# ORGANIZATION FORMAT OF GANITA SUTRAS 

## Step - 34: Ganita Sutra-4 <br> परावर्त्य योजयेत्। <br> (Paravartya Yojayet)

1. Ganita Sutra-4, being fourth in the sequential arrangement of the text of Ganita Sutras, as such it accept association of artifice 4 for its organization features.
2. Being fourth sutra it avails the features of the fourth letter of the text of Ganita Sutra-1, that is, ' $e^{\prime}$ ' which is of the placement as fourth letter of the fourth row of the varga consonants.
3. The transition from Ganita Sutra-3 to Ganita Sutra-4 is parallel to the transition from artifice 3 to artifice 4 .
4. As such it is a transition parallel to the transition from features of third letter, namely ‘आ’ to fourth letter namely 'ध्’’ of the text of Ganita Sutra1.
5. The formulation 'आध्' is of the meaning and values of half of half that is one quarter ( $1 / 4$ ).
6. This as such shall be leading us from 3-dimensional frame of 3-space to four dimensional frame of 4 -space.
7. One may have a pause here and permit the transcending mind to be face to face with this dimensional feature which here focuses as that 3 -space accepts 3 dimensional frame, while 4 -space accepts four dimensional frame.
8. Further the above features of formulation 'आध्' as of value $1 / 4$, as such focuses upon one of the four dimensions of 4 -space.
9. It would be relevant to note that 3 -space is a linear order space, while 4 space is a spatial dimensional space.
10. With it the transition from Ganita Sutra-3 to Ganita Sutra-4, as such is going to be a transition of the features of transition from linear order
space (1-space) in the role of dimension of 3-space) to spatial dimensional space ( 2 -space in the role of dimension of 4 -space.
11.Further it also would be relevant to note that the second antstha letter namely ' r ' accepts transcendental values index as ' 3 '.
11. Still further it also would be relevant to note that artifice 3 is the value which under the role of Ganita Sutra-1 'one more than before' is of 'triple steps' attainment as ' $1,2,3$ '.
13.Still further here it would be relevant to note that the triple $(1,2,3)$ is a unique triple of artifices which is of the features of the only prime triple as that artifices $1,2,3$ uniquely accept only 1 or the number itself as it divisor.
14.Still further it would be relevant to note that the transcendental value index for first vowel 'अ' is ' 1 ' while the transcendental value index of second vowel ' $इ$ ' is ' 2 '.
15.Therefore the transition from first vowel set up to second vowel set up is of multiple features parallel to transition from different roles of artifice 1 / 1-space / line / interval / hyper cube 1 to artifice 2 / 2 -space / surface / hyper cube 2.
16.Further this transition from first vowel to second vowel is of applied values of transition from linear dimensional order to spatial dimensional order.
17.Still further it is going to be of values of transition from first manifestation layer $(1,2,3,4)$ to the second manifestation layer $(2,3,4$, 5) and likewise would follow the transitions from the transcendental ranges $(1,2,3,4,5)$ to $(2,3,4,5,6)$ and also transition from the self referral range $(1,2,3,4,5,6)$ to the self referral range $(2,3,4,5,6,7)$ and so on.
12. Still further, the applied value of transition from first vowel to second vowel would be parallel to the transition from the format of Ganita Sutra1 to Ganita Sutra-2.
19.This transition feature which takes from Ganita Sutra-1 to Ganita Sutra-2 parallel to transition from first vowel to second vowel, the same under the symmetry rule (of ganita Upsutra-1) augmentation for sequential rule (of Ganita Sutra-1), shall be sequentially leading the transition for the quadruple $(1,2,3,4)$ parallel to the quadruple vowels (अ, इ, उ, ऋ) and
ahead the same would be parallel to quadruple Ganita Sutras (Ganita Sutra-1, Ganita Sutra-2, Ganita Sutra-3, Ganita Sutra-4).
20.One may have a pause here and permit the transcending mind to be face to face with the features of fourth vowel ( $($ ) and parallel to it of organization format of Ganita Sutra-4.
21.One may have a pause here and permit the transcending mind to be face to face with the composition of fourth vowel ( () being 'र्र' + 'ई'.
22.One may further have a pause here and have a fresh look at this composition of the fourth vowel availing pair of letters, namely the second antstha letter, namely ' T ' and second vowel in its elongated form 'ई'.
23.This as such shall be leading us to the pair of transcendental value indices $(3,2+2=3,4) / 3$-space, 4 -space.
24.Still further it would be relevant to note that the dimensional synthesis value for the pair of spatial dimensions, comes to be $(2,2)=2-0+2=4$.
25.In the light of these features, one may approach the working rule of Ganita Sutra-4, that is 'Transpose and Apply' / Transpose and Unite.
26.One may have a pause here and chase the composition of formulation ‘परावर्त्य’.
27.This composition 'परावर्त्य' avails ten letters

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| प् | अ | र् | आ | व् | अ | ᄃ | त् | यू | अ |

