

Phase 10

Formatted Existence Phenomenon

10.9

Panini Ashtadhyayi - Cyclic Values Flow :
(Rigved Samhita – Panini Ashtadhyayi;
Panini Ashtadhyayi – Rigved Samhita)

Abstract

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Abstract

Panini Ashtadhyayi deserves to be appreciated as prime scripture of Vyakaran Vedanga, of values taking to Vedic domain with Sakala Rigved Samhita at its core.

Panini Ashtadhyayi to Sakala Rigved Samhita and back from Sakala Rigved Samhita to Panini Ashtadhyayi is a cyclic approach of Vedas to Vedangas and Vedangas to Vedas.

Present write up, as such may also be appreciated as a step of transition for entering Vedic Mathematics domain of Ganita Sutras, which is going to be phase 11 write ups.

Panini Ashtadhyayi to Vedic Mathematics and back from Vedic Ganita Sutras mathematics to Panini Ashtadhyayi will enrich the chase of hope to be parallel with Vedic knowledge systems.

I

Sakala Rigved Samhita – Panini Ashtadhyayi
Initiation formulations

(i)

- a. अपौरुषीय/ Aporshia,**
- b. पौरुषीय/ Porshia**

1. TCV (अपौरुषीय) = 36 = TCV (अनुबन्ध/ Anubandh).

2. TCV (अपौरुषीय) = 35 = TCV (उदगीथः / Udgith).
3. Six place value system : 35 double digit numbers and 100 first triple digit number.

5 x 7 grid

35 Double digits numbers & 100 First triple digit number of 6 place value system

01	02	03	04	05
10	11	12	13	14
15	20	21	22	23
24	25	30	31	32
33	34	35	40	41
42	43	44	45	50
51	52	53	54	55

36

64

100

(ii)

- a. ब्रह्म / Braham
- b. वैदिक/ Vedic,
- c. लौकिक/ Lokik

4. TCV (ब्रह्म / Braham) = 28
5. TCV (वैदिक/ Vedic) = 25
6. TCV (लौकिक/ Lokik) = 22
7. TCV (वैदिक ब्रह्म / Vedic Braham) = 53
8. TCV (लौकिक ब्रह्म / Lokik Braham) = 50
9. देवनागरी वर्णमाला वर्ण / Devnagri Alphabet letters = 50

II

Core formulations

- a. वेद / ved
- b. लोक / Lok

10. TCV (वेद/ Ved) = 20 = D7, 7-space content spectra

11. TCV (लोक / Lok) = 14 = H4, Hyper cube 4.
12. $20 = 14 + 6$
 $D7 = H4 + H2$
13. Seven space content spectra within 4-space manifests 4-space body (Hyper cube 4) and its spatial orderd (H2).
14. TCV (वेदलोक/ Vedlok / Vedic domain) = $20 + 14 = 34 = H9$ and $20 - 14 = 6 = H2$.
15. $H9 + H2 = 40$
16. TCV (पुरुषजीव / Pursha Jeev) = 40
17. TCV (नचिकेता अग्नि / Nachiketa Agni) = 40
18. TCV (सत्ता देवता / Satta Devta) = 40
19. TCV (अग्नि स्तम्भ / Agni Satambhi) = 40



Brahma

Vishnu

III

चतुर्युग

Chaturyuga

सत्य त्रेता द्वापर कलि

Satya Treta Dwapar Kali

20. (सत्य युग) Satya Yuga
 $400 + 4000 + 400$ दिव्य वर्ष Divya Varsha
21. (त्रेता युग) Treta Yuga
 $300 + 3000 + 300$ दिव्य वर्ष Divya Varsha

