THE TIME VELOCITY

Abstract:

We see numerous events around us every day. The motions of small atoms to large cosmic stars are part of those events, or we can say these motions are the controller of all events. But why do we see all these events or changes as specific? Why do we not see the flow of day-night or all global events change? If we consider the overall movement of objects in the universe as time, then there will be a systematic movement system of that time. A motion system that can be made to move fast-slow or back-and-forth just like an object moves. That is, I am talking about the contraction-expansion and past-future of time. What is the scientific definition of time, how it relates to physics, how it is consistent with gravity or the curvature of space, how life experiences the flow of time, and how the sensed external time flow is related to brain time are discussed here. Attempts to simplify the mysterious motion of time through simple mathematical analysis can radically change our conventional understanding of time.

Keywords: Theory, t_O System method, The effect of changing "t_v", Different time zones, Time velocity in Space.

Introduction:

Let's say Pooja and Raj are standing on the side of the road, a car passes them. Pooja saw the car going at a speed of about 70 kmph. But Raj saw the car going 10 km! Is it possible? Is it possible for two observers to see the motion of all objects in two ways at the same moment?

Let's look at it differently. Suppose, the team that came to play with expert players on the football field, scored dozens of goals with a clumsy team! We must investigate the matter!

Is it the case that the expert players were all standing and the amateur players were all running? But the audience saw both their teams playing. So how is it possible? Does physics have any such rules?

This would be possible, if the clumsy group is adept at controlling the speed of time.

We wait for someone; can't we pass this waiting time quickly? Or can we prolong any useful moment? Why seconds minutes hours they are always the same kind of long? Why can't we lengthen and shorten the days and nights or the moments according to our needs? Why do we experience continuous flow without seeing a different flow of time? Do others see the way I see things going? If it is same then why? If it is different then how?

Time and other aspects of nature have always seemed to me a great mystery. Since then I started looking for answers to many such questions related to time. The subject needed to be related to mathematics, so I had to work for a long time to realize how the subjects fit into mathematics.

This article on time will increase our understanding of the speed of time and its length and in the near future we will be able to do many things faster and easier by speeding up or slowing down instantaneous time. More research and technology related to this will radically change us ongoing understanding of matter and natural principles.

Methodology:

What do we mean by time?

We have known time as a dimension since Albert Einstein. Basically, we are used to using time as a vector quantity. It is a quantity relative to which the motion of all universal matter, or the rate of occurrence of space, is determined. But it's not spectacular. Therefore, we consider the specific rate of chaotic change of matter in all universes as time. That is, time is the rate of change of a certain universal motion system.

The velocity of an object is $10km/h$, we mean that the object exceeds $10km$ of spatial distance, subject to the change of all objects in the universe in 1 hour. So as definition, time is a universal quantity. That is, if the velocity of an object is $\boldsymbol{v}$, then all observers $(O_A, O_B \dots O_Z)$ will have the same value of $\boldsymbol{v}$. But as we know, according to the theory of relativity each different contextual structure frame has its own time flow. And so, time is not a universal quantity.

The velocity (v) of an object is, when the object traverses' space, time traverses its own length in the same moment. That means, $\boldsymbol{v} = \boldsymbol{LT^{-1}}$.

Now, we know- time $(\boldsymbol{T})$ is the motional length quantity, where the T's direction is always from the past to the future. So ' $\boldsymbol{T}$ ' is a continuous length equation.

From the principle of relativity $\boldsymbol{t' = t\sqrt{(1 - v^2c^{-2})}}$ *(Special Relativity)*, we see that when the velocity of a moving

observer is close to the speed of light relative to a fixed reference frame, the value of time $\boldsymbol{t'}$ of that observer decreases with respect to the reference time $\boldsymbol{t}$.

Let's say there are two clocks showing times $\boldsymbol{t}$ and $\boldsymbol{t'}$ from a specific platform. Imagine that the clock showing $\boldsymbol{t'}$ travels along the abc path at nearly the speed of light and returns to point a after 10 years. Let's assume that according to $\boldsymbol{t' = t\sqrt{(1 - v^2c^{-2})}}$, the time difference between the clocks showing $\boldsymbol{t}$ and $\boldsymbol{t'}$ is 2 years, where $\boldsymbol{t} > \boldsymbol{t'}$ and $\boldsymbol{t}$ = 10 years, $\boldsymbol{t'}$ = 8 years. This isn't a momentary event; rather, it's an ongoing process over a span of 10 years in relation to $\boldsymbol{t}$. In other words, having a lower value of $\boldsymbol{t'}$ in relation to $\boldsymbol{t}$ is part of this ongoing process, which causes that time to consistently delayed. This is possible if we consider time as a quantity of velocity.

So, we can say that at a specific moment, $\boldsymbol{T}$ is the event of crossing $\boldsymbol{t_l}$ at its speed $\boldsymbol{t_v}$, which is the time

or $\boldsymbol{t = t_l t_v^{-1}}$ ***or*** $\boldsymbol{t_v = t_l t^{-1}}$.

Since we are determining the time velocity, this velocity will always be determined relative to another platform time t' or observer. So, for t'; $t_v = tt'^{-1}$ 01

That is, in t clock unit time, t' clock as many units time passes, that is relative to t clock is t' clock's time velocity. Since we are comparing the unit time of t clock with respect to the unit time length of t' clock, we will consider the measurement as the length (t_l) of unit time of t clock which is inversely proportional to t_v.

So, $t_v = tt'^{-1}$ or, $t_v = t_l^{-1}$

Since the times of two different structures are inversely proportional to each other. So, at time t, $t'_v = t't^{-1} = t'^{-1}_l$ and at time t', $t_v = tt'^{-1} = t_l^{-1}$, where t_v is the time velocity of the platform clock and t'_v is the time velocity of the traveling clock. t_l or t'_l is the time length of the clocks.

We explain this in more detail.

Let us assume that, in any time zone, at a t moment, time passed t_l length. So, in that area time velocity, $t_v = t_l t^{-1}$ (Formula 01). Now let us similarly assume that, at time $10t_E$ moment in Earth's surface time zone, time passes $10t_l$ length (B of Figure 04). Hence the time velocity in Earth's surface time zone is $t_{vE} = t_{lE}t_E^{-1} = 10t_{lE}(10t_E)^{-1} = 1t_{lE}t_E^{-1}$. Since we determine the time velocity of all time zones in the universe relative to the time velocity of the Earth's surface time zone, we will do so by assuming the surface time velocity $t_{vE} = 1$.

Now we assume that in a different time zone X, at $5t_E$ moment, time passes t_X unit (B of Figure 04) or, $t_{vX} = t_X t_E^{-1}$ or, $t_{lX} = 5t_E t_X^{-1}$ (since, $t_v = t_l^{-1}$) or, $t_{lX} = 5 \times 1^{-1} = 5$

Hence, $t_{vX} = t_{lX}^{-1} = 5^{-1}$ in X zone or, the time velocity of the X zone is 5^{-1} or 20% of the Earth's surface time zone.

That is, the time velocity of a different time zone is inversely proportional relative to the zone's time velocity of observer, or exactly to the observer 's own time velocity, so the time velocity of the outer zone to the observer, proportional to total unit time and inversely proportional to total time length of that zone. Since the observer does not experience his own time velocity and duration, any value of t_{lX} will be proportional to the observer's own time velocity.

