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Time and the Photon

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For more proof that math and physics are dead, we go today to AskaMathematician.com, where we get an answer to the question, "If a photon doesn't experience time, how does it travel?"

Before we look at that answer, I must say this website is strange. It looks like propaganda from the masthead down. Each "answer" is given either by "the physicist" or "the mathematician." Who are these guys? Since when do science and math post answers anonymously? I can understand why they wouldn't want to sign their names to such poor answers, but what kind of readers read anonymous propaganda? How does this site get any hits? If you hit the "about" link at the top, you get nothing. Zero information about who is posting these answers, and from where. Same if you hit the "home" link. Nothing. They have a couple of photos posted, which may be jokes, but if they are real, then our authors are just a couple of young graduate students. Which of course just means they are repeating things they learned in the past year. They haven't even had time to question these things themselves, so why are they answering questions?

But to get right to it: how does an object that doesn't experience time manage to travel? According to "the physicist,"

The short, unenlightening, somewhat irked answer is: look who's asking.

[Does he mean "irksome"?] But no, wait, I was asking the physicist, not "cool Zen boy sitting on a bamboo mat." I want a real answer, not misdirection from the first sentence, as we are getting here. Any real physicist would know that "who's asking" has absolutely nothing to do with it.

To expand on his misdirection, Zen boy first confirms that for light time does not pass. After some more hemming and hawing, we get to this:

When an object moves past you, you define its velocity by looking at how much of your distance it covers,

according to your clock, and this (finally) is the answer to the question. The movement of a photon (or anything else) is defined entirely from the point of view of anything other than the photon.

How exactly does that answer the question? Zen boy has just told us that c is defined by your distance over your time, but that wasn't the question. The question is about the photon's *own* clock. If we ride along with Albert on his ray of light, how do we move if time is stopped? Zen boy has not answered that question, he has just dodged it.

You see the mess mainstream physics has gotten itself into. It is so confused now that it thinks it is cool to post answers like this. These kids aren't embarrassed to publish this stuff, because it really is no worse than what their teachers taught them. Their professors also think they are Zen archers or other adepts, and when they aren't quoting Heisenberg they are quoting the Dalai Lama. The top physicists in the field look just as foolish as these two kids, that is, so why should Zen boy be ashamed to write like this? We can almost see him preening while he types, which somehow makes it all even worse. We might as well get our physics from Richard Gere.

We have a major problem here, which the asker of the question seems to recognize but which Zen boy refuses to see. Since velocity is *defined* as distance over time, if time is stopped, then there can be no velocity. The photon cannot be moving by its own measurements. Somewhat better pettifoggers than Zen boy have claimed this is no problem for Relativity, since nothing moves in its own time frame. You are stopped relative to your own time frame, and so is light. No problem. But there *is* still a very big problem, since *you* can still measure *your own* velocity. You do not need someone else to tell you how fast you are going. Why can't light do this the same way you do? When you do it, you measure yourself relative to a background. So you go *outside* your own local frame. Light can also do this, since it could just pick you as its background. It has now gone outside its own frame. Since you see light moving relative to you, light must see you moving relative to it. Why would light see everything as stopped?

Light *doesn't* see everything as stopped, because light is moving. The only way light could see everything as stopped is if light weren't moving. But we know that it is. Since light must see you as moving relative to it, light must see motion. If light sees motion, then light experiences time, since that is what time is. Time is by definition linked to motion. If there is motion, there is time. Therefore, light must experience time in the same way everything else does. Time cannot be stopped for light, anymore than it can be stopped for you.

Remember, if the current argument worked for light, it should work for you, too. The current argument (which Zen boy is sort of trying to mirror) is that you can't measure your own motion from your own frame. Since velocity is relative, you are stopped relative to your own frame, because you are *in* it. Therefore, light is not moving relative to itself, therefore light experiences no time. But if that were true, it would also be true for you. You are also not moving relative to yourself, therefore there is no motion in your frame, therefore you should not be experiencing time. Time should be stopped for you, too.

