

The Physical Time Resemblance as a King Maker

Prasenjit Debnath

Abstract – The physical time, resembles as a king maker, plays the central role to dictate our Universe, what it was, what it is and what it will be. Every matter as an anti-matter, if come together will annihilate each other to form energy to radiate into the Universe. If a matter has a mass of $+M$, the anti-matter has a mass of $-M$; means if we add a matter or an anti-matter, if the total mass increases, the other will decrease if we add that. Suppose we are made of matter having mass of $+M$, the time we travel is forward (positive direction) direction. Then, the anti-selves of us should travel in time in opposite (Negative direction) direction. Our Universe is expanding; the anti- selves Universe must be contracting. So, we can conclude that the net displacement in space and time is zero. The movement made by us is compensated by our anti-selves to make the net spatial and temporal movements are zero. The forward time arrow of us is not a straight line, as time is not running forward at the same speed everywhere in the Universe due to a lot of reasons like non linearity in distribution of masses and nonlinear motions of masses, the nonlinear expansion of the Universe, nonlinear variation of density, existence of Black holes; the net resultant forward time arrow is a closed-curved curvature with no beginning and no end. Also time is discrete in nature, so that we jump from one time instant to next time instant in forward direction. As long as we are matter, the time will move in one direction in a closed-curved curvature movement and the anti-matter will move in opposite direction in also a closed-curved curvature like movement. The annihilation of self and anti-self can occur at every time instant when they switch over each other's time instants. But the annihilation never happens to us because self and anti-self when meet, time is undefined between two successive time instants. In other words, self and anti-self never be in a same time instant. As the resultant spatial and temporal movements of self and anti-self are zero, the term absolute rest is appropriate for Space and time. Both have mostly absolute properties like both are discrete, deterministic. As long as we are matter, in other words, as long as self and anti-self are separated, we will have either forward or backward movement in space and time. If for some reason we annihilate each other, we will lose the concept of forward and backward movement of space and time and also their relative effects on us. The time is deterministic, means given to the past and present initial conditions, future can be completely determined. Future can never be probabilistic. Application of probability in both microscopic and macroscopic world is the ignorance and lack of proper knowledge and mathematical formulation of initial conditions of present and past.

Keywords – Time, Closed Curved Loop, Discreet Time, Deterministic Time, Time Instants, Matter, Anti-Matter, Mass.

I. INTRODUCTION AND THEORY

One of the observable property of time for us is that it is moving forward [1] and it can move forward only [2] in a closed-curved loop with no beginning and no end; with its tangent unidirectional at every time instant. It can never

run back for us due to causality [3]. It means that the present time instant is the very effect of previous time instant. So, successive time instants are in a cause-effect relationship [4]. In the similar manner, future time instant is the effect of the present time instant, in other words, the present time instant formed because the past time instant collapsed and the future time instant forms because the present time instant collapses for us. For our anti-self, the reverse holds [5], [6]. That means, for anti-selves future time instant is the anti-cause of the present time instant, and the same the past is the anti-cause of present time instant. So, for anti-selves, the successive time instants are related in anti-cause and anti-effect relationship [7], [8]. The time is very discreet, thus each one is termed as a time instant. We can never run backward in time due to causality, it means that our past time instant is no more our property, it is the property of anti-selves, and we completely lost of our possession on past time instant. So, for us, our history is preserved and protected with natural selection, can never be manipulated by human being or any other living being, if any, superior to human being. If history is preserved and protected, it implies that our future is also preserved and protected, because near future will become history after a discrete time tenure (some collection of time instants). Another reason of our future preserved and protected, because our future is the unique, preserved and determined history of our anti-selves, which is also protected due to anti-causality for them and in the same way, our unique, preserved and determined history is the future (probabilistic future in the sense that of psychological inability of recognizing deterministic future) of our anti-selves which is also protected. So, what is our and the anti-selves of us role is to lead life as time, the resemblance of a king maker, specifies to be. In other words, our probabilistic future is well known deterministic past for our anti-self and the reverse holds for us and anti-selves. If manipulation is preserved and protected of past and future, we are merely spectators and observers of a Big Game wholly controlled by the Time, the resemblance of a king maker, that runs from Big Bang to Big Crunch. But because time runs in a closed curved loop, Big Bang and Big Crunch are successive time instants. As a human being it is inspirational for us to see many possibilities in front of us, but it is merely an illusion for us as these possibilities elude us to choose the best among many possibilities [9],[10]. But what we choose among many possibilities is the only way can be chosen from. So, the present is also preserved and protected with natural selection. The same thing is true for our anti-selves too. It is universally true that time can only move forward for us [11] and the reverse for our anti-selves. It cannot move in a straight line, if it is so, it would have a point of beginning and a point of an end, means it would have started at an infinite time before and end up at some time later at infinity. Actually it never had a beginning and it

