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Abstract

Einstein's law of time (1905) is expressed as a damaru model. It is represented as analogies of two cones jointing tip to tip being 'X' shape. Upper and lower expanded openings of 'X' if membranous and axial horizontal line results morphology of dumbbell. The diameter of axis of the damaru of time is equal to the size of unit of present time, and both expanding sides represent infinite past and infinite future respectively. Trident model of time (Ψ) is triplet of past, present and future. It is framed in a trident model of time with the help of Newton Trident law (1710). Time, Universe and Energy are a homologous and omnipresent trident. But, here Time (Ψ) is explained in the Trident model in which past, present and future stand on an axis of energy in the expanding Universe.

Key Words: Bimodal of Time, Law of Time, Mathematical modelling, Morphology of Time, Damaru, Newton's Trident. Einstein's law of time

Introduction

Time is angular relation between sun, observer and planet. Sequence of event is time thus it is associated with energy and micro universe. The triangle UTE is trident Ψ , an event is itself UTE, 3 all born at a time from nothing called god particle or higgs boson, HB must be prior to the nature, combined with space, time and energy.

Since, Time is a vector relation between a star and planet.

Therefore, Time $\Psi = \omega^0 =$ \checkmark Sun Observatory Earth

In mathematics of time, Einstein's (1905) model and Newton's (1710) trident model are basic source for damaru - trident bimodal [1,2]. Where, universe U, reaches though expansion energy E, the time automatic reach there. There are many types of tridents. Example:-

1 Universal tridents: U Ψ E

2. Time's tridents: AM, PM, Transition.

3Life's tridents: APT+DNA+NADH

4 Pathogenic triangle of host, pathogen and environment

5 Arithmetic tridents representing: algebra. Value, unit

6 Greek Mathematical Si **Psi** ψ , or $\mathcal{\Psi}$, the 23rd letter of the modern Greek alphabet. Specific Trident of double-u "w' is Simulating in Newton's Trident. Trident is a scientific symbol of energy. But, here Trident is modelled that to be Past, Present and Future. It ever stands on elongating median axial bar of energy with the expansion of universe.



Albert Einstein studied time and made a mathematical formula depicted in Figure 1a. and he made a bi-conical model, represented in figure 2b. The future light cone and past light cone both are expending outside and middle's observers point is hyper super phase of present tense. It is structure of damaru where the Space (Universe) and the Energy are suggested to be threads of damaru model as depicted in figure 1c and 1d.

Specific type of dumbbell (*i.e.* more elongated equi bisidal) is called damaru. Figure 1 represents damaru, a mini musical instrument. It is a hollow bi sided drum is 300gram weight and 15.0 cm. in length. Middle of it, has less diameter, i.e. 5.0 cm and both sides are large in diameter 10.0 cm. On both sides drums, leathers membranes are stretched by strong thin rope passing to and fro over a length of damaru, which is tightening in periphery at middle of damaru. Two strings little longer than half length of damaru are attached to the middle of damaru having a bead at the tip. By holding damaru in middle with free strings and shaking it half round to and fro, both beads of strings hit the drums and makes "dm-dm' Sound. [3,4,5]

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Figure 2 Damaru structure and it's three positions of strings to sound.

Damaru model of Time

The origin of Universe is the origin of infinite past. As, we are estimating the birth of the earth or sum or the milky way. Since here 11 galaxies yet discovered. Hence Infinite Past tense (Adikal) could be taken. Similarly, we estimate future of earth, sun and milky way. But Future of universe = infinite future tense. It is obvious that present tense is at middle of (near) past tense and earlier future tense. Therefore, the size of the future tense could be taken unit of time like next day or next month or next decade or next century or next millennium. Therefore infinite future tense (Anantkal) is considered. Thus, five tense was described in a paper of ten law of time and their respective ten mathematical axiom.[6] If, we assume ultra time like Auto second or Femi to second, The is beyond imagine so that negligible. And width of damaru at centre will be zero. It employs to two cones jointing tip to tip, as the diagrammatic representation is made in figure 1..