So, $t_{vX} = t_{lX}^{-1}$ 02

The time we know and use is basically the unit value of time t. But this "t" cannot fully describe the time when we are dealing with time flow in different time zones. But an unused quantity of time is its velocity *(t_v)*, which is inversely proportional to the time length *(t_l)*. In other words, if $t_l \propto t_v^{-1}$, we get $t_l = Kt_v^{-1}$ or $t_l\, t_v = K$, where K is a constant with a value of $\mathbf{1}$.

Therefore, $t_l\, t_v = 1$……………………………………………………………………………………………………03

This means the product of the time length and velocity is always **1**.
The meaning, T has length and also velocity. But we always use the unit of T, for example, the speed of the car is $100km/T$, it takes T time to do the work etc. When we refer to T, we mainly mean time unit t. But, all the exciting stuff is actually in the velocity (t_v) of T.
The velocity V of an object means, as when at moment t, $'T'$ passes its distance t_l with its velocity t_v, at which moment the object exceeds the spatial L distance.
So, $V = Lt^{-1}t_v$…………………………………………………………………………………………………04

That is, the velocity of an object is proportional to the time velocity and inversely proportional to the time length.
As each star, object, particle, etc. is a distinct context structure, each individual structure has its own time velocity. Similarly, each human, animal or any observer *(O)* has their own time velocity. But no observer (human or animal) experiences the self-time velocity. The viewer always feels the time flow of the around/outer world. This "outer world time flow" or "t_{vX}" is invers proportional to the own time velocity t_O. The own time velocity t_O is unique to each observer, so we will denote the own time velocity as "observer's own time velocity" abbreviated as "t_O".
Therefore, External time velocity to an observer is $t_{vX} \propto t_O^{-1}$ or, $t_v = Kt_O^{-1}$………………………05

where X is the any outer time zone and t_{vX} is the regional time velocity of the specified region, to any viewer.
Then, we get, $t_{vX} \propto t_O^{-1}$ or, $t_{vX}\, t_O = K$, where K is a constant, whose value is **1.**
So, $t_v t_O = 1$ or, $t_O = t_l$ (since, $t_v = t_l^{-1}$).

Therefore, the velocity of objects to an observer in the specified time zone (X) is
$v_{OX} = KLt_X^{-1}t_{vX}$ **or,** $v_{OX} = KLt_X^{-1}t_{lX}^{-1}$ **or,** $v_O = KLt^{-1}t_l^{-1}$ **or,** $v_O = Lt^{-1}t_O^{-1}$ ………………………06
(since, $K = 1$ and $t_v = t_O^{-1} = t_l^{-1}$**).**
Here, v_{OX} is the velocity of object to the specified observer in specified (X region) time zone,
t_{lX} is the time length of the specified (X region) time zone,
t_{vX} is the time velocity of the specified (X region) time zone,
t_O is the observer's own time velocity.
That is, the value of an object's velocity is proportional of the time velocity of that zone and inversely proportional to the observer's own time velocity or time length of that region. The external time length (t_{lX}) is invariant, so all velocities are inversely proportional to an observer's own time velocity. Even if the values of L and t_l are unchanged, the values of v_X may be different for the groups O_1, O_2 and O_3 if they have different values of t_O. Hence there is no such thing as universal velocity or speed, all speeds are relative to different viewers.

Taking t_{lX} and t_X as 1 unit we get, $v_O \propto Lt_O^{-1}$ ………………………………………………………………………..07

Now let's assume that the average velocity rate of all objects in the universe is V which is the same to the general observer, so V is universal or v_{All}. Therefore, $v_{All} = Lt_{lAll}^{-1}$ where t_{lAll} is the universal time length.
All running values are All, where V is v_{All}. But to the specific viewer V is v_O, where $v_{All} \cong v_O$.

Time is a gravitational space curvature flux equation. The quadrilateral area of curvature is the regional time flow field. For example, the gravitational field around the Earth is the Earth's regional time flow (t_{vEarth}) field. All individual masses or mass aggregates in this field region have their own time flow. Basically, time flow is a reverse process of the gravity formula.

<u>Theory:</u> In a time zone, all objects or particles velocities and their own time velocities are proportional to that's zone time velocities.

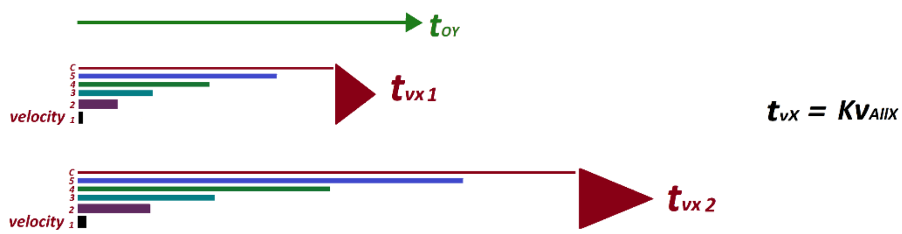


Figure 01

Suppose, the time velocity of X zone to an observer O_Y of time zone Y is t_{vX} *(Fig. 01)*. So, all motions (v_{AllX}) of X are proportional to t_{vX}. That means, all the motions v_{AllX} (v_{1X}, v_{2X}, v_{3X} … t_{OX} … v_{PX} …. c) belong to X, is proportional to t_{vX}.
That is, $v_{AllX} \propto t_{vX}$ ……………………………………………………………………………………………………08

Since t_{OX} is a motional variable included in v_{AllX}, any change in the value of v_{AllX} will change the value of t_{OX} proportionally.
That is, since t_{OX} is an integral of v_{AllX}, $t_{OX} \propto v_{AllX}$ ……………………………………………………………………09

For example, if objects, animals, plants, atoms, particles are distinct context structures in the surface time zone of the Earth surface, their own time velocity and all motions are proportional to the surface time velocity.
Suppose, for a given moment, the value of all the motion of the Earth surface, $v_{AllEarth} = 1$. If that moment the Earth time velocity t_{vEarth} increases twice, then the value of all the velocities will be, $v_{AllEarth} = 2$. So, with all speeds doubled, how would an observer on Earth *(O)* see the matter?

Since the speed of everything $\boldsymbol{v_{AllEarth}}$ has increased by 2x, the value of a viewer's $\boldsymbol{t_{OX}}$ will increase by 2x in the same rule. But for the observer, the value of external time velocity $\boldsymbol{t_{vX}}$ or $\boldsymbol{t_{vEarth}}$ is relative to the observer. That is, we know from $\boldsymbol{v_O \propto Lt_O^{-1}}$ $(\boldsymbol{Rule.07})$, that any velocity or all motion is inversely proportional to the time $\boldsymbol{t_O}$ of the viewer $\boldsymbol{O}$. So, if $\boldsymbol{t_{vEarth} = 2}$, at the same moment $\boldsymbol{t_{OX} = 2}$. Since, $\boldsymbol{v_{AllE} \propto t_{vE}}$, $(\boldsymbol{Rule.08})$.
Therefore, we get, $\boldsymbol{v_{All} = Lt_O^{-1}}$ or, $\boldsymbol{v_O = 2L(2t_O)^{-1} = Lt_O^{-1}}$ at the same moment.
That means, any change in local zone time velocity will remain unchanged for the viewer in that zone.

