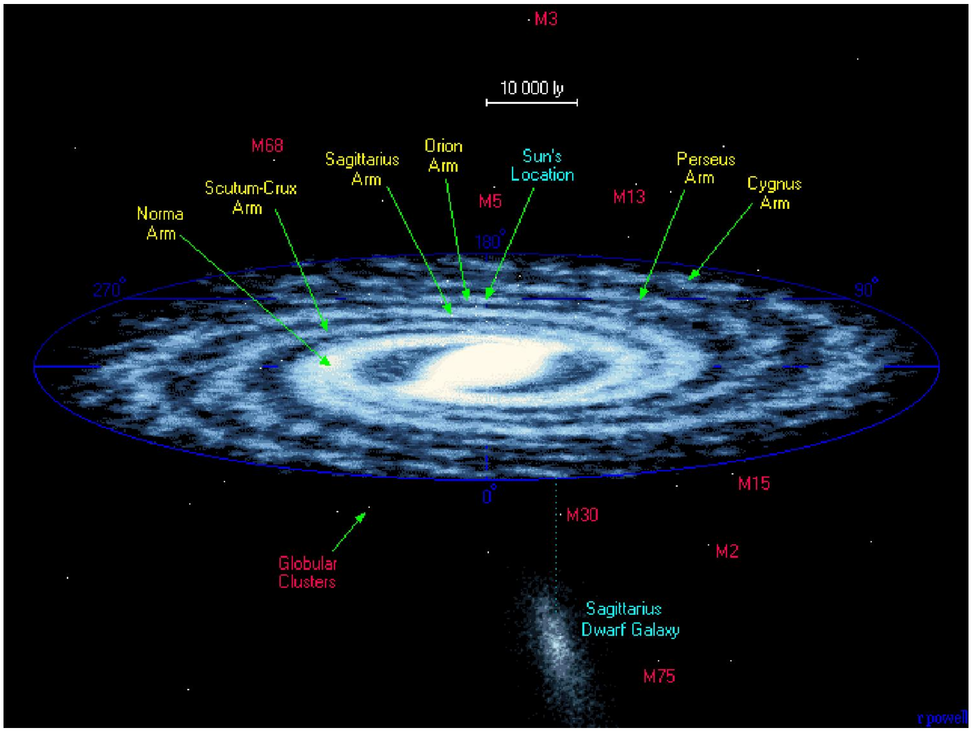
50 Orders of Change in A Combinatorial Universe



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Abstract

Matter may exist in one of three states in the universe. The interactions between these states of matter add up to fifty types of change. Causes of change include: the spectrum of inter-changed states, due to imbalance, failure to synchronize, balance and coherent synchronization, caused by the interplay of three modes of matter, which sum up to 50 (order of powers). This paper describes the three states of matter and how their interactions combine to create fifty types of change.

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Introduction

Three States of Matter

1	Thaama	Black Hole	compressive, dense and inelastic
2	Raja	8 x 8	resonant, shuttling and bonding and expansive
3	Sathwa	9 x 9	radiant and elastic, interactive states

According to a mathematical and scientific de-coding of Vedic literature, there exist three states of matter in the universe.

We shall discuss the Black Hole state of matter at some later point in another paper.

The Raja Guna equals the 8 x 8 state, which is resonant, shuttling and bonding and expansive; and is related to the I Ching, the 64 Yogini of Tantric fame, along with the Lie Algebra E8.

The Sathwa state corresponds to the 9 x 9 world of the Vedic Square and Vastu Shastra, Vedic Feng Shui, as well as the Tai Xuan Jing, the Dao De Jing and the 81 chapters of the Yellow Emperor's Internal Canon.

The following information is derived on a book about Vedic Physics, but redacted and edited for ease of reading, understanding and comprehension in a format more familiar to western readers.

Four Phases

Through a process of permutations and combinations, the three major interactive states of matter produce 4 complementary phases of balance and synchronization, as well as their opposite phases:

Siddhi	**Thushthi**	**Ashakthi**	**Viparyaya**		
coherent & synchronous	balanced and equalised	asynchronous or weak	interactive		
	4+5=9	9+8+11=28		10+18 =28	
8	**9**	**28**	**5**		**50**
1	**3**	**5**	**7**	**9**	**25**
9	**7**	**5**	**3**	**1**	**25**
10	**10**	**10**	**10**	**10**	**50**

A cycle has 4 phases and adds sequentially to:

1+2+3+4=10

which forms the standard count in a cycle.

In addition, this gives the logarithmic base in internal changes that instantly occur within the cycle.

Any rate increase in the substratum must be incremental, which means that the increase is over the previous state.

The graphical display shows a 1 to 10 sequence in rate laid out as combinatorial state in the substratum.

1+3=4	6+10=16	15+21=36	28+36=64	45+55=100
4 (2x2)	16 (4x4)	36 (6x6)	64 (8x8)	100 (10x10)

In the substratum, only one side remains above the ground level vibrations rate of C, while the rest remain below, that is within C or C Cubed.

An oscillating state must be able to divide equally if it is to remain stable. In the same way, if the instantaneous product of colliding Thaamasic interaction is to balance with the expanding Satwic sequential time - like reaction, then the rate of separation in both directions must be equal to half of the Thaamasic product value.

By combining two adjacent states, it is possible to produce divisible states that produce such synchronous combinational Levels, as follows. Splitting by half keeps the rate the same along both axes, and helps retain coherence and synchronization.

2 + 2 = 4	8 + 8 =16	18 +18 = 36	32 + 32 = 64	50 + 50 =100
2/2=1	**8/4=2**	**18/6=3**	**32/8=4**	**50/10=5**

The incremental rates of such combined sequences increase by one unit, based on their own time cycles, and so remain stable and cannot divide in any other way.