22. (द्वापर युग) Dwapar Yuga
 $200 + 2000 + 200$ दिव्य वर्ष Divya Varsha
23. (कलि युग) Kali Yuga
 $100 + 1000 + 100$ दिव्य वर्ष Divya Varsha
24. सत्य त्रेता द्वापर Satya Treta Dwapar
 दिव्य वर्ष Divya Varsha **10800**
25. शाकला ऋग्वेद संहिता ऋचा Shakala Rigved Samhita Richas
10552
26. $10800 = 10552 + 248$
27. $10552 = 8 \times 1319$;
 TCV (आकाश / Akash / Space) = 8
 TCV (सूर्य / Surya/ Sun) = 13
 TCV (ध्रुव / Dhurav / Pole Star) = 19
28. $248 = 8 \times 31$;
 Cube (structural components) 31;
 8 corners, 12 edges, 6 surfaces, 1 volumme, 3 axes, 1 origin
29. Cube (8 sub cubes); 8 cubes structural components = 8×31
30. $248 ; 2^1, 2^2, 2^3$

IV

ब्राह्माण्ड चक्र आकाश / Brahamand Chakra Akash

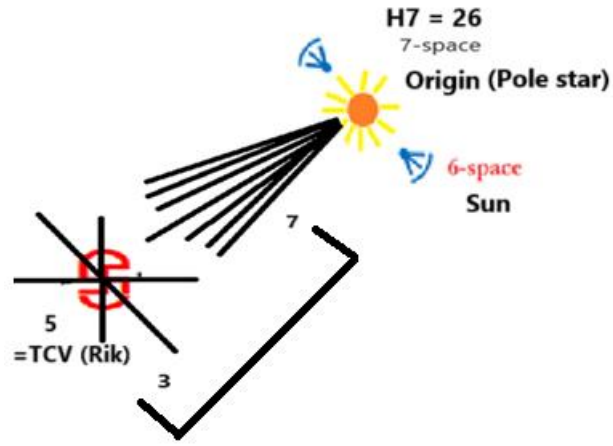
प्रकृति प्रत्यय अङ्ग चक्र आकाश

Prakati Prataya Angya Chakra Akash

31. TCV (ब्राह्माण्ड चक्र आकाश) = 57
32. TCV (प्रकृति) = 18
33. TCV (प्रत्यय) = 15
34. TCV (अङ्ग) = 10
35. TCV (चक्र) = 6
 $TCV (ब्राह्माण्ड) = TCV (प्रकृति) + TCV (प्रत्यय) + TCV (अङ्ग)$
 $43 = 18 + 15 + 10$
36. Numbers range 1 to 18 is of 33 factors;
 $33 = 18 + 15 = TCV (प्रकृति) + TCV (प्रत्यय)$

37. Numbers range 1 to 15 is of 25 factors;
 $25 = 15 + 10 = \text{TCV (प्रत्यय)} + \text{TCV (अङ्ग)}$
38. Numbers range 1 to 10 is of 16 factors;
 $16 = 10 + 6 = \text{TCV (अङ्ग)} + \text{TCV (चक्र)}$
39. Numbers range 1 to 6 is of 8 factors.
 $8 = \text{TCV (आकाश)}$

V प्राकृतिक प्रवाह Prakratik Prahvah



40. TCV (प्राकृतिक) = 21
 $21 = 1 + 2 + 3 + 4 + 5 + 6$
 6-space Sathapatya measuring rod
41. TCV (प्रवाह) = 26
 Hyper cube 7
 7-space origin of 6-space

VI सूर्य / Surya / Sun; ध्रुव / Dhuruv / Pole Star

सूर्य / Surya / Sun;

C0 = cyclic phase, C1 = Letters TCV, C2 = Total cyclic value,
C3 = Grand total value uptill the cyclic phase

C0		C1						C2	C3
1		3	6	2	1	1		13	13
2		3	4	1	0	2		10	23
3		1	3	1	2	1		8	31
4		2	2	1	1	0		6	37
5		0	1	0	1	2		4	41
6		1	1	1	1	2		6	47
7		0	0	0	1	1		2	49
8		0	0	1	0	1		2	51
9		0	1	1	1	1		4	55
10		1	0	0	0	1		2	57
11		1	0	0	1	0		2	59
12		1	0	1	1	1		4	63
13		1	1	0	0	0		2	65
14		0	1	0	0	1		2	67
15		1	1	0	1	1		4	71
16		0	1	1	0	0		2	73
17		1	0	1	0	0		2	75
18		1	1	1	0	1		4	79
19		0	0	1	1	0		2	81
20		0	1	0	1	0		2	83
21		1	1	1	1	0		4	87
22		0	0	0	1	1		2	89

