: "From the *Ṛgveda* comes the *Bhāratī vṛtti*, from the *Yajurveda* the *Sāttvatī*, from the *Sāmaveda* the *Kaiśikī* and from the *Atharvan* comes the remaining one (*Ārabhaṭī*)".

It is noteworthy that the *Ṛgveda*, which is hailed as the source of the *Bharatī vṛtti*, is a *Veda* that is a compilation of *mantra*-s *sans* tunes — they are meant to be recited aloud with the help of the *udātta, anudātta* and *svarita svara*-s — unlike the *Sāmaveda*, which consists of, in the most part, mantras from the *Ṛgveda* but set into tunes. This implies that the spoken word is of paramount importance and can be recognized as a characteristic marker of the *Ṛgveda*. By associating the *Bhāratī vṛtti* with the *Ṛgveda* the *Nāṭyaśāstra* clarifies its position on the equivalence drawn between the Seen and the Heard. This recurs throughout *Nāṭyaśāstra*— to emphasize the *śravya* aspect of performance while offering didactic discourses on the *dṛśya* aspect. No artificial distinction between the Seen and the Heard aspects of *rasa* is therefore encouraged.

The notion of *vṛtti* is closely intertwined with the idea of application in the dramatic arts. It can be said, with some confidence, that the knowledge of *vṛtti* is imparted by the *Nāṭyaśāstra* in order to draw the

trainee/director/composer's attention to the practical aspects of dramaturgy. For example, the first of the *vṛtti*-s — the *Bharatī vṛtti* — relates to the compositional and enunciation techniques of a play (or any other type of composition or performance). The name *Bhāratī* itself speaks of the creation tale associated with this *vṛtti* and reminds us of the "weight" or "*bhāra*" the tradition (through the text) attaches to the spoken word by alluding to the "*atibhāra*" or excessive weight of Bhagavān Viṣṇu's steps. In a way, it also offers a prescription as to the nature of the effect that should desirably be produced by the spoken word or the speeches used by the performers. Such preeminence of '*vāc*' or the spoken word is central to the understanding of *rasa-śāstra*, aesthetics. Kapila Vatsyayan puts it in the following manner: "[I]n the Indian context, when one speaks of drama, dance or music, one is alluding only to the dominant or fundamental principle of the 'word' movement or sound and is not referring to these arts in isolation or in mutual exclusiveness." (Vatsyayan 2005:9). Failure of understanding the basic tenet on the scholar's part points to a deliberate distortion.

The Case of Explaining *Rāga-rasa* through Images

A strong evidence against Pollock's approach comes from *Gāndharva-vidyā*, or the science of music and dance. This ancient science and art had taken upon itself the complex and challenging task of translating *bhāva* into forms and contents into both *dṛśya* and *śravya* media. One must keep in mind that music (which is dominated by *śravya* elements) and dance (where *dṛśya* elements dominate) developed in India as arts complementary to each other, the complementarity being a defining feature of their common epistemology.

In both theory and practice, Indian art music has always devoted a special place to the art of visualizing a *rāga* by the artiste in her mind's eye. Artistic depiction of various *rāga*-s and *ragiṇī*s, according to the moods that they evoke, has been accomplished by visual artists. Such depictions are, of course, instructed by prescriptions of the *śāstras*. Such prescriptions, formulated in *ślokas*, are known as *dhyāna-śloka*-s. Each *rāga/rāgiṇī* has its *adhiṣṭhātrī* (roughly translated as 'tutelary') god/goddess, and the *dhyāna-śloka*-s evoke the specific god/goddess by enumerating the mood, the *bhāva*. This in turn helps the performer conceive the particular *bhāva* of the *rāga/ rāgiṇī*. This

is a translation process, wherein an idea gets translated into twofold material manifestations: a) into the *nāda* (sonic form) and b) the *deva-deha* (godly form).

Swami Prajñānānanda asserts that this theorization and its applications have been a long-standing tradition; only it has come to be codified rather recently in a treatise titled *Rāga-vibodha* by Somanātha in 1609 C.E.(Prajñānānanda 1996:13). In this text, Somanatha formulates the theory in the following manner:

> *uktaṁ rūpam anekaṁ tattad-rāgasya nādamayam evam |*
> *atha devatāmayam iha kramataḥ kathaye tadekaikām ||*
> *susvara-varṇa-viśeṣaṁ rupaṁ rāgasya bodhakaṁ dvedhā |*
> *nādātmaṁ devamayaṁ tat kramato'nekam ekañ ca ||*

<div align="right">(Rāga-vibodha 5.168)</div>

Enough has been said about the sonic form of *rāga*-s so far; now the godly form of *rāga*-s will be expounded one by one. They are understood to be the forms (*rūpa*) of *rāga*-s which are illuminated by sweet tones and letters; and forms are twofold: sonic (*nādātma*) and godly (*devamaya*).

The *nāda* form evidently represents the *śravya* and the *deva* form, the visual aspect of the *rāga-rūpa*. Such coupling of the two aspects side by side within theoretical paradigms for the discourse on *rasa*, in almost every application of the *Rasa* Theory (in the fields of drama, poetry, music, dance), weakens any basis for such hypothetical assumptions as "the Sanskrit tradition differentiated between the two types of literature, or better yet, that it drew an opposition indicating that analysis applicable in the one domain might not be automatically applicable in the other" (Pollock 2012:189) taken for granted in Pollock (2012).

Conclusion

Even Pollock has acknowledged that the reconstruction of a single and linear historical narrative of Sanskrit literary tradition is hard to achieve in the light of the revisions and contributions of authors later in the day to a text that had already seen the inception of its literary life (Pollock 2016:16). If this is seen in the light that his understanding

and approach to the discourse, like everybody else, has evolved over time and he has acknowledged the futility of attempting a linear historiographical approach for Sanskrit literary-aesthetic traditions; some important questions still remain to be answered. First among them is: what about the inseparability of aesthetic concepts with their metaphysical-philosophical counterparts in the Sanskrit tradition? Viśvanātha Kavirāja, Ānandavardhana, Abhinavagupta, Śubhaṅkara — almost all the stalwarts of the tradition who have been almost unanimously placed between ninth century C.E. to sixteenth century C.E. (and not later) by international scholarship have drawn our attention to the connection of the aesthetic with the metaphysical, the spiritual.

Why, then, is Pollock steadfast on a strategy of translation that exercises maximum domestication into the Anglo-US universe of ideas, semantics, words and terminologies? Is he not aware of the dangers of such strategies with respect to cultural misrepresentation, negation of cultural differences and criticality of otherness? In continental sociology and literary criticism, adoption of such strategies for translation has already been brought to question and they have been severely criticized for suppression of knowledge systems other than the West's own worldviews and historicism; some eminent sociologists such as Michel de Certeau, whose works I have drawn upon in this essay, have even gone so far as to call such stratagems in the name of translation and interpretation as "violence" brought upon specific (non-Euro-American) epistemologies.

It is up to those scholars living *in the tradition*, or in the words of Shri Rajiv Malhotra, the "insiders" (Malhotra 2016), to ponder over these vital questions relating to the present, past and future of the academia in the field of Sanskrit studies and perhaps, to raise pertinent and pointed questions about the work of Neo-Orientalist scholarship, if not to provide concrete answers — and build the *Uttarapakṣa* of this discourse which has historically been heavily skewed in the direction of the *Pūrva-pakṣin*, i.e. the typical Western Sanskritist, who uses the postmodernist, deconstructivist, feminist, or psychoanalytic framework to read and interpret traditional Indian texts. Upon scrutinizing works such as Pollock (2012) one gets a feeling that rendering *śravya* and *dṛśya* as two inherently separate categories growing independently of each other, is characteristic of the Western mind which has always sought to make sense of the

world by differentiating and analyzing its manifestations into separate constituents and putting them under distinct categories.

This can no doubt be an effective approach to understand the products of the external world, and that is exactly what the Western epistemologies have been doing — right from the age of Aristotle through Bernhard Varen and John Ray ('scientists' whose work formed the basis of 'scientific' racism) and Carl Linnaeus (father of taxonomy, the science of classification). How far such an approach can be rendered applicable to concepts such as *rasa*, which is intrinsically psychological, is a question that should be raised more and more in the face of works pouring out from Neo-Orientalist scholarship. It is imperative for scholars of Indic studies, and especially those of Swadeshi Indology, to recognize and understand this legacy of selectively attributing the 'scientific' label to approaches which understand the world by means of differentiation and refuse to acknowledge such approaches which seek synthesis, harmony, coexistence and mutual dependence.

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Chapter 6

The West on Our Poems: A Critique[*]

– Shankar Rajaraman

(*tryaksha@gmail.com*)

Abstract

Any Pūrvapakṣa of Western Sanskrit scholarship needs to take multiple approaches. Each of the available approaches has its own place in the larger picture. Critiquing Western understanding of Sanskrit Kāvya literature is one such approach. In this paper, I examine 20 examples of mistranslations, followed by two of faulty editing, and one of misanalysis by Western Sanskrit scholars. I also suggest a method of classifying the mistranslations under different heads based on the probable causes underlying them. I conclude with a short discussion on how Western Indologists must approach Sanskrit Kāvya literature.

Introduction

In his four-tier model of critiquing Western Indology, Malhotra (2016) explains Tier 4 as pertaining to a study of how specific Sanskrit verses are analyzed by Western Indologists *vis-a-vis* traditional Sanskrit scholars. He calls upon traditional scholars to play a

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role at this level noting, however, that they would be handicapped without familiarizing themselves with Tiers 2 and 3 — tiers that are respectively about the networking strategies and theoretical frameworks employed by Western Indologists.

In this paper, I shall demonstrate how traditional scholarship in Sanskrit can equip us with the analytical tools that are helpful not just in understanding Sanskrit texts correctly, but also in detecting instances where such understanding is inherently flawed. In other words, traditional Sanskrit scholars can summon theoretical frameworks which they are familiar with (rather than those they see as alien) in order to defend their texts against the sort of misanalysis which Western scholars subject them to. It is no doubt important that we have a thorough understanding of Western Indological thought. But deconstructing such thought must be seen as a process in which traditional knowledge (knowing our view) and knowledge of Western theories (knowing the opponent's view) are complementary to one another, rather than the former being seen as contingent upon the latter.

How Western Indologists analyze Sanskrit texts is closely linked to how they understand them, and how they understand them is reflected in how they translate them. Faulty understanding leads to flaws at the level of analysis and translation. With this background in mind, I shall examine 20 examples of mistranslations, two of editing errors, and one of misanalyses that reveal shortcomings in understanding Sanskrit *kāvya* texts. This paper is a consolidation of what I have already discussed in my blog (`https://hrdayasamvada.wordpress.com/`). All examples of mistranslations and editing errors that I examine have been selected from Clay Sanskrit Library's publication series. According to the homepage (`http://www.claysanskritlibrary.org/`) of Clay Sanskrit Library (henceforth abbreviated in this article as **CSL**), it is "a series of books covering a wide spectrum of Classical Sanskrit literature spanning two millennia". The homepage informs us that fifty-six volumes have been published under the banner since 2005. Among those associated with CSL are Prof. Sheldon I. Pollock (General Editor), Isabelle Onians (Editor), and a panel of Translators such as Yigal Bronner, Wendy Doniger, Friedhelm Hardy, Matthew Kapstein, Sir James Mallinson, David Shulman, and Gary Tubb, apart from the General Editor and the Editor themselves (`http://www.claysanskritlibrary.org/people.php`). I have included in this list the names of only those

Western Sanskrit scholars whose work I shall discuss shortly. For examining misanalysis of Sanskrit verses, I shall refer to one example from the book, Tubb (2014).

Examining Mistranslations

In this section, I shall examine the English translations of 20 Sanskrit verses selected randomly from CSL series publications. These translations can be classified thus on the basis of the type of their flaws:

(a) getting the narrative wrong;

(b) being unfamiliar with the Indian cultural ethos;

(c) being unfamiliar with complementary bodies of knowledge that Sanskrit *kāvya-s* draw upon;

(d) getting the semantics wrong — at the levels of individual words, compound words, sentences/phrases

(e) failing to spot one or more puns that are important for making an overall sense of a Sanskrit verse.

In any given instance, more than one reason may also operate. In some cases, I shall focus on explanatory notes rather than translations *per se*. I take such notes to be the logical extensions of translations because firstly, they reveal how the translator has understood the meaning of a verse over and above what he/she has translated; and secondly, how they proceed to fill gaps in the reader's comprehension of a verse.

(a) Getting the Narrative Wrong

Literary narratives give verbal form to a series of events (Snaevarr 2010). Such a form is characterized by *coherence* (there is some sort of causal or other types of connection between the events in a narrative), *meaningfulness* (it is possible to make sense of the way in which the narrative's narrator and internal characters understand the events), and sometimes, *emotional import* (the narrative captures its narrator's and internal characters' evaluation of and emotional responses to the events) (Goldie 2004). Narratives are not just the products of culture. Culture also provides the framework within which narratives become meaningful (Brockmeler 2012). From an Indian aesthetic viewpoint, narratives can be understood in terms of the *emplotment* of *vibhāva-s*

(Antecedent Events), *anubhāva-s* (Consequent Responses including verbal and non-verbal behaviours), and *vyabhicāri-bhava-s* (Transient States such as *garva* (pride), *asūyā* (envy), *śrama* (fatigue), *vyādhi* (physical illness), *viṣāda* (despondency)). Put simply, Sanskrit poets integrate *vibhāva-s*, *anubhāva-s*, and *vyabhicāri-bhava-s* in a coherent and meaningful manner within a narrative. The effect of emplotment on the reader is that his/her *sthāyi-bhāva-s* (sustained egocentric mental states such as *rati*, *utsāha* (perseverance), *śoka* (sorrow)) are transformed into *rasa-s* – their pleasurable, aesthetic counterparts. According to the *Nāṭyaśāstra* of Bharatamuni, dramatic narrative (*nāṭya*) must refer to the actual world for its depiction of antecedent events and consequent responses. *Vibhāva-s* and *anubhāva*-s thus have their real world correspondences in the form of *kāraṇa-s* and *kārya-s* (stimuli and responses). To know *vibhāva-s* and *anubhāva-s* is to know their corresponding real world *kāraṇa-s* and *kārya-s*. *Vibhāva*-s and *anubhāva*-s are therefore described by Bharatamuni ((Dvivedi 1996:153) as *loka-svabhāvānugata* (compatible with what holds true in the actual world), *loka-prasiddha* (well-established in the actual world), *loka-svabhāva-saṁsiddha* (determined by what holds true in the actual world), and *loka-yātrānugāmi* (in agreement with the world of interactions). The word *loka* (world) used here refers, no doubt, to a cultural world within which *nāṭya* is made meaningful.

The translator must have firsthand experience of being in a culture that endows his target narrative text with meaningfulness. If not, the translated narrative will be a poor recount of the events depicted in the original text.

With this background, I shall examine some examples of translations that point to an improper understanding of Sanskrit versified narratives.

1. Hardy's (2009) translation of verse no. 48 from the *Āryā-saptaśatī* of Govardhanācārya:

The verse is about a lover whose lady has purposefully kept his upper garment (*uttarīya*) with herself during his previous visit so she has the pleasure of seeing him once more when he returns to take it back. His friends ask him to stop feeling sorry for being left with a single garment because the very fact that his beloved confiscated his upper garment proves the extent to which she loves him. Given below are the original Sanskrit verse and its English translation by Hardy.

apy ekavāsasas tava sarva-yuvabhyo'dhikā śobhā ||
anurakta-rāmayā punar-āgataye sthāpitottarīyasya |

"Even though you go barebodied, wearing but a single garment, to your rendezvous with an infatuated woman, you look finer than all other young men"   (Hardy 2009:43)

Hardy seems to have taken *sthāpitottarīyasya* as an independent word and translated it as "barebodied" instead of construing it along with (*anurakta-*)*rāmayā* "he whose upper garment has been retained" (by his beloved). Without this bit, the translated narrative does not do justice to the original narrative because there is no explanation for why the lover has to go barebodied.