Nova day in Jim, Dumbbell is not filled with air. But it is filled with same elements made of it and it employs to physical exercise not for ethnic music. Here, available mathematical literatures in reference 5 to10 employ for the dumbbell of exercise at Jim but not of musical dumbbell called Damaru. Therefore, this study deals with musical damaru. It is some time associated with bell music as represented in reference [5]. One can go for 2 cones formulae, to see head to head, addition of two triangle *i.e.* bi trigonometry concept of damaru model is represented in Figure 5. *i. e.* $-> <- \Delta^{-1} + \Delta = X = Damaru$.

Geometry of damaru

If we draw a rectangle ABCD and make 2 diagonal lines AC and BD. Then we draw a horizontal axis L_1L_2 . We found a shape of Damaru. Action of damaru employs to circular oscillation. Centrifugal force from present point employs to hit future n past by axiom of equality. But sound intensity will depend to tension membrane quality and weight of bead at top of hitting thread. Both striker threads of Damaru at present tense in figure 5, are for drumming sound. It is simulation of supersonic sound, produced by Planets movement around star. "dmdm sound" (or ultra sound at seconds clicks in metaphysical naive) Metaphysicians say to listen ultra sound. "Anhad" means supersonic unlimited not ultra. Where thickness of axis of Damaru = Size unit of present. Since past and future are infinite. So both sides expand and thus we get damaru shaped morphology of time.

Damaru sounding

Mathematical physics of damaru is interesting study that when it was rotating 45^{0} to 90^{0} ; 'to and fro' *i.e.* simple harmonic motion of $\frac{1}{2}$ rotation. Then frequency = wave length / time \propto loudness \propto tension of thin ropes tightened to both drums+ applied force by damaru player. Since on both sides were same membranes and its tightness is equal. Therefore, Past sound= future sound. If, at the centre of damaru, both free threads had length $l_1=l_2$, and free ends of both threads had beads weights $w_1=w_2$ respectively. Damru when rounds up to 45^{0} and returns back 45^{0} (θ) to and fro as a simple harmonic motion. Centrifugal force 'F' of treads moving by rotational angle ω^{0} of threads beads hitting to mini drums = sound intensity.

<=> Damaru =D, Church Bell =B, with different having axis =X and Y respectively.

The line segment x_1x_2 Or $l_1 l_2$ = horizontal (x axis)

The line segment y_1y_2 Or $p y_2 =$ vertical (y axis)

D+B= dumbbell.~> formulae of atheism

D=X, B=1/2X, both filled with air.

F(D) = 2 hits external walls of leather membranes at same time.

F(B)= 1 hit internal wall of bronze metal but common for alternatively hit by an oscillation *i.e.* 1 SHM= 2 clinks of bell.



Figure 3: Geometry of damaru and bell.

Action of damaru model employs to circular oscillation. Centrifugal force from present point hit future and past by axiom of equality. But sound intensity will depend to tension membrane quality .Weight of bed at top of hitting thread = Energy and Universe = 2 threads having beads at tip . Weight of beads α Sound intensity. Speed of rotational oscillation α sound Intensity. Tension of membranes of bi drums α sound intensity. \therefore Sound= k. W.F. T. (K=constant, (medium and here training) Here, it is not divided by distance square. Since it is universal axiom and movement of planets n stars causes super -super Sonic or philosophical ultra -ultra sound, But in the modelling and simulation of damaru is played by high metaphysical exercises and music for magic. There are 5 beats per seconds in slow drumming damaru. 10 beats /S in medium speed and 20 beats in fast damaru playing, as represented in the you - tube linked at reference(12) Stop watch and video when start at same time and keeping eye in watch, counting beats of damaru for all 3speeds =1/2 rotational oscillation number (=frequency).Two treads at centre of damaru have their length L₁=L₂ respectively, then both striker threads will sound same time. If, L₁>L₂, L₂ sounds earlier and *vice versa*. So artistic sound (music) could be played on damaru (12)

Trident model of Times

Trident is three pronged spear weapon of Poseidon or Neptune or Shiva depicted in figure3. French Mathematician, Rene Descartes (1596-1630) wrote '*La geometrie*' in which he included algebra in geometry thus Cartesian geometry revolved influencing both mathematician and philosophers. Newton Studied Parabola of Descartes and gave Name 'Trident' (1710). Newton classified cubic equations into 72 different cases, in which Trident is 66th species in his classification and he gave essentially identical graph in trident form. *i.e.* four infinite legs and the Y axis is an asymptote to two tending trending towards contrary parts . This figures a parabola by which Descartes constructed equations of Six dimensions [7,8].



