How to overturn relativity theory

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Abstract:

This paper uses some simplified methods, such as using the before and after positions of two points to determine the lengths or space change of an object, assigning a fixed duration of time to all participants to measure their traveled distance, etc.

By analyzing the motion of objects frame by frame, derive formulas that should be adhered to by fast-moving objects, which indicate the usage of relative velocity rather than absolute velocity, ultimately leading to the conclusion that time and space are invariant and immutable.

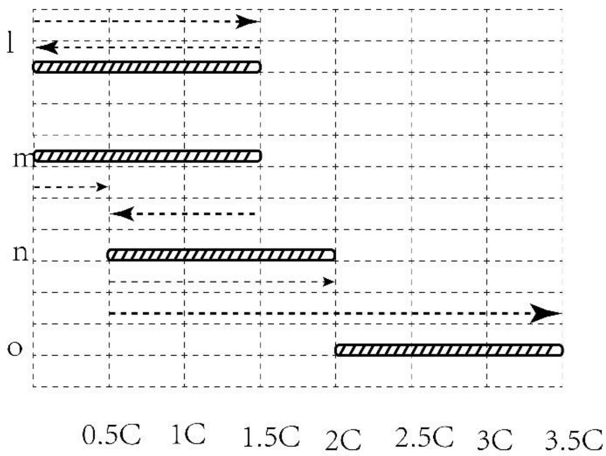
However, Einstein's paper "On the Electrodynamics of Moving Bodies" uses the absolute velocity of light for the entire calculation, so the algorithm of that paper is wrong.

Keywords: Relativity, relative velocity

To overturn Einstein's "On the Electrodynamics of Moving Bodies", model simplification is necessary. Fortunately, when simplified data is substituted into the formula, the formula should still hold true. Otherwise, it can be proven that he used an incorrect algorithm.

Due to humanity's natural tendency to defer to authority, complex arguments are often rejected. Thus, to overturn Einstein's theory of relativity, the thesis must be clear and simple, with a model that is accessible and easily understood by everyone, avoiding the complexity that could potentially confound editors, as was the case with the original text.

Now let's discuss "On the Electrodynamics of Moving Bodies," Einstein's first paper on special relativity published in 1905 in the German journal Annalen der Physik. The original German title is "Zur Elektrodynamik bewegter Körper." Based on this work, I have constructed a simple model, as shown in the figure A:



When discussing a rigid rod, let’s set the rod length as 1.5C, C represents distance or length, c represents the speed of light, and 1C equals 1 second multiplied by c.

As in the case of l in the figure, suppose that the rigid rod is stationary, and a photon travels from the left endpoint to the right endpoint, taking 1.5 seconds. It then returns from the right endpoint to the left endpoint, taking 1.5 seconds.

This is consistent with the equation 2AB/(t'a-ta)=c in his paper.

$$\frac{2\overline{AB}}{t`\mathrm{A}-tA}=c$$

2*1.5C/(1.5+1.5) = c

Now assume that the rigid rod is moving to the right at a speed of 0.5c along the direction of the rod. Give each observer a time limit of one second.

Do not care about any clock, that would make things complicated. You give each one 1 minute. Then freeze everything and observe their locations.

As in case m-n:

According to the speed of 0.5c and a time span of one second, the left endpoint of the rigid rod is positioned at n-0.5C.

A photon emitted from the right endpoint of the rigid rod, starting from n-1.5C, reaches the left endpoint, which is also n-0.5C, in this one second. This is because the speed of light is not affected by the initial speed of an object and continues to travel at the speed of light c.

The formula is $1.5C = 1 \times c + 1 \times 0.5c$.

Since the time and velocity are fixed, their distances traveled are also fixed. They meet at that point, within that second, time and length remain normal, neither lengthening nor shortening.

Next, let's look at case n-o, with a time limit of 3 seconds:

The right endpoint of the rigid rod moves from n-2C to o-3.5C, $0.5 \times 3c = 1.5C = 3.5C - 2C$.