2. Mallinson's (2006) translation of verse no. 37 from the *Pavana-dūta* of Dhoyī:

The scene of this verse is set in Vijayapura, the capital city of the hero, a king from the Sena dynasty. The poet describes a situation in which the women of the city are playing hide-and-seek with their lovers on the attics of the city's mansions. These women are as beautiful as the bracket figures carved on the walls of the attics and would scarcely be found out by their lovers if they were to hide among them. However, there still is a giveaway. If their lovers, in the course of their search, would perchance touch their beloveds, the latter would have goosebumps on their limbs and could thus be found out. Mallinson's translation doesn't do justice to the sequence of events in this narrative. I refer below to his translation along with the Sanskrit original.

yat-saudhānām upari valabhī-sālabhañjīṣu līnāḥ
susnigdhāsu prakṛti-madhurāḥ keli-kautūhalena |
unnīyante katham api rahaḥ pāṇi-paṅkeruhāgra-
sparśodgacchat-pulaka-mukulāḥ subhruvo vallabhena ||

"Where, in attics atop mansions, gorgeous girls of artless beauty keen for some fun play hide-and-seek among lovely wooden statues and are discovered only when the touch of the petals of the lotuses held in their hands makes the hair on their lovers' bodies stand on end"

(Mallinson 2006:127)

According to this translation, the women who are hiding have lotuses in their hands (this is what Mallinson understands from the Sanskrit

pāṇi-paṅkeruha though a Sanskrit compound formed of words for hand and lotus most often than not refers to a hand that is soft, pretty, and so on, hence comparable to a lotus; rather than to a lotus held in the hand) and when the petals of these lotuses touch their husbands who are searching for them, it is they (the husbands) that have goosebumps! Carrying the absurdity further, the translator makes the claim that the ladies who are hiding are discovered by their husbands when the hair on the latter's bodies stand on end.

Firstly, the ladies would be careful not to reveal their presence to their husbands and would therefore not allow the lotuses they are carrying (even if this wrong translation of *pāṇi-paṅkeruha* is accepted as correct for the sake of argument) to touch the bodies of their husbands who are searching for them. Secondly, how could it be possible that the goosebumps on one person's body give away the presence of someone else?

3. Pollock's (2009) translation of verse no. 5. 23 from the *Rasa-taraṅgiṇī* of Bhānudatta:

This verse illustrates the *vyabhicāri-bhāva* of *apasmāra* (epileptic seizure). To understand the verse, one must be conversant with a minor episode in the *Rāmāyaṇa* in which Bharata shoots an arrow at Hanumat when the latter is returning to Laṅkā carrying the mountain Droṇagiri in his hand. As the mountain falls from the hand of Hanumat, the trees on the ground shake as if out of fear. The poet fancies that the trees had a bout of seizure on seeing the falling mountain. Instead of attributing *apasmāra* to the trees on the ground, Pollock makes mountains (? on the ground) the subject of *apasmāra*. He thus translates "*apasmāraṁ dadhur bhūruhāḥ*" as "the mountains seemed possessed" (Pollock 2009:227)[1].

Not only does Pollock's translation alter the narrative considerably, but it is also faulty on other accounts. The translator has either carelessly rendered the word "*bhūruhāh*" as "the mountains", or is confused about who the subject in this verse is. Because of this confusion, all compound adjectives that are actually applicable to trees are made to qualify mountains. Furthermore, two of these adjectives are translated wrongly in a way that does not reflect a correct cultural understanding of the behavior that results from *apasmāra*. Thus *udvellan-nava-pallavādhara-rucaḥ* and *paryasta-śākhābhujāḥ* have become "the *pallava* buds their swelling lower

lips" (Pollock 2009:227) and "the tangled branches their arms" (Pollock 2009:227) in the translation rather than "their buds, standing for pretty lower lips, quivered" and "flinging their branch-arms" (my translations).   It is important to note here that *apasmāra*, though described as resulting from possession by spirits, is similar in its symptomatology to seizures (compare with Māgha's fanciful description of the ocean as suffering from *apasmāra* in *Śiśupālavadha*, 3.72). The English translator must therefore imagine an episode of seizure in this context. Finally, Pollock reasons that the mountains were possessed "to behold the peak dropped by the monkey". This is how he translates "*śailaṁ prekṣya kaper nipātitam*" – thereby rendering "*prekṣya*" ("having beheld") as if it were "*prekṣituṁ*" ("to behold").

4. Pollock's (2009) translation of verse no. 1.16 from the *Rasa-mañjarī* :

In this verse, Pārvatī is described as mistaking her reflection in the crescent moon on Śiva's head for another woman and threatening him (presumably by rigorously shaking her hand in front of him) out of anger. Not only does Pollock translate "*tarjayāmāsa*" wrongly as "began to slap" (Pollock 2009:17)[2] but in doing so, he also reveals his ignorance of behaviours (*anubhāva*-s) that Sanskrit poets regard as proper under such circumstances; and slapping (to my knowledge) is never reckoned among them.

5. Notes on translations rather than translations *per se* can sometimes reveal how versified narratives are misunderstood by Western Indologists. Readers are likely to be misled by such notes and get the narrative wrong. Two examples from Doniger (2006) might suffice to clarify this point.

Verse no. 4.3[3] from Harṣa's *Ratnāvalī* is one in which the hero, king Udayana, believing that his sweetheart, Sāgarikā, is dead, orders his life-breaths to leave him, and join her before it is too late, i.e., before she has gone too far. If they delay, they would be robbed forever of the good fortune of being with her. The king wants his *prāṇa-s*, life-breaths, to enjoy what he himself is deprived of.

Noting that this is "A difficult verse" (Doniger 2006:493), Doniger sets about conjecturing as to what the verse means. Her reading of the word "*muṣita*" is flawed, and she attempts to fit her misreading to the context in a contorted way. "*Muṣita*" literally means "robbed of". But like its English translation itself, it can be used in the sense of

"deprived of". The Sanskrit commentary, *Prabhā*, by Nārāyaṇaśarma explains this word as "*vañcita*", i.e., "cheated" ("*bhavatāṁ śīghra-gamanābhāve tasyā alābhāt madvad vañcitā bhaviṣyatheti tātparyam*"— "If you won't go soon, you won't be able to meet her, and will find yourself cheated like I myself am") (Kale 1928:162).

Doniger translates "*muṣita*" as "plundered" (Doniger 2006:235). Plundered by whom? – The king himself. That this is how Doniger understands the verse is clear from her notes: "The second part seems to mean that if the breaths do not leave of their own accord he will kill himself and thus steal them, to catch up with Sāgarikā ——" (Doniger 2006:490).

The king, according to Doniger, wants to catch up with Sāgarikā and considers his life-breaths as an impediment that has to be overcome in the process. But, according to the poet, the king wants his life-breaths to attain what he himself cannot as long as he is embodied. Doniger's king is selfish whereas the poet's is altruistic.

6. The second example from Doniger is her translation of verse no. 1.1, the *nāndī-padya*, of Harṣa's *Priyadarśikā.*

This verse[4] depicts the marriage between Śiva and Pārvatī, describing a series of emotional states that the latter is going through in that situation. Pārvatī, the bride, longs to have a look at the face of Śiva, the groom. But her eyes are agitated by the smoke from the sacrificial fire. The cool rays of the moon on Śiva's head come to her rescue and comfort her reddened eyes. Just as she is about to catch a glimpse of Śiva's face, she beholds Brahmā, the officiating priest, in their vicinity, and out of modesty bends her face down (how could she, in spite of her eagerness, directly look at the groom when another male is standing close by?). She can now see Śiva reflected in her bright toe-nails. But instead of being happy that she could manage to look at least at the reflected image of her husband, Pārvatī is filled with jealousy – for, along with Śiva is also reflected Gaṅgā, her co-wife, whom he holds in his matted locks. Going through these emotional states, Pārvatī suddenly feels the touch of Śiva's hand on hers during the ritual of *pāṇi-grahaṇa* and is covered by goosebumps. The poet ends the verse with a prayer that Pārvatī, thus described, bring about auspiciousness.

Doniger's notes about why Pārvatī should bend her face down when she looks at Brahmā are as follows (Doniger 2006:493): "She is shy of

showing her face in front of Brahmā, perhaps because of the tradition, preserved in many myths, that Brahmā desired her himself at the wedding, and was punished by Śiva".

I am not aware of such a myth. If it were popular, other Sanskrit poets would have alluded to it in their works. However, that is not the case. Kālidāsa's *Kumāra-sambhava* does not mention it. Moreover, even a suggestion of such perverse love in Brahmā would disturb the overall beauty of the verse in which the poet has carefully brought together the descriptions of several bodily and behavioral responses (agitated eyes, bending the face down, goosebumps) and mental states (eagerness, bashfulness, envy/jealousy) to strengthen his depiction of Pārvatī's love for Śiva (In *Nāṭya-śāstric* terms, the *sthāyi-bhāva* in this verse is *rati* (love), which being augmented by *vyabhicāri-bhāva*-s such as *autsukya* (eagerness), *vrīḍā* (shame/bashfulness) and *asūyā* (envy), and *anubhāva*-s such as agitated eyes, bending the face down, goosebumps, etc., is elevated to the state of the *rasa* viz. *śṛṅgāra* in the reader.

Bringing Brahmā's love in the picture will be an impropriety, *anaucitya*, of the highest order. On this verse, Kale (1928:2 Notes) makes observes – "She felt shame for fear of being observed by Brahmā who was there serving as the uniting priest" – and further adds – "At first she had not seen her (i.e., Gaṅgā) as she dared not look long at Śiva in the presence of Brahmā". This, I feel, is the correct way of looking at the narrative and filling its gaps imaginatively.

(b) Being Unfamiliar with Indian Cultural Practices

Two examples, one from Kapstein's (2009) translation of Kṛṣṇamiśra's allegorical play *Prabodha-candrodaya* and another from Mallinson's (2006) translation of Dhoyī's *Pavana-dūta*, are analyzed below to show how something that is a part of every Hindu's cultural knowledge can go unnoticed by Western Indologists resulting thereby in pathetic mistranslations of textual portions from Sanskrit literature.

7. For a Hindu, the *sindūra* is not merely "vermilion". When applied in the parting of the hair by Hindu women, it also signifies that they are happily married. When someone is described in Sanskrit *kāvya-s* as having wiped off the *sindūra* mark of his enemies' wives, it is a roundabout way of saying that he has annihilated his foes and

rendered their wives widows. Viṣṇu is described by Kṛṣṇamiśra as:

> "*vibudha-ripu-vadhū-varga-sīmanta-sindūra-sandhyā-mayūkha-cchaṭonmārjannoddāma-dhāmādhipa*"

<div align="center">(Prabodha-candrodaya, 4.32, Kapstein 2009:180)</div>

Here, one must understand that Viṣṇu possesses (*adhipa*) an unhindered (*uddāma*) prowess (*dhāma*) that can rub off (*unmārjana*) the *sindūra* mark (*sindūra*) akin to a streak (*mayūkha*) of twilight (*sandhyā*) from the parting of the hair (*sīmanta*) of the wives (*vadhū-varga*) of *asura-s* (*vibudha-ripu*). In sum, this compound lauds Viṣṇu as the vanquisher of asura-s.

Kapstein translates the compound as follows: "You are the sovereign whose majestic luster eclipses twilight's rays, vermilion like the parted hair of the wives of god's rivals" (Kapstein 2009:181). It seems the translator has divided the compound into two halves *sandhyā-mayūkha-cchaṭonmārjannoddāma-dhāmādhipa* (You are the sovereign whose majestic luster eclipses twilight's rays) and *vibudha-ripu-vadhū-varga-sīmanta-sindūra* (vermilion like the parted hair of the wives of god's rivals).

I make the following comments on this translation: (1) it is incorrect to describe parted hair as "vermilion" because *sindūra* is a pigment, not a color term (unlike in English where vermilion also signifies a dark red color); (2) even if Kapstein's translation is allowed for the sake of argument, it would still be a breach of Sanskrit literary practice to compare the luster of a brave warrior (which Viṣṇu is in this context) with twilight rather than with bright daylight.

As I understand, the basic flaw in Kapstein's translation stems from mistaking the noun *sindūra* for an adjective. Having wrongly decided that *sindūra* stands for dark red (vermilion), the translator uses this as a color adjective to connect the two halves of the compound. In doing so, he fails to realize that it is only the English word "vermilion" that can be used in these two senses, not the Sanskrit "*sindūra*".

Finally, the note given for this Sanskrit compound only serves to further compound the already flawed English rendering. The note reads "Wives of the god's rivals: the vermilion in the hair of the *asura's* wives is visible because they are bending in submission" (Kapstein 2009:308).

Firstly, the Sanskrit original makes no mention of *asura's* wives bending in submission. Such an assumption is therefore out of context. Secondly, the translation uses "vermilion" in the sense of a color adjective whereas the note above uses it in the sense of a pigment. Thirdly, the translator gives no reason as to why the *asura's* wives bend in submission before Viṣṇu (which in itself is a figment of the translator's imagination). Fourthly, it is not clear what is so special about the *sindūra* in the hair of the *asura's* wives as compared to that of *sura-s*, *gandharva-s*, *vidyādhara-s*, etc. In other words, there seems to be no logic, if one goes by Kapstein's translation and note, for singling out the *asura's* wives. And finally, one is clueless about who this *asura* that the note above mentions in the singular is. In summary, Kapstein's erroneous attempt at translating the Sanskrit compound could have been avoided if he had prior cultural knowledge about the *sindūra's* relationship with a Hindu woman's marital status.

8. Mallinson's (2006:120) translation of verse no. 28[5]:

The verse alludes to the temple of Murāri in the Suhma province. The courtesans employed in the service of the Lord are so charming that, seeing them carry play lotuses in their hands, one would surely mistake them for Goddess Lakṣmī herself.

To understand this verse, the translator must be aware of the cultural detail that Lakṣmī is known by the lotus she carries in her hand.

Mallinson translates *pāṇau līlā-kamalam asakṛd yat-samīpe vahantyo lakṣmī-śaṅkāṁ prakṛti-subhagāḥ kurvate vāra-nāryaḥ* as "The courtesans around the temple, with their natural beauty and the play lotuses they constantly carry in their hands, make Lakṣmī anxious".

The translator falters on three counts in this verse: firstly, he reveals his ignorance about the culturally significant portrayal of Lakṣmī as holding a lotus in her hand; secondly, he wrongly understands *śaṅkāṁ* as "anxiety" rather than as "mistaken belief"; thirdly, the note that the author provides — "A pun is made on Lakṣmī's name Kamalā, which means lotus" (Mallinson 2006:277) — is both factually incorrect (lotus is *kamalaṁ*, not *kamalā)* and irrelevant to the verse (as is evident from the translator's failure to explain how the pun noticed by him operates in the verse). All that the note does is to make us suspect that the translator is aware of some relationship between Lakṣmī and lotus, but not of the sort that might help us understand the verse correctly.

(c) Being Unfamiliar with Complementary Bodies of Knowledge that Sanskrit *Kāvya*-s draw upon

9. Pollock's (2009) note on verse no. 3.30 from Bhānudatta's *Rasa-taraṅgiṇī*:

Anybody who has read Kālidāsa's *Raghuvaṁśa* must know the episode in which Raghu plans to go on a military expedition against Kubera so he can help Kautsa, disciple of Varatantu, pay his *guru-dakṣiṇā.* In the said verse, Raghu speaks to Kautsa as follows: "All that I would ask of you, Kautsa, is to pause a moment"[6] (Pollock 2009:183). This is a translation of the Sanskrit original "*yāce kintu bhavantam etad akhilaṁ kautsa kṣaṇaṁ kṣamyatāṁ*" (Pollock 2009:182).

