Special Theory of Relativity based on fraudulent science?

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Abstract –This article makes it highly likely that the question mark in the title has to be an exclamation mark.

Introduction

Chapter 1 shows that Einstein's mistakes in his mathematics in the Special Theory of Relativity are so extremely obvious that one can hardly belief that he didn't make them purposely.
Chapter 2 shows that the scientific establishment changed, after his death, Einstein's hypothesis regarding the speed of light fundamentally, but that it maintained, uncriticised, the result of his theory.

1. Einstein's unpardonable mistakes

If Einstein would not have made these mistakes he would not have succeeded in presenting his consistent transformation formulas. 'Consistent' regarding the following property: after having transformed the coordinates x and t from system K to system k, the original coordinates in K are found again applying the same formulas with the appropriate variables from k to K.
These mistakes will be shown in texts in between quotes from ref [1], being a correct translation of ref [2].

The crucial equation is: x'/(c-v) = t, that can also be written as x' = ct - vt.
Einstein defined v as follows: "

Now to the origin of one of the two systems (*k*) let a constant velocity *v* be imparted in the direction of increasing *x* of the other stationary system (**K**), and let this velocity be communicated "

At the start of § 3 in his article, he defines x' as follows:
"If we place x' = x - vt, it is clear that a point at rest in the system k must have a system of values x', y, z, independent of time."
Given his definition of v this is a confusing remark, because it is clear that x', defined in k, is the projection of x in K, resulting in x' = x - vt. If x' would be independent of time, then x has to be x_0 + vt, with x_0 defined as constant in K. There is no text at all in Einstein's article that gives rise to this assumption. So seemingly his remark about x' has just to be ignored. What is left is that x must have been meant as an, for the time being arbitrary, coordinate in K, independent of time.
Comparing x' = x - vt with x' = ct - vt, means that x is now replaced by ct, being in contradiction with the original definition of x. That is suspicious. What Einstein then did in his mathematics is shown hereafter.

" Since τ is a *linear* function, it follows from these equations that

$$\tau = a\left(t - \frac{v}{c^2 - v^2}x'\right)$$

where *a* is a function $\phi(v)$ at present unknown, and where for brevity it is assumed that at the origin of *k*, $\tau = 0$, when *t*=0. "

Remark: x' equals 0 at the origin of k, so indeed when t = 0 then τ = 0 in the presented expression of τ.
But then x, being x' + vt, also equals 0 at t = 0. So x' = -vt, clearly in contradiction with x' = ct – vt.
"

With the help of this result we easily determine the quantities ξ, η, ζ by expressing in equations that light (as required by the principle of the constancy of the velocity of light, in combination with the principle of relativity) is also propagated with velocity *c* when measured in the moving system.

For a ray of light emitted at the time $\tau = 0$ in the direction of the increasing ξ

$$\xi = c\tau \text{ or } \xi = ac\left(t - \frac{v}{c^2 - v^2}x'\right)$$

But the ray moves relatively to the initial point of *k*, when measured in the stationary system, with the velocity *c*-*v*, so that

$$\frac{x'}{c - v} = t.$$ "

Remark: At this place Einstein thus replaced x = 0 in K by the distance ct of a light ray moving with velocity c relative to K and thus x', just being defined as x = –vt, by x' = (c-v)t, without any explanation. Remarkable too is that Einstein seemingly does not consider the velocity of light constant relative to whatever reference, as the scientific establishment did after his death!

"

If we insert this value of t in the equation for ξ, we obtain

$$\xi = a\frac{c^2}{c^2 - v^2}x'.$$

In an analogous manner we find, by considering rays moving along the two other axes, that

$$\eta = c\tau = ac\left(t - \frac{v}{c^2 - v^2}x'\right)$$

when

$$\frac{y}{\sqrt{c^2 - v^2}} = t, \ x' = 0.$$ "

At this point Einstein implicitly introduces, without any explanation, a velocity of light $\sqrt{(c^2-v^2)}$, being $\neq c$ as well as $\neq c-v$, along the y-axis and seemingly also along the z-axis because he continues with:
"Thus

$$\eta = a\frac{c}{\sqrt{c^2 - v^2}}y \text{ and } \zeta = a\frac{c}{\sqrt{c^2 - v^2}}z.$$ "

That has to be qualified as totally unscientific.