Within 3 seconds, the photon travels from the starting point, the right endpoint n-0.5C, at the speed of light c, and reaches o-3.5C, which is exactly the right endpoint of the rigid rod, because $3 \times c = 3C = 3.5C - 0.5C$.

At this 3 seconds, both time and length remain unchanged. Everything appears normal too.

However, if you combine these two movements, as in Einstein's paper, the photon travels back and forth on the rigid rod at a speed of c, from the right endpoint to the left endpoint, and then from the left endpoint back to the right endpoint, it takes $1 + 3 = 4$ seconds. Originally, when stationary, it only took 3 seconds. In the frame of reference of high-speed motion, time and length undergo changes.

Alternatively, assuming that the time is correct, as it is predefined by you, $4 \times c / 2 = 2C$, leading to the conclusion that the length of the rod has changed, which means that the space has been altered.

Or, assuming that the length remains unchanged at 3C, and the time taken is 4 seconds, the speed of light would not be c but rather 0.75c, which does not conform to the principle of the constancy of the speed of light. What happened after combined?

The truth is:

$2AB/(t'A-tA)=c$, the original formula in the paper is no longer valid when the object is moving. In fact, because there is an enhancement and weakening phenomenon in the direction of Doppler affect of velocity, the correct algorithm should be divided into two sections and calculated separately.

This is attributed to the fact that when a moving object is used as a reference frame, the speed of light is calculated using relative velocity. For example, suppose you are stationary and emit a photon to the left and another to the right. After one second, freeze everything and measure the distance. The two photons are 1C away from you, but the measured distance between the two photons is 2C. However, when using a moving object as a reference frame, with one of the photons as the reference point, within one second. Throughout the entire motion process, time is a shared dimension between the photon and you. It would be illogical and unreasonable to assert that by merely changing the reference frame, the passage of time itself would be altered. Within one second, the distance between the two photons changes from 0 to 2C, resulting in a speed of light of 2c.

By the same logic, suppose you are Superman and your eyes have the function of measuring speed. Fix your eyes on the left end of the rigid rod and observe. The left endpoint of a rigid rod moving to the right at a speed of 0.5c, observing a photon, as in case m-n. One second ago, the photon was 1.5C away. One second later, the photon arrives, it takes one second, and its measured speed is 1.5C/1 = 1.5c. We call this the relative velocity.

Similarly, in case n-o, which takes 3 seconds, you stand on the moving rigid rod and use your superpowers to measure the speed of the photon. The photon is actually moving away from you at a relative speed of 0.5c. 0.5c × 3 seconds = 1.5C.

The correct formula is: 1 second × 1.5c + 3 seconds × 0.5c = 1.5C × 2. Einstein used the absolute velocity c in the formula, which is a very obvious low-level error.

Einstein's paper confused relative speed and absolute speed. When measuring the speed of a stationary object (actually a stationary cosmic coordinate, assuming a map is drawn), the absolute speed is measured.

Taking the moving object as the coordinate, what is measured is the relative speed. The absolute speed of light is c, and the relative speed of light depends on the two directions in which the object and the photon move.

Using a moving object as a reference object, you can only use the relative velocity of the object to calculate, not the absolute velocity of the stationary object.

Now we have the line of thinking to overturn he theory of relativity. Before deriving a formula, we can use a specific example with specific numbers to calculate the result, and then summarize the result as a formula.

Analyze frame by frame, that is, for each tick of the second hand of the clock, determine its starting position and final position. If you are calculating the length of a rigid rod, you can take the starting time position and ending time position of the two endpoints respectively, and determine the starting length and ending time length of the rigid rod based on the positions of these two points before and after the movement. Artificially limit the time of all participants to be the same, and then freeze everything, that is, assuming that the time synchronization during the movement process has changed, then observe whether the space (length here) has changed under the condition of the same speed. Of course, conversely, after moving a certain distance at a certain high speed and freeze all, you can also calculate whether the time they take is the same.