Pollock's footnote for this verse — "King Raghu speaks to his priest at the conclusion of a sacrifice where he gave away all his wealth" (Pollock 2009:182) — is misleading because we know from the *Raghuvaṁśa* that Kautsa is a student who has just completed his studies, not the priest of Raghu.

10. Doniger's (2006) notes on the ancient Indian ritual of *dohada* are erroneous and mixed up. These notes have been provided for verses numbered 1.14 and 1.18 from Harṣa's *Ratnāvalī.* The *dohada* ritual was performed in order to fulfil the fancied wishes of specific trees so they could put forth flowers. The following verse (quoted by Apte 2005:379) summarizes the longings of several trees —

> *pādāghātād aśokas, tilaka-kurabakāv īkṣaṇāliṅganābhyāṁ,*
> *strīṇāṁ sparśāt priyaṅgur, vikasati bakulaḥ*
> *sīdhu-gaṇḍūṣa-sekāt,* |
> *mandāro narma-vākyāt, paṭu-mṛdu-hasanāc campako,*
> *vaktra-vātāc cūto, gītān-namerur vikasati ca puro*
> *nartanāt karṇikāraḥ* ||

According to this verse, the *bakula* blooms when women spit mouthfuls of wine on it and the *campaka* when women smile.

According to Doniger's notes, however, "the *bakula* —, said to blossom when a beautiful woman sprays it with water from her mouth" (Doniger 2006:482) and "the *campaka*-s — enjoy the mouthfuls of wine the women have sprayed on them and they blossom when the women smile on them" (Doniger 2006:483).

(d) Getting the Semantics Wrong

(i) At the level of individual words —

11. In his translation of Govardhanācārya's *Āryāsaptaśatī*, Hardy (2009:16) renders *pradoṣa* (verse no. 39 of the prelude) as "early morning" (Hardy 2009:17) instead of as "evening"[7]

12. In the same aforementioned text, Hardy's rendering of *tūla* (cotton) in verse no. 172 (Hardy 2009:82) as "*tula*" (*sic*) makes his translation "Which *tula* will have to be brought back to life that is burning in the fire of recent separation?" (Hardy 2009:83) of *nava-viraha-dahana-tūlo jīvayitavyas tvayā katamaḥ* incomprehensible.

13. Mallinson (2006:118) incorrectly translates *"bhūmidevāṅganānām"* (verse no. 27)[8] in Dhoyī's *Pavanadūta* as "the king's harem". *Bhūmideva*-s are brahmins. A king would be *nara-deva*, not *bhūmi-deva*.

14. Torzsok's (2006:146) translation of verse no. 2.165 in Murāri's *Anargha-rāghava*: The verse is a description of the twilight hour by Lakṣmaṇa[9]. The crimson of the evening is fancied here as the fire that emanates when day and night rub against each other. The lamps that are lighted at this time look like sparks of this fire. The translator renders "*dīpāḥ*" as "stars" (Torzsok 2006:147) instead of as "lamps"/"diyas". While the lamps share the golden-red hue of the evening sky and can therefore be imagined as related to the latter in some way, the stars cannot.

(ii) At the level of compounds -

15. In his translation of Dhoyī's *Pavana-dūta*, Mallinson (2006:137) renders the *karmadhāraya* compound "*mukha-vidhu*" (moon-face) as "face of the moon", thus jeopardizing the meaning of the verse as a whole. The verse describes how a *ketakī* petal (fashioned into an ear-ornament) falling from the ear of ladies during their love-sports is mistaken to be a fragment of their moon-face. The petal of *ketakī* (pandanus) is often compared to the crescent moon (and vice-versa), as in one of the benedictory verses of Bhavabhūti's *Mālatī-mādhava* (*ketaka-śikhā-sandigdha-mugdhendavaḥ*). I quote a part of Mallinson's translation here (2006:137) – "connoisseurs inspect it as if a single fragment of the face of the moon were before their eyes" – of the original "*utpaśyanti — bhinnaṁ sākṣād iva mukha-vidhoḥ khaṇḍam ekaṁ vidagdhāḥ*" (verse no. 51, Mallinson 2006:136). Given

that the Sanskrit compound is "*mukha-vidhu*" and not "*vidhu-mukha*", one cannot explain away the translator's error by assuming that he has mistaken a *karmadhāraya* compound for a *ṣaṣṭhī-tatpuruṣa* compound.

(iii) At the level of sentence/phrase –

16. Bronner and Shulman's (2009:88) translation of verse no. 13[10] from Vedānta-deśika's *Dayā-śataka*: The verse describes how the devotees' sins drown in the flood of Lord Srīnivāsa's compassion so deeply there is none who can offer them a helping hand. The purport of the verse is that the sins do not resurface. The Sanskrit original is "*hastālambo mad-āgasāṁ mṛgyaḥ*": "my sins have to search for a helping hand that can pull them out" (my translation). That the sins cannot find such a helping hand is understood. If they had, the Lord's compassion would have to be branded as incapable of delivering the devotee from his/her sins.

Bronner and Shulman (2009:89) translate the Sanskrit phrase quoted above as "would it be too much to ask you to give it (my burden of evil that will drown) a hand". This goes completely contrary to what the poet wants to convey, implying as it does that the Lord's Compassion (=ompassion incarnate) must give a helping hand to the devotee's drowning sins, causing them, in effect, to surface up.

17. Hardy (2009:184) wrongly translates the phrase *varjitā bhujaṅgena* ("freed of a serpent") that occurs in verse no. 463 of Govardhana's *Āryā-saptaśatī* as "is not free from snakes". The verse in question compares, through punning, a girl who is faithful to her husband and therefore *varjitā bhujaṅgena* — without a paramour — to the river Yamunā, which is also *varjitā bhujaṅgena* – freed (by Kṛṣṇa) of the serpent Kāliya. By translating *varjitā* as "not free" and the singular *bhujaṅgena* as "snakes", the translator simultaneously reveals his lack of proficiency in Sanskrit grammar and Hindu mythology, apart from spoiling a happy Sanskrit pun through his translation.

(e) Failing to Spot Puns

Though I could have discussed this point in the previous section itself, I feel Sanskrit verses are so replete with puns that it is important to discuss separately the consequences of not spotting them during translation. Firstly, the very beauty of a Sanskrit verse may rely heavily on punning. Secondly, poets such as Govardhana pun

frequently. While translating the works of such poets, a translator must be prepared to encounter puns at every nook and corner. Thirdly, important as it is to spot a genuine pun, it is equally important not to overdo things and imagine a pun where none in intended. Example no. 8 discussed above is an instance of imagining a nonexistent pun.

18. Pollock's (2009:89) half-hearted translation of verse no. 99 from Bhānudatta's *Rasa-mañjarī*: The verse is based on a series of puns that all refer simultaneously to the heroine and a lamp. Pollock has missed the pun in the line *"tasyā daiva-vaśād daśāpi caramā prāyaḥ samunmīlati"*[11]. The phrase "*caramā daśā*" also means "the last wick" (as in Kālidāsa's "*nirviṣṭa-viṣaya-snehaḥ sa daśāntam upeyivān*", *Raghuvaṁśa*, 12.1). His translation of this phrase as "final hour" in "Fate would have it that her final hour is nearly upon her" (Pollock 2009:89) is limited to the heroine, and bears no relation with the lamp. Either Pollock should translate all the puns occurring in a verse or give a second meaning in the notes, not translate some puns and leave out others for readers to figure out themselves.

19. Verse no. 28 from Govardhana's *Āryāsaptaśatī* seems to have eluded the imagination of the translator Hardy (2009:12). The Sanskrit verse along with its English translation and notes by Hardy are given below —

> *maṅgala-kalaśa-dvayamaya-kumbham*
> *adambhena bhajata gajavadanam |*
> *yad-dāna-toya-taralais*
> *tila-tulanālambi rolambaiḥ ||*

Translation: "Be devoted without arrogance to Him with the Elephant's Face! He has two frontal lobes that resemble auspicious vessels, and the bees, agitating for his ichor, become like sesame seeds"

(Hardy 2009:13).

Notes: "The meaning or significance of *tila* (also "mole") is not quite clear. The ichor is so fragrant and so abundant that masses of black bees gather around his temples, so maybe the comparison is with a vessel filled with black sesame seeds" (Hardy 2009:272).

The translator appears to have missed out on a second meaning of *dāna-toya*. This compound word not only means "ichor", the fluid that

flows out of the temples of an elephant in rut, but also "the ritual water that is poured into the hands of one who receives *dāna*, gifts". The punning use of *dāna* in these two senses is very common in Sanskrit literature (e.g., "*dānaṁ dadaty api jalaiḥ sahasādhirūḍhe*", *Śiśupāla-vadha* 5.37). What the poet wants to convey is that the frontal lobes of Lord Gaṇeśa are like two vessels filled with the ritual water for *dāna* (that happens to be the ichor) and the bees clinging to it are like sesame seeds mixed with this water. Hardy's ignorance about the second meaning of *dāna*, the culturally prescribed use of water during the ritual of *dāna*, and the ingredients that are mixed with this water – have all contributed towards making his translation ineffective. It is important to note that a common Sanskrit word for ichor is *mada* or *mada-jala*. When a poet, such as Govardhana, with a penchant for puns, employs *dāna* (that is more commonly understood as gift and less commonly as ichor) in place of *mada*, the translator should immediately suspect that there is a pun lurking underneath.

20. Hardy (2009:124) glosses over a pun in verse no. 293 of Govardhana's *Āryā-saptaśatī* with the result that his translation makes no sense. The verse and its translation are given below:

> *duṣṭa-graheṇa gehini tena ku-putreṇa kiṁ prajātena |*
> *bhaumeneva nijaṁ kulam aṅgārakavat kṛtaṁ yena ||*

> Translation: "O house-wife, what good is that bad son, born to you under an unfavorable asterism, who, like Mars, has reduced his own family to coals"   (Hardy 2009:125).

"*Ku-putra*" is not just a "bad son" but also the planet Mars, who is referred to as "the son of *Ku*, Earth". Similarly "*aṅgārakavat kṛtaṁ*" is not just "reduced — to coals" but also "made into one that has *aṅgāraka*" (Aṅgāraka is yet another name for Mars).

Since the translator doesn't provide any notes that enlighten the reader about these other meanings of *kuputra* and *aṅgāraka*, readers are left in the dark as to what makes the poet compare the bad son to Mars. The comparison is based not on any concrete attributes common to both but on mere wordplay.

The translation also seems to imply that what is common to the bad son and Mars is that both reduced their family to coals. However, there is nothing in Hindu mythology to suggest that Mars brought about a destruction of his own family. Even if such a story existed, comparing

two people on the grounds that both reduced their families to coals is
hardly poetic.

Examining Editing Errors

In this section, I shall examine two examples of editing errors. Both
examples have been selected from the CSL series. The errors are a
result of the editors' inattention to grammar and metrical details

1. Verse no. 1.4 in Harṣa's *Ratnāvalī*, edited by Doniger (2006:70):
   Instead of "***bhavatu** ca pṛthivī samṛddha-sasyā*" we have "*bhavantu
   ca pṛthivī samrūddhasasyā*" as the first line of the verse, a mistake
   on both accounts — grammar and metrics.

   According to the principles of Sanskrit grammar, the subject of
   a sentence must agree with its verb both in person and number.
   However, in the edited line given above, the subject *pṛthivī* is in
   the singular form and the verb *bhavantu* that goes along with it
   is in the plural form.

   From a metrical point of view, it suffices to say that the second
   syllable of the edited line is long though it should have been
   short in keeping with the rules of the meter Puṣpitāgrā in which
   the verse is composed.

2. Verse no. 4.32 in Kṛṣṇamiśra's allegorical play *Prabodha-
   candrodaya*, edited by Kapstein (2009:180): In this verse, that is
   composed in the Daṇḍaka meter, every line starts with 6 short
   syllables (e.g., *tri-bhu-va-na-ri-pu*) followed by a specific number
   of triads each of which has the following pattern: long syllable
   — short syllable — long syllable (e.g., *kai-ṭa-bho*).

   Since a Daṇḍaka's beauty is fully evident only when read out
   aloud, Kapstein should have been extra careful not to allow a
   metrical error to mar it. However, he allows the metrically
   flawed word "*vallarī*" to creep into the compound "—*śrībhujā-
   vallarī-saṁśleṣa-saṅkrānta*—". With a basic sense of Sanskrit
   metrical aesthetics, one can easily conclude that the correct
   reading is "—*śrībhujā-valli-saṁśleṣa-saṅkrānta*—".

   As to the meaning of the compound itself, it makes no difference
   if *vallarī* is replaces *valli*. However, this replacement makes a lot

of difference to the rhythmic structure of the verse. Editors of Sanskrit poetic texts shouldn't compromise for meaning at the expense of metrical perfection. They should respect structure and sense alike[12].

Examining Misanalysis

Here I shall examine Tubb's analysis of Bāṇa's verses in the Śaśivadanā meter as part of the article "On the boldness of Bāṇa" (Tubb 2014:308-354). Tubb considers Bāṇa's verses as "based on the (21-syllable) Śaśivadanā meter" (Tubb 2014:335) which they no doubt are. The pattern of long and short syllables in this verse is as follows: UUUU_U_UUU_UU_UU_U_U_ ("U" stands for short syllable and "_" for long syllable). This is the famous Campakamālā meter in which many Kannada and Telugu poets have composed their verses.

There are two points which Tubb raises in his article:

Point one:

Verses that are ascribed to Bāṇa in anthologies (e.g., *Subhāṣita-ratna-koṣa*), for example, the following verse —

> *rajani-purandhrir oḍhra-tilakas timira-dvipa-yūtha-kesarī*
> *rajatamayo'bhiṣeka-kalaśaḥ kusumāyudha-medinīpateḥ |*
> *ayam udayācalaika-cūḍāmaṇir abhinava-darpaṇo diśām*
> *udayati gagana-sarasī-haṁsasya hasann iva vibhramaṁ śaśī ||*

> (verse no. 930 in *Subhāṣita-ratna-koṣa*)

go against the prosodic pattern of short and long syllables prescribed for this meter. In the example given above, the first two lines obey the rule but the last two lines do not. This, Tubb considers a "bold change" (Tubb 2014:338).

Nowhere in the history of Sanskrit literature have poets tried to be original by breaking metrical rules in the manner described above. Breaking metrical rules is considered as a flaw rather than as something positive. Furthermore, Tubb mentions poetic reasons for substantiating the metrical flaw, commenting how "the combined effect of these three surprises (i.e., three instances when the metrical pattern has been broken) is to place the strongest possible emphasis on

the beginning of the word *haṁsasya*, — an emphasis that serves several poetic purposes simultaneously. It stresses the action of laughing expressed by the verbal root *has/haṁs*——" (Tubb 2014:339).

To my knowledge, traditional commentators never look out for a suggested meaning, a *dhvani*, in instances where a metrical flaw is evident. In that case, all verses quoted by Sanskrit aestheticians for illustrating various poetic flaws may have to be interpreted as examples of *dhvani*.

Point two:

Tubb makes a lot about the instances in which poets (Bāṇa, Māgha) have not cared to follow the rule of *yati* (caesura) in verses that are composed in the aforementioned meter. He painstakingly notes the place of *yati* in each line of the exemplary verses that he has chosen, and finds out that they don't match even within the same verse, leave alone when one verse is compared with another composed in the same meter.

