How many things can happen in a single instant?

Source: http://sci.tech−archive.net/Archive/sci.physics.research/2004−12/0735.html

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From: Mike Helland (*mobydikc_at_gmail.com*)
Date: 12/19/04

Date: Sun, 19 Dec 2004 12:48:24 +0000 (UTC)

This seems to be a standard assumption people have:

"If time did not exist, no event occurred."

As you may know this the opposite of how I view things. Instead I would say:

"If no event occured, time does not exist."

So time is not a medium for change. It is not a continuum, and its not even really a dimension. It is the analysis that something has changed. It exists in the subjective conscious experience of an observer. This is consistent with special relativity's definition that "time is what a clock measures", with the implications of quantum mechanics and string theory, and with what recent developments in the field have suggested.

In other words, time is not a prerequisite for something happening, it is a result of something happening.

There's an easy way to wrap your head around this.

Let's take the following situation with bleacher seats. Imagine you have a stadium, and there are four people (A1−A4) sitting in a single row:

___A1_A2_A3_A4

And in the next row, are four more people (B1−B4), but sitting one seat to the left, so we have:

___A1_A2_A3_A4
B1_B2_B3_B4

Finally, there is a third row, and those people (C1−C4) are sitting one seat to the right of the original row. This is our picture:

___A1_A2_A3_A4
B1_B2_B3_B4

_____C1_C2_C3_C4

We now make the following rules:

1. Consider that movement and time in the stadium is discrete

We know that from quantum mechanics and Planck's Constant, such a suggestion might actually apply to nature

2. Since time is discrete, consider that the smallest, indivisible interval of time is the time it takes to move one seat, and this interval is called an instant

Ok. Now, in our picture, our row B will move one seat to the right, and C one seat to the left, so that after an instant we have:

___A1_A2_A3_A4
___B1_B2_B3_B4
___C1_C2_C3_C4

In this instant of time, if we were sitting in row A, you would have seen row B and row C move one seat. Which makes sense, because our rules say that in one instant, the smallest indivisible interval of time, only movement from one seat to the next will occur.

But what if you were sitting in row B? You would have seen row A move a single seat, but row C would have moved 2 seats! How can, in the smallest indivisible interval of time where only movement by one seat is possible, can this be true? And doesn't that mean that if the smallest indivisible unit of time corresponds to the movement of one seat, that by moving two seats, we've actually managed to divide the indivisible unit of time?

There is an assumption here that all eight seats (four from row B, and four from row C) can move in a single instant. The assumption is multiple things may happen in a single instant.

What if that assumption is not correct? In fact, let us assume it is wrong.

Remember what I said at the top about time?

If something moves, there is time. Not the other way around.

That means that when a single seat moves in its smallest allowed motion, there is an instant of time. In our example eight seats are moving, so, based on this new view of time, there should be eight instants, not just one, which was the previous assumption.

Therefore, the rules are not violated, since the seats would look like this after one instant:

___A1_A2_A3_A4
B1_B2_B3____B4
_____C1_C2_C3_C4

and this after two:

___A1_A2_A3_A4
B1_B2_B3____B4
___C1____C2_C3_C4

If you follow this scheme, you will never observe a seat moving more than one seat away from you in a single instant, even when relative motion is involved.

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Right now our leading theory of mechanics is Relativistic Quantum Field Theory. A brief history of the idea is that we found Newtonian mechanics, we updated Newtonian mechanics and made it special relativity. Then we found quantum mechanics, something totally different from Newtonian mechanics. Making a field theory out of QM gave us QFT. And finally we combobulated special relativity, which is an evolution of Newtonian mehanics, with QFT as an afterthought.

I suggest that the reason this path to a theory of everything has failed is because we made QFT relativistic by pairing it with old and incompatible Newtonian mechanics.

What I've described in this post is the foundations for a brand new version of mechanics well suited for quantum phenomena that implicitly contains the effects of special relativity, eliminating the need to force QM and the old Newtonian mechanics into the same hole, and taking a new path to a theory of everything. We also avoid postulating into existence a speed limit, something that might come in handy since Newtonian mechanics and general relativity assume that changes to the force of gravity are propogated throughout space−time much faster than the speed of light, making it difficult to find a workable theory of quantum gravity with a graviton that may only move at c.

I've done this by asking a simple question "what can happen in an instant?"

By the way, this puzzle is Zeno's fourth puzzle on time and motion. In 2500 years it seems that no one has questioned the assumption that "many things can happen in one instant of time." By questioning that assumption, and postulating the antithesis, we have an extremely elegant solution, and an interpretation of mechanics that implicitly contains the effects of special relativity.

If you disagree with me, you are essentially saying that "more than one thing may happen in one instant of time."

I see no reason to accept that as a fact (nor, as a consequence, any of the physics that is built on that assumption).

That leaves me with one question:

Why do you accept the fact that many things may occur in a single instant?

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