# Time Travelling to Present Impossible

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**Abstract -** *Time travel has been accepted by many researchers, yet it is considered as an illusion and mystery. Time is considered as a 4th dimension still it is unique from other 3 dimension. But controlling of time is still impossible. There is no proof stating time travel existed. Same there is no proof that reveal there is no time travel. Though time travelling is not accepted by many researchers the budget allocated on time travelling research is always high. Time travelling machine is invented by none. We are already travelling time by the way of time. Many researchers have provided theories about time but still there is no perfect definition of time. Time quantization is a hypothetical concept since no experimental evidence has been provided that space or time for the matter is quantized. But this paper includes a concept of quantized time. Time travel requires larger accuracy in calculation of time. Slight variation or defect in calculation of time will affect the time travelers with a great impact. As theoretical physist Albert Einstein states that if a particle travels above the speed of light in vacuum will cause it to time travel. But the theoretical concept still considers as an imaginary concept. The time is explained by many researchers with Expressions, formulas and definitions yet there is no specified way for time travelling. There are many theories approached by many philosophers regarding time travelling. But there is no theory that is free from flaws. Every theory regarding time travelling is presumably having problems in it. Time travelling can be done unless these problems are rectified. This paper does not discuss about possibility of time travelling but the series problem lies behind time travelling.*

***Key Words*: Time, Time travel, Time Calibration, Time quantization, Travel time, General relativity, paradox theory, Mind time, dimension key.**

## *1.* INTRODUCTION

Time calibration is a major important factor for time travelling in this paper the definition of time and mathematical calibration of time is discussed. Additionally, the properties of "present in time not stable" will also be described. The main aim of the paper is to state the possibility of returning to the particular time at the initial state of time travelling is not possible.

## 2. LITERATURE REVIEW

Einstein's relativity states that an object travelling above the speed of light can cause time travelling. This theory explains about travelling to future [1]. The communication during time travelling is not possible as stated in quantum non-communication theory. The signals could not transfer while travelling above the speed of light [2]. The grandfather paradox stated that the person invented time machine travels to past and kill his grandfather. As grandfather is dead the father of the time traveler will not be born as such the time traveler will also not be born. As time traveler did not born the time machine will not be created and time travel did not happen. So, his grandfather will be alive. If his grandfather is alive, Time traveler's father will be born and as such time traveler will be born. Time machine will be created. This is called as loop or closed time curve (CTC) [3][4]. According to the theory of grandfather paradox one person who time travel can only know the past or future but making any changes will affect the present. The time travelling to past can be achieved by Euclidian quantum gravity [5] is stated by Stephen hawking. He also arranged a time travelling party and his invitation stated" the party is on June 28, 2009, and the coordinates also mentioned in party invitations. But he gave the invitations after the party starting that time travelers from future will attend his party. This was an experiment conducted by Stephen Hawkins [6]. As time travelling to past is imaginarily possible. Returning to present will be a major issue.

## 3. TIME

Time does not have a beginning and end and it doesn't have a physical relationship with another dimension as it is an imaginary dimension [7]. This imaginary dimension is known as time. Time is differentiated into three state, namely past, present and future [8][9]. Referring to time, things happened occurred is state as past and which is going to happen in stated as future. Things' happening currently is known as present. But "present is not stable" which is explained in this paper.

Even though time can be divided into finite divisions, it is considered as an illusionary element [10]. Mostly time is differentiated as year, month, week, day, hour, minute and seconds. Second is basic SI unit of time. The calculating of time is based on the SI unit. The medieval philosophical writings had revealed that the atom was a smallest possible divisional unit of time and equal to 15/94 of second. Second can be divided into 1/86400 solar days. In May 2010, smallest time interval uncertainty is defined as 12 attosecond. Earth's rotational period is not stable, hence calibration of second differ every time [11]. The first invariable second is calculated using atomic clocks

ephemeris second [12] with the help of vibrating frequency of Caesium Atom is used to calculate SI unit of time (i.e.,) seconds [13]. Many Philosophizes states that the past and future are the memories of incidents happened and are not a part of time. Though Quantized be accepted by everyone. But it is undeniable that time can be subdivided into finite parts. From this it is explained that quantized times have very finite divisions of time which cannot be limited [11]. Aristotle described that time is related to motion [4].