He must know that Caṁpakamālā/Śaśivadanā is a meter with a weak *yati*. Breaking a *yati* where none practically exists is no bold step. When we compare two verses composed in meters such as Indravajrā, Upendravajrā, or Vasantatilakā, we can observe that the *yati*-rule is scarcely obeyed. So is the case with Caṁpakamālā/Śaśivadanā.

Conclusion

Translators desire to communicate through their translations a hitherto hidden cultural world to their audience. However, the extent to which they themselves are familiar with that world and can make sense of happenings in it, plays an important role in determining how effective their communication will turn out to be. Literary texts in a classical language such as Sanskrit describe a cultural world whose continuity with contemporary times is scarcely visible even to an Indian, let alone, a Western, Sanskritist. Western Sanskrit scholars are in a sense twice as disadvantaged as their Indian counterparts in understanding and appreciating this cultural world since they are removed from it both spatially and temporally.

As my examination of mistranslations demonstrates, Western scholars often err in their translation of Sanskrit verses because they are

not conversant with something that is part and parcel of every Hindu's culturally acquired knowledge. It is therefore important that they approach Sanskrit *kāvya* literature with humility and a healthy sense of uncertainty rather than with surety, born out of arrogance, that some basic grounding in the Sanskrit language and a couple of dictionaries is all that is needed to make poems from a hoary past reveal their deepest secrets.

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Notes

[1] The full verse is:

 udvelan-nava-pallavādhara-rucaḥ paryasta-śākhā-bhujaḥ (sic)
sphūrjat-koraka-phena-bindu-paṭala-vyākīrṇa-deha-śriyaḥ |
bhrāmyad-bhṛṅga-kalāpa-kuntala-juṣaḥ śvāsānilotkampitaiḥ
śailaṁ prekṣya kaper nipātitam apasmāraṁ dadhur bhūruhāḥ ||

[2] The full verse reads:

 pratiphalam avalokya svīyam indoḥ kalāyāṁ
hara-śirasi parasyā vāsam āśaṅkamānā |
giriśam acalakanyā tarjayāmāsa kampa-
pracala-valaya-cañcat-kānti-bhājā kareṇa ||

[3] The full verse reads:

 prāṇāḥ parityajata kāmam adakṣiṇaṁ mām!
re dakṣiṇā bhavata, mad-vacanaṁ kurudhvam!

śīghraṁ na yāta yadi, tan muṣitāḥ stha nūnaṁ
yātā sudūram adhunā gajagāminī sā ||

The translation given is:
Breaths of my life, leave me; do what I ask. Oblige me more than I obliged her. If you don't leave quickly, you'll surely be plundered. For the woman who walks with the grace of an elephant has already gone far away.

[4]The full verse reads thus:

 dhūma-vyākula-dṛṣṭir indu-kiraṇair āhlāditākṣī punaḥ
paśyantī varam utsukānata-mukhī bhūyo hriyā brahmaṇaḥ |
serṣyā pāda-nakhendu-darpaṇagate gaṅgāṁ dadhāne hare,
sparśād utpulakā kara-graha-vidhau gaurī śivāyāstu vaḥ ||

[5]The full verse reads:

 tasmin senānvaya-nṛpatinā devarājyābhiṣikto
devaḥ suhme vasati kamalā kelikāro murāriḥ |
pānau līlā-kamalam asakṛd yat-samīpe vahantyo
lakṣmī-śaṅkāṁ prakṛti-subhagāḥ kurvate vāra-rāmāḥ ||

[6]The full verse reads thus:

 audāsyaṁ na vidhehi, gaccha na gṛhāt saṁvīkṣya mṛd-bhājanaṁ
yāce kin tu (sic) bhavantam etad akhilaṁ, kautsa, kṣaṇaṁ kṣamyatām |
dāsaś ced aham asmi ced, vasumatī sarvaiva saṁgṛhyatām
svarṇaṁ ced gurudakṣiṇā, dhanapater ānīya sampādyate ||

Translation by Pollock:
Please do not, seeing this earthen bowl of mine, leave my house in despair. All that I would ask of you, Kautsa, is to pause a moment. If I am your slave, and still alive, take the whole world for your own. If gold is your teacher's gift, I'll get it from the Lord of Wealth himself.

[7]The full verse reads:

 sakala-kalāḥ kalpayituṁ
prabhuḥ prabandhasya kumuda-bandhoś ca |
sena-kula-tilaka-bhūpatir
eko rākā-pradoṣaś ca ||

It has been translated as
They alone are capable of accomplishing the encyclopedia of arts and skills and of displaying all segments of the moon, the lotuses' friend: the king who is the crest-jewel of the Sena lineage and the early morning of a full-moon day.

[8]The full verse reads:

 gaṅgā-vīci-pluta-parisaraḥ saudha-mālāvataṁso
yāsyaty uccais tvayi rasa-mayo vismayaṁ suhma-deśaḥ |
śrotra-krīḍābharaṇa-padavīṁ bhūmi-devāṅganānāṁ
tālī-patraṁ nava-śaśi-kalā komalaṁ yatra yāti ||

The translation reads:
The lush land of Suhma, bathed on its borders by Ganga's waves and festooned with

garlands of mansions, will be astonished at your arrival. Palm fronds as slender as the sliver of the new moon serve as ear ornaments for the king's harem there.

[9]The verse reads:

cūḍā-ratnaiḥ sphuradbhir viṣadhara-vivarāṇy ujjvalāny ujjvalāni
prekṣyante cakravākī-manasi niviśate sūryakāntāt kṛśānuḥ |
kiṁ cāmī śalyayantas timiram ubhayato nirbharāhas-tamisrā-
saṁghaṭṭodbhūta-sandhyānala-kiraṇa-kaṇa-spardhino bhānti dīpāḥ ||

The translation has been rendered as:
The holes of poisonous snakes are blazing with their bright head-jewels here and there; from the sun-stones, the fire enters the hearts of the shel-duck; and the stars that pierce the darkness look like tiny sparkles of the radiant sunset, whose fire was produced by the violent friction of the day and the night on both sides.

[10]The full verse reads:

bhagavati daye, bhavatyā vṛṣagirināthe samāplute tuṅge |
apratigha-majjanānāṁ hastālambo madāgasāṁ mṛgyaḥ ||

The translation reads:
When you flood even the god on the peak of Bull Hill, surely my burden of evil will drown, too. Compassion, great goddess: would it be too much to ask you to give it a hand?

[11]The full verse reads:

cakre candramukhī pradīpa-kalikā dhātrā dharā-maṇḍale
tasyā daiva-vaśād daśāpi caramā prāyaḥ samunmīlati |
tad brūmaḥ śirasā natena, sahasā śrīkṛṣṇa nikṣipyatāṁ
snehas tatra tathā, yathā na bhavati trailokyam andhaṁ tamaḥ ||

The translation has been rendered as:
God made the moon-faced girl the single lamp of beauty on earth, and Fate would have it that her final hour is nearly upon her. I bow my head and beg you, dear Krishna, hurry and pour a drop of love: oil in her, to keep deep darkness from engulfing the entire universe.

[12]The passage reads:

tribhuvana-ripu-kaiṭabhoddaṇḍa-kaṇṭhāsthi-kūṭa-sphuṭonmārjitodātta-cakra-sphuraj-jyotir-
ulkā-śatoḍḍāmaroddaṇḍa-khaṇḍendu-cūḍa-priya! prauḍha-dordaṇḍa-vibhrānta-manthācala-
kṣubdha-dugdhāmbudhi-protthita-śrībhujāvallarī-saṁśleṣa-saṁkrānta-pīna-stanābhoga-
patrāvalī-lāñchitoraḥ-sthala!   sthūla-muktā-phalottāra-hāra-prabhā-maṇḍala-prasphurat-
kaṇṭha! vaikuṇṭha! bhaktasya lokasya saṁsāra-mohacchidaṁ dehi bodhodayaṁ deva! tubhyaṁ
namaḥ!

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Chapter 7

रसब्रह्मसमर्थनम्

– रा. गणेशः

(avadhaniganesh@gmail.com)

अपर्याप्तमुदाकारामामपर्यायतमास्मिताम् ।
प्रपद्ये सकलास्वादां निष्कलां रसभारतीम् ॥

पूर्वपीठिका

तदिदं 'रसाध्याय'[1] संज्ञितस्य कस्यचन ग्रन्थस्य[2] सारासारविवेचनार्थं समायोजनम् । तथापि नास्माभिरस्यैकस्य मीमांसने मनः प्रवर्ततेतराम् । यत ईदृशा आक्षेपविक्षेपा बहोः कालादारभ्य वर्तमाना एव विद्वज्जगति । नेदमपूर्वं किञ्चिन्नाप्यभिनवम् । अन्यच्च नात्र काप्यस्मदीयानस्मदीयविभेदव्यपदेशोऽपि लगति । यतः पुरा हि रसस्यानुमानिकतां लोलुपतां सुखदुःखात्मकतां च कथयद्भिः कथाकृद्भिः स्वकीयं मूलच्छेदं पाण्डित्यमस्मिन्नेव भारते देशे प्रादर्शि नैकधा । अतोऽत्र न कापि स्वजनपक्षपातपातित्यमस्मासु लिप्यते । अपि च वैदेशिकैः कैश्चिद्व्याप्तसंस्कृतविद्याग्रन्थैर्गन्धिलैः पौनःपुन्येन भारतीयार्षसंस्कृतेर्जीवातुभूत- मानन्दपारम्यं निजाग्रहैरग्रहणैर्वा मुह्यद्भिर्निराकर्तुं कृता कूटपरम्परा । तत्रभवद्भिः प्रेक्षा- वित्कूटस्थैः प्राचार्यहिरियण्णमहोदयैः पूर्वमेव सङ्क्षेपसुन्दरं समर्थं च समर्थनं व्यधायि रसपारम्यस्य । तदत्रास्माभिरनुसंधेयमिति परिकरश्लोकः —

पारदृश्वा सारदृश्वा हिरियण्णमहोदयः ।
चक्रे यच्छास्त्रसङ्क्षेपं तदस्मद्ध्यानमर्हति ॥[3]

एवमेव वार्तमानिकेषु विद्वत्सु नैकतमेन पादेकल्हुनरसिंहभट्टवर्येण भारतीयसंवेदनं[4] कथयता कथनार्षो नयः प्रकाशितः । ईदृशाः पूर्वसूरिभिरानन्दकुमारस्वामि-वासुदेवशरणाग्रवाल-गुण्डप्प-प्रमुखैः प्रपञ्चित एव । तथाप्यलङ्कारशास्त्रदृशा प्रत्येकतया नरसिंहभट्टमहोदयेन[5] किमप्यनुत्तमं कल्पितं किल तदनुसारमेवं वक्तुमलमिति सङ्ग्रहः —

भट्टो नृसिंहनामा च यत्संवेदनमाह तत् ।
पुनरत्रानुसंधेयं यतस्तत्कृत्स्नदर्शनम् ॥[6]

शास्त्रजातमिदं सर्वं जीवत्सामग्र्यसत्त्ववत् ।
साक्षात्कृत्य सुधीः पश्येत्समष्टिं नैव विस्मरेत् ॥

व्यष्टिवैचित्र्यसर्वस्वं स्वानुभूतौ विलीयते ।
वृक्षवैविध्यमुग्धानां कथं कान्तारदर्शनम् ॥

सम्प्रति पूर्वपीठिकारूपेण भारतीयसौन्दर्यशास्त्रसंबद्धं किञ्चिदत्र प्रस्तूयते । सर्वमिदं कारिका-वृत्तिमाध्यमेन निरूप्यत इति विदितवेदितव्यानामपरोक्षमेव ।

नानुमेयो परोक्षो न नाप्तवाक्यैकवेदनः ।
न प्रत्यक्षोऽपि लोकार्थे ह्यपरोक्षो रसः स्मृतः ॥

भौताः पदार्थाः प्रत्यक्षानुमानाभ्यां ज्ञायन्त इति निश्चितम् । किञ्च भावानामभौतत्वं सुप्रतिष्ठितमिति हेतुना भौतन्यायोऽत्र न प्रसज्यते । भावानामभौतत्वं तु तेषामभावायापि न कल्प्यते । यतः स्वसंवेदनविरुद्धोऽयं प्रसङ्गः । अतो हि नैते भावाः परोक्षाः । तर्हि किमवशिष्यत इति विचिकित्स्यते चेदपरोक्षा एव भावा इति निगमनम् । केचनाधुनिकविज्ञानिन आहुर्यद्भावा अपि काश्चन मस्तिष्कमज्जाविद्युद्रासायनिकप्रक्रिया इति । स्यादिदं तथ्यं वाऽतथ्यम् । अनेन नास्माकं मतं प्रतिहन्यते । यतस्तथ्यमिदं न कदाप्यस्मद्भावेषु बुध्यते । स्यान्नाम रति-हास-क्रोध-विस्मयोत्साहादिभावप्रपञ्चः कश्चिद्रासायनिकी क्रिया । परमस्मासु तथ्येनानेन प्रीतिर्वा भीतिर्वा शान्तिर्वा दान्तिर्वा न जायते । अतः स्वसंवेदनपरिधिबाह्या ये केऽपि वैज्ञानिकवास्तवाविष्कारा मानुषसंदर्भेषु न मनागपि परिणमन्तीत्यलम् । तस्मात्तदिदमवधेयं यद्भौतादिविषयज्ञानेन वाऽज्ञानेन भावप्रपञ्चे न किञ्चिदुपचीयते न किञ्चिद्वाऽपचीयत इति परमार्थः । प्रायेण लोके भव-भावयोरशास्त्रीयानुदारस्वच्छन्दसाङ्कर्येण धीमन्तोऽपि जनाः क्लेशमनुभवन्ति परेषु च क्लेशमनुभावयन्तीति सर्वथा शोचनीयम् ।

भौतादिशास्त्रजातानां सृतिवद्रैखिका नहि ।
भावशास्त्रस्य चास्यार्धिश्चक्री संविचिरन्तनी ॥

सामान्यतो भौतादिशास्त्रविद्याविकासं निर्वर्ण्य साम्प्रतिकपण्डिता भावाश्रितानां कलानामपि जीवव्यापाराणामपि प्रगतिः काचिद्रेखात्मिकेति भ्रान्तिमुत्पादयन्ति । किञ्च वस्तुस्थितिरन्यैव

विदत इति प्रेक्षावतामपरोक्षम् । रसमीमांसा तु सर्वथा भौतातीतसरणिमनुवर्तते ।
अतोऽत्र शास्त्रविकासो न सर्वथा रेखात्मकः । तस्मादेव मुनिना भरतेन प्रोक्ते
नाट्यवेदे बीजभूता नैके महाविषयाः परवर्तिनामनेकेषां विदुषां स्वानुभूतिपुरस्सराङ्गीकारार्थं
समभवन् । परन्तु तत्र तत्र स्पष्टीकरणं वा विस्तरणं वा भङ्ग्यन्तरनिरूपणं वा
समपेक्षितम् । न कदाप्यस्माभिर्मुनेर्भरतस्य सरला सुकरा वाणी शास्त्रशैशवत्वाय
स्वीकार्या । वेदोपनिषत्सु यत्तत्त्वं प्रगल्भमपि समर्थं, प्रगाढमपि समग्रं सुलभवाग्लभ्यम्;
रामायण-महाभारतादिष्वार्षकाव्येषु मानुषभावभूमानुभवकल्पनं यद्व्योदारमूहातीतमपि
साहजिकं तत्तथैव नाट्यवेदेऽपि विज्ञेयम् । अत्रैव महामतयोऽप्यस्मत्कालीना नैकशास्त्रेषु
कृतभूरिपरिश्रमा व्यामोहिता इव दृश्यन्ते । तदपसरणं नास्माभिरुपमातुमलम् । केवलं
तन्निरूपणमेव मेधामितम्पचानां मादृशां विनम्रो यत्न इति प्रणिपातपुरःसरं विज्ञाप्यते ।