Figure4 a: Trident of Newton

Figure4 b : Common Trident

Cartesian equation: $xy = cx^{3} + dx^{2} + ex + fxy = cx^{3} + dx^{2} + ex + f$

Trident and serpentine energy holder in figure 3 Snake is energy wave. There are no such systems to move juvenile energy into vertebra. But snake is depicted for energy to run in vertebra and vast universe. The milky way at centre of universe n solar system is centre of milky way.and earth is in centre of planetary system, and Ujjain India the centre of Asia. The form of energy light gravity etc, astral- gravity (solar) earth's gravity or any mega object.Universe is expanding oval. Since, it is infinite, therefore, we can assume spherical and universe is expanding with energy (light) and time. Such that, where ever Universe and energy reach, time automatically reaches with trident of past, present and future. So that in all 360⁰ the tridents of time must make circular shadow ,arising from the centre of universe and the centre of Universe would be base of all tridents of time . The center of the galaxies is suggested to be milky way. The centre of milky way is suggested Solar system , Sun is suggested centre of planetary system and centre of the earth is suggested the centre of continuum. Thus, there are 5 peripheries: Universe, Galaxy, Solar system

, Planets and environmental continuum. And everywhere the the trident of time presents with the trident of past present n future, ever stands on elongating median axial bar of energy with the expansion of universe.

Discussion:

Trident is a scientific symbol of energy. Trident - damaru bimodal is developed from theory of model Newton's Trident (1801) and Einstein's (1901) Times law. An specific Trident di double-u "w' stands on line to transform Psi. great tense have put one hand trident and another damaru as depicted in figure #3* Both stricker threads hit to present and past . since past followed by present to likewise the past future is ready prepared to be real in present in astrology. In the Damaru model of Time, Energy n Universe are the two striker threads.Mathematical modelling is came in practice by many mathematicians [9-19] Sunny singh, Boxton Bill and David peat are of views that Mathematics is language of Nature[20,21,22], Mitesh Vankar and Heisber wrote that maths is queen of physics [24,25]. Therefore maths should be little different from physics. For example : "Balance' of physics is not Balance of maths in arithmetic's. Since balance of physics is neutral (0) While in arithmetic's in dividing solve, if at last remains some balance number (+).In each sentence, Time is present in tense, energy is present in verb. Universe is also already present in cosmos. This earth is itself sky and cosmos. Since about centre of solar system and .middle of galaxy the milky way, all and all is universe. Beyond universe is too itself universe, same time and energy are infinite. An observer can see micro part only. The time from infinite future to infinite past moves. While globe from past continuous progresses to future. Earth moves toward future .

Angular momentum of damaru:

First Law of movement of Newton is that any object is unable to change itself resting state or in moving state without applying force. This property is called moment of inertia =I.

If any particle is at distance L from axis of damaru. if, mass of particle = m.

if any particle has mass m and it has distance L from the its axis, then, I=mL²

If damaru is rotated by angle of w^0 , Then, angular momentum of damaru = I.w.

Since, damru is moving by *w* angular movement, Therefore, in the rotational movement, linear velocity of this particle, v = L w. Then, from Axis of Damaru, in the rotational movement, the linear moment of the particle = mLw.

Therefore, Angular momentum of the particle around rotational axis = mLw, $L = mL^2w$.

Since, $mL^2 = I$, => angular momentum of damaru = I.w.