### 3.1 Future

Things that are going to happen in known as future. Mostly in every incident we are attaining future in a flash. Future always depends on the past [14].

### 3.2 Past

Incidents that already happened are considered as past. Mostly the incidents happened are saved as Experience. This past has a direct relationship between the futures. The future incident is always depending upon the past incidents. So, the future incidents have major impact of past [15].

## 4. TIME TRAVEL

Time travelling is moving from one point to another either forward or backward [11]. Since time travelling has many theoretical problems. It is considered as impossible [16]. Time travelling is nothing but travelling faster than actual time will lead to future and travelling slower than actual time will lead to past. The time travelling can be performed by several methods [17]. Majority of physist believe that travelling to future is only possible way of time travelling [18]. Einstein's relativity gave a theoretical explanation for attaining future. But no one had gave a clear information for attaining past [19][20]. Attaining the past by time travelling is physically impossible [21]. Stephen Hawkins stated that time travelling to past can be achieved by with the help of Euclidian quantum gravity [5]. Time does not move or flow. Two sources of time travelling are i) special and general theory of relativity ii) Time reversal invariance of the fundamental law of physics. Paul Horwich's 1987 provide information that time is asymmetric in shape. Travelling from past to future has a lot different than travelling future to past [22].

## 5. GENERAL RELATIVITY THEORY

As per theory of general relativity an object in vacuum travels faster than speed of light can travel forward in time (i.e. future). Let us consider a general relativity equation

$$\mathbf{E= mc^2}$$

Where,

E= energy
m= mass of the object
c= velocity of the light

As stated above an object in vacuum at requires mass travels more than the speed of light will create an amount of energy. But still now there is no discovery of particle that travel faster than light. As light composed of photons, it has no mass similarly there is no assurance for any presence of mass for the particle to be discovered. The discovered particle will be displaced at a speed more than the speed of light with the help a machine. Time travel is not possible that time, displacement only possible. Because travelling speed increases at the same time travelling time was reduced. Travelling in presence of time is not time travel. Because travelling based on time involves displacement and energy based on time. But time travel not only involves displacement and energy it also involves pressure, temperature, friction, vibration and momentum. With the help of the energy stated above object can move from one place to another easily. But it is known as displacement or teleportation. Displacement or teleportation is not equal to time travel. Because teleportation helps to travel one place to another place within the same dimension. But time travel helps to travel time in different dimension.

## 6. DIMENSION KEY

As time being a dimension, it requires a lot of energy to travel from one dimension to another. This energy is known as dimension key. Let us consider an object, that object travelling at a high speed could have a change its molecular structure by the way of speed, pressure and temperature. So, the energy used to travel time will make a change in molecular structure of the object. Light cannot pass through every object. So, the energy which is caused by travelling more than the speed of light cannot be the dimension key.by changing the frequency of the vibration, it can pass through any object. So, vibration can be the dimension key.

**x**, **y**, and **z** = positive dimensions
**x'**, **y'** and **z'** = negative dimensions
$\mathbf{t_1}$, $\mathbf{t_2}$ and $\mathbf{t_3}$ = various periods of time

