

# Reason Behind Different Timezones on Earth

## (The Time-Machine Crashes on Every Attempt)

Rumani Dey<sup>1</sup>

<sup>1</sup>Independent Researcher, Dayananda Sagar College of Engineering, Bangalore, Karnataka Kolkata, India

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**Abstract:** I have been trying to find the logic behind time travel since a long time now. I tried thinking of time to be circular rather than being linear. Time might be a logarithmic or exponential entity as well. This hypothesis is when I was dreaming of the time travel and tried to think of speed of time. I think I solved the reason behind different time zones on earth through this logic. I found something called , “Time has speed too” as part of this hypothesis. As part of this hypothesis, sun is not moving uniformly throughout . So, light does not have a uniform speed is the hypothesis. Light accelerates and slows does . Also we see that a year doesn’t always have 365 days. There are leap years. At least this proves that time-travel is real and it baffles me more and more to present this before you.

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### I. INTRODUCTION (IS TIME CIRCULAR?)

Owing to the fact that universe is obsessed with circles, I tried to realize the fact that time might be circular. I am still trying to find out whether time is circular. But I land up in disaster at every attempt. Time is an entity which only life can realize. For time to exist, there has to be light and motion in the cosmos which can be perceived by life which has consciousness. “Yesterday something happened “ can be realized only when today exists or the sun went down to create yesterday. Light which is coming from sun moved to create yesterday.

### II. IS TIME EXPONENTIAL OR LOGARITHMIC?

#### ➤ Exponential

When time is exponential, like  $E=mc^2$ , it needs to have speed or time has to be increasing or decreasing with time. If time increases with time, our consciousness will be at a different level. If time reduces with time, things will be speeding up. Like we humans cannot calculate faster than calculators. This hypothesis of time having speed is a fully a topic of imagination.

#### ➤ Logarithmic

Time might also be logarithmic . If we could have controlled our consciousness like sometimes, we can control our breathing and hold our breath. What would have happened? If we hold our consciousness for few seconds and don’t come back to consciousness after few seconds, we would be in coma forever. Or we will be immortal beings if we could hold our consciousness. Consciously holding

consciousness would give rise to logarithmic function of consciousness. If time is exponentially speeding up, then it will take a logarithmic pattern.

### III. MY TIME MACHINE CRASHES EVERYTIME HYPOTHESIS

When someday we humans will decode the time-machine we will have to face challenges of teleportation. The time machine will go lost in the teleportation muddle.

#### ➤ My Time Machine Crashes Everytime I Send it Back

If I want to go back in time by t1 seconds, how much time(t2) will it take me to do so? I need to go back 4 seconds in the past and it takes me 2 seconds say to do so. Meaning To come back to current time , I will have to travel for 8 seconds from past to future (as initial assumption). The time Is 1AM now. I want to go to 12:59:56AM. I will reach 12:59:56AM at 1:00:02AM. Again when I come to future if I am in time machine, I will have to travel 4seconds in 2seconds. At 12:59:56AM I will begin travelling to 1AM and reach by 12:59:58AM. Isn’t the time travel crashing here?

If I am not travelling through the time machine while I am returning from past, and the time Is 1AM now. I want to go to 12:59:56AM. I will reach 12:59:56AM at 1:00:02AM. And I will have to travel to 6seconds when the time will be 1:00:08AM. So, I am 14 seconds in the past now from current time. This probably is the reason why we have different time zones on earth.

### ➤ *My Time Machine Crashes Everytime I Send it in Future*

Lets travel to future now. We are moving towards future and not back in time. If I want to travel 4 seconds in future at the speed of 2seconds. Meaning it takes me 2 seconds to travel to 4 seconds in future. If the current time is 1AM here. I want to travel to 1:00:04AM in 2seconds. I will reach 1:00:04 AM at 1:00:02AM. If I want to go back now in past to 1AM, I will travel back at 12:59:58AM at 1:00:04AM. So, we reached 1:00:04AM finally through the time machine. So, isn't time a exponential entity and can have some congruence to  $E=mc^2$ . Also reason why we are moving in future rather than back in time.

### ➤ *Practical Values*

EST is back in time than that of IST . Its back by 10.5 hours. Germany is 4.5 hours back to that of IST. Someday we will be able to build a clock which will understand angular speed of time and work accurately without manual intervention in all time zones.