उदाहरणपद्यानां काव्यानां वा तथैव च ।
रूपमात्रहतः कुर्यान्न तत्सिद्धान्तदूषणम् ॥

केवलं स्वर्णभूषाणां विचित्राकृतिविस्मितः ।
न कोऽपि कुरुते विद्वांस्तदुपादानगर्हणम् ॥

अन्यच्च साम्प्रतिकाः साहित्यविमर्शनविदः प्रतिनिविष्टतया भारतीयकलासिद्धान्तेषु कौलीन-
दिदृक्षवः कचित्कचित्तत्तदालङ्कारिकदेशकालीनरुचिवैकट्यफलान्युदाहरणपद्यानि परिभाव-
यन्तस्तद्द्वित्तिप्रायाणि तत्त्वान्यपि विसंवादीनीति प्रजल्पन्ति । किञ्च न ते जानन्ति यत्प्रल्हे
काञ्चनपरिष्कारे सत्यपि रूपवैरूप्ये स्वरूपसौष्ठवं न हिनस्तीति । अतः सर्वेदास्माभिश्चिरन्त-
नानां सिद्धान्तमीमांसावसरे प्रतिभाविद्भिर्भाव्यम् ; येन न कदाचिदपि लक्ष्यदोषा लक्षणेषु
नापतेयुः । अग्निरन्नमपि पचति, पाचकमपि दहति । न तेन कदाचिदपि दुष्यति ।

स्वसंवेदनमूलत्वादायुर्वेदौषधं यथा ।
रससिद्धान्ततत्त्वं च त्रिकालाबाधितं भवेत् ॥

केवलं मूलिकादीनां रासायनिकचिन्तनम् ।
यदिष्यते तथैवात्र मनःशास्त्रीयशोधनम् ॥

आयुर्वेदे भारतीये यद्यप्यौषधानां रासायनिकी प्रक्रिया चातुराणां देहान्तस्तेषां व्यापारविधिर्न
निश्प्रचं प्रत्यपादि तच्छास्त्रविद्भिस्तथा च देहरचनामर्मसर्वस्वनिरूपणं नाकारि लोकोर्जितं
तथापि प्रायेण निरपवाद इव चिकित्सा वर्वर्ति स्वास्थ्यं च जरीजागर्ति । समासत इदमत्र
वक्तव्यं यदायुर्वेदे भिषज्मुखनिदानमेव विद्यमानमपि विनापि प्रयोगालयपरिकरव्यूहपरामर्श-
नेन भैषज्यं प्रसरत्येव; गदाली निर्गलत्येव । अनेनैव न्यायेन रससिद्धान्तेऽपि विनाऽधुनिक-
मनःशास्त्रीयपरिशोधनं, विना तत्तद्देशकालीनसामाजिकार्थिकराजकीयसांस्कृतिकवैलक्षण्य-
समाकलनं केवलं मानुषास्तित्वस्य भावसामान्यस्य निस्सामान्यसार्वत्रिकानुभवपुरस्सरं
यच्चिन्तनं विहितमनेनैव सर्वमपि जैविकचित्तवृत्तिविलसनं यावन्मात्रं विविधकलाविदां
तत्प्रयोक्तृणां च सौकर्याय पर्याप्तं तावन्निरूपितं निराकुलम् । कुर्वन्तु नाम साम्प्रतिका

अस्यां दिशि संशोधनं यन्मनःशास्त्रीयादिप्रतिनवतन्त्रज्ञानविज्ञानसौविध्यसाध्यम् । यदि कचित्कचिद्रसतत्त्वमहागारप्राकारसालभञ्जिकानां पादालक्तकलेपने प्रयोजकता स्यादनेन स्वागताहेमेव सुतराम् । परं निश्चयोऽयं यत्त्र महागारः सर्वथा सुदृढः सुस्थिरः सुचिरं स्थास्यत्येव परमानन्दपरमात्मगर्भितश्च । यतोऽत्र दत्तस्यायुर्वेदीयदृष्टान्तस्येव न रसतत्त्वं भौतमात्रम् । तदिदं भावपरमम् । अतो हि नात्र कापि यातयामता कालबाह्यता वा क्लेशयत्यस्मान् । केवलं तत्त्वस्पष्टीकरणार्थं स्थूलोऽप्यसावायुर्वेदीयदृष्टान्तो दत्तः । सत्यमेवानेन हीनोपमानदोषदूषिता स्यादत्र विचारसरणिः । तथापि यथोपनिषत्सु वेदेषु वा तत्र तत्र हीनोपमानप्रायाणि भवन्ति वाक्यानि तथात्राप्यनेयम् । रसपर्यवसायिनि ध्वनिप्रतिपादनावसरे यथाऽऽनन्दवर्धनेन तत्रभवता केवलं ध्वनिमात्रप्रतिष्ठापनार्थमवरोऽपि वस्तुध्वनिराद्यतः स एव नयोऽत्र प्रादर्शीति स्वसमयमर्यादां स्मरन्तो वयं विरमामः । सर्वमिदमस्मत्प्रबन्धेष्वन्यत्र सुविस्तरं निरूपितमिति वाग्विग्लापनेनालम् ।[7]

> सच्चिदानन्द-कृष्णाभ्यां वेदान्ततत्त्वं यदीरितम् ।
> तदेव भरतप्रोक्ते रसतत्त्वे प्रतिष्ठितम् ॥

यथा वेदान्तशास्त्रस्य निर्विशेषसार्वत्रिकानुभवपारम्यं, अध्यारोपापवादप्रक्रियानिरूपणं तत्रान्यतमस्यावस्थात्रयस्य मीमांसनं निस्सन्दिग्धेन विधिना स्वनामधन्येन विदुषा कृष्णस्वामिना च तच्छिष्यतल्लजेन श्रीसच्चिदानन्देन्द्रसरस्वतीस्वामिचरणेन व्यधायि तथैव चिरन्तनेन मुनिनापि तत्रभवता भरतेन महानयमौपनिषदिको नयः प्रगल्भतया समाकलितः स्वकीये नाट्याम्नाये । नात्र काचिच्छ्रद्धाजडता, विश्वासाभासाभासता, हेत्वाभासरूषिता दुस्तर्कसरणिः प्रवर्तिता । केवलं सर्वोपचेयप्रमाणैरेव सकलमपि समनुष्ठितम् । तद्यथा —

> अध्यात्म-लोक-शास्त्राख्यप्रमाणत्रितयान्वितम् ।
> कलामीमांसनं कार्यं सम्प्रदायक्रमो ह्यसौ ॥

अत्राभिनवगुप्तपादैः स्पष्टीकृतमिदमेव स्वटीकायाम् । रुय्यकेणापि न्यरूपि महिम्नो व्याख्यावसरे । अस्मद्गुरुचरणैरवदातकीर्तिभिः कृष्णमूर्तिमनीषिभिः स्वप्रबन्धे सम्यगिदं प्रत्यबोधि[8] । तत्सर्वमाहृत्य कल्पयामश्चेद्ध्यात्मं नाम स्वसंवेदनं, लोकस्तु लोक्यमानो लोक एव यद्देशकालप्रतिष्ठितः, शास्त्रं तावदेतयोः समाहारस्वरूपं ज्ञान-विज्ञानसमन्वितं युक्तिपुरस्सरस्यानुभवस्य निश्चप्रचनिरूपणम् ।

पूर्वसूरीणां सरणिमेव समाकलय्य कलयामश्चेदियमत्रोपलब्धिः —

> अवस्थात्रयनीत्यैव सच्चिदानन्दवेदनम् ।
> स्वात्मनस्तु यथैवास्ते रसस्यापि तथैव हि ॥

> किञ्ज्ञानो रसस्यास्ते स्फुरद्बाह्यकलाक्रमैः ।
> निमित्तहत एवायं ह्यतो ब्रह्मसहोदरः ॥

> वक्रोक्तिचिन्तनं चापि श्रुत्यन्तनयसन्निभम् ।

अध्यारोपापवादाभ्यां सुधीमद्‌भिः प्रवर्तते ॥

ध्वनिसर्वस्वविज्ञानं पुनर्वेदान्तनीतिवत् ।
नेति नेति क्रमेणैव रसपर्यवसायि हि ॥

सच्चिदानन्दघनस्य ब्रह्मणो यत्स्वरूपं तदेवात्मन इति निरुह्लङ्घो वेदान्तसमयः । किञ्च बाह्येन कलानिमित्तेन प्रत्यभिज्ञेयस्तावद्रसानन्दः सर्वथाऽवसितायां कलायां तिरोधत्ते । अत एव निमित्तहतोऽयमानन्दः सर्वात्मना ब्रह्मास्वादसहोदरः । तस्मादेव रसमीमांसावसरे वेदान्तिनामेव नयः समादरणीयः । नो चेद्विचारसरणिरेव विपद्यते । युक्तं हि सूक्ष्मं वस्तु विवेक्तुं सूक्ष्मतरं साधनं कल्प्यत इति । वक्रोक्तिस्तावद्वक्रतापरपर्याया सकलासु कलास्ववलङ्कृतिरूपा । अलङ्कृतीनां सिद्धिस्तु सुतरामध्यारोपापवादयुक्त्यैवेति सह्लावतां विदितमेव । यथा मुखचन्द्र इत्यत्र मुखोपरि चन्द्रस्याध्यारोप आदौ, तद्दर्शनेन सुतरामाह्लादमात्रजनकत्वतात्पर्येण तदपवादोऽपि पश्चात् । एवं कलासामान्यस्य रूपस्वर्वस्वं वक्रतेति प्रतीयते । ध्वनिस्तावत्परम्पराऽनुरणनरूपो रसेन विना न कुत्रापि विरमति । यथा ब्रह्मवादिनां सर्वोपाधिजातं यावत्सच्चिदानन्दघनसाधनं तावन्नेति-नेतिक्रमेणैव निराक्रियते । इत्थं प्रतिपदमस्माभिः कलाशास्त्रस्य वेदान्तशास्त्रोपजीवित्वं सनिदर्शनं सयुक्तिकमपि प्रपञ्चितमित्यलम् ।

यथा वेदान्तविद्यायां जीवन्मुक्तपरम्परा ।
तथा साहित्यविद्यायां महाकविपरम्परा ॥

तदिदमवधेयं यद्‌भारतीयपरम्परायां सर्वप्रमाणापेक्षया निस्सामान्यसार्वत्रिकानुभव एव सार्व-भौमत्वमर्हतीति । अनेनैव शुष्कतर्कापेक्षया स्वरसानुभवरासिक्यं वरमिति स्फुरति । तथा च शतानां शब्दशरणानां शास्त्रञ्जंमन्यानां गड्डुरिकाप्रवाहापेक्षया त्वेक एव ज्ञानविज्ञानवान्मश-स्यते । अनेनैव नयेन वेदान्तविद्यायां वामदेव-याज्ञवल्क्य-श्रीकृष्ण-शङ्कर-रामकृष्ण-रमणा-दीनां जीवन्मुक्तपरम्परेव साहित्यविद्यायां महाकविपरम्परा यद्व्यास-वाल्मीकि-कालिदास-शूद्रक-बाणादीनां, होमर्-शेक्सपियर्-दोस्तोविरिस्किप्रमुखाणां च साहित्यशास्त्रज्ञनामधारिणां महासमूहापेक्षया बलवत्तरेति निश्रीयते । अन्यास्वपि कलासु यथा गीत-नृत्य-चित्र-शिल्पादिष्वपि सरणिरियं समूह्या ।

आत्मतत्त्वं निराकर्तुं सच्चिदानन्दमात्रकम् ।
भारतीयार्षसंस्कृत्यां क्रियन्ते बहुधा क्रमाः ॥

आनन्दद्वेषिभिर्नित्यं दुस्तर्काभासभासुरैः ।
तत्रान्यतम एवासौ रसनिर्वापणो नयः ॥

शास्त्राभासान्शुष्कतर्कान्कलाभासान्दुराग्रहान् ।
विहाय पश्यतां सद्यो रसतत्त्वं स्फुरत्यलम् ॥

भारतीयकलास्वादे कोविदास्तद्विनिर्मितौ ।
कुशला ये च ते प्रायो रसनिर्वचने क्षमाः ॥

अथवा स्वाग्रहोन्मुक्ताः कलासामान्यशीलिताः ।
स्वसंविद्रसिका अत्र समर्था इति निश्चितम् ॥

कुतोऽयं रसविध्वंसनव्यसनविधिरिति विचिन्त्यते चेत्प्रतीयत इदं यत्सर्वदा न केवलं भारते
जगति सर्वत्राप्यात्मवादिभिः सह नैरात्म्यवादिनो विवदन्ते । अमीषां नैरात्म्यवादिनां तु
कण्ठकुठारास्पदं तथ्यं तावज्जगतीहैव सामान्यानामपि मानवानां सदैवानुभवभाव्यं कला-
स्वादनं निरतिशयानन्दस्वरूपमिति, तदेव रस इति व्यपदिष्टमित्यपि । ते तु कथञ्चिद्ब्रह्महानिरा-
करणेऽपि समर्थाः स्युः, यतो हि नानाविधप्रपञ्चनत्वाद्ब्रह्मस्वरूपस्य । परं समस्तजनसेव्यमाने
कलानन्दे न तादृशं भेदमुत्पादयितुं प्रभवन्ति सुतरां सामान्यानुभवविरोधित्वात् । अत
एव तन्निराकरण एव बद्धबुद्धयः खलीकुर्वन्ति स्वानुभूतिमपि । तदर्थमूहातीता अपि
दुर्वादा आद्रियन्ते । किमुत, सात्त्विकं सुखमेव निराकुर्वन्ति, त्रिकरणैरपि द्विषन्त्यहो ।
तस्माद्रसतत्त्वपरिज्ञानार्थं प्रतिनिविष्टबुद्धिरियं दूरीकार्या । विशिष्य भारतीयकलापुरस्सरं
रसानुभूतिप्राप्त्यर्थं तत्तत्कलानां तत्त्व-प्रयोगेषु प्राञ्जलावगाहः कार्यः । अथवा स्वस्वदेशीय-
स्वस्वकालीयकलास्वादेन संभावितहृदयाः स्युः । मुक्तमात्सर्यास्त्यक्तकातर्याः स्युः ।
सर्वमिदं सहृदयलक्षणनिरूपणावसरे लोचनकृता कथितम् । तत्पूर्वमेव नाट्यवेदप्रथमाध्याये
मुनिर्जगाद माननीयम् ।

चतुर्वेदमयं नाट्यं व्यपदिश्य महामुनिः ।
सौन्दर्यनयसर्वस्वं ध्वनतीति सुनिश्चितम् ॥

भारतीयसौन्दर्यशास्त्रशाखिनो मूलं वेदाः । तदिदं तथ्यं नाट्यवेदारम्भ एव मुनिना न्यरूपि ।
अतो हि भारतीयकलानामात्मोपवसतिर्न कदाचन निराकृतिमर्हति ।

पुरुषे नासदीये च रुद्राध्याये यदूर्जितम् ।
स्कम्भोच्छिष्टादिभागे वा तत्रान्वेयो रसोदयः ॥

भूमविद्याप्रकरणे पञ्चकोशविमर्शने ।
अवस्थात्रयचिन्तायां श्रुत्यन्तोक्तिर्यदूर्जिता ॥

साप्यत्र सारतो ग्राह्या तथा श्रीकृष्णवाचिकी ।
विभूतियोगसंदृब्धा नीतिश्चापि महीयसी ॥

रससिद्धान्तसंबद्धा ध्वनिसिद्धान्तयोजिताः ।
सर्वे वादा दार्शनिकाः स्वानुभूतिविशोधकाः ॥