Dhuruv / Pole Star

C0 = cyclic phase, C1 = Letters TCV, C2 = Total cyclic value,
C3 = Grand total value uptill the cyclic phase

C0		C1						C2	C3
1		7	1	3	7	1		19	19
2		6	2	4	6	6		24	43
3		4	2	2	0	0		8	51
4		2	0	2	0	4		8	59
5		2	2	2	4	2		12	71
6		0	0	2	2	0		4	75
7		0	2	0	2	0		4	79
8		2	2	2	2	0		8	87
9		0	0	0	2	2		4	91
10		0	0	2	0	2		4	95
11		0	2	2	2	2		8	103
12		2	0	0	0	2		4	107
13		2	0	0	2	0		4	111
14		2	0	2	2	2		8	119
15		2	2	0	0	0		4	123
16		0	2	0	0	2		4	127
17		2	2	0	2	2		8	135
18		0	2	2	0	0		4	139
19		2	0	2	0	0		4	143
20		2	2	2	0	2		8	151
21		0	0	2	2	0		4	155

VII अष्टाध्यायी सूत्र Ashtadhyayi Sutra

SN	Sutra	TCV	Grand TCV
1	संज्ञा	25	25
2	परिभाषा	29	54
3	अतिदेश	22	76
4	अधिकार	17	93
5	विधि	18	111
6	नियम	22	134

Spatial order value $2 \times 134 = 268 = 4 \times 67$

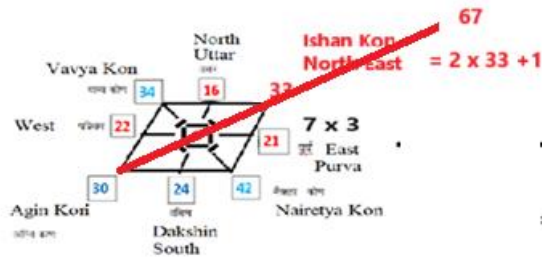
Prithavi (पृथिवि) – Dhurav (ध्रुव)

Earth uptill Pole Star

	SN		TCV	Grand TCV
	1	ध्रुव	19	19
	2	सूर्य	13	32
	3	आकाश	8	40
	4	वायु	13	53
	5	अग्नि	14	67
8	6	आप		
25	7	पृथिवि		

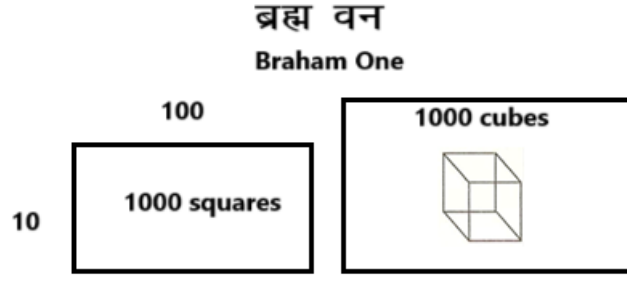
Note :- Flow from Pole star to Fire = 67

Flow from Pole star to Earth = 100



$$100 = 33 + 67$$

$$33 = \text{TCV (ईशान कोण)}$$



VIII

वेद (ved)

कोष्ठक (Koshtak)

सिद्ध कुंजिका (Siddh Kunjika)