#### • *Current Time is 1:00:00 AM*

Time takes 2s to go 4 s in future : at 1:00:02AM I will be at 1:00:04AM . Again at 1:00:04AM I will be at 1:00:08AM . If Current time is t, time travelled time is  $t+2k$  .

Time takes 4s to go 2s in future : at 1:00:04AM I will have travelled to 1:00:02AM. Again at 1:00:08AM I will have travelled to 1:00:04AM. If Current time is t, time travelled time is  $t-2k$  .

Time takes 2s to go 4 s in past: at 1:00:02AM I am at 12:00:56AM. I am 6 seconds away. At 1:00:04AM I am at 12:00:52AM. I am 12 seconds away . At 1:00:06AM I am at 12:00:48AM. I am 18 seconds away. So , if Current time is t, time travelled time is  $t-6k$  .

Time takes 4s to go 2s in past : at 1:00:04AM I am at 12:00:58AM. I am 6 seconds away. At 1:00:08AM, I am at 12:00:56AM. I am 12 seconds away. At 1:00:12AM , I am at 12:00:54AM . I am 18 seconds away. So, if Current time is t, time travelled time is  $t-6k$  .

#### • *Current Time is 1:00:00 am*

Time takes 1s to go 3s in future : at 1:00:01AM I will be at 1:00:03AM . Again at 1:00:02AM I will be at 1:00:06AM. If Current time is t, time travelled time is  $t+2k$  .

Time takes 3s to go 1s in future : at 1:00:03AM I will have travelled to 1:00:01AM. Again at 1:00:06AM I will have travelled to 1:00:02AM. If Current time is t, time travelled time is  $t-2k$  .

Time takes 1s to go 3s in past: at 1:00:01AM I am at 12:00:57AM. I am 4 seconds away. At 1:00:02AM I am at 12:00:54AM. I am 8 seconds away . At 1:00:03AM I am at 12:00:51AM. I am 12 seconds away. So , if Current time is t, time travelled time is  $t-2k$  .

Time takes 3s to go 1s in past : at 1:00:03AM I am at 12:00:59AM. I am 4 seconds away. At 1:00:06AM, I am at 12:00:58AM. I am 8 seconds away. At 1:00:09AM , I am at

12:00:57AM . I am 12 seconds away. So, if Current time is t, time travelled time is  $t-2k$  . K is sum of 3s and 1s .

Suppose it takes 2s to go 5s in past . Then at 1:00:02AM I will be at 12:00:55AM. At 1:00:04AM, I will be at 12:00:50AM. if Current time is t, time travelled time is  $t-nk$  . K is sum of 2s and 5s.

Germany is IST - 4h 30mins

$t-nk$

$t-270mins$

$t-16200secs$

$nk1$  is 16200..... (1)

Bangladesh is IST +30 mins

$t+nk2$

$t+1800$

$nk2$  is 1800.....(2)

$k1 = 9k2$

So, Bangladesh which is 5 hrs = 18000 s ahead of Germany , has a “ k “ value of 2000. So, maybe it takes time t seconds to travel 2000-t seconds .

But I feel light accelerates and slows down as it goes around earth . Light does not have a constant speed is what I understand from this.

## IV. CONCLUSION

Time is circular for us humans. Circle is “That which begins from where it ends”. I was not existent before my birth and I will not exist again after death. Time is circular.

## ACKNOWLEDGMENT

I acknowledge that this is an original content as perceived by my imagination of time.

## REFERENCES

- [1]. Zerubavel, E. (1982). The standardization of time: A sociohistorical perspective. *American Journal of Sociology*, 88(1), 1–23.
- [2]. Howse, D. (1997). *Greenwich Time and the Discovery of the Longitude*. Oxford University Press.
- [3]. Eggert, P., & Olson, A. (2024). *The IANA Time Zone Database*. Internet Assigned Numbers Authority.
- [4]. Steinmetz, J. (2014). Political time: How time zones became a global political institution. *Journal of Global History*, 9(3), 351–376.
- [5]. Starr, M. (2018). Time is political: The regulation of clocks in modern states. *History & Technology*, 34(2), 123–148.