If you enjoy complexity, you can design objects with velocities of 0.9c and rod lengths of 1.9c, and describe the position of the rod and the photon every 1 second to see if the time and length have actually not changed.

Alternatively, you can establish a three-dimensional coordinate system and take into account the physics law of the Doppler effect. By calculating in segments, you can observe how time and rod length are affected. If Einstein's formula holds true, it should apply to any case or specific numbers plugged into it. However, using simpler cases makes it easier for people to understand.

Let us consider another more complex example involving movement within a three-dimensional space. The intersections of all linear motions, where one object reaches another, can be simplified into plane geometry for computational purposes. To this end, envision a spacecraft ABC which forms a right-angled triangle with its hypotenuse measuring 5C, and its two perpendicular sides measuring 3C and 4C, respectively. Here, 1C is equated to the distance covered by light moving at speed c in one second – an exceedingly vast measure. Refer to the illustration provided in Figure H:

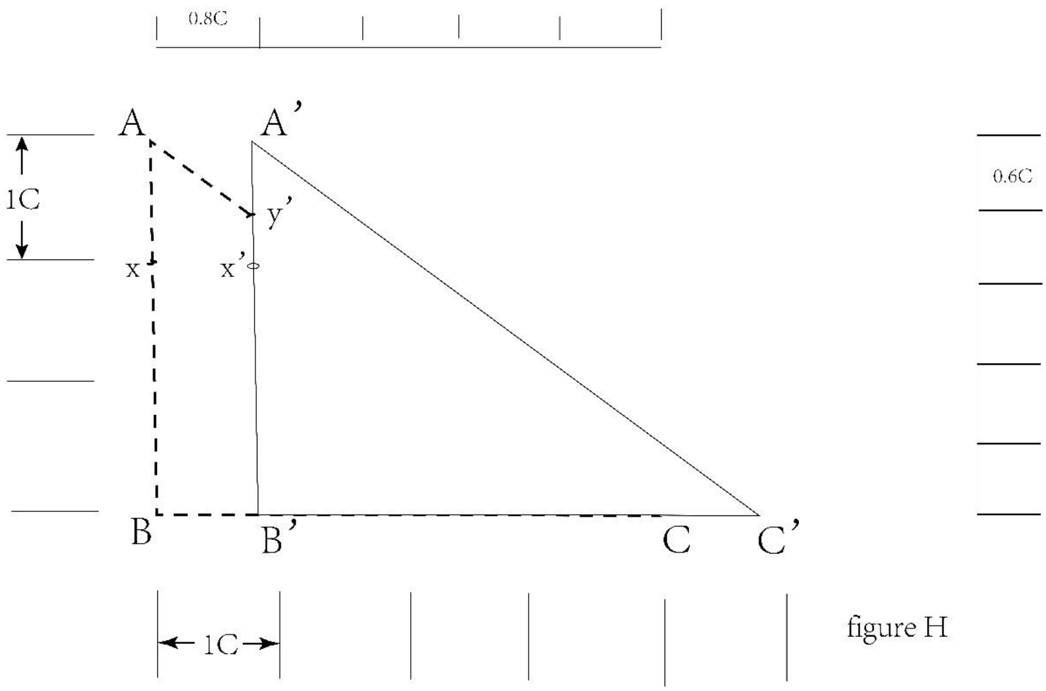


figure H

When it is stationary, a photon takes 3 seconds to travel from point A to point B, and 5 seconds from point A to point C.

Next, let's observe the motion model. When the triangular spaceship moves along the direction of BC at a velocity of 0.8c per second, after five seconds, 5 x 0.8c = 4C, that is, point B moves to point C. At the same time at point A, photons or similar entities with photon-like properties are emitted from point A in various directions.

Give everyone one second, and then freeze everything to observe the positions of all entities.