When a local time velocity $\boldsymbol{(t_{vX})}$ changes, it will be undetectable to all observers in that region, but the rest of the world will have evidence of the event, since the outer world is not involved in the event. That is, the outer world of the modified time zone then will be the external time velocity region $\boldsymbol{t_{vOut}}$ to the viewer, where $\boldsymbol{t_{vOut} = t_{OX}^{-1}}$ (07) and $\boldsymbol{X}$ is the viewer's own time zone.

Now let's assume, that the value of $\boldsymbol{t_{vU}}$ is almost zero at $\boldsymbol{t_U}$ moment in whole universes as local time. That is, at $\boldsymbol{t_{vU} = t_{IU}^{-1}}$ $(\boldsymbol{Rule.02})$ or, $\boldsymbol{t_{vU} = 0}$ or, then $\boldsymbol{v_{AllU} = 0}$ $(\boldsymbol{Rule.08})$. So, at that moment all momentum in the universe will be almost zero and there will be no information about it. That is, if there is any change of the time velocity $\boldsymbol{(t_{vU})}$ of the universe, there will be no evidence of this change in the universe and it will remain unknown to us forever. In the same way we can assume any moment to be eternally fixed or eternally moving, since mathematically this assumption is justified.

Can we stop a speeding bullet, or protect ourselves from an unforeseen event in a moment? There are some cases where decision-making and action are taken in very small moments. How can this be possible?
Assuming, that small moment is $\boldsymbol{t = 1}$ second. Now we can never change $\boldsymbol{t_l}$. But we'll want to change its value from 1 second to 100 seconds by pulling it like a rubber band. Technically we often try to directly control the participant in the event. But we want to completely control the whole situation, that is, we want to control the $\boldsymbol{T}$, under which not only the participants in the event but all events in the world will be subject to it. We want to control the events of the moon, the sun, the motion of the stars, the motion of the atom. We cannot change $\boldsymbol{t_l}$, fortunately we have the quantity $\boldsymbol{t_v}$, which we can change by changing our own time $\boldsymbol{t_O}$. The point is this - when we want to catch a moving train, we stop it. To do this we do not drag the train, but rather stop the train relative to ourselves by moving ourselves towards the train.

There is no universality of the events we have already discussed. That is, the velocity is $\boldsymbol{v}$ of the car, has no meaning. It is said that the velocity of the car to the observer (***O***) is $\boldsymbol{v_O}$, because all

the velocity is inversely proportional to $\boldsymbol{t_O}$. When we increase the value of $\boldsymbol{t_O}$, the value of $\boldsymbol{t_{vX}}$ will decrease at the same rate. And the viewer will see the value of $\boldsymbol{t_{lX}}$ is increasing.
Since, $\boldsymbol{t_{lX}} \propto \boldsymbol{t_O}$ so, we can control any event if we can change the value of $\boldsymbol{t_O}$ in our own time velocity and that is the key to the time contraction-expansion. That is, increasing the value of $\boldsymbol{t_O}$ or, $\boldsymbol{t_{lX}}$ is means "time expansion" (since, $\boldsymbol{t_{lX}} \propto \boldsymbol{t_O}$) and decreasing mean "time contraction".

Suppose, for a viewer ***O***, the value of $\boldsymbol{t_O}$ increased 10times, then the result is such that
$\boldsymbol{v_O = KLt_O^{-1}}$ *or* $\boldsymbol{v_O = 10^{-1}L = 0.1KL.}$
That is, the viewer will see all the motion decreases 10 times.
$\boldsymbol{t_O}$ is essentially its own system of reading the singular time, which is at the center of the consciousness of the organism. Therefore, a viewer's time reading system of brain will not correlate with physical time flow.
For example, suppose an observer's brain time velocity $\boldsymbol{t_O}$ is doubled, then the value of the force to him is $\boldsymbol{F = ma = mlt_l^{-2}}$ ***(****Newton's Second Law F=ma, Principia****)***, since $\boldsymbol{t_v = Kt_O^{-1}}$ or, $\boldsymbol{t_O = Kt_v^{-1}}$ or, $\boldsymbol{t_O = Kt_l}$, any change in the value of $\boldsymbol{t_O}$ equals the value will change of $\boldsymbol{t_l}$ in the same way, so that the value of all force to him will decrease at a rate inversely proportional to the square of $\boldsymbol{t_O}$. Similarly, the value of gravitational constant g of Earth surface will be 2.45. Even so, as his body is under the outer time zone, the value of his physical force will be correspondingly reduced to him. Thus, the values of all the equations related to speed will change with the value of $\boldsymbol{t_O}$.
Now what is meant by external time perceived by the observer or, external time speed or more precisely the external time velocity ($\boldsymbol{t_{vX}}$)? The contrary question is what does the viewer's own time mean by $\boldsymbol{t_O}$?
The fundamental difference between matter and organism is the ability to sense the speed of time. It becomes conscious only when the system or process through which the object gains the ability to do the initial reading of the environment around it. The next step in making minimal readings to the environment is to respond to oneself or to continually maintain that reading capacity and to continue to improve. Then comes the sensation of one's existence and the tendency to sustain oneself. This tendency making the competition to sustain one's existence with the environment and the continued improvement of its own system. Inanimate objects thus become competitor or life-forms in a complex system. The basic condition of the object's primary reading ability is to determine or adjust the rate of changing of the environment. That is, specifying external time or outward time velocity ($\boldsymbol{t_{vX}}$) relative to the object's conscious. In order to make external time velocity ($\boldsymbol{t_{vX}}$) readings, the conscious object first needs the $\boldsymbol{t_O}$ system. It necessary to all life, from the simplest to the complex.

t_O System's working method:

We approach the very primal state of consciousness. Imagine a simple biological process whose consciousness is at a very early stage. In this case, how will the system read the environmental changes around? We are thinking of an early consciousness system smaller than a simple cell or a virus. The system has no fixed rate of change of matter at the atomic or Nano level of the surrounding environment or has no reading ability.

We usually think, we see nature as it is or as time goes on.

In reality, it makes no sense. The singular value of everything we see and feel in the universe is subject to our own existence. It's like this - a boat floating in the ocean will have a similar current on the leeward side of whatever direction it tries to go.

This nano system develops t_O system within itself and acquires the ability to read the precise rate of change of matter at the atomic or Nano level according to the surrounding environment. The system gets the changes information in the surrounding environmental by few ways. In this case, electrons, photons and sub-atomic vibrations are the main information carriers of this system. In this case, electron photons and sub-atomic vibrations are the main information carriers of this system.

Thus, on a large scale, the changes in the environment reach the brain in the form of electron waves through various organs of the body and we feel it. The brain's t_O system gets readings of the rate of change of the external environment from these electrons.

The long evolution of each animal and species class has given them this precise reading ability, so that the species has the maximum ability to sustain itself with changes in the external environment. That is, the number of these informative electrons for a specific species class is specific, so their tv values will also be specific.

Some species of animals move and react very quickly, such as flies, some small birds, etc. There are also some species of very slow nature, such as sloth. In this case the standard of reaction of the plant is very long. The faster the value of the external time velocity v for the species, the greater the speed and motion of all the external matter.