But of course that isn't how time is defined. Your watch isn't ticking because you are moving relative to your own frame. Your clock is ticking because you (or your watch) are moving relative to other frames. Since light is also moving relative to other objects, its watch must be ticking.

In order to keep the current interpretation of Relativity, mainstream physicists have been forced to overturn or ignore previous definitions, like the definition of velocity as v=x/t. As we have seen, they

have no problem doing that. Relativity and other new physics made them more rich and famous and powerful than that old equation ever did, so of course they will choose to keep Relativity and ditch the old equations and definitions.

You will say, “Well, I follow your logic, and I agree that time should be passing for light, since it is moving, but we still have Einstein's equations to deal with, which have been confirmed over and over. These equations have been proven to work, and yet they do contain this limit where mass goes to infinity, time stops, and so on. So we are now up against that. If you are right and Relativity is true, the transforms are mostly right, but time does not stop, what gives?”

What gives is the equations, which are flawed. We do need transforms in many situations, and Einstein's transforms are good approximations in some experiments, but the equations and interpretations are far from perfect. Even Einstein admitted that. He told us his equations were not perfect. That is why we get these paradoxes. The paradoxes are *not* necessary parts of the physics or math; nor are they signs of esoteric knowledge. They are signs of mistakes in the math. Since I have shown precisely where the mistakes are, we no longer have to put up with the fake paradoxes. We do not have to embrace the paradoxes, or paste over them with pseudo-Buddhistic nonsense. We can return to real math and physics again.

I showed several years ago that this limit we are talking about turns up first when Einstein calculates the mass and energy transforms. In that original paper, he derives a transform called *gamma*, which has a square root in the denominator. He then expands the square root using the binomial expansion, showing not only that his new equation reduces to the classical kinetic energy equation at low speeds, but that it implies limits at zero or infinity for mass increase, time dilation, and so on. However, I showed that very early and very basic mistakes in his derivation falsified *gamma*. I corrected the errors, finding a new transform that did most of the things *gamma* did, getting very similar numbers, but *with no square root*!

Correcting these errors led to many updates, but two of the most important were with this energy equation we are dealing with. First, I showed that with my new transform, the Relativity equations reduced directly to the classical energy equations, with no approximation and no infinite series. That's right: the Relativity transform is not an approximation at slow speeds, and it reduces to the classical energy equation *at all speeds*. I showed how to go from one to another, with simple math, as you can see by going to that paper.* The reason I was able to do this was that my new transform contained no square root. So there was no binomial expansion and no infinite series. Second, this same correction meant that c was no longer acting like a limit in the math. The equations still contained some limits, it is true, but not this one, and none at infinity or zero. Mass did not go to infinity at c and time did not go to zero.

That is the real answer to this question. Since the photon travels, it *must* experience time. We should have known that just from the definitions of “time” and “travel.” Nothing can travel and not experience time, because to do so would be a contradiction of the given definitions. Relativity is true, but it can't break basic rules of logic and math. Knowing that law was fixed, I knew that Relativity must contain some basic mathematical errors, and I did not quit until I found them. Once I found them and corrected them, all the paradoxes simply evaporated. My corrected Relativity does all the things the old Relativity did, it just does them more simply and directly. And it does them without ever once expecting you to accept the unacceptable. You don't need to be a Zen master or a Yogi to do physics, you just need to be scrupulously *honest* in your math. As it turns out, enlightenment has to do more with honesty than with esoterica.

*I know the paper is long and dense with equations, but these things can't be corrected with a wave of the wand. If the problems were easy to dig out, this would have been done long ago. If you get weary, go to the gloss, or skip down to the section that addresses this specific problem. It is in the section on the energy equations, part 7. A problem like this doesn't fall to a soundbite answer, as we saw from AskaMathematician.com. It can be answered only by years worth of work like I have done.