वेदेष्वेव काव्यानां च कलानां च व्यपदेशो भूरि दृश्यत इति नैकेषु प्रसिद्धेषु सूक्तेषु विश्रुत एव ।
तथा चात्र परमानन्दपारम्यं निरतिशयरूपेण जागर्तीति न संशयः । अस्मत्परम्परायामपि
वेदानां काव्यमूलत्वं तत्र तत्र प्रापञ्चि विज्जिका (एकोऽभून्ननलिनात्... इति पद्ये)-भवभूति(उत्तर-
रामचरिते)-राजशेखरादिभिः । अर्वाञ्चोऽप्यरविन्द-गणपतिमुनि-कपालिशास्त्रि-वासुदेव-

शरणाग्रवालाद्योऽत्र समर्थानुवर्तिनः । अतो रसतत्त्वस्य वेदमूलत्वं वेदानामनुभवमूलत्वं च निष्प्रतिहतम् । एतदेवोपनिषत्सु कारिकोक्तानां भूमिविद्यादीनां प्रकरणव्यपदेशेन मतिरथपथ-मावहति । अन्यच्च श्रीमद्भगवद्गीतासु विभूतियोगे भगवता वासुदेवेन कलासौन्दर्यं निसर्ग-सौन्दर्यं मानुषसौन्दर्यं च विविधाभिर्विभूतिभिः पथप्रदर्शकरूपेण सूत्रप्रायं प्राभाणि । किमधिकं, यानि न्याय-साङ्ख्य-योग-मीमांसादीनि दर्शनानि तात्पर्येण वेदान्तदर्शनलक्ष्याणीति हिरियण्णमहोदयो मनुते तानि सर्वाण्यपि वेदोपवसतित्वादेव रसतत्त्वनिर्वचनेऽपि वावदूकतां वहन्ति । तस्माद्रसमीमांसायां दर्शनानां प्रसक्तिः परम्पराविरोधिनीति न केनापि भाव्यम् । तदस्त्वेव मद्गुरुचरणानां कृष्णमूर्तिमहोदयानां काचिदाशङ्का स्वीयरसोल्लासकृतौ यच्छद्दर्शन-प्रस्तावेन सौन्दर्यशास्त्रार्थं न किञ्चिदपि प्रयोजनमिति तत्तेषामेव परमगुरुभिर्हिरियण्णमहो-दयैर्निरस्यते । वस्तुतस्तु कृष्णमूर्तिवर्यस्य विवक्षा स्वानुभूतिविधुरशुष्कशास्त्रकोलाहलमात्रेण रसमीमांसा न कार्येति । तत्र तस्यैव विदुषः परवर्तिन्यो नैककृतयः प्रमाणमिव समुल्लसन्ति यथा *भारतीयकाव्यमीमांसे — तत्त्व मत्तु प्रयोग'* (कन्नडभाषायाम्), 'Studies in Indian Aesthetics', 'Indian Literary Theories: A Reappraisal' इत्याद्याः । तथा भाषण-संवादेषु सहृदयनिष्ठत्वमेव तत्रभवता प्रत्यपादीति वयमेव साक्षिणः ।

भारतीयकलाशास्त्रप्रस्थानानां परम्परा ।
मूल्यमापनमाहात्म्याद्धिद्धासाह्या चिरन्तनी ॥

न केवलं रसदर्शनस्य परमलङ्कार-गुण-रीति-मार्ग-वक्रता-ध्वनि-औचित्यादीनि सर्वाण्यपि काव्यतत्त्वानि कवि-सहृदयसंवेदनविशुद्धानि यथान्यायं स्थानमर्हन्तीति सुनिश्चितम् । यत एतेषां तत्त्वानां प्रतिपादनपूर्वमेव व्यास-वाल्मीकि-कालिदासाद्यो महाकवय इति मानिताः पुनरेताभिः परिकल्पनाभिः प्रत्येकतया विमृष्टा अस्खलितस्थानेष्वेव प्रतिष्ठिताः खलु! यथा त्वलङ्कारमार्गेण 'उपमा कालिदासस्ये'ति, गुण-रीत्यादीनां वर्त्मना 'वैदर्भगिरां वास' इति, वक्रोक्तिपथेन वक्रतापरमाचार्य ('कुन्तके कालिदास' इति कृष्णमूर्तिमहोदयस्य लेख उल्लेख्यः) इति, ध्वनिसरण्या ध्वनिधुरन्धर ("कालिदासप्रभृतयो द्वित्राः पञ्चषा वा महाकवय" इत्यानन्दवर्धनः) इति, औचित्यपद्धत्या परमौचित्यकारीति ("पठेत्समस्तान्किल कालिदास-कृतप्रबन्धानी"ति क्षेमेन्द्रः) इति मतैक्यं वहद्भिः प्रस्थानैः किमन्यद्वा निरूप्यते? अन्यच्चाद्यापि तत्त्वान्येतानि रसध्वन्यौचित्यवक्रतारूपेण सर्वप्रकाराणां काव्यादिकलानां गुण-दोषविमर्शने स्वारस्यमीमांसने च समर्थानि सन्तीत्यस्मदुपज्ञोदितकृतिष्वारभ्य नैकेषां विदुषां रचनास्वपि साक्ष्यमस्तीति सूचयितुमलम् ।

'रसाध्याय' विवेचनम्

वयमिदानीं हृदयेकृतपूर्वपीठिकाः श्रीमतां पोळ्ळाक् महोदयानां 'रसाध्याय'ग्रन्थस्य प्रास्तावि-कावलोकनेन प्रस्तुतं प्रकल्पं निर्वर्तयामः । अत्र तेषां कृतेः प्रास्ताविकमात्रपरामर्शनार्थं हेतु-र्द्विधा । तेषां स्वोपज्ञविचारबाहुल्यमस्मिन्भाग एव निक्षिप्तमित्येकः; अपरस्तु प्रस्तुतप्रबन्धस्य गात्रपरिमितिः ।

स दोषज्ञः कथयति भारतीयसौन्दर्यमीमांसायां काव्येतरकलानां सुषमाविवेचनमुपेक्षितप्राय-मेवेति[9] । किञ्च नायं क्षोदक्षमोऽभिप्रायः । यतः —

कलानां सकलानां तु रस एव परा गतिः ।
संस्कृतेः सुषमा सर्वा तस्मिन्नेव प्रतिष्ठिता ॥

निजानां चित्तवृत्तीनां तटस्थात्मीयदर्शनम् ।
कलासर्वस्वगन्तव्यं रसतत्त्वतयाऽऽदृतम् ॥

साहित्यगीतनृत्तानां चित्रशिल्पादिसंहतेः ।
नाट्यं समाहृतिस्तस्मात्तद्रसः सर्वसंमतः ॥

नाट्यं तु सर्वकलानां समाहार इति स्थितम् । अतो हि नाट्यमीमांसावसरे सर्वापि कलाभाविती त्वन्तर्हिता । अन्यच्च यथा काव्यसौन्दर्यविवेचनार्थमलङ्कारशास्त्रमिति वा साहित्यविद्येति वा ज्ञानशाखाऽस्ति, तथैव गीत-नृत्यादीनां स्वारस्यविवेकार्थं सन्ति सङ्गीतशास्त्राणि । विदितमेव हि वाक्यमिदं सङ्गीतरत्नाकरीयं यद् "गीतं नृत्यं तथा वाद्यं त्रयं सङ्गीतमुच्यते" । अमरकोषोऽपि "तौर्यत्रिकं नृत्यगीतं वाद्यं नाट्यमिदं त्रयम्" इति सहमतं वक्ति । दुर्दैवादिव 'रसाध्याय'कर्ता सङ्गीतशास्त्रग्रन्थानां पल्लवग्राहिपाण्डित्यमपि नात्मनि कलयति । अन्यच्च लेखनसौकर्यदुर्भरे मुद्रापणसौलभ्यरहिते तस्मिन् युगे समस्तकाव्यानामाद्यन्तविमर्शनं दुःशकमेवासीत् । किमुत सकलकलानां व्याख्यानम्? अपि च साम्प्रतिका इव प्राचीनभारतीया न कदापि काव्यानामान्वयिकविमर्शनद्वारा वाचकानां सहृदयतां कदर्थयन्ति स्म । केवलं काव्यानां स्थूलशब्दार्थतात्पर्यपरिज्ञानमात्रं साहाय्यं टीकाभिः कल्पयन्ति स्म । प्रायेणाभिधावृत्तिपर्याप्ता व्युत्पत्तिनैयून्यसमीकरणमात्रतात्पर्या भवति स्म तेषां व्याख्याक्रिया । केवलं पाठकानां भावयित्रीप्रतिभापरिचर्यार्थं सर्वमिदं कार्यजातं प्रवर्तते स्म । यतो हि निर्णिबन्धध्वननशीलतां के वा निरुन्ध्युः? को वापि रसध्वनेरवधिः? अतः साम्प्रतिकविमर्शका इव तदानीन्तनीयाः प्रायेण स्वाभिप्रायाभि-सन्धिभिः काव्यरसिकान्न बा(बो)धयन्ति स्म । एतद्विहाय काव्यसामान्यतत्त्वपरिज्ञानार्थं प्रौढप्रस्थानग्रन्थाः, प्रक्षिग्धपाठ्यपुस्तकानि च सहृदयरुचिरूपणार्थं प्रभवन्ति स्मेति समूहितुमलम् । गीतनृत्यादिकलासु तावत्समस्या विभिन्ना चैतद्धिका च । यतः कला इमाः प्रयोगैकपारम्याः ; ग्रन्थस्थीकरणं तु तासां दुःशकमेव । तथा कृते सत्यपि तद्बोधः सुतरां कठिन एवेति विद्यमानतत्तच्छास्त्रलक्षणग्रन्थैरेव ज्ञायते । अत एव प्रायेण काव्यकलापेक्षया कलान्तराणां ग्रन्थस्थीकरणं विरलमिति वक्तुमलम् । तथापि मुद्रापणयुगपूर्वस्मिञ्जगति पश्यामश्चेद्भारतं विहाय नान्यत्र क्वापि गीत-नृत्य-शिल्पादिकलानां ग्रन्थस्थीकरणमियति प्रमाणे दरीदृश्यते ।

पूर्वोक्तग्रन्थकर्ता पुनश्च भारतीयसौन्दर्यशास्त्रं केवलं साहित्यरसमेव रसत्वेन मनुते[10] नान्यासां कलानामित्यभिप्रयति । एतदप्यलीकभाषितम् । नूनं सन्त्येव केचन साम्प्रतिकास्तस्य साधु-वादिनोऽस्मिन्विषये । परमिदमाक्षेपणं सर्वथा नष्टविवेकमिति निवेद्यते । सर्वमिदं पूर्वमेवा-स्माभिः सविस्तरमन्यत्र प्रत्यपादीति नात्र निर्वहणैषिता क्रियते ।[11] अन्यैरपि विद्वद्भिस्तदिदं

प्रपञ्चितमेव । सङ्क्षेपेण वक्तव्यमिति चेत्सर्वाश्च कलाः कलाकृतां चित्तवृत्तिमूला रसिकानां पुनश्चित्तवृत्तीरिव चोदयन्ति पर्यन्ते तद्दर्शन एव साफल्यमनुभवन्ति । अतः सर्वेऽपि तथा- कथितकाव्यरस-गीतरस-नृत्यरसमुखाश्रितवृत्तिमूलाश्रितवृत्तिचूलाश्रितवृत्त्यन्तराला इति निश्चिते सति को वा विवदीतु?

विद्वानसौ कथयति भारतीयपरम्परायां प्रतिभातत्त्वविवेचनं न सम्यगभिहितमिति[12] । एतदप्यसदेव ।

प्रतिभा तत्त्वतस्त्वन्ते स्वसंवेदनचेतना ।
अनिर्वाच्या ह्यतस्तस्याः कार्यमेव निरूप्यते ॥

निरुपाधिक आनन्दो रसश्चापि तथैव हि ।
तस्मात्तत्कार्यरूपेण प्रभेदा एव कीर्तिताः ॥

एवमेवालङ्कृतीनां गुणानां मार्गगामिनाम् ।
विवृतिर्भूरिशो भाति रसस्यापेक्षया कृतौ ॥

प्रतिभा नामापूर्ववस्तुनिर्माणक्षमत्वमित्याहुः । यत्र सर्वेषां कलाकार्याणां कारणमिति कल्पितं तदेव प्रतिभेत्यवगम्यते । यदि कारणमेव मीमांस्यते तर्हि तत्कस्याप्यपरस्य मूलकारणस्य कार्यत्वेनावगम्यते । एवमनवस्थादोषस्तु दुर्निवार्य एव । अतो हि वेदान्ते ब्रह्मस्वरूपमिव केवलं स्वरूपलक्षणसङ्क्षेपकथनमात्रेण विरम्य प्रतिभातत्त्वमप्यालङ्कारिकाः प्रमेयान्तरमूरी- कुर्वन्ति । नैतत्तावद्दूषणं प्रत्युत भूषणमेव प्रतिभाया अचिन्त्यस्वरूपत्वात् । विदुषा तेन पुराऽन्वयिकाव्यविमर्शनं दार्शनिकान्वेषणमिव नानुष्ठितमित्यपि समाक्षिप्तम्[13] । वादोऽसावपि न क्षोदक्षम इति प्रतिभाति । पूर्वोक्तरीत्या भारतीयकाव्यमीमांसा सहृदये बहुधा श्रद्धाति । न कदापि तमवगणयति । अत एव सिद्ध्यपेक्षया स्वाद एव परमां काष्ठामधिवसति । याश्च संस्कृतयः फलकृपणास्ता एव निजानन्दापेक्षया सर्वमन्यन्महदिति मन्ते । अत्रापि भारते देशे केचन तथा स्युः । परं नैतेषां कलास्वादनार्हतापि सिद्धतीति समयोऽयं सौन्दर्यविदाम् । सङ्क्षेपेण वक्तव्यं चेत्कामापेक्षया सुतरामर्थोऽवर इति । स च कामस्तु हृदयविस्तारपरं धर्ममनुरुन्धन्मोक्षाय पूर्वपीठिकेवापि समुन्नतं पदमधिवसतीति स्वसंविद्भेदिनां साक्षात्कारः । अन्यच्च पराग्रूपिणि द्वैतमूलिनि पाठ्यमात्रावलम्बिनि चान्वयिकविमर्शने कथमिव निस्सामान्यामूर्तेतत्त्वाभिमुखत्वम्? तस्मादिदं वदतोव्याघात इव प्रसज्यते । अत एव तात्पर्यमेवम् —

आस्वादापेक्षया मूल्यमापनं नैव शस्यते ।
अपूपा भक्षितव्याः किं सुषिरं गणयेन्तु किम् ॥

ध्वनिमार्गेण सर्वासां कलानां मूल्यमापनम् ।
सिद्धमित्यपरास्त्येव नीतिरौचित्यचञ्चुरा ॥

आन्वयिकविमर्शनार्थं काव्यानां ध्वनिसिद्धान्तस्तावद्वर्तत एव । ध्वनि-गुणीभूतव्यङ्ग्ययो-राळम्बनेन प्रायेण सर्वाश्च कलाः सहृदयदृष्ट्या व्यवस्थापयितुमलमिति पूर्वमेव प्रतिपादितम् । अत्र नैके पूर्वसूरिणश्च प्रबन्धाश्चास्माकं साक्ष्यमिव यच्छन्ति । कलाविद्धशा तु वक्तृतानाम्नी महती शक्तिरस्त्येव विमर्शनार्थम् । एतेषां सर्वेषामप्युपरि विद्यत एवौचित्यमिति व्यापकं विमर्शनसाधनं येन देशकालानुसारिणी नानासंस्कृति-नागरकताव्यापारसहस्रवैविध्यशोधनी सौन्दर्यमीमांसा हस्तसाद्भवति ।