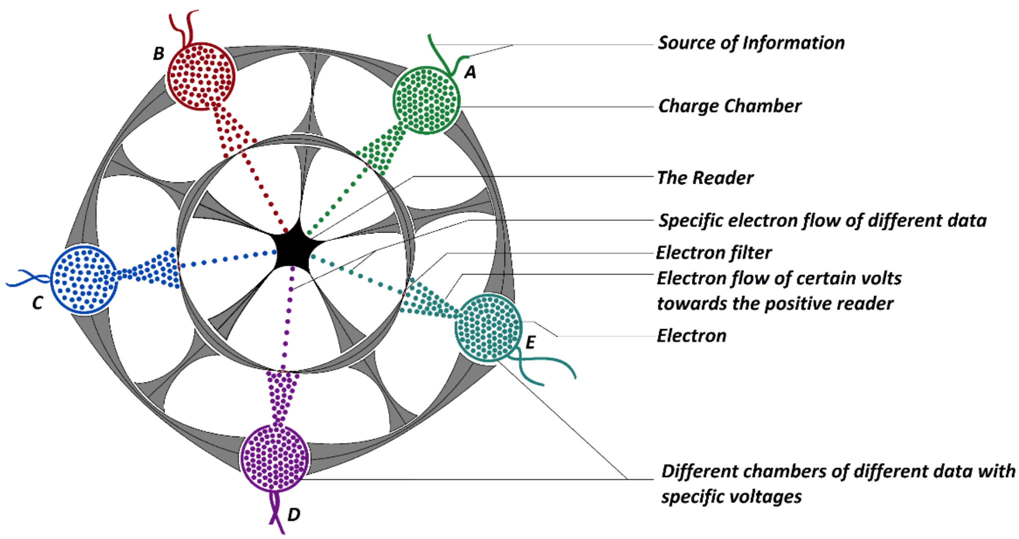
So, his own movement and reaction quality in that fast environment will be woefully slow. Any force value will be proportionally higher for all those species. Normally it may seem inconvenient to us. But it is a result of long evolution relative to their existence that best suits them. The external environmental change or time velocity depends on the species or observer's own time flow value of t_O.

Let us assume that some observers of different species including humans and plants are O_1, $O_2 \dots O_6 \dots\dots.. O_n$ and have their own time velocities t_{O1}, $t_{O2} \dots t_{O6} \dots\dots.. t_{On}$ where, t_{O1} is the lower value and t_{On} is the higher value (Fig: 09). Hence, the values of t_{v1}, $t_{v2} \dots t_{v6}$ will decrease in order. That is, if the velocity of an object in the external environment is v, the value of this v will be different for the observer O_1, $O_2 \dots O_6 \dots\dots.. O_n$.

Now we describe the matter with respect to a human viewer.

We receive the environment changes around us in the form of information such as light, sound, touch and chemical analysis, and we react accordingly. Our body converts various information from the surroundings into electron waves and sends them to our brain and we get readings of environmental changes.

We know that the light emitted from the external environment is converted into electrical charges by the photosensitive cells of our eyes and sent to our brain. Assuming, every small unit



Based on the specific charge, the reader determines the rate of change of the external environment

Figure 02

time some electrons from this part of the brain are deposited in chamber A of the t system ***(Figure-02)*** and produce a specific charge volt. When a specific voltage is generated, the electrons in the chamber are attracted to the positively charged reader and flow towards it. Most of the electrons are absorbed by a filter in route from the chamber to the reader, and from the remaining electrons the reader obtains a snapshot of environmental changes beyond that single time. Suppose, thus the reader receives sound, feel, balance and taste chemical information from chambers B, C, D and E respectively.

Thus, the reader, taking a snapshot of the external environmental change at a given moment, determines a precise rate of that change. This specific rate is determined based on the number of electrons gained. In this case the number of electrons affects the reading power of the $\boldsymbol{t_0}$ system. That is, the higher the number of electrons, the higher the analytical power or higher readings the $\boldsymbol{t_0}$ system will get. But the number of these electrons must also be definite to make the changes in the external environment precise or stable. This analytical faculty system, or $\boldsymbol{t_0}$ system, exists in all sentient beings, from tiny cells to multicellular brains. Thus, from simple to complex life, all consciousness $\boldsymbol{t_0}$ systems get a precise reading of environmental changes by determining the precise velocity of external time.

Assuming the number of carrier electrons received by the human brain reader is 50 per second and hence the value of t_O is 1, so the rate of change of the external environment to humans, $t_v = 1.$

Now we imagine a rotating fan. Assume the rotation spin of the fan is one per second. In this condition an observer can get a clear reading of the fan handles. Now we increase the spin of the fan to 3. This results in almost a blur to the viewer due to the motion of the fan handles (Figure 11, A). In this case, at the t_1th second, the positional change of the handles, without receiving enough information about the change from 50 electrons, the reader waits for more information from more electrons. But the next 50 electrons give displacement information equal to the next t_2th second of the handle. Thus, the information deficit repeats itself, causing the t system to lose the ability to fully read the handles and the viewer seeing the handles as blurry. Suppose we triple the speed of electrons from each chamber.

As a result, from 150 electrons per 1 second, the t_O system receives enough information of the same position the handles and be full reading capable of the handles *(Figure 11, A)*.

Now the observer, how to perceive the event?

The observer will see this event in reverse. That is, he will see the fan speed decrease by 3 times due to which he will be able to analyze each handle better. Since the fan is moving at the same time as all events in the around environment, the viewer will see all events in the around slow down at 3 times.

In fact, the fan is presented here only to explain the phenomenon. All mundane changes in the around flux are phenomena of change in time or, external time velocity, t_v.

Therefore, the material system that can read the external environment at a specific time velocity is called consciousness. And based on the speed of the data carriers, the readings the system receives are described as the system's own time flow or, own time velocity ***(t_O).***

To the viewer, the effect of changing "t_v" or time contraction-dilation:

Energy:

The mass of matter is a fundamental quantity. So, the total value of energy in the change of t_O remains the same.

We know $E = mv^2$ *(Britannica)* or $E_O = mv_O^2$ (specific observer) and the total value of matter is $E_O = mc_O^2$ *(Special Relativity)*. Since $v_O^2 = Kt_O^{-2}$, so all the values of the equation take 1 unit, if the value of t_O is 5 then the value of E_O is 5^{-1}. That is, the energy E_O value per unit time of the observer will decrease at a rate inversely proportional to the square of t_O. But since the value of t_l is proportional to t_O, the total energy E_O emitted by the mass to the same viewer will increase by 5 times proportional to t_l, resulting in $E_O = 25^{-1} \times 25 = 1$. That is, even if E_O is

inversely proportional to the square of t_O to the observer at a single time, the total energy of matter will
always be the same.

Mass inertia:

The mass inertia of matter is always a fundamental quantity. Inertia is proportional to force. Again, the acceleration of the object is proportional to the force in the same direction.

Since $f \propto mlt_l^{-2}$ or, $f_O = Kmlt_O^{-2}$, the force acting on the object and its acceleration are both inversely proportional to the square of t_O.

Suppose an object has mass m and a force f is applied to change its position with velocity v. Now we double the value of t_O of the observer. Then, f will decrease according to $f_O = Kmlt_O^{-2}$, so the rate of change of position of the object will also decrease. Hence, to keep the object's displacement the same to the observer, the value of the force must also increase at the same rate. That is, the inertia of the object will always be the same for the observer at any change in time velocity.

Deformation tendency of material:

When a force is applied to the surface of an object, it is applied along 90 degrees to the surface and the force travels in waves inside the object.