TCV (कोष्ठक) = 21

TCV (सिद्ध) = 19

TCV (कुंजिका) = 19

$ \begin{array}{c} 21 \\ \swarrow \quad \searrow \\ 19 \quad 19 \\ \hline 59 \end{array} $	$ \begin{array}{cc} \mathcal{H}6 & \\ 22 & \\ \mathcal{H}5 & h5 \\ 18 & 19 \\ \hline 59 \end{array} $	<i>6-space origin of 5-space</i>
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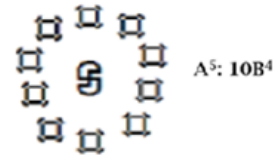
IX

Shakala Rig-Ved Samhita

1. Shakala Rigved Samhita is the principal Vedic Samhita.
2. Vyakaran Vedanga is the principal Vedanga.
3. Panini Ashtadhayayi (Sutras) is the principal Vayakaran (Sutras).
4. To appreciate and for to be parallel with values and features of Ashtadhayayi (Sutras), one is to on cyclic chase : from Ashtadhayayi to Rigved Samhita and back from Rigved Samhita to Ashtadhayayi.

5. Rigved Samhita is organized as :

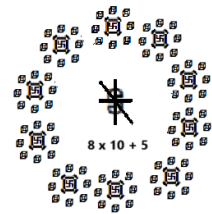
(i) Ten Mandals, parallel with creative (4-space) boundary of ten components of transcendental (5-space) domain.



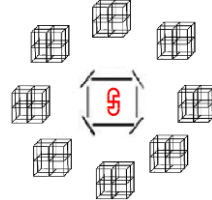
(ii) Eight Austaks, parallel with solid (3-space) boundary of eight components of creative (4-space) domain.



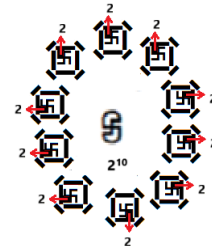
(iii) Eighty five Anuwaks, parallel with eighty five solid (3-space / cubes) components of transcendental (5-space) domain boundary and dimensional frame.



(iv) Sixty four adhayayas, parallel with sixty four sub cubes of solid boundary of eight components of creative boundary of transcendental domain



(v) One thousand and twenty four (1024) Suktas parallel with spatial dimensions frame of transcendental domain enveloped by creative boundary of ten components



(vi) Two thousand and twenty eight vargas parallel with creative dimension frame of transcendental domain enveloped within creative boundary of ten components.

(a) 432000 akshras –

(b) 397265 manifest akshras –

(c) 34765 unmanifest akshras –

(d) 10552 richas / mantras -

(vii) Each richa has distinct rishi, Devta, Chandas and Swara
Here at this stage, TCV values of these formulations are being tabulated

- (a) TCV (ऋषि) = 12, Sathapatya D5
- (b) TCV (ऋषि) = 26, Sathapatya H7
- (c) TCV (छन्द) = 19, Sathapatya h5
- (d) TCV (स्वर) = 15, Sathapatya h4
- (e) TCV (रिचा) = 8, Sathapatya D4
- (f) $10552 = 8 \times 1319$
- (g) $432000 = 4 \times 108000 = 32 \times 26$

X Vyakaran Vedanga

- 1. TCV (व्याकरण) = 24
- 2. TCV (वेदांग) = 30

XI Panini Ashtadhyayi

- 1. TCV (पाणिनी अष्टाध्याय) = 26
- 2. TCV (अष्ट) = 11,
- 3. TCV (अध्याय) = 13,

XII Sankhiya Nishta and Yoga Nishta

- 1. TCV (साख्य) = 20, TCV (निष्ठा) = 22, TCV (साख्य निष्ठा) = 42 = TCV (नैऋत्य कोण)
- 2. TCV (योग) = 12, TCV (निष्ठा) = 22, TCV (योग निष्ठा) = 34 = TCV (वायव्य कोण)

XIII Kapil Muni

- 1. TCV (कपिल) = 15, TCV (मुनि) = 22, TCV (कपिल मुनि) = 37 = TCV (श्री भगवान्)

XIV

Spatial order Creator space

‘2 as 1’ and ‘1 as 2’

Ashtadhayayi opens with ‘आ’ / TCV (आ) = 2
and closes as ‘अ, अ’ / TCV (अ) = 1, TCV (अ) = 1
Chapter 8 opens with command ‘सर्वस्य द्वे’ /
TCV (सर्वस्य) = 19, TCV (द्वे) = 19.

