

Theory of Time Dilation/ Twin Paradox and its Limitation

Sahriar Ahamed

44 Gollamari North Bank (GNB) Khal Road, Khulna, Bangladesh

**Corresponding Author:* Sahriar Ahamed, 44 Gollamari North Bank (GNB) Khal Road, Khulna, Bangladesh

ABSTRACT

Washington DC, capital of USA. Delhi, capital of India are situated at a time difference of 12/13 hours. If we travel this distance by a rocket with a speed of 10mile/second it will take only 9/10 minutes. When we start at this speed from Washington DC to Delhi at 8 PM we will reach Delhi by 8:10 PM, Washington standard time. When we return back to Washington DC it will be 8:20 PM, Washington standard time. Only 20 minutes is gone by the coming and going process. Though it will be Morning in Delhi. But this will happen in case of every short and long distance. No matter you travel at speed of, rocket, Light or more than the speed of Light. If you travel at the speed of light for 2 years and when you will come back again to the earth; it will be passed - a total of 4 years; 2 years for going and 2 years for coming,. Both the traveler and non traveler will pass the same time. If the travelers are twin, they both will be older by 4 years more. There is no such thing as twin paradox will happen. Their look may be a bit different due to gravitational force on the earth.

Keywords: time, space, relativity, time dilation, twin paradox, quantum rotation, Albert Einstein, 4th dimension, 3rd dimension.

INTRODUCTION

There is a renowned theory- "Time dilation" which is discussed in the theory of special relativity. It says that a clock is "slowing down" as determined by an observer who is in a position of relative motion with respect to that clock. Similarly, using the second observer's going at the speed of light notion of simultaneity, it is found that the first observer's clock runs slower by the same factor. Thus, both the observers determine that all clocks in motion relative to that observer run slower than that observer's own clock. [1]

OBSERVATION

Actually that is not the "Time Dilation". It is the "Quantum Rotational differences". The thing mentioned as the clock/Time here is nothing but the measurement of the earth's rotational scale around the sun.

LOGIC BEHIND THE OBSERVATION

The quantum rotation is not the real TIME- the 4th dimension. Minute, seconds, hours, days months, everything is scaled and measured as per the earth's rotation around the sun. One full rotation of the earth is known as year. [2] Day, minutes, hours are the small units of the division of one rotation or one year count. [3]. So,

basically what we call time is the measurement scale of universal quantum rotation. [4]

TIME IS NOT INFLUENCED BY GRAVITY AS WELL

When mentioning about the theory of Time Dilation in a line of wikipedia it is written as like this "A clock that is under the influence of a stronger gravitational field than an observer's will also be measured to tick slower than the observer's own clock" [5] – in this statement it reflects that they are measuring the time/clock on the earth with gravitational force. But gravity has no influences on the real 4th dimension we call as TIME. Gravity and Quantum Rotation activities are parts of time and they can influence the time least than we can think. Due to change/speed of time gravity and quantum rotation happens. [6] "Time doesn't changes due to gravity or quantum rotation" is what I like to say.

Actually, the time we always understand up to these days in perspective of the earth which is based on the rotation of the earth around the sun. Fact is, this rotation is the quantum rotation of universe. So, first and last thing what I like to say that, "TIME is not the QUANTUM ROTATION of the EARTH or the SUN or any other rotations only. But TIME includes all these things". [7]

TIME CAN'T BE TRAVELLED WITH THE FASTEST SPEED

Ever since we know about Albert Einstein and TIME as 4th dimension; It became a renowned theory that we can travel time in the future or past if we go at the speed of light or more than the speed of light. [8] But according to my observation, Speed doesn't help us to across the time no matter whether its same as light or more than light. Because, what we say and understand by time is the earth's perspective observation. So, any speed is not helpful to travel and pass the TIME- PRSENT. We should think that time is another dimension and as per the great scientists Albert Einstein it's the 4th dimension. [9]

Our life in the earth is the 3rd dimensional life. We are living in 3rd dimension and trying to travel another dimension with super/hyper speed which is not logical at all.

LOGICAL EXPLANATION WHEN WE GO AT FASTER SPEED AS LIGHT

Suppose the earth and the mercury is placed at a distance of 56,974,146 miles. [10] If you travel at the speed of light or 186,000 mile per second to the mercury, it will take 306.33 second or 5.10 minutes to reach the mercury. When you will return back it will take another 5.10 minutes. So, the two way travel would take only 10.20 minutes.

A man staying at the earth and a man who is travelling both will experience that the both way travel took 10.20 minutes. There is no scope that the travelling person will experience 10.20 minute and the person who is staying on the earth will experience 20.40 minutes. So, where is the scope of time dilation for the man who is travelling at speed of light or more? and the man who is staying on the earth? The same thing will happen no matter what ever the distance is.

Only crossing the distance time will be passed, it does not matter which is our speed, which is the place we are travelling. Its true that speed can help us to travel faster than usual time. But we have to think that time which we are mentioning it's the perspective of the earth. We are calculating it by the rotation of the earth around the sun. Its not the exact time or the true time which is the 4th dimension. [11]

DEPTH ANALYZE WHEN WE MOVE AT SPEED OF LIGHT

Take a look where light is arising and moving. It is arising from the stars as the sun. It travels in

this space. [12] It helps to keep the planets warms and also help to reflect the colors from the material. When the light of stars fall on material it reflect colors and our eyes are made suitable to look these colors for 3 dimensional universes. So, directly or indirectly light is an element of 3 dimensional elements and arising in 3 dimension and travelling in 3 dimension too. [13] So, in which logic we can say that the speed of light may take us to the 4th dimension? Its true that the speed of light may help us to go faster. Even we can beat the quantum rotation between planets and stars too. Thus we can reach to USA from India at night previous day while it is day in the next day in USA.

LOGICAL ASSUMPTION

Time is the fourth dimension. Everything-matter, nonmaterial, visible, invisible virtual things are included in it. And often we are mixing up this quantum rotation with the 4th dimension -TIME.

CONCLUSION WITH DECISION

So, based on the above fact we can say that twin paradox or time dilation is actually an emotional theory without the practical and basic logic. In the basic assumption of time dilation is defining Time as the quantum rotation, gravity only. But in practical TIME is the 4th dimension and including each and every known unknown visible or invisible things.

REFERENCES

- [1] <https://www.britannica.com/science/time-dilation>
- [2] <https://www.quora.com/The-orbit-of-earth-around-the-sun-is-365-2563-days-The-extra-0-25-factor-is-considered-by-adding-1-extra-day-to-every-4th-year-How-is-that-0-0063-taken-into-account>
- [3] <https://www.youtube.com/watch?v=WLRA87TKXLM>
- [4] <https://physicsworld.com/a/was-the-universe-born-spinning/>
- [5] https://en.wikipedia.org/wiki/Time_dilation
- [6] <https://www.collinsdictionary.com/dictionary/english/fourth-dimension>
- [7] <https://www.morebooks.de/store/gb/book/theory-of-relativity-of-time-and-of-evaluation-of-human-civilization/isbn/978-3-659-75070-0>
- [8] <https://www.scienceabc.com/pure-sciences/what-would-happen-if-you-traveled-at-the-speed-of-light.html>
- [9] <https://www.collinsdictionary.com/dictionary/english/fourth-dimension>

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- [10] <https://theplanets.org/distances-between-planets/>
- [11] <https://www.collinsdictionary.com/dictionary/english/fourth-dimension>
- [12] <https://www.youtube.com/watch?v=--V1nNO9bow>
- [13] <http://www.softeng.rl.ac.uk/st/projects/felib4/Docs/html/Intro/intro-node38.html>

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