Kinetic energy of this particle = $\frac{1}{2}$ mv²

But, v = Lw, Therefore Kinetic energy of this particle = $\frac{1}{2} mL^2 w^2$

Here, $mL^2 = I$, Therefore Kinetic energy of this particle = $\frac{1}{2}$ Iw²

Elasticity of bi drum surface:

Elasticity is the reversible expansion of any object within a limit on applying external force. Expansion results a little change in shape called strain. When tightness of thread (fixing both drums by multiple sewing) is increased by circular tightness at the axis of damaru, the area of drums increase in the ratio of force applied in tightness. If applied force is F and area of drum surface is A. Then, tangential Stress (S) = F/A dyne per Cm².

If area of drum is increased little by 'a' cm², Then by Hook's law(1660), S α a.

or $S = \eta a$, Here, η =Elasticity coefficient

Conclusion: Dmaru Model:

The centre of the damaru represents present tense and it's periphery is the Unit of present tense. The broadness of damaro on both sides represents infiniteness of past and future both sides. But we have to consider a limit of mega time e.g. one million years both equally past and future both sides, and a century of present time at middle. Thus the model of damaru would be created. Since, the middle of damaru is present tense , if it is Zepta Second (10^{-21} S) it is negligible, Therefore the shape of damaru would be 'X' morphed. But if we take adequate size of present time , but less than past or future , then it would be damaru model , Since Past and future both are equal, the size of damaru would be double to Past or future , or an addition of both past and future. At the middle of damaru has two threads having beads on it's tips when damaru rotates 45^0 to-and-fro, it produces centrifugal force to threads to move and hit the leather pad of damaru both sides sounding "dm-dm'.

Trident model:

Damaru is associated with bell, as well as, it is also associated with trident in Sawism, Boddisn, and Athenian. Below three forks damaru is hanged by forks, in practice generally. Past, Present and future are the three forks of trident, standing on energy in universe. Middle stand of trident is also representing the Treads of damaru. Since middle fork of trident is arrow shaped up side representing infinite movement of time to be past (History). Therefore, middle fork of trident could be represented another thread of dumaru pairing with first thread of damaru is here stand of trident. Since, acute tip of middle fork of trident represents infinite movement of present times. Therefore, the both side's forks of trident would be future and past. Both sides forks are expanded outside representing that the future and the past are infinite. (just like expansion of damaru from centre).

Since the Universe is ever increasing with the energy in the form of light, universe in oval shape expands and where ever reaches the time also reaches to make a Super trident of Universe energy and Time and at the periphery of universe Time is already present with times trident of past, present and future. The centre of universe is suggested to be the basal tip point of the times trident, where the time universe and energy are originated by big bang, depicted as *Ubi bene ibi* in greec epic could be an indication of Universe, energy and time. The morphology of trident is similar to greec letter Si for S. therefore Time is :Samay'' in India. All over globe, trident and damaroo are associated with each other and both are ethical and mathematical article.

Figure

5a and 5b represent their ethical value and association.