The odd number gaps between product of interactions combine as follows:

1	3	6	10	15	21	28	36	45	55

Sequential or additive

3 + 6 = 9	10 + 15 = 25	21 + 28 = 49	36 + 45 = 81

Simultaneous interaction

3 x 3 = 9	**5 x 5 = 25**	**7 x 7 = 49**	**9 x 9 = 81**

Since odd numbers cannot divide evenly as integers, all these interactive combinations are transient, but the following sequential Raja combinations are stable and harmoniously balance interaction and decay.

1	2	3	4	5
1 + 1 = 2	3 + 3 = 6	5 + 5 = 10	7 + 7 = 14	9 + 9 = 18

These total 50, which shows that it can remain in a balanced state, because the recurring gap of 4 is harmonious:

2 x 2 = 2 + 2

2 + 6 + 10 + 14 + 18 = 50

The five orders of combinational change gives 2, 8, 18, 32 and 50 in both directions and 2 + 6 + 10 + 14 + 18 = 50 as sequential combinations.

2 + 6 + 10 + 14 + 18 = 50	2 + 6 + 10 + 14 + 18 = 50

These combinations cover every unit incremental rate, to provide a stable interactive group at all levels above and below the neutral level. Even though the combination process involves uneven incremental counts, the ratio of the change increases only in discrete unitary steps to maintain proportionality.

The incremental ratio ascends unit by unit, thereby maintaining the integer relationship necessary to hold the integer count relationship order in the internal logarithmic (instant) and external numerical (sequential) increments.

The incremental ratio establishes the rationale for the synchronous states that allow two or three axes to oscillate synchronously within a single unit to give a centre of mass.

Moreover, the incremental ratio allows two adjacent axes with the same oscillatory count to remain in locked synchronous, coherent mode. This produces the bonding, effect which is seen as an orbital capture in atomic and molecular states.

When two or three axis counts are unequal, then the counts multiply to produce all the possible variations in interactions.

If synchronous, the counts are absorbed and seem to disappear, but instead the counts superpose along the axis as a changed Linga state (acquire mass) from the previous varying Bhava phase.

A visual example would be that of two gear wheels rotating at different speeds, trying to mesh but are kept apart by the teeth on one contacting in turn all the teeth on the other wheel. Both wheels stay separated by a distance equal to the sum of the two radii.

When the revolutions synchronize, the teeth mesh and the gear wheels move in closer to each other because each tooth occupies the gap in the other wheel, thereby producing a reduction in the volumetric status, which is the equivalent synchronous state of acquiring a mass or super-positioned wave number, or increase in the bonding.

The consequence of this spectrum is that, within the substratum, the maximum number of interactions that can be accommodated is 10_{50} counts.

This combinatorial process keeps any two axes synchronized with a third axis, and keeps the ensemble unified and coherent, with a unified centre of mass action.

To maintain synchrony and coherence, all interacting values must be even - numbered, or else timings in two axes can vary by half an integer. In such circumstances, that would not stay in a relatively static position with respect to other components, in which case synchronization, coherence and resonance would be lost.

The unit increase in the substratum remains within a cycle but an increase from 9 to 10 needs a cycle fraction of 1/9 to 1/10, to change one count. However, the change from 99 to 100 requires 1/99 to 1/100 of the cycle for the same unit.

The first slope is 1/2 , which means the average rate of change per unit is

$$(\sqrt{1^2 + 2^2}\ ) = \sqrt{5}\ /2$$

The maximum self similar increment in rates must be based on what is available at that instant and that gives the following series:

1	2	3	4	5	6	7	8	9	10
0 +1 = 1	2 + 1 = 3	5 + 3 = 8	13 + 8 = 21	34 + 21 = 55	1 + 1 =2	3 + 2 = 5	8 + 5 = 13	21 + 13 = 34	

In order to make it scale invariant, the above incremental series must be reduced to the same slope or first ratio

$$\sqrt{5}\ /2$$

Which gives the final power series as follows:

The factor x = 1.618

1 x /√5 /2 = 2.236 = x^2 = 2.618

2 x /√5 /2 = 4.472 = x^3 = 4.236

3 x /√5 /2 = 6.708 = x^4 = 6.853

5 x /√5 /2 = 11.18 = x^5 = 11.09

8 x /√5 /2 = 18 = x^6 = 18

13 x /√5 /2 = 29 = x^7 = 29

21 x /√5 /2 = 47 = x^8 = 47

34 x /√5 /2 = 76 = x^9 = 76

55 x /√5 /2 = 123 = x^{10} = 123

Conclusion

The argument section ends with explicit references to the Golden Ratio, which indicate the continued importance of the Golden Ratio in the manifestation of matter and the growth process in the universe.

This paper has attempted to lay out the combinatorial processes within the three states of matter, and the interactions between the three states. The subject is difficult and the original poorly written, so the author hopes that the concepts have been successfully conveyed.

The author wishes to iterate here the importance of this section:

2 + 6 + 10 + 14 + 18 = 50

The five orders of combinational change gives 2, 8, 18, 32 and 50 in both directions and 2 + 6 + 10 + 14 + 18 = 50 as sequential combinations.

This sequence of numbers is extremely important in the universe, and especially sheds light on the importance of the numbers 18 and 50 in the universe. For example, the author refers readers to the Vixra paper by Yuri Danoyan http://vixra.org/abs/1306.0166.

In addition, the author refers to the ancient Indian and later Chinese study called Da Yan in Chinese, which is a divination system based on the number fifty that is a form of indeterminate analysis. The latter bears direct relation to the Golden Ratio.

Contact

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'Other people, he said, see things and say why? But I dream things that never were and I say, why not?"

Robert F. Kennedy, after George Bernard Shaw