A portion of the force is reflected from different parts of the material, creating a reaction force at the point of application of the force. Which we know as Newton's third law. The value of the force flowing through the material and the instantaneous shear response depends on the density and stiffness of the material. As density and hardness values increase, wave speed also increases. If the value of the speed of the flowing wave decreases due to the material or due to the low velocity of time, then the hardness of the material will drastically decrease and the deformation tendency will increase. Let us illustrate the point with an experiment.

Suppose an observer has a value of t_{vX} is $\mathbf{1}$.

We put a glass ball or bottle on a stand or table. Suppose the spectator hits it with a hard stick in such a way that the bottle only moves its position from ***A*** to ***B*** when the stick touches it.

Now let's do the test again. Suppose the observer's value of t_O is increased at 10 times and the speed of the stick is kept the same for him. So, $v_O = KLt_l^{-1}$ then, $v_O = 10L(10t_l)^{-1} = 1$. That is, the speed of the stick will be the same for that observer (O), whereas the speed of the stick will be 10 times higher for general viewers. So, the second test will be the same for the observer. Now when the spectator hits the bottle with the stick at the same speed, the stick will penetrate the bottle keeping the bottle almost stationary. Since the value of t_v is less than 10 times, the flow of force applied by the stick into the bottle will be less at the same rate and the reaction force will be correspondingly less, so the stick will penetrate the bottle almost unimpeded. That is, to the observer the deformation tendency of the object is proportional to t_O or the hardness of the object is proportional to $\boldsymbol{t_v}$.

Light speed:

Since $\boldsymbol{v_O} \propto \boldsymbol{t_O^{-1}}$ or, $\boldsymbol{v_O} = \boldsymbol{K t_O^{-1}}$ or, $\boldsymbol{c_O} = \boldsymbol{K t_O^{-1}}$. That is, the speed of light will change at a rate inversely proportional to $\boldsymbol{t_O}$. But the light constant or, $(c_O \pm v_O) = c_O$ will remain the same.

Waves:

Let $\boldsymbol{X}$ and $\boldsymbol{Y}$ are two time zones. Two regions have gravitational values $\boldsymbol{G_X}$ and $\boldsymbol{G_Y}$, where $\boldsymbol{G_X}>\boldsymbol{G_Y}$, then the time velocity at region $\boldsymbol{X}$ is $\boldsymbol{t_{vX}}$ and the time velocity at region $\boldsymbol{Y}$ is $\boldsymbol{t_{vY}}$. $\boldsymbol{O}$, an observer of the $\boldsymbol{X}$ region.

Let the time velocity of region $\boldsymbol{Y}$ be $\boldsymbol{t_{vY}} = \boldsymbol{2t_{vX}}$. Hence the viewer $\boldsymbol{O}$, will see all the events in $\boldsymbol{Y}$ zone, happening at double speed. He will see the speed of all objects, animals, particles etc. are doubled, since his own time zone is moving at half the speed of the $\boldsymbol{Y}$ zone. The viewer can learn this information through the light coming from the $\boldsymbol{Y}$ zone.

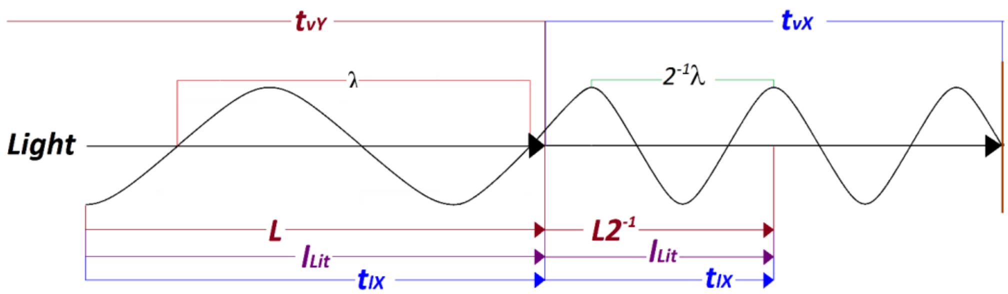


Figure 03

Let a light ray coming from region $\boldsymbol{Y}$ zone towards an observer have wavelength $\boldsymbol{\lambda}$, frequency $\boldsymbol{f}$ and velocity $\boldsymbol{v}$ of the wave. Now whenever the wave enters $\boldsymbol{X}$ region from region $\boldsymbol{Y}$, the velocity of the wave will be $(\boldsymbol{2v})^{-1}$, since $\boldsymbol{t_{vY}} = \boldsymbol{2t_{vX}}$. That is, if the wave travels a distance $\boldsymbol{L}$ in region $\boldsymbol{Y}$ at a unit time of $\boldsymbol{t_{lX}}$, it will travel a distance $(\boldsymbol{2L})^{-1}$ in ***(Figure 03)*** region $\boldsymbol{X}$. As we know, when light is emitted from a source, it also carries information about the source. If we consider the length of light at a unit time of $\boldsymbol{t_Y}$ as $\boldsymbol{l_{Light}}$, then the spatial length of region $\boldsymbol{Y}$ and the length of light will be equal or, $\boldsymbol{L} = \boldsymbol{l_{Light}}$. But since the distance traveled by the ray is halved in the same time in the $\boldsymbol{X}$ region, the amount of data will also be halved. Since time is continuous, the amount of information deficit will continue to increase at each subsequent $\boldsymbol{t_X}$ time unit. If that were the case, we would see information gaps in everything around us, apart from the distant ones. So, at time $\boldsymbol{t_X}$ there will be complete information of $\boldsymbol{l_{Light}}$ within distance $(\boldsymbol{2L})^{-1}$. That is, the ray will be compressed along its direction, resulting in a wavelength value of $(\boldsymbol{2\lambda})^{-1}$. Again, since the wave number at time $\boldsymbol{t_X}$ in the $\boldsymbol{Y}$ region and the wave number at the same time in the region are the same, the value of the frequency $\boldsymbol{f}$ is the same in the two regions.

We know, $\boldsymbol{\lambda} = \boldsymbol{v}\boldsymbol{f}^{-1}$ *(The Encyclopedia Britannica)* or, $\boldsymbol{v} = \boldsymbol{\lambda}\boldsymbol{f}$. Taking the values of $\boldsymbol{\lambda}$ and $\boldsymbol{f}$ in the $\boldsymbol{Y}$ region to be one unit, we get, $\boldsymbol{v}_{\boldsymbol{Y}} = \boldsymbol{\lambda}\boldsymbol{f} = \mathbf{1} \times \mathbf{1} = \mathbf{1}$ and $\boldsymbol{v}_{\boldsymbol{X}} = \boldsymbol{\lambda}\boldsymbol{f} = \mathbf{1} \times \mathbf{2}^{-1} = \mathbf{2}^{-1}$. That is, even if the frequency $(\boldsymbol{f})$ value of all electro-magnetic waves coming from any outside time zone is the same in $\boldsymbol{X}$ zone, the wavelength value is proportional to the time velocity of $\boldsymbol{X}$ zone or $\boldsymbol{\lambda}_{\boldsymbol{x}} = \boldsymbol{\lambda}_{\boldsymbol{y}}\boldsymbol{t}_{\boldsymbol{vX}}$.

Now how will the viewer read this wave and wave information?

Let $\boldsymbol{O}$, an observer in X time zone, the time velocity of $\boldsymbol{X}$ zone is $\boldsymbol{t}_{\boldsymbol{vX}}$ and $\boldsymbol{O}$'s own time velocity is $\boldsymbol{t}_{\boldsymbol{vX}}$. How will the viewer read the light coming from any source in region $\boldsymbol{Y}$?