Figure 5 a , ethical value of trindent



Reference

- 1. <u>https://www.researchgate.net/publication/328949278_The_Possibility_of_Time_Travel_through_Einstein's_Special_Relativity_Theory. Retrieved on 10-05-2021</u>
- 2. https://mathworld.wolfram.com/TridentofNewton.html. Retrieved on 10-05-2021
- 3. https://en.wikipedia.org/wiki/Damaru. Retrieved on 10-05-2021
- 4. https://www.yamaha.com/en/musical_instrument_guide/drums/mechanism/mechanism003.html Retrieved on 10-05-2021
- 5. https://hinduism.stackexchange.com/questions/798/why-is-there-a-damaru-attached-to-lord-shivastrishul/800. Retrieved on 10-05-2021.
- Mahar, H D (2017) Interrelationship between law of time and Mathematical axiom International AMSE Conference Nov. 4-5 2017, MS'17, Co-126PP.52.
- 7. https://link.springer.com/chapter/101007/978-3-310-74808-55_37.
- 8. https://en.wikipedia.org/wiki/Trident Retrieved on 10-05-2021
- 9. Curves by Sir Isaac Newtonin Lexicon Technicumby John Harris published in London in 1710. https://www.google.com/search?q=Curves+by+Sir+Isaac+Newtonin+Lexicon+Technicumby+John+Harris +published+in+London+in+1710.&oq=Curves+by+Sir+Isaac+Newtonin+Lexicon+Technicumby+John+H arris+published+in+London+in+1710.&aqs=chrome.. 69i57.3895j0j15&sourceid=chrome&ie=UTF-8.
- 10. Retrieved on 10-05-2021ACADEMIC JOURNAL ARTICLE: Australian Mathematics Teacher
- 11.1988 mathematical exploration by David Wells called Hidden Connections, Domble eanings. Dumbbell Maths By Scott, Paul
- 12.https://www.questia.com/library/journal/1G1-266942892/dumbbell-maths Retrieved on 10-05-2021.
- 13. Basile Charasse, Hung Thai-Van, Christian Berger-Vachon and Lionel Collet; Assessing auditory nerve recovery function with a modified subtraction method: Results and mathematical modelling" Clinical urophysiology 114(7):1307-15
- Stéphane Gallego, Christian Berger Vachon, Lionel Collet Recognition of vowels by cochlear implant using fuzzy logic Claude Bernard University Lyon 1Advances in Modelling and Analysis B 1, 39.79 (Jul 1994)
- 15.Stéphane Gallego, Emmanuel Perrin and Christian Berger-Vachon; 'Recognition of vowels by cochlear implant using fuzzy logic" Hospices Civils de Lyon (Centre Hospitalier Universitaire de Lyon) B 1:103-116 July 1994
- 16. Auditory Brainstem Response (ABR) Latency: Relative Importance of Age, Sex and Sensorineural Hearing-Loss Using a Mathematical Model of the Audiogram, "International Journal of Neuroscience" 67(1-4):187-97(November 1992) DOI: 10.3109/00207459208994784PubMed
- 17. Lionel Collet, C Berger-Vachon, Evelyne Veuillet, V Desreux and A Morgon; "Auditory Brainstem Response (ABR) Latency: Relative Importance of Age, Sex and Sensorineural Hearing-Loss Using a Mathematical Model of the Audiogram" JOURNAL DE PHYSIQUE IV Colloque Cl, supplément au Journal de Physique II, Volume 2,: 85-99,(April,1992)
- 18. Lionel Collet, Evelyne Veuillet, C Berger-Vachon and A Morgon; "Evoked Otoacoustic Emissions: Relative Importance of age, Sex and Sensorineural Hearing-Loss Using a Mathematical Model of the

Audiogram' International Journal of Neuroscience 62(1-2):113-22(February 1992) DOI: 10.3109/00207459108999765PubMed

- 19. Basile Charasse, Hung Thai-Van, Christian Berger-Vachon and Lionel Collet; Assessing auditory nerve recovery function with a modified subtraction method: Results and mathematical modelling" Clinical urophysiology 114(7):1307-15
- 20. Stéphane Gallego, Christian BergerVachon, Lionel Collet Recognition of vowels by cochlear implant using fuzzy logicClaude Bernard University Lyon 1Advances in Modelling and Analysis B 1, 39.79 (Jul 1994)
- 21.Stéphane Gallego, Emmanuel Perrin and Christian Berger-Vachon; 'Recognition of vowels by cochlear implant using fuzzy logic" Hospices Civils de Lyon (Centre Hospitalier Universitaire de Lyon) B 1:103-116July1994
- 22. Auditory Brainstem Response (ABR) Latency: Relative Importance of Age, Sex and Sensorineural Hearing-Loss Using a Mathematical Model of the Audiogram, "International Journal of Neuroscience" 67(1-4):187-97(November 1992) DOI: 10.3109/00207459208994784PubMed
- 23.Baxton, Bill; "The Language of Mathematics: Telling Mathematical Tales' © 2008, https://www.springer.com/gp/book/9780387728582Retrieved on 06-10-2020
- 24. Sunny Singh; "44Mathematics is the language of nature" February 15, 2006 03:44 Emergence 361
- 25.https://serendipstudio.org/oneworld/blog/mathematics-language-nature Retrieved on 06-10-2020



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