After one second, the spaceship is at position 0.8C, owing to its velocity of 0.8c. Like triangle A'B'C' in the figure.

The photon emitted in the direction of AB starts at point A and is at point x after 1 second. Since light will not change direction without external force, and the speed of light is not related to the initial velocity and acceleration of point A, the position of point x is 1xc=1C. One second ago, the observer at point B was 3C away from the photon. One second later, the observer at point B is at point B', and the distance from point x is

$$xB' = \sqrt{(2C)^2 + (0.8C)^2} \approx 2.154C$$

The result of this measurement of the speed of light is the change in distance, 3C-2.154C=0.85C, which means that the speed of light within one second is 0.85C.

Another photon moving along direction AC reaches C after five seconds, since point B also arrives at point C after five seconds; thus, this photon is received at point B and the light is seen. This photon was at point A one second ago, and at point y' one second later, because 1 x c = 1C.The spaceship's speed is 0.8c, and it was at point A one second ago and at point A' 0.8C away one second later. Based on this, the distance between A' and y' can be obtained as 0.6C.

A'y' = $\sqrt{(1C)^2 - (0.8C)^2}$ =0.6C

Calculated using the moving object as the reference coordinate, the observer at point B measured the distance of the photon to be 3C one second ago, and the distance of the photon to be 3C - 0.6C = 2.4C one second later, which means that the photon is moving along the wall of the spaceship AB, and the actual speed is only 0.6c.

Most modern misconceptions, including those found on platforms like Wikipedia, believe that a photon emitted from point A one second ago will reach point x' one second later, simply because the distance between A' and x' is 1C.

Assuming this scenario to be valid, the right-angled side A'x' = 1C and the leg AA' = 0.8C, then we have the hypotenuse

Ax' = $\sqrt{(1C)^2 + (0.8C)^2}$ ≈1.28C

This would mean that the actual speed of the photon emitted from point A and reaching point x' within one second is 1.28c, thereby successfully achieving superluminal speed.

Although the observer at point B is now at point B', the observed speed of light is still 1c, but relative to the cosmic map, point A is stationary, and the photons emitted from the stationary point A in all directions are still 1c, but I have calculated that the speed of some other photons is 1.28c within one second. It is time to give my algorithm the Nobel Prize.

If you are truly unable to perceive the speed of this photon, perhaps try to sense the direction of the photon instead.

Therefore, in the moving reference frame, the photon emitted from point A approaches point B at a speed of 0.6c per second and reaches point B after 5 seconds, rather than reaching point B at a speed of c. Time and space do not change due to the extremely high speed of an object.

Time is a measurement tool introduced by humans. Matter, devoid of consciousness, cannot perceive time. It is impossible to change time through motion. There is no fulcrum to leverage such change, there is no point upon which force is applied, and altering time would not be consistent with the law of conservation of energy.

However, space is a tangible existence. Even if a space is entirely empty, we can assign coordinates to it, and these coordinates are absolutely stationary. The essence of describing the motion of an object is fundamentally about the change in the object's position relative to these stationary coordinates. The absolute speed of light, c, is therefore defined in relation to these stationary coordinates in space.

Therefore, the final conclusion is that relative to space, the absolute speed of light is constant, which is the ultimate speed at which matter can travel. I tend to believe that it is impossible for matter to exist beyond this ultimate speed. However, when using a moving object as a reference frame, humans should use the relative velocity of light, not the absolute velocity of light.

Einstein's paper assumes that the speed of light is constant and uses the absolute velocity of light c throughout to measure moving objects. So it's outrageously wrong.

As for the phenomena observed by other scientists, those experiments that prove that the time and space of the theory of relativity can be changed, are essentially a phenomenon in human psychology. Humans often have a preconceived conclusion first, and then apply the conclusions to various existing phenomena for explanation, such as theism and the theory of the soul are all products of this way of thinking. Due to space limitations, I have another paper that uses electromagnetic theory to explain those experiments, which also makes sense.