As we know from the function of $\boldsymbol{t}_{\boldsymbol{O}}$, the wave speed of the electron determines our brain time speed. As a result, we can determine specific changes in the outer environment with various information. Now the process of converting the wave into electron waves can be different.

Assume, $\boldsymbol{A}$ and $\boldsymbol{B}$ are two charged near screens. Since, $\boldsymbol{A}$ is negative and $\boldsymbol{B}$ is positive, electrons jump from $\boldsymbol{A}$ to $\boldsymbol{B}$. The process continues continuously at the specified volt according to the specified value of $\boldsymbol{t}_{\boldsymbol{O}}$ ***(Figure 04).***

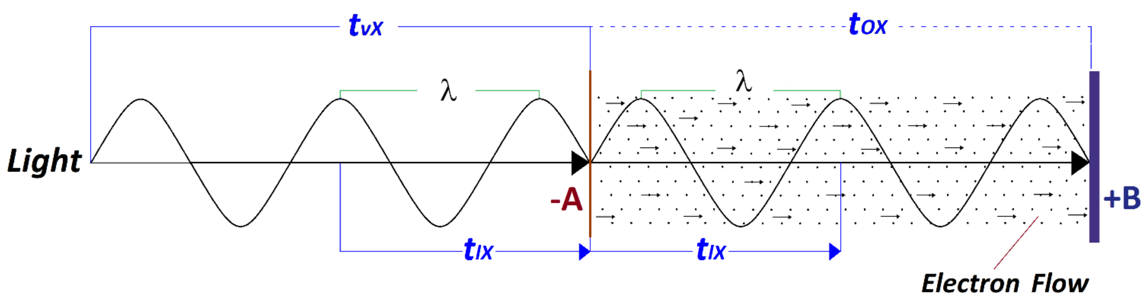


Figure 04

Suppose, $\boldsymbol{t}_{\boldsymbol{O}} = \mathbf{1}$, so the speed of electron from $\boldsymbol{A}$ to $\boldsymbol{B}$ is $\boldsymbol{v}$. Now, if $\boldsymbol{t}_{\boldsymbol{O}} = \mathbf{1}$ then $\boldsymbol{t}_{\boldsymbol{vX}} = \mathbf{1}$.

In this case the wave coming from the source has wavelength $\boldsymbol{\lambda}$ and frequency $\boldsymbol{f}$.

We know that electron energy increases upon photon absorption. Now when the wave falls on $\boldsymbol{A}$, its height from $\mathbf{0}$ to maximum $\boldsymbol{h}$ is successively increased by the photons of the screen electrons and the wave reaches the screen $\boldsymbol{B}$ in reverse direction. Consequently, the based-on variation of electron energy, $\boldsymbol{B}$ determines the wavelength and frequency of the wave. Based on the momentum of the electron, if $\boldsymbol{t}_{\boldsymbol{O}} = \mathbf{1}$, the wavelength and frequency of the wave coming from the source will be same. So, if $\boldsymbol{t}_{\boldsymbol{O}} = \mathbf{1}$, then $\boldsymbol{\lambda}_{\boldsymbol{X}} = \boldsymbol{\lambda}_{\boldsymbol{O}}$ and $\boldsymbol{f}_{\boldsymbol{X}} = \boldsymbol{f}_{\boldsymbol{O}}$. That is, if an observer's own time unchanged, the wavelength and frequency as the wave coming from source in his same time zone are always will be same to the observer.

Let's say, the observer's own time velocity is $\boldsymbol{t}_{\boldsymbol{O}} = \mathbf{2}$, then what will the same wave look like to the observer?

Since $t_{vX} = t_O^{-1}$ or, $t_{vX} = 2^{-1}$ or, $v_{allX} = 2^{-1}$ or, $c_X = 2^{-1}$ so, $v_X = \lambda f$ or, $f = v_X\lambda$ or, $f = 2^{-1}$ will be (since, $v_X = 2^{-1}$ and λ takes the value of one). That is, as the speed of the light wave to the viewer is half, the value of the frequency will also be half. According to the formula, the value of wavelength λ remains unchanged, but the velocity of the electron from A to B will be $2v$ (since, $t_O = 2$). Now when the wave falls on A, the electron from A transfers the information to B at twice the speed.

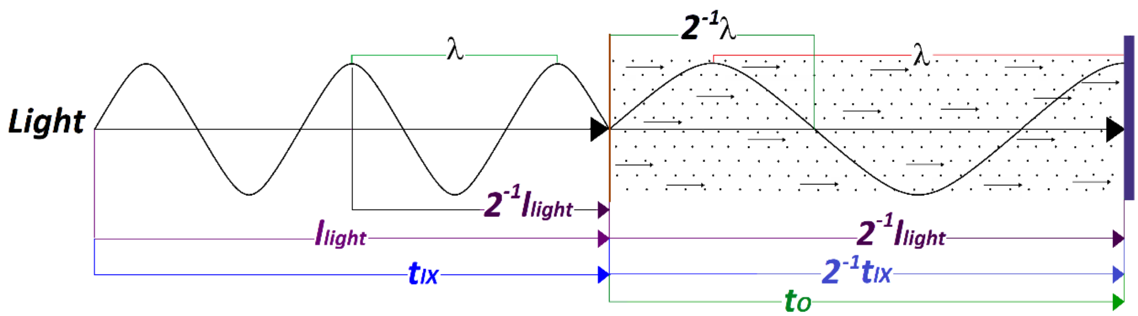


Figure 05

So, the wavelength of the wave or, the data will be expanded and doubled ***(Figure 05)***. That is, the value of the frequency of any wave coming to the viewer is inversely proportional to the viewer's own time velocity or $f_O = t_O^{-1}$ or, $f_O t_O = 1$ and the value of the wave length is proportional or, $\lambda_O = t_O$ or, $\lambda_O t_O^{-1} = 1$. If $t_O > 1$, the observer will see the outer environment as dim and redshifted in color. If $1 > t_O$, then the viewer will see the outside environment as bright and blue shift in color.

Different time zones:

Assume X, Y are two different time velocity zones. Where $t_{vY} = 2^{-1}t_{vX}$. Now the time velocity of region T_Y to an observer (O_X) of T_X is t_{vY}, which is relative to t_{vX}. Assume (O_X) exits from T_X and enters region T_Y. Now generally if we take $t_{vX} = 1$, then $t_{vY} = 2$ (since $t_{vY} = 2^{-1}t_{vX}$ or, $t_{vY} = 2^{-1}t_{OX}$). Since the viewer exits X zone and enters Y zone, he will be under Y zone time velocity. We know, $t_{vY} \propto t_{OY}$, so the value of t_O will be 2 instead of 1. Hance, $v_{AllY} = Lt_O^{-1} = 2^{-1}t_O^{-1} = 2^{-1}2 = 1$. That is, all velocities will be normal to the observer entering the Y zone rather than halved. Therefore, even though the time velocities in different time zones are different relative to each other, the time velocity value for the self-zone to viewer will always be 1 or normal. Now $t_{OY} = 2^{-1}t_{vX}$, if $t_{vY} = 2^{-1}t_{vX}$, since the external velocity is $t_{vX} \propto t_O^{-1}$ or, $2t_{vY} = t_{vX}$. That is, since the observer's own time velocity in region t_{vY} is half of the time velocity t_{vX}, the observer will see the value of v_{AllX} or all normal motions in region T_X is twice.