28. It would be relevant to note that the artifice ' 10 ' is a double digit artifice availing digit ' 0 ' as place value digit and artifice 1 as first numeral of 10 place value system.
29.Further here it would be relevant to note that 9 numerals ( $1,2,3,4,5,6$, $7,8,9)$ as double digit expressions would be of format $(01,02,03,04,05$, $06,07,08,09$ ).
30.Still further it would be relevant to note that the artifices pair $(01,10)$ constitute a reflection pair of artifices.
31.It is this feature which is to be taken as that it brings into the 'reflection operation' as one of the basic operations of mathematics, science and technology of 4-space.
32.Further it also would be relevant to note that $1+2+3+4=10$, and as such that the artifice value ' 10 ' is attainable in four sequential steps and parallel to it in terms of measuring rod of 1 -space to 4 -space as that number of dimensions of 1 -space to 4 -space come to be $1+2+3+4=10$.
29. Still further it also would be relevant to note that domain boundary ratio of hyper cube 5 is $\mathrm{A}^{5}: 10 \mathrm{~B}^{4}$.
30. One may have a pause here and permit the transcending mind to be face to face with this phenomenon of creator's space (4-space) multiplying itself 10 fold at the boundary of transcendental domain (5-space).
35.The formulation 'योजयेत्' avails seven letters :

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| य् | ओ | ज् | अ | यू | अ | त् |

36.It would be relevant to note that 3 -space accept 7 geometries range within 4-space.
37.This is there because of the spatial dimensional order of 4 -space.
38. The spatial dimensional order, as such avails a pair of dimensions uniting as a dimensional frame which means these are unified by the origin of the dimensional frame.
39.Further it also would be relevant to note that the 0 space plays the role of dimension of 2 -space and also as the dimension of dimension of 4 -space.
40. With it the unifying value for the pair of dimensions of the spatial order shall be of ' 0 ' value as 0 -space is playing the role of dimension of 2space.
41.Still further it would be relevant to note that NVF (Unit) $=$ NVF (Zero).
42. Still further it also would be relevant to note that n space as dimension structures ( $n+2$ ) space as domain.
43.Therefore 1 -space as dimension shall be structuring 3 -space.
44.It is this feature of structuring dimensional domain (as third fold of the manifestation layer) along each of the pair of dimensions of the spatial order that there would be a seven steps long reach which may be given expression as ' $-3,-2,-1,0,1,2,3$ ' and parallel to it there shall be 7 geometries respectively of -3 signature, -2 signature, -1 signature, 0 signature, 1 signature, 2 signature, 3 signature.
45.One may have a pause here and permit the transcending mind to continuously remain in deep sitting of trans and be face to face with the phenomenon of dimensional synthesis mathematics where a pair of dimensions synthesized in terms of the unit value of dimension of dimension.
46.Further one shall have a pause and permit the transcending mind to be face to face with the phenomenon of uniting of dimensions of a dimensional frame of the dimension (as here in the case of spatial order of 4-space), the unification of pair of dimensions amounts to a unification with unit of dimension of dimension provide a joint for the unified range of dimensions as has been in case of spatial dimensions worked out above.
47.There being a joint of zero value for the pair of dimensions of a spatial order (of 4-space) as such the joint would permit a bend (B End), because of which there would be a $4 \times 4$ grid format zoning for the surface (2space), of the features of playing role of spatial dimension for creator space.

| 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- |
| 2 | 3 | 4 | 5 |
| 3 | 4 | 5 | 6 |
| 4 | 5 | 6 | 7 |

48.It would be relevant to note that the above set up as 4 rows and 4 columns is availing quadruple manifestation layers $(1,2,3,4),(2,3,4,5),(3,4,5$, $6)$ and $(4,5,6,7)$.
49.Further as that it avails 7 steps long range ( $1,2,3,4,5,6,7$ ).
50.Still further as that artifice 4 and parallel to it 4 -space is of middle placement of the range.
51.Still further it also would be relevant to note that artifice value 10 and parallel to it artifices $1,2,3,4,5,6,7,8,9,10$ is the range which accept first three values $(1,2,3)$ as primes triples and last three values $(8,9,10)$ as composites triples.
52.The middle quadruple values $(4,5,6,7)$ is parallel to the manifestation layer $(4,5,6,7)$.
53.It would be relevant to note that the fourth column of above $4 \times 4$ matrix is precisely of vertical quadruple $(4,5,6,7)$.
54. One may have a pause here and permit the transcending mind to the added features for transition and transformation from horizontal line to a vertical line.
55.Still further it also would be relevant to note that each quarter of the square would be a square and would be permitting structuring as $4 \times 4$ grid zoning.
56. The dimensional frame (as a bending line) would be available for each of the four quarters and these quadruple dimensional frames shall be synthesesing a two dimensional frame for the synthesized square of 4 quarters squares.
57. With it the quarter wise transposition from placement of one quarter to other quarter, shall be of the spatial format of the reflection operation, which deserves to be chased.
58.Likewise the split of a three dimensional frame into a pair of three dimensional frames of half dimensions and structuring of a cube into eight sub cubes as well deserves to be chased.
59.It would be a blissful exercise to chase pair of orientations of a line, pair of faces of a surface and the split of a three dimensional frame into a pair of three dimensional frames of half dimensions.
60.It shall be taking us from the mathematics of ' 1 as 1 ' of linear order 3space to mathematics of ' 2 as 1 ' \& ' 1 as 2 ' holding simultaneously within spatial order 4-space.
61.It would be blissful to chase the formulation 'OPPOSITE'.
62. Here it would be relevant to note that NVF $(\mathrm{Op})=31=\mathrm{NVF}$ (cube) and that the pair of formulations ( $\mathrm{Op}, \mathrm{Po}$ ) are of setting of the features of format of reflection pair of artifices.
63.Further as that NVF $(\mathrm{OP}, \mathrm{PO})=\mathrm{NVF}($ Cosmic $)$.
64.NVF $($ Opposite $)=$ NVF $($ Cosmic site $)$
65.NVF $($ Site $)=53=$ NVF (axis).
66.As such NVF (cosmic site) $=$ NVF (cosmic axis).

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