will never have an end because the formation of next time instant is the very cause of collapsing the previous time instant which is causality [12]. Net resultant time for us is moving in a closed curved loop due to many reasons of non-linearity. As a human being, what is reality is very relative and perception dependent. Our perception limitations make the boundary between real and unreal. We know that particle and energy are two facets of same thing. We call particle as matter particle and energy as force carrying particle. Actually all forces such as Gravity, Electromagnetic, weak and strong nuclear forces are all the different effect of the same energy or different forms of same force carrying particles. The same time instant has different effect on different space points, at the same time; the same spatial point has different effect on different time instants. In terms of effect on us, space and time are inter-relative [13], [14]. Other than that, time is an independent variable, but it acts on us differently at different positions in space, it is because at each discrete spatial point, time has different speed, so the effect of time is also different. What we observe in daily life, our anti-selves should observe the reverse of that. Now, the matter we visualize may be matter or anti-matter, so are we, may be made of anti-matter or matter. But our perception can detect only of one type, either matter or anti-matter. The opposite one is not detectable by our perception. It is assumed that time movement in forward direction is also the effect of a force carrying particle but it's property of forwardness totally independent of other variables like spatial variable. In other words it proves its absoluteness. I agree with the Laplace observation that future is absolutely deterministic, given to the initial conditions of present and past which is very valid for both microscopic and macroscopic Universe. Probability is just an apparent truth; underlying truth is that there is no scope of probability, because the best we choose among the many conditions is also observer dependent given the initial conditions of present and past. In other words, it is only the influence of initial conditions that provides present decision which is also preserved and protected by time. As past is analogy to collapsing staircase, we never have a link to go back to the past. The collapsing staircase is the very cause of formation of future time instant. Two events are equally important for time, but time makes one very popular and the other unnoticed due to natural selection property of time. As we jump with discreet time instants, we have an identity transformation, means we get a new identity at each time instant abolishing the previous identity with collapsing staircase. It is analogy to that is we have whole new address at each time instant leaving the previous address completely abolished. In other words, we are changing our destination continuously with every time instant. A clock is a good approximation and a miniature model of time of our Universe, every twelve hours later it get reset again to perform the similar task again and again. Although the clock is a perfect circle, the time curvature may not be a circle for us, but nevertheless a circle may be a good approximation of time for us, applicable for our Universe. Things, that does not make any sense to us and if it is happening around us, has equal importance for time

as things that make deeper sense to us. In other words, every happening has equal importance for time. We never encounter what is called "Continuous Time". It's a pure assumption to be continuous. Rather it is man's inability to recognize the tiny little gap between two discrete time instants. Time is always discrete in nature, very like the other three known spatial dimensions- length, breath and height. It is proved that all three spatial dimensions are not continuous, no matter how smooth they are; always there is a gap between two successive points. That is also true for the fourth dimension the time. The Time governs our past, present and future. Because our psychological non linearity cannot recognize future, it keeps us interesting, in other words provides purpose of life and that's where lies the romance of sports. Two events are equally important for time, but time makes one very popular and the other unnoticed. One event is a tiger attacks a deer and the other one is Brad Pitt releases a movie at the same time. But because of time's non-linear effect on psychology, one natural selection of Time makes one popular and the other unnoticed. A lot of people can be of more ability than Brad Pitt, but they are unnoticed as they are lacking in natural selection property of time.

II. CONCLUSION

Time's absolute nature and properties implies that we live in a deterministic Universe. It never works with probability. Given a set initial conditions of present and past, the temporal and spatial variables can be solved to determine the future. We use randomness when our intuition cannot explain the phenomena, in other words, our lack of ability and knowledge to have proper understanding of the insight. There can never be alternative histories. It only seems to us having many options but past, present and future are preserved and protected by time. There is only one and definite history of a particle. Future can be tractable with accurate knowledge of the present and past states of initial conditions very like a recursive solution. We can try utmost for things that seems to us in our control, but have to accept the fact that time governs our past, present and future and so is true for our anti-selves. We are dependent on the effect of time, but the time never waits for none.

REFERENCES

- [1] Stephen Hawking, "A Brief History of Time", Bantam Books, London 1988
- [2] Stephen Hawking, "The Grand Design", Bantam Books, London 2011
- [3] Stephen Hawking, "How to build a time machine", Available: <http://www.dailymail.co.uk/> created on 27/04/2010.
- [4] Elizabeth Howell, "Time Travel: Theories, Paradoxes & Possibilities", Available: <http://www.space.com/> on 21/06/2013
- [5] "Is time travel possible?", Available: <http://spaceplace.nasa.gov/review/>
- [6] "Time travel", Available: http://en.wikipedia.org/wiki/Time_travel
- [7] "Time Travel", Available: <http://plato.stanford.edu/entries/time-travel/>
- [8] Adams, Robert Merrihew, 1997, "Thisness and time travel", *Philosophia*, 25: pp. 407–15

- [9] Arntzenius, Frank, "Time travel: Double your fun", *Philosophy Compass*, 2006, 1: pp. 599-616
- [10] Benovsky, Jiri, "Endurance and time travel", *Kriterion*, 2011, 24: pp. 65- 72
- [11] Carlson, Erik, "A new time travel paradox resolved", *Philosophia*, 2005 33: 263-73
- [12] "Backwards causation, time, and the open future", *Metaphysica*, 2008, 9: 173-91
- [13] Godfrey-Smith, William, "Travelling in time", 1980, *Analysis*, 40: 72-3
- [14] Grey, William, "Troubles with time travel", *Philosophy*, 1999, 74: 55-70

AUTHOR'S PROFILE



Prasenjit Debnath

born in Agartala, Tripura, India on 15th of March 1979. I am pursuing Ph.D. degree in the Department of Physics in National Institute of Technology Agartala, India.