

# My Definition of Time

Paul Schroeder

Pshrodr8@aol.com

2016

In response to a discussion of time it was suggested we should form a definition, here is my take.

Consider first prehistoric man and animals. They experienced one obvious regularity in which the sun rose and set. Other than that life consisted of survival. Regularity provides time and it was the day.

Gradually more regular patterns were detected such as the moon growing and shrinking and the annual weather and crop changes. So there were three regularities, the day, the month and the year. But they had no common relation to each other. So man invented the week for one connection and the hour for another. The hour served the purpose of subdividing the 'day' regularity. It varies due to longitudinally separate locations and time zones were created. People at different latitudes also experience the day period differently due to annual tipping of earth so the minute and second were created for that subdivision.

Consider for a moment a person in a space ship in earth's orbit that's maybe offset from earth by 5 degrees of orbit. His ship doesn't rotate and his only view is toward the sun. He experiences none of the regularities mentioned above. At most he might detect planets approaching or crossing the sun, especially mercury and Venus. So time is different or non-existent. In somewhat similar conditions regularities dont exist out in remote space that match ours.

And then there is the issue that detection of regularities is determined by and supported with visual documentation. But vision requires light and it has properties such as velocity. So Relativity suggested we dispose of time. Meanwhile local corrections to time led to further subdivision of all the regularities with cesium clocks. So the process of seeking accurate and definable time is to continue subdividing all the earlier regularity subdivisions down to infinitely small components.

Note that for observers separated by position or by motion, the time measure is not the same. It is based on infinite sources.

There are also extensions in the direction toward larger where centuries, eons and periods play a role as time keepers. All these subdivisions do not give exact divisions of other subdivisions.

That covers the components of time, and we see that time itself is not a real physical thing. Just like the universe, time is infinite in all directions and can have no fixed direction of flow. But we still have the birth and flow forward of lives and thus a direction to analyze. The key is that the direction of passage is of one's 'existence', not of time. Other flows forward are of groups of things such as the human existence. In longer views there is the existence of the solar system or of galaxies which seem to flow

forward. Bottom line is that there is no reason that time can't flow differently in different areas of space or different spatial directions of flow.

My specific time definition would be that 'time is an infinity that envelopes us and it resides within the spatial infinity of the Universe'. Motion exists so that which we call time is a series of components that subdivide and measure the motions. The measures within the time infinity are regular actions (regularities) or equally clocks and their ticks. The measuring clock ticks often serve as a definition of time. Clocks are used to subdivide time.

I have explained that the word gravity has a dual meaning. The gravity we experience is often called attraction and is 'the effects of gravity'. However the source of gravity is the pushing force, also called gravity. So we see here that time has similar dual definitions as infinity and as clicks.

Paul Schroeder