We know Jupiter's mass is three hundred times greater than Earth's. Naturally, due to the excess of gravity at the same height, the speed of time at that height will be less than the speed of time

at the same height above the earth. So, if we take t_{vY} for that altitude region of Jupiter and t_{vX} for the same altitude region from Earth, then t_{OY} viewer will see events on Earth or $v_{AllEarth}$ a bit more dynamic. But at the same time the t_{vX} viewer will see a less dynamic set of events in the t_{vY} region which is inversely proportional to each other. This is best explained if the regional time velocity gap is very large.
We know that the speed of time in a black hole is almost constant. Let's assume a viewer examines this constant time. We will try to understand the matter by ignoring the adverse conditions there for the time being. So, the local time velocity of the black hole is t_{vBH}, which is almost constant. Assume that 1 second (t_{BH}) of a black-hole is equal to 1 lakh years of the solar system. That is $t_{lBH} = 3.1536 \times 10^{11} t_{lSun}$. Since own time velocity is proportional to regional time velocity or $t_{vBH} \propto t_{OBH}$, the value of t_{OBH} for that observer will decrease at the same rate, so conversely for that observer $t_{vSun} = 3.1536 \times 10^{11}$. As a result, a hundred thousand years of the earth will pass in one second moment of the observer. That is, the viewer will see the Earth revolving around the Sun almost like an electron.
What will explain this high-speed event to us?

Naturally, if the Earth's rotation speed increased so much, the planet would be thrown out of the solar system and all the other worlds would explode in an instant as all the other worlds were speeding up the same! But it's not happening.
Basically, what the viewer sees happening is relative to that viewer.
Since $t_{vOut} = Kt_{OBH}^{-1}$ or, $t_{vU} = Kt_{OBH}^{-1}$, so, as the time velocity of the external world is greater for that observer of the black hole, the value of the gravitational force will also be greater in proportion to the square of t_{lOut}. Hance, gravity and Centrifugal force are equal, so the world is in balance to that observer. That is, to a general observer in the Universe, the time velocity in its own region (t_{vU}) is normal and the time velocity inside the black hole (t_{vBH}) is approximately zero. Conversely, to an observer inside a black hole, the time velocity of its own region (t_{vBH}) is normal and the time velocity of the external world (t_{vU}) is extremely high. As a result, the normal laws of nature in other time zones will appear completely different or unfamiliar to viewers in different time zone. Now we similarly imagine a spectator inside an atom. That observer's own time speed will equal the atom's maximum time speed (t_{vAtom}). Since $t_{vAtom} \propto t_{OAtom}$, the observer will see external time or all motion of the outer world is almost zero.
The same is true of the nuclear world. The nuclear world is a world of very small masses. The speed of time of the nucleus inside is very high because the mass an atom is very small. And so, the value of the velocity of the atomic time zone (t_{vAtom}) will be proportionally several million times higher than the normal world time. As a result, the natural laws of those regions will seem unfamiliar and different to us. Now inside an atom we similarly imagine an observer. The viewer's own time speed t_{OAtom} will be equal to the very high time speed of the atom.

Since $\boldsymbol{t_{vAtom}} \propto \boldsymbol{t_{0Atom}}$, the viewer will see, the external time or all the motion of the world is almost zero.
That is, the same principle applies to the atomic world as well. The atomic world is a world of very small mass classes. Because the mass of the nucleus inside an atom is very small, the speed of time is very high. And so, the value of the time velocity $(\boldsymbol{t_{vAtom}})$ in the atomic region will be proportionally millions of times greater than the time in the normal world. As a result, the natural rules of all those regions will seem unfamiliar and different to us.

Time velocity in Space:

What does time actually mean? How is it related to physics?
Time is the interaction between matter due to the fundamental forces of nature and the movement of matter in the universe due to this interaction. But this motion system depends on the curvature of space and the tension due to the compression-expansion between points in space. The more mass that is added to a point in space, the more the curvature of space at that point will increase, resulting in greater obstacles to space travel. In this way the speed of time slows down from a flat place to a progressively more curved place. Since the mass of the photon particle as a single structure is the least, the amount of resistance will also be the least, so the speed of the photon particle is also the greatest.
That is, the spatial curvature around the photon particle is the lowest, so the time speed is the highest, and the area around the black hole has the maximum spatial curvature, so the time speed is the slowest. Since the speed of the photon particle is the highest in space, we will consider the speed of light $(\boldsymbol{c})$ as the unit speed of time. Therefore, since the velocity of $\boldsymbol{c}$ is maximum in the plane space, the value of $\boldsymbol{t_v}$**,** will also be maximum.
If radiation were everything in the universe, then the speed of time would be maximum and the same everywhere.

Now assume a sphere moving with velocity $\boldsymbol{v}$ on a plane structure **AB** along the $\boldsymbol{x}$ axis. A force $\boldsymbol{f}$ acts along the surface **AB** on the sphere so that the sphere always rests on the surface **AB**. The sphere is moving from **B** towards **A** with velocity $\boldsymbol{v}$. In this case the distance traveled by the sphere is $\boldsymbol{L}$ on $\boldsymbol{x}$ axis and $\boldsymbol{0}$ on $\boldsymbol{y}$ axis. If we make the surface **AB** perpendicular to $\boldsymbol{y}$, then the sphere is moving in both $\boldsymbol{x}$ and $\boldsymbol{y}$ directions. where $\boldsymbol{L}$ is the product of two vectors on both axes. Now we think of this $\boldsymbol{x}$ axis as the space plane or spatial dimension and the $\boldsymbol{y}$ axis as the mass dimension, where $\boldsymbol{y}$ is the direction of less mass and $-\boldsymbol{y}$ is the direction of more mass ***(Figure A of 06)***. If we imagine space as a flat elastic field, space becomes progressively convex in any direction from the center of mass of a star ***(Figure B of 06).*** Therefore, since the speed of light is zero at the event horizon of a black hole, the value of space curvature will be maximum towards the mass. Now as the light falls from the plane of the x-axis space to the curvature, the value of $\boldsymbol{c}$ continues to increase in its vector value from the spatial dimension to the mass dimension, thus

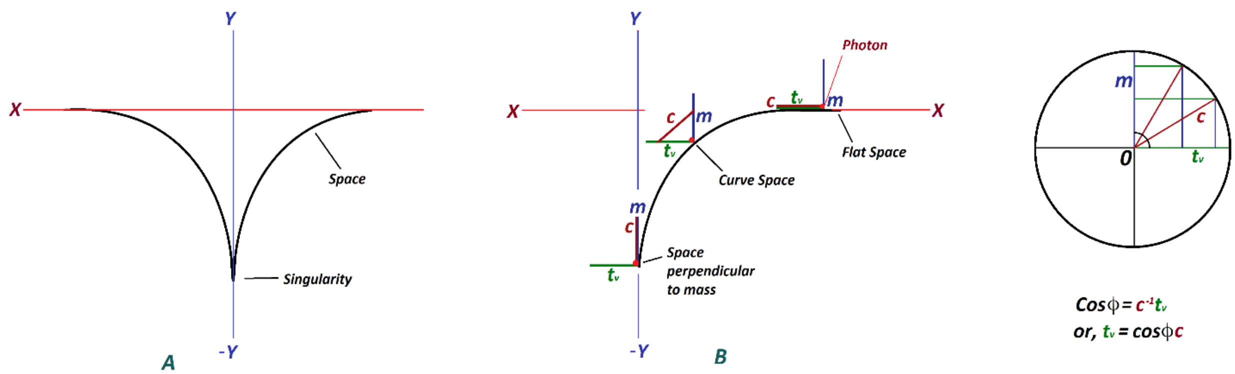


Figure 06

at the incident horizon the spatial value of c is zero and the mass value is maximum. Since the spatial value of $\boldsymbol{c}$ is the value of $\boldsymbol{t_v}$, then in any space curve

$\boldsymbol{Cos\theta = t_v c^{-1}}$ **or,** $\boldsymbol{t_v = Cos\theta c}$**.**

That is, the speed of time in a certain region is proportional to the product of the angular value of $\boldsymbol{Cos\theta}$ of curvature space with the plane space in that region and the product of the light speed $(\boldsymbol{c})$.