Ganita Sutra 1 text ‘एकाधिकेन पूर्वेण’ is a composition of a pair of word formulations ‘एकाधिकेन’ and ‘पूर्वेण’. TCV (एकाधिकेन) = 34, TCV (पूर्वेण) = 34.

Ganita Sutra 1 formats operative value, ‘one more than one’ and Ganita Sutra 2 formulates operative rule, ‘all from nine and last from ten’. There are 16 Sutras and 13 Upsutras, together ‘29’ operative rules. Value 29 is parallel with TCV (ब्रह्मा / Brahma / creator / Presiding deity of spatial order Creator space.

XV

Ganita Sutras and Upsutras text avails 519 letters.

TCV (एक / Ek / One) = 8, parallel with cube being a set up of eight sub cubes, a format on which value 519 transforms and transits as $519 \times 8 = 4152 = 4000 + 152; = 8 \times 500 + 8 \times 19$.

Within spatial order Creator space, transcendental (5-space) domain is at ‘0’ value state : Hyper cube 5, four folds (3, 4, 5, 6) of summaitron value ‘18’ parallel with TCV (शून्य / Sunya / Zero), Hyper cube 5 is of 11 versions, parallel with which are 11 geometries of ‘0’ to ‘10’ signatures. Ganita Sutra text avails formulations of values (0, 1, 2, 7, 9, 10) while values (3, 4, 5) are at the base, upon which Ganita Sutras mathematical structure is manifested.

XVI

Ganita Sutras and Upsutras text

Ganita Sutras mathematical structure manifestation is initially for 7-space, $H7 = 26$. Text opens with letter ‘ए’ / sixth vowel, TCV (ए) = 6. There are 16 sutras. Values range 1 to 16 is of 29 factors parallel with 16 Sutras and 13 Upsutras. Text avails ‘36’ distinct letters. Text is of 46 words formulations.

Letter wise occurrence frequency in the text is as under :-

Table of frequency of occurrence of letters in text of Sutras and Upsutras

C0 = serial number, C1= letter, C2= frequency of the letter of Sutras, C3 = frequency of the letter of upsutras, C4 =total frequency of letter of Sutras and Upsutras, C5 = Grand total

C0	C1	C2	C3	C4	C5
SN	L	FF	FF	Total	GF
1	अ	67	51	118	118
2	आ	15	12	27	145
3	इ	7	6	13	158
4	ई	0	1	1	159
5	उ	6	8	14	173
6	ऊ	10	5	15	188
7	ऋ	0	1	1	189
8	ए	12	10	22	211
9	ओ	2	5	7	218
10	ऐ	0	1	1	219
11	क्	8	5	13	232
12	ख्	1	0	1	233
13	ग्	3	5	8	241
14	ङ्	1	0	1	242
15	च्	9	7	16	258
16	ज्	1	2	3	261
C0	C1	C2	C3	C4	C5
17	ञ्	0	1	1	262

18	ट्	2	1	3	265
19	ण्	8	5	13	278
20	त्	9	14	23	301
21	थ्	0	1	1	302
22	ड्	3	7	10	312
23	ध्	2	0	2	314
24	न्	18	15	33	347
25	प्	7	5	12	359
26	भ्	4	1	5	364
27	म्	15	9	24	388
28	य्	24	20	44	432
29	र	11	4	15	447
30	ल्	5	3	8	455
31	व्	10	9	19	474
32	श्	5	3	8	482
33	स्	7	6	13	495
34	ष्	3	3	6	501
35	.	4	5	9	510
36	:	4	5	9	519

XVII
Basis base mathematics of Vedic knowledge systems

Vedic Ganita Sutras is the basis base mathematics of Vedic Knowledge systems. This is going to be chased in phase 11.

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