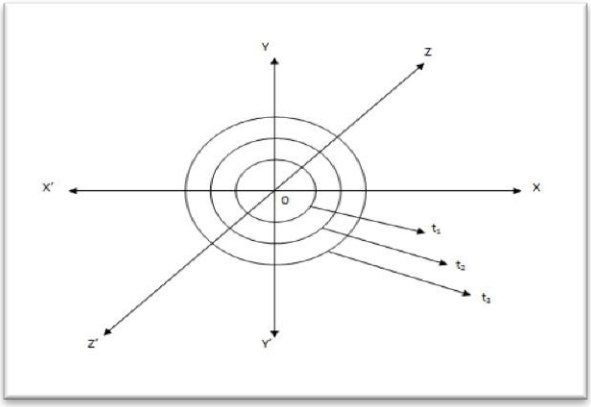


**Fig -1**: Object movement

According to the diagram x, y and z are consider as a three positive dimensions and x', y' and z' are consider as a three negative dimensions. At the same time $t_1$, $t_2$ and $t_3$ are various periods of time. "0" is consider as an object travel to the dimensions. In this diagram we clearly known as a generally three dimensions (x, y, z and x', y', z') are travel positive and negative side through linear motion, but time travel through the cyclic motion.

## 7. MIND TIME TRAVEL

According my opinion human mind is the only source that travels faster than any other particle from one place to another. But there won't be any physical contact with initial and final point. Because the time travel in mind is an imaginary one. With this mind time travel one can only imagine travelling to past or future. There won't any physical relationship. Indulgence of any physical relationship is still not possible. As human imagination will be changing frequently, and it also an imaginary one.

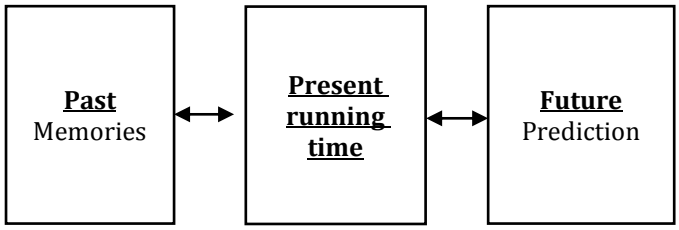


**Fig -2**: Mind Time Travel

Time travelling can be made with human imagination as follows,

### 7.1 Present to past

Still travelling to past is impossible thing. But imagination of occurrence in past can be accurate with the help of the pictures, videos and memories. By this way it is obvious that one cannot change anything but recalling of those events in the past will be accurate.

### 7.2 Present to future

One cannot know the future accurate but can predict the future by calculating the present. As this is only a prediction it may not be true.

## 8. TIME CALBRATION

As stated, time calibration plays a vital role in time travelling. Because everything is based on time. So, time calculation is very important in time travelling process. The time travelling period from initial to end is decoded only by calculation of time. In most cases, time travelling period is divided into year, month, dates, hours, minutes and seconds. But the time is divided into infinite loop after seconds which is mostly neglected every time.

**Table -1:** Common Time Specification [23]

| | |
|---|---|
| 1Year | 365days |
| 1Days | 24Hours |
| 1Hour | 60Minutes |
| 1Minute | 60Seconds |

**Table -2:** Scientific Time Specification [23]

| Unit | Definition |
|---|---|
| Millennium | 1000years |
| Century | 100years |
| Decade | 10year |
| 1 year(At average) | 365.242 days or 12 months |
| Common year | 365days |
| Leaf year | 366days |
| Quarter | 3months |
| 1 Month | 28.31days or 4weeks |
| 1 Week | 7days |
| 1 Day | 24hours |
| 1 Hour | 60minutes |
| 1 Minute | 60seconds |
| Decisecond | $10^{-1}$second |
| Centisecond | $10^{-2}$second |
| Millisecond | $10^{-3}$second |
| Microsecond | $10^{-6}$ second |
| Nanosecond | $10^{-9}$ second |
| Picosecond | $10^{-12}$ second |
| Femtosecond | $10^{-15}$ second |
| Attosecond | $10^{-18}$ second |
| Zeptosecond | $10^{-21}$ second |
| Yoctosecond | $10^{-24}$ second |