Since particles have their own mass, there will also be spatial curvature around those particles at a proportional rate, and the angular value of that curvature will be as of planets and stars. But for the same angular value of space the time around the particle world will be much longer than the time around the star. So, the mass of matter must be involved in the motion of time in space.

If we take the plane of space as the $\boldsymbol{0}$ value of the $\boldsymbol{y}$ axis, then as the value of mass increases in this flat space, the negative value of $\boldsymbol{y}$ also increases. We denote this value as the mass of $\boldsymbol{y}$ or $\boldsymbol{y_m}$.

Now the area of spatial curvature around a particle is very small but the value of curvature is the same as that of a planet or star, but the value of $\boldsymbol{y_m}$ at the center of mass of the particle is very negligible. Hence the value of $\boldsymbol{y_m}$ is proportional to mass. But the value of $\boldsymbol{y_m}$ at the center of mass of a black hole is higher than that of a star of the same mass. Hence the value of $\boldsymbol{y_m}$ does not depend only on mass.

The value of $\boldsymbol{y_m}$ depends on different conditions like mass, volume, speed etc. of the substance. Hence the value of time velocity $\boldsymbol{t_{vX}}$ should be dependent on the value of $\boldsymbol{y_m}$ instead of being mass dependent. Hence the time velocity for a specific time region,

$\boldsymbol{t_{vx} = Cos\theta_X c y_m^{-1}}$……………………………………………………………………………………………………10

where $\boldsymbol{X}$ is the specific region of space, $\boldsymbol{c}$ is light speed.

Now if we take the value of $\boldsymbol{t_{vEarth} = Cos\theta_{Earth} c y_m^{-1}}$ to be $\boldsymbol{1}$, then the value of $\boldsymbol{t_{vX}}$ of the observer's own region anywhere in the Universe will be $\boldsymbol{1}$ or unchanged. That is, the value of the external time flux $\boldsymbol{t_{vX}}$ in any gravitational space-time region of the Universe to any observer or detector will remain unchanged unless the value of the observer's own time velocity of $\boldsymbol{t_O}$ changes independently.λ

Findings/Results:

Generally, velocity of something $\boldsymbol{v} = \boldsymbol{LT^{-1}} = \boldsymbol{Lt_v t_l^{-1} t^{-1}}$, but to a specific observer $\boldsymbol{v_O} = \boldsymbol{Lt_v t_l^{-1} t^{-1}}$ **or,** $\boldsymbol{v_O} = \boldsymbol{Lt_v t_O^{-1} t^{-1}}$. Where Observer is $\boldsymbol{O}$**,** the external time velocity to the observer is $\boldsymbol{t_v}$**,** or the external time length to the observer is $\boldsymbol{t_l}$ and the observer self-time velocity is $\boldsymbol{t_O}$**.**

$\boldsymbol{v_O} = \boldsymbol{Lt_O^{-1}}$. That is, all motion is relative to the observer.

Any change in the observer's own time velocity $(\boldsymbol{t_O})$ is imperceptible to that observer.

Any change in local time velocity $\boldsymbol{t_{vX}}$ of the viewer's is imperceptible to that viewer.

Any change of external time velocity will depend the observer's own time velocity and to change at an inversely proportional rate of each velocity. That is, contraction of own time results in expansion of outer time and expansion of own time results in contraction of outer time.

All motion systems or absolute velocities in a given region are proportional to the time velocity of that region. That is $\boldsymbol{t_{vX}} \propto \boldsymbol{v_{AllX}}$ or $\boldsymbol{t_{vX}} = \boldsymbol{Kv_{AllX}}$.

Any change in external time to the viewer is mainly due to change of own time.

The sense of definite motion of external time is a primary condition for the existence of consciousness.
Time velocities are different in different time zones.

Deformation tendency of material to an observer is inversely proportional of external time velocity.

Time velocity is essentially a quantity related to space elasticity and spatial barrier.

Lighter masses have lower spatial barriers due to curvature and higher masses have larger barriers. So, the speed of time is faster in areas of lighter mass than in areas of higher mass.

The speed of time is extremely high in the atomic world, so any energy and force values in those regions will be extremely high.

The speed of time is similar to that of a rotating orbit. Whereas the lower mass objects or particles rotate at high speed in lower orbits and heavier objects rotate at lower speeds in higher orbits.

Conclusion:

Here is a discussion of different region-wise time speeds and their effect relative to the viewer, which only represents the current running time. The past-future time travel or revers time is a completely different matter. A unique characteristic of organisms is the ability to sense changes in the environment at a certain rate or change in time at a certain rate. This reading system is completely different from the body's flowing time or ambient time. This system is not dependent on speed and spatial curvature, it is part of the electrical current in the body's nervous system. Therefore, by changing the quality of this flow in a controlled manner, how to change the value of the perceived time velocity with respect to the viewer is discussed here. The interrelationship between the speed of time in different regions and the speed of time experienced by the viewer is explained. We also discussed the changes in the value of the laws of physics related to motion and the effect this has on the viewer, in changing the speed of time as perceived by the viewer. We also discussed how the value of time speed depends on the plane and curvature of space-time. The whole discussion represents the matter of time dilation in the Universe around us, which is not motion dependent.

I think this research of time contraction-dilation is very preliminary. In the future we will be able to do great things in a very small moment of time. Further research in this field will radically change human civilization.

Time Quantity	**Symbol**	**Formula**
Time	T	T
Time Unit	t	$t_v t_l^{-1}$
Time Velocity	t_v	$t t_l$
Time Length	t_l	$t_v t^{-1}$
Time unit of time zone	t_X	$t_{vX} t_{lX}^{-1}$
Time velocity of time zone	t_{vX}	$t_X t_{lX}$
Time length of time zone	t_{lX}	$t_{vX} t_X^{-1}$
Observer	O	O
Light speed	c	
Length of light	l_{Light}	
Observer's own time velocity	t_O	t_O
Observer's own time velocity in time zone	t_{OX}	t_{OX}
Outer time velocity to observer	t_{vX}	t_{OX}^{-1}
Outer time length to observer	t_{lOX}	$t_{vX} t_X^{-1}$
Mass velocity	v	$L t_v t_l^{-1} t^{-1}$
Mass velocity to specific observer	v_O	$L t_v t_O^{-1} t^{-1}$
Time velocity of deferent zone to observer	t_{vY}	$t_Y t_{lY}$
Universal	All	$L t_{vAll}^{-1}$
Mass axis	y_m	

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