समग्रसौन्दर्यमीमांसा कापि दार्शनिकदशां न प्राचलदित्यप्यसत्[14] । यतः —

> कलामात्रे रसस्यैव मीमांसा पारमार्थिकी ।
> ततोऽप्युन्नतिरस्त्येव ब्रह्ममीमांसनाध्वनि ॥

विद्वद्वरेण हिरियण्णवर्येण स्वकीये 'Art Experience', 'The Indian Conception of Values' चेति ग्रन्थद्वये निरुपमानविधिना वादाभासोऽयं पूर्वमेव निराकारि । पाश्चात्यानामिव भारतीयानां कलामीमांसा साक्षाद्दर्शनशास्त्राणां प्रकरणेषु नान्तर्गतेति प्रायेण तद्विद्यासौभाग्य-मित्येव मन्महे वयम् । यतो हि यद्यपि सर्वदर्शनस्वारस्यपरिपुष्टापि भारतीयकलामीमांसा स्वतन्त्ररूपेण निस्सामान्यस्वानुभवमेव प्रमाणयन्ती रसाभिव्यक्तिवादे व्यञ्जनाव्यापारविश्रान्ते सुखेन तत्त्वपरिपूर्तिमेधाञ्चकार । अनेन हेतुना सा तु वस्तुतन्त्रपदमुपारूढा सर्वमान्यापि सम-जनि । नो चेन्नैकेषु दर्शनाभासेषु दृष्टलक्ष्मीवतां भवनेषु दरिद्रबान्धवधात्रीव कर्तृतन्त्रक्लेशक्लिष्टा दीनदीनं लुठति स्म । तस्माद्वर्तमानवस्तुस्थितिरेव भारतीयकलामीमांसायाः सर्वथा शोभन-करीत्यवोचाम ।

विपश्चिता तेन भरते वात्सल्यरसस्याभावः प्रदर्शितः[15] । नायं नूतनाक्षेपः । सर्वेऽपि विवेकिनो विशदानुभवशीलिनो निर्विवादमङ्गीकुर्वन्ति यद्रससङ्ख्यामीमांसापेक्षया रससिद्धान्तः परमं गरीयानिति । मुनिनापि भरतेन तत्र तत्र प्रादर्शि स्वागमे यच्छास्त्रविस्तरणं गच्छता कालेन यथोचितरीत्या सूरिभिः कार्यमिति । प्रायेण विधिमिममेव शिरसिकृत्वा नैक आलङ्कारिकमूर्धन्याः स्वं स्वं विचारं यद्रसतोपज्ञोपष्टम्भकं प्राचीकटन् । समग्रमिदं शास्त्र-मखण्डैकवृत्त्या जङ्गमशीलतया च ग्राह्यमिति सुधीमतां मतम् । तदिदं सर्वविद्यानामपि निर्व-र्णनलक्षणमिति च गम्यते । अन्यच्च रतिर्नाम स्वात्मसंतर्पणभाव इति चिन्तयामश्चेदन्यैव या कापि संविद्विच्छित्तिः प्रस्फुरेद्यथा —

> रतिः सकामा शृङ्गारो निष्कामा वत्सलत्वभाक् ।
> अन्यच्च सर्वभावानां रसत्वाप्तिः कचिन्मता ॥

श्लोकोऽयं व्यापकं व्याख्यानमपेक्षत इति नात्र विस्तृतिरिष्यते ।

नाट्यवेदे रसस्तु कलाकृन्निष्ठो न तु सहृदयस्येति कोऽप्याक्षेपः[16] । अत्र कृष्णमूर्तिमहोदय-स्यापि सहमतिरस्तीति सूचनापि काचिच्चकास्ति । अश्रद्धेयमिदं परमार्थतः । यतः —

नाभिज्ञाते सहृदये रसः किं वा प्रयोजनम् ।
कलालोकस्य सर्वस्य वक्रतावत्मैनः परम् ॥

कलाकृद्यदि भोक्ता स्यादृरसस्यानन्यमात्रकः ।
तर्हि सोऽपि भवेत्त्वस्य निर्मितेः सहृदेव हि ॥

सर्वसामान्यविवेकवेद्यं यच्चरमगत्या रसो यदि न सहृदयहृदय आविष्कृतो न भवति
तर्हि सर्वदा सर्वथा च तस्य वैतथ्यं वैयर्थ्यं च सिद्धम् । रसस्य मूलं वस्तुनि
वा कलाकृति वा पात्रे वाप्यनुकर्तरि वा यत्र कुत्रापि स्यान्नाम; परं तत्पर्यन्तभूमिः
सहृदय एव । अस्याः सरण्याः साधनकाले प्रायेण लोल्लट-शङ्कुक-भट्टनायकादीनां
वादाः प्रसृताः स्युः । परं सर्वेऽपि तात्पर्येण सहृदयनिष्ठा इति निभालनीयम् । यथा
सर्वाण्यपि भारतीयदर्शनानि वेदान्तपर्यवसायीनीति हिरियण्णवर्यमतं तथैवात्रापि ज्ञेयम् ।
किं बहुना भरतागमस्य प्रथमाध्याय एव विधातरि देवदानवमानवानां क्रीडनीयकाभ्यर्थनावधौ
रूपकप्रेक्षकलक्षणनिरूपणे च तत्त्वमिदमेव स्फुरति ।

पुनश्च पोल्लाक् वर्यः अलङ्कारशास्त्रं नाट्यमीमांसापेक्षया क्वचिदर्वाचीनमपि मनुते[17] ।
एतदस्माकं विचारमूढमिति प्रतिभाति । यतः —

साहित्यगीतचित्राद्याः कला नाट्ये प्रतिष्ठिताः ।
अतस्तासां च मीमांसा तत्त्वदृष्ट्या सनातनी ॥

अन्यच्च लक्षणादीनां वृत्तीनां चिन्तने मुनिः ।
इतिवृत्तेऽपि तद्धूते छन्दसां विवृतावपि ॥

प्रायेण बहवोऽपि विपश्चिद्वरेण्याः प्राच्यभारतीयसंस्कृतौ कालानुपूर्वींविषये विविधतत्त्वानां
वादानामुपजीव्योपजीवित्वप्रसक्तौ विविधविषयानधिकृत्य तत्तद्ग्रन्थेषु समुपकल्पितस्थलपरि-
माणानतरतम्यविचारे च महतीं विचिकित्सां जनयन्तो विवादशालीनतायामेव स्वात्मानं
धन्यं मन्यन्ते । किञ्च भारतीयनैसर्गिकभावरीतिः काचिद्विभिन्नैव । नूनमेतेषामुपरि
निर्दिष्टानां विचाराणां महत्त्वं किमप्यस्त्येव । तथापि सर्वे च ते भारतीयसंवेदनस्य
हृद्गं न कदाप्यधिवसन्तीति तथ्यम् । केवलमङ्गभूताः खल्वेते । विवेकमिमं
भूयोऽप्युपझ्रावयन्तो महान्तोऽपि मुह्यन्ति मोहयन्ति च । तदिदमत्राप्यापतितम् ।
सर्वमिदं श्रीनरसिंहभट्टेन सम्यक्प्राबोधि स्वीयकृतिषु । नाट्यशास्त्रे षड्विंशलक्षणानां
विवरणे व्याकरणालङ्कारच्छन्दोविचित्यादिषु काव्यमात्रस्य नैकान्यङ्गानि प्रपञ्चितानि । तथा
चेतिवृत्त-वृत्ति-रूपकप्रभेद-सन्धि-सन्ध्यङ्गादिष्वपि काव्यसंबन्धीनि भूयांसि तत्त्वानि तत्र तत्र
प्रस्फुरन्तीति प्रकटमेव ।

मान्यलेखकः क्वचित्काव्योक्तिर्नाट्यप्रयोगापेक्षया गरीयसीति मनुते[18] । अत्र तस्येङ्गितं तु
श्रव्य-दृश्यकाव्ययोर्मध्ये किमपि वैमनस्यं जनयितुमिव प्रतिभाति । रुचीनां वैविध्ये यत्किमपि
कथञ्चिदपि भवितुमर्हति । परं विशुद्धशास्त्रचिन्तनावसरे सर्वासामपि कलानां तत्तन्मात्रा
कापि सार्वभौमिकी स्थितिर्जागर्तीति निश्चप्रचम् । अन्यच्च प्रत्येकोऽपि कलाविशेषः स्वकीयं

वैशिष्ट्यं यन्निजमितिमहितं बिभर्तीति दृष्टचरमेव । यथा गाने याऽमूर्तता विशुद्धभावैकप्रवणता
वर्वर्ति सा प्रायेण शब्दार्थमयकथनात्मकसाहित्ये मनागिव कनीयसी स्यात् । किञ्च
वस्तुन एकस्य स्वभावप्रस्तावे नानाविधानां मूर्तामूर्तानां वस्तूनां वा भावानां क्रियाणां वा
स्थलानां प्रस्तावमपि वक्रवाग्व्यापाररूपेण सुलभतया समानेतुं साहित्ये शक्यं स्यात् ।
परमिदं गीते क्वचिन्नृत्ते वा सर्वथा दुःशकमिति दृष्टचरमेव । अथ च नृत्ये सकलानामपि
सात्त्विकभावानां सूक्ष्मातिसूक्ष्मसुविशदसुनिपुणप्रकटीकरणं रससिद्धेन केनापि कलाविदा
शक्यत एव । अस्याच्छमाक्षिकरसास्वादसदृक्षस्य तीव्रानुभवस्य जानुद्घ्नमपि नायाति
कदाचित्साहित्यरसचर्वणा । चित्र-शिल्पेषु या काप्यधिष्ठानसुषमा सुविस्तृता विलसति सा
प्रतिक्षणोन्मीलितनिमीलितमधुरिम्णि कालप्रवाहतरलिम्नि गाने कथं वा परिलब्धुम्? अतः
सर्वास्वपि कलासु या काप्यनिर्वचनीयविच्छित्तिरन्या नानटीतीति निश्चप्रचम् । तदेव
भङ्ग्यन्तरेण ब्रूते तत्रभवान्काव्यादर्शकारः[19] । अन्यच्च मनोरङ्गस्थले नाट्यायमानत्वेन विना
न कासामपि कलानां कलात्वं, तन्नाम रसास्वादत्वं, शक्यत इति लोकत्रयानुभवः । तदेव
पुनरत्र व्यपदिष्टम् । यथा —

प्रयोगत्वमनापन्ने काव्ये नास्वादसंभवः ।
इति तौतीयवाक्येनाद्वैतं सर्वकलास्वपि ॥

दृढसंशयालुना विदुषा रसः कृतिगतो वा पात्रगतो वा सहृदयगतो वेति पुनश्च संशीतिमुत्थाप-
यति[20] । तदिदमस्माभिः पौनःपुन्येन स्पष्टीकृतम् । हन्त! पुनश्च परापतति प्रकारान्तरेण
पिशाचिकेयं समुच्चाटनार्थम् । उक्तं हि महतः शास्त्रस्य शतशताब्दविस्तृतस्य निर्माणान्वय-
कालस्य विविधानि चिन्तनानि महीयसापि विवेकेन स्वीकार्याणि परीक्ष्याणि निरूप्याणि च ।
तदा ज्ञायत एवेदं तथ्यं यत्कविर्वा गायनो वा नटो वा चित्रशिल्पी वा स्वकलानिर्माण-
चिकीर्षायां यदा प्रेरितश्चान्तर्बहिश्च तदा बाह्यमिदं जगदन्तरात्मनश्चित्तवृत्तिः कोऽपि
सहृदय इव विविधकलाविशेषान्प्रतिमुहुर्निर्वर्ण्य तत्पश्चान्निजकलारचनायां व्यग्रो भवति ।
अस्मिन्नपि काले तदा तदा कर्तृत्वेन भोक्तृत्वेन ज्ञातृत्वेन विमर्शकत्वेन चैव बहुभूमिकामयेन
भावेन स्वमेव निर्माणं परिशीलयन्ननुशीलयन्कामपि लोक-लोकोत्तरभावनामनुभवति ।
तत्पश्चादवसिते सति तत्कार्ये (काव्य-चित्र-शिल्पादिषु) प्रयुज्यमाने वा (आशुकविता-गीत-
नृत्यादिषु) सहृदयस्तद्रसं समास्वादयति । सर्वेष्वेतेषु स्तरेषु कारयित्री-भावयित्रीप्रतिभयोः
पर्यायपातीनि कटाक्षाणि यद्यपि प्रविलसन्ति तथापि सहृदय एव समग्रसमास्वादनसंभवः ।
यतः कलाकृदेकः स्वीयकलाप्रेरणावधौ निर्माणावधौ वापि यदि रसानन्दं समनुभवति
सहृदयास्तु नूनमसङ्ख्याका एव तस्य कलाकृतो निर्माणेन सर्वदा सर्वत्र च स्वादमास्वादयेयुः ।
अनेनापि विधिना ज्ञायते यत्पर्यन्ततो रसः सहृदयनिष्ठो यतः कलाकृदपि मूलतस्तत्त्वतः
सहृदय एव । संदिहानाः केचन मन्येरन्नत्सहृदयोऽपि स्वीयभावयित्रीप्रतिभात्वात्कलाविदेव
किलेति । तदत्रास्माकं समाधानं कलाविदि द्वे अपि प्रतिमे स्थः । किञ्च सहृदये
तावद्भावयित्र्येकैव । अनयोः सामानाधिकरण्याद्भावयित्रीति ह्येकैव तिष्ठति । अतः सर्वेऽपि
सहृदयाः । अन्यच्च सहृदयत्वेन परमार्थत आस्वाद एव चिरं स्थास्यति सत्त्वोद्रेकस्वरूपी;
न तु रजःस्पर्शमयी निर्माणशक्तिरित्यभ्युपगम्यते । इदमेव भारतीयसंवेदनसारं यदास्वादः
साधनापेक्षया वरमिति । सर्वमिदमत्र सङ्क्षिप्तमेवम् —

कवेः कल्पनकाले तु वस्तुनिष्ठा रसाद्वतिः ।
काव्यनिर्माणवेलायां कृतिनिष्ठा भविष्यति ॥

रसिकस्य समास्वादे तन्निष्ठैवेति कथ्यते ।
परं सर्वमिदं स्वस्मिन्सर्वथा सर्वदा स्थितम् ॥

सज्ज्ञावानसौ ख्यापयति क्वचिदत्र भारतीयकाव्यपरम्परा बौद्धमूलीयेति[21] । इदं तु कौटिल्यवैकल्यभ्रान्त्यादीनां नैकेषां व्यभिचारिणां दुर्विलसितमिति सर्वथा भाव्यम् । यतः—

बौद्धानां काव्यमूलत्वं न कदाचन कल्प्यते ।
यतो वेदेषु तद्दृश्यं कलानामपि भूरिशः ॥

सर्वथा चित्तवृत्तीनां कलाद्वाराऽनुशीलनम् ।
समस्तनरलोकाभिमतं नात्र विशिष्यते ॥

इह जगति सर्वास्वपि नागरकतासु संस्कृतिषु च मूलभूताः कलाः स्वस्वोपज्ञा एवेति प्रेक्षावतामपरोक्षम् । काव्यं गीतं नृत्तं चित्रं वा प्रागैतिहासिकमानवा अपि कल्पयन्तः रञ्जयन्ति स्म स्वात्मन इति समूह्यमेव । कापि संस्कृतिः कस्मादपि जनसमुदायात्काव्यप्रकारं वा छन्दःप्रभेदं वा वक्रोक्तिभङ्गन्तरं वा स्वीकुर्यान्न तु साक्षात्काव्यकलामेव । विशिष्य वेद-वेदाङ्ग-कथेतिहासवाङ्मयसमृद्धे सनातनधर्मे निवृत्तिमात्रमुग्धाद्बौद्धात्कथमिव श्रृङ्गारादिपुरुषार्थचतुष्ट्यप्रतिपादकसमयस्य काव्यकलाप्रवरस्य सङ्ग्रहणसंभवः? अस्माभिः पूर्वमेव चिरन्तनतमस्य बौद्धकवेरश्वघोषस्य रामायणानृण्यता प्रत्यपादि । तथा च भारतीयकाव्यस्य सनातनधर्ममूलत्वं च प्रादर्शि नैकेषु प्रकरणेष्वित्यलम्[22] ।