## 9. DEEP TIME SPECIFICATION

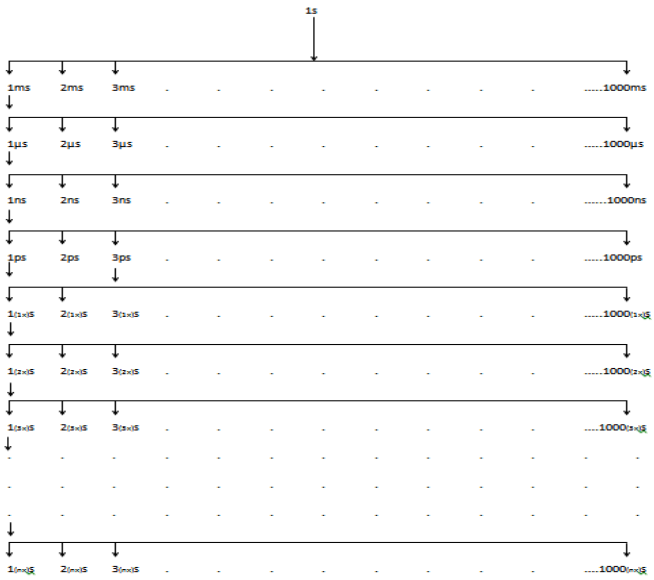


**Fig -3**: Deep time

From the above [table 2], it is proven that a second has a 1yoctosecond in it. Any physical unit can be divided into several subdivisions.

From the chart [Fig.3], it is proved that the time can be divided into numerous subdivisions which are not yet discovered.

Till data there are no inventions as divided that could divide time minutely, but it is definite that the time can be subdivided into several minute units. Time has definite gap between each division, hence change of subdividing time is possible. This state that the universal time cannot be so precise that is cannot be calculated.

Commonly the time in seconds can be subdivided till yoctoseconds [Table 2]. The above chart [Fig.1] states that the picoseconds can be divided into 1000 times. Time can be divided into **1(1x)s, 2(1x)s, 3(1x)s, .....1000(1x)s.** Similarly **1(1x)s** can be divided as **1(2x)s.** By dividing into numerous time it is defined as **1(2x)s, 2(2x)s, 3(2x)s, .....1000(2x)s**. This chart helps to state that the time cannot be divided so precisely. 10picosecond can be predicted but the divisions after 10picosecond **1(nx)s, 2(nx)s, 3(nx)s, ....1000(nx)s** is very hard to predicted[fig.1]. If **1(1000nx)s** is predicted it is impossible to predict the subdivisions of **1(1000nx)s** to **1(1001nx)s**
etc. Mathematical numbers don't have an end so it is impossible to predict the subdivisions of time.

The current time is known as present. But it is impossible for any individual to calculate present time and its subdivisions so precisely. Hence from the chart [Fig.1], the time present doesn't exit, and it can be known from mathematical calculations.

Calculation of time is a major important factor in time travel. Time travelled time, destination time& return time can be known by time calculation. The above chart defines that the precision of present& destination time cannot be calculated. However, the destination time need not to be precise, but the return time should be accurate& precise to return to the exact time when time travelling initiated. But the calculation return time so accurate& precise is not possible. The time can be divided minutely, but no one could calculate the subdivision of time. Hence time traveler cannot achieve the time when the time travelling is initiated is the view of this paper.

## 10. CONCLUSION

This paper explains that the time has infinite loops and it cannot be calculated by mathematical terms. As it has infinite subdivisions one cannot specify present time as present has become a false statement. If present cannot be calculated accurately, returning to the particulars time is impossible. This fact the returning to the present is impossible. Not only time but also science involves minute subdivisions of measurements of measurements. In future smallest unit will play an important role. At the same time though time differ from other three dimensions (X, Y and Z), it always related other three dimensions. with this we can understand that travelling from positive and negative can be controlled in other dimensions. Similarly, time can also be controlled. So, time travel possible.

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