वेदान्तदर्शनं नूनं रससिद्धान्तहृद्गतम् ।
अस्यार्वाचीनता नैव व्याख्याभिर्युज्यतेतमाम् ॥

काव्यशास्त्रकाञ्चनकषाश्ममानिना माननीयेन रसमीमांसा तु गच्छता कालेन 'वेदान्तीकृते'ति च कोऽप्यभियोगः कल्पितः[23] । इदं तावदत्यन्तमसन्मृगमरीचिकेवेति वच्मो वयम् । अवस्थात्रयमीमांसाकेन्द्रभूतस्य माण्डूक्योपनिषदो मूलस्रोतसस्तावदथर्ववेदस्य किल रस-मूलत्वं मुनिना भाषितं पुरा! स्कम्भोच्छिष्टादिसूक्तेषु मुण्डकादिष्वप्युपनिषत्सु रससिद्धान्तस्य जीवातुभूतं ब्रह्मानन्दाद्वैतत्त्वं सुप्रसिद्धमेव । सर्वमिदं समीक्ष्य किं न केनापि याथार्थ्ये ज्ञायते?   विचारोऽयं प्रथितयशोभिरानन्दकुमारस्वामिप्रमुखैर्नैकत्र नैकधा प्रपञ्चितमिति नास्माभिरत्र पुनर्विपुलीक्रियते ।

सहृदयंमन्येन तेन विदुषा क्वचिद्भारतीयानां रुचिभेदपरिज्ञानं नासीद्रसास्वादे लोकनीति-भावनीतीनामपि संवेदनं नासीचेति साकूतं समाक्षिप्यते[24] । विशिष्योदाहरणरूपेण मुग्धा-मन्तर्वह्णीं शकुन्तलां निराकुर्वता दुष्यन्तेनानुष्ठिते निर्घृणकर्मणि रससिद्धान्तस्य किं वा दायित्वमिव च पृच्छति । हन्त! सर्वेषामीदृशामाक्षेपाणां मूलं तु कलास्वाद-लोकास्वादयो-

रद्वैतं कल्पयतां प्रयोजनैकलोलुपानां सत्त्वातिशायिनि साक्षिभावेऽपि रजोरूषितकर्तृत्व-
भोक्तृत्व-मदाहङ्कारहुङ्कारिणां रसवैमुल्यमेव । तदिदं पर्यन्ततो ब्रह्मनिराकरणमेव, प्रत्युत
निजानन्दन्यक्कारणमेव भवतीति पौनःपुन्येन प्रतिष्ठितमस्माभिः । यदि विश्वस्मिन्सत्यस्य
सौन्दर्यस्य शिवस्य चापि भारतीयार्षभावस्य विरोधि किमप्यस्ति चेत्तदिदमेव रसविद्वेषणं
व्युत्पत्त्याभासभावनं समाजसुधारणाभासदुरहङ्कारदुर्विलसितमिति निरूपयामो यथा —

रसास्वादनसंस्कारः शनैर्व्यञ्जनवर्त्मना ।
व्युत्पत्तिं विविधां सूते तत्र का परिदेवना ॥

परन्त्वानन्दमात्रेण सर्वसङ्कल्पताऽद्रतिः ।
सिध्यतीति स्वयं वेद्यं रसस्तव्याज एव हि ॥

नीतिः सामाजिकी रीतिर्व्याख्या वापि यटृच्छया ।
रसानन्दस्य न क्वापि कर्म दुर्वार्यमुच्यते ॥

यथा ब्रह्म समस्तानां कर्मणामुत्तरं तथा ।
रसानन्दोऽपि सर्वासां व्युत्पत्तीनामिति स्थितिः ॥

कदाचिदौचित्यं रसस्य नैतिक-सामाजिकमौल्यमार्गदर्शीत्यनुबध्नता साधुनेन धीमता पुन-
रलङ्कृत्यशिरश्छेदनाय इवास्य तत्त्वस्य कृपणतामपि कथयति[25] । परं न कारणानि
विवृणोति । किञ्चास्मद्विकलनिश्चयस्तावदौचित्यं सर्वासामपि व्युत्पत्तीनां परमायतनमिति ।
यतो दर्शनशास्त्रेषु विवेक इव साहित्यविद्यायामौचित्यम् । अत एव यथा नास्ति-
कास्तिकादिभेदानतिरिच्य सर्वाण्यपि दर्शनानि नित्यानित्यविवेकादिकं स्वस्वचिन्तनश्रेण्यां
मोक्षोपायत्वेन स्वीकुर्वन्ति तथा समस्तान्यप्यालङ्कारिकप्रस्थानान्यौचित्यानौचित्यविवेकम् ।
विवेकमतीत्य नैतिक-सामाजिकादिमौल्यानां को वान्यः प्रबलतमो विद्यते विज्ञानदण्डः?
तस्मादभियोगोऽयमप्यपास्त एव । तद्यथा —

कार्यकारणभावानां व्युत्पत्तीनां तथैव च ।
भूमिका त्वौचिती ह्येकाऽप्यनयालं विवेकिनाम् ॥

ग्रन्थारण्यगन्धेभस्तावदसौ ग्रथनकुशलः स्वस्यालङ्कारशास्त्रपाण्डित्यतपसः परमं फलमिव
रससिद्धान्त एव यातयाम इति गतरस इति चतुरतया कथयति[26] । तदिदं तस्य कृतिगीतस्य
निगूढध्रुवपदमिव प्रतिभाति प्रेक्षावताम् । सावधिर्विवेकः परमविवेको निरविधिरिति प्रत्यहं
प्रत्यूचुरस्मदुपाध्याया महामहोपाध्यायाः श्रीरङ्गनाथशर्माणः साहित्यालङ्कारवेदान्तवर्माणः ।
तदत्रान्वेयमित्यस्माकं भागधेयम् । अद्यापि वाल्मीकिरस्मान्त्रञ्जयति व्यासो निरञ्जयति चेति
कालिदासः समञ्जयति ; कतिपयसहस्रवर्षप्राचीनाः केचन मोहन-हिन्दोल-मध्यमावतीत्यादि-
रागा अनुरागेण निबध्नन्ति ; भारतीयं नाट्यशास्त्रं नैकनट-नर्तकाभिनीतिभिरनुबध्नाति ; साञ्ची-
एल्लोरा-बादामि-देवगडीयादीनि शिल्पानि समाह्लादयन्ति । एवमेवाधुनाधुननिर्मितानि कथा-
नकानि चलच्चित्राणि गेयानि चास्मान्समनमेव सन्तोषयन्ति भूषयन्ति च । सर्वत्र वयं रस-
सूत्रेणैकेन सर्वानपि सुन्दरान्कलामणीन्स्वदेशीयान्विदेशीयान्वा समकालीनानन्यकालीनान्वा

निरुपाधिकं निबध्नीमो निजहृदये च बध्नीमः । किमिदं नालं निदर्शनं रसतत्त्वस्य सदातनत्वा-
र्थम्? नूनमिदं दर्शनमेव । रस-ध्वन्यौचित्य-वक्रतेति चतुःस्कन्धात्मकं भारतीयं सौन्दर्यशास्त्रं
वस्तुतन्त्रत्वेन समग्रस्य विश्वस्यापि गर्वास्पदमिति निवेद्य विरम्यते । तदत्र सङ्ग्रहः —

यातयामं गतरसं रसतत्त्वं यदि स्वयम् ।
तर्हि मानुषसर्वस्वं नष्टमित्यवधार्यताम् ॥

मनसा मानवाः सर्वे मनोवृत्तिः सदातनी ।
विभावा यदि भिद्यन्ते भावानां का नु वा क्षतिः ॥

विभावा अर्थमात्रा हि भावा वै कामरूपिणः ।
अतः सर्वोऽप्यर्थजातः कामसेवापरायणः ॥

पाकपात्राणि भिद्यन्तां पाक एको हि सोऽप्यथा ।
भिद्यते यदि चैकैव बुभुक्षा तर्पणा तथा ॥

चोद्यं तावदभियोगकण्टकमालामध्ये क्वापि निजनिबद्धताक्रकुसुमान्यपि स्रगाभासपरिपूर्त्यै
गुम्फति माननीयो मनीषी ।[27]

स्वाभिप्रायविशुद्धीनां मितिसंशीतयोऽसकृत् ।
विदुषा भणिता आदाविति काचिद्विलक्ष्यता ॥

तदिदं सत्यमिति वयं श्रद्धाना विरमामः ।

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Notes

[1]*A Rasa Reader.*

[2]Pollock (2016).

[3]Hiriyanna (1954).

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[5]Bhat (2016).

[6]Bhat (2003).

[7]Ganesh (2013).

[8]Krishnamoorthy (1982).

[9]Pollock (2016:24).

[10]Pollock (2016:24).

[11]Ganesh (2014).

[12]Pollock (2016:24).

[13]Pollock (2016:24).

[14]Pollock (2016:24).

[15]Pollock (2016:28–29).

[16]Pollock (2016:29).

[17]Pollock (2016:30).

[18]Pollock (2016:32).

[19]इक्षुक्षीरगुडादीनां माधुर्यस्यान्तरं महत् । तथापि न तदाख्यातुं सरस्वत्यापि शक्यते॥ (१.१०२).

[20]Pollock (2016:34).

[21]Pollock (2016:37).

[22]Ganesh and Ravikumar (2016).

[23]Pollock (2016:39–40).

[24]Pollock (2016:47, 53).

[25]Pollock (2016:54).

[26]Pollock (2016:54–55).

[27]Pollock (2016:48).

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Our Contributors

(in alphabetical order of last names)

Naresh Cuntoor

Dr. Naresh Prakash Cuntoor is a Senior Research Scientist, Intelligent Automation Inc., Rockville, MD, US. He has an M.S. and PhD from the Department of Electrical and Computer Engineering, University of Maryland. His research interests include human activity recognition, scene understanding, perceptual organization and computer vision for robotics applications. He pursues Sanskrit with keen interest and is a volunteer for Samskrita Bharati, USA.

Sreejit Datta

Sreejit Datta is currently pursuing his PhD in Comparative Literature at the Centre for Comparative Literature, Bhasha Bhavana, Visva Bharati, Shantiniketan. He is an accomplished musician and has been obtaining training since the past 15 years without a break. He was awarded the Young Artiste Scholarship in the category Hindustani Light Classical Music (with a specialization in Rabindrasangeet, Tagore's songs) by the Ministry of Culture, Government of India for a two-year advanced training in his chosen field in the year 2010.

R. Ganesh

Shatāvadhānī Dr. R. Ganesh is an Engineer and Metallurgist by training, a Sanskrit and Kannada poet, and a practitioner of the traditional art form of Avadhāna known for extempore poetry. He has performed more than 1000 Avadhāna-s till date. A scholar in Kannada and Sanskrit, he gives discourses on Indian culture and Classical Indian

poetry (Sanskrit/Kannada).   He has composed/translated works in Sanskrit/Kannada. He is a recipient of the Rajyotsava Prashasti (1992) and the Badarayan Vyas Samman (2003) amongst others. His D.Litt Degree is on the art of Avadhāna in Kannada language.

K. Gopinath

K. Gopinath is a Professor at Indian Institute of Science in the Computer Science and Automation Department. His research interests are primarily in the computer systems area (Operating Systems, Storage Systems, Systems Security and Systems Verification).   He is currently an associate editor of IEEE Letters of Computer Society (2018-); previously he was also an associate editor of ACM Trans. on Storage (2010-2017). His education has been at IIT-Madras (B.Tech '77), University of Wisconsin, Madison (MS'80) and Stanford University (PhD'88). He has also worked at AMD (Sunnyvale) ('80-'82), and as a PostDoc ('88-'89) at Stanford. He is also interested in understanding the Indic contributions in the area of computer science and more broadly in S&T.

Ashay Naik

Ashay Naik is a software developer at Matific Ltd. and has just released his first book *Natural Enmity: Reflections on the Niti and Rasa of the Panchatantra [Book 1]*. He has a Masters in Information Technology from the Queensland University of Technology, Australia and an Honours in Sanskrit from the University of Sydney, Australia.

Shankar Rajaraman

Shankar Rajaraman is an allopathic doctor, a psychiatrist, and an award-winning Sanskrit poet.   His Sanskrit works include *Bhārāvatāra-stava* (in praise of Śiva), *Nipuṇa-prāghuṇaka* (a Bhāṇa on a contemporary theme), *Vaidyopahāsa-kalikā* (a satire on doctors) and *Devīdānavīya* (illustrating *citrabandha*) for which the Karnataka Samskrit University awarded him with the Professor M. Hiriyanna Sanskrit Works Award in 2013.   *Citranaiṣadham*, his recent work, illustrates *gomūtrikābandha* throughout. He has been awarded the Badrayan Vyas Samman for the year 2016 and Bannanje Puraskara for

the year 2017. He has translated across Sanskrit, English and Kannada. His doctoral thesis is a confluence of psychology and Sanskrit poetics.

Charu Uppal

Charu Uppal, is a Senior Lecturer at Karlstad University in Sweden. Her research, which generally follows under the broad umbrella of media studies focuses on the role of media in bringing about social change, identity formation and mobilizing citizens towards cultural and political activism. Her work has appeared in journals such as Journal of Creative Communication, International Communication Gazette and Global Media and Communication.

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Finis

Dr. K S Kannan, the General Editor of this series of volumes, is the Academic Director of Swadeshi Indology Conference Series, and a Nominated Member of Indian Institute of Advanced Studies, Shimla, Himachal Pradesh.

He is a former Professor at Jain University, Bangalore, a former Director of Karnataka Samskrit University, Bangalore, and Member, Executive Committee, Indian Institute of World Culture, Bangalore.

Prof. Kannan has taught Sanskrit for more than four decades. His publications include over 20 books (authored/edited), and over a dozen book chapters. He has presented over 30 papers at various international/national conferences and has delivered invited talks at many prestigious institutions.

Padmavibhushana **Prof. R. Nagaswamy**
(Former Director of Archeology, Govt. of Tamil Nadu; Expert of world renown in archeology, epigraphy, temple culture and history)

Infinity Foundation India is making this great nation rediscover itself. What is being done now is what should have been done much earlier and that is in the area of Swadeshi Indology. The only prayer that is lived for the past 5000 years of history is on the tongue of every Indian who says "give me critical intellect" - *dhiyo yo naḥ pracodayāt* - and that is being resurrected.

Dr. Pappu Venugopala Rao (D.Litt)
(Scholar, Poet, Musicologist, Sanskritist, Astavadhani, Author and Dance Theoretician)

I find 3 different kinds of scholars today. Scholars who quote text out of context...Scholars who learn from our traditional scholars here, and translate that into English and attack the same gurus who taught them. And there is the third variety of scholars – who never read the original texts, read some second hand or third hand translations, come back from Western point of view and criticize us without ever reading originals. This is the background of many of today's scholars.

This myopic view must be set right.
Yādṛśī bhāvanā yasya siddhir bhavati tādṛśī.