He continues with:
"Substituting for x' its value, we obtain

$$\begin{aligned} \tau &= \phi(v)\beta(t - vx/c^2), \\ \xi &= \phi(v)\beta(x - vt), \\ \eta &= \phi(v)y, \\ \zeta &= \phi(v)z, \end{aligned}$$

where

$$\beta = \frac{1}{\sqrt{1 - v^2/c^2}},$$

and ϕ is an as yet unknown function of v. "

Going back to his statements: "If we insert this value of t in the equation for ξ .." resp. "Substituting for x' its value.." we find that Einstein must have applied x'=x-vt in order to get $\tau = a\beta^2(t - vx/c^2)$, because applying x'=(c-v)t would have resulted in $\tau = tc/(c+v)$. He now carried out the following manipulation. He found the expression $\xi = ac^2x'/(c^2-v^2)$ $(= a\beta^2x')$ by applying $t = x'/(c-v)$ in $\xi = c\tau = ac\{t-vx'/(c^2- v^2)\}$ and then created $\xi = a\beta^2(x - vt)$ by applying x' = x - vt instead of x' = (c - v)t, as he did in the step before.

Such a suspicious mathematical manipulation should be qualified as fraud, if not, then as stupid.

Another, even more fraudulent looking, operation of Einstein pops up in his last copied remark: " and φ is an as yet unknown function of v." Where he originally defined $a = \varphi(v)$, it is now clearly found that he purposely used $\varphi(v) = a\beta$ in his expressions for τ and ξ, as well as in the expressions for η and ζ.
However, Einstein ends his reflections with the conclusion that $\varphi(v) = \varphi(-v) = 1$. Given the fact that he explicitly applied $\varphi(v) = a\beta$, the crazy consequence is that $a/\sqrt{(1-v^2/c^2)} = 1$. So 'a' must be 1 and v be 0!

His manipulative mathematics resulted in his Special Theory of Relativity only applicable for zero velocities.

Einstein must have realized himself this most remarkable consequence and, as a result, must have purposely avoided to pay attention to it, for the simple reason that it is the deathblow for his theory.
If such behaviour would not justify the qualification fraudulent, what other qualification should be used?

The crucial question is: why did, and still does, the scientific establishment not observe all these manipulations?

2. Scientific establishment's unpardonable mistakes

Einstein's postulate about the speed of light sounds:

> "*Any ray of light moves in the 'stationary' system of co-ordinates with the determined velocity c, whether the ray be emitted by a stationary or by a moving body.*"

The fundamental error in this postulate is that he effectively reintroduced, with his 'stationary' system, the ether model, most likely without noticing it, because he rejected the ether model himself in the same article. It is generally accepted that an absolute stationary system does not exist. As a result only a stationary system w.r.t. another system can exist. As a consequence that other system is also stationary w.r.t. the first mentioned one. Therefore the introduction of a singly 'stationary' system is senseless, whether it is put in quotes or not. Einstein even defined it as **the** 'stationary' system:

> "Let us take a system of co-ordinates in which the equations of Newtonian mechanics hold good[2]. In order to render our presentation more precise and to distinguish this system of co-ordinates verbally from others which will be introduced hereafter, we call it **the** 'stationary' system. (Note 2: i.e. to the first approximation.)"

The scientific establishment seemingly realized this mistake too. Instead of combining this mistake with Einstein's mathematical manipulations and as a result reject the STR, it added another mistake to the story:

> It changed Einstein's wrong postulate into another, even more unphysical, postulate, by assuming that the velocity of light in vacuum is c relative to whatever reference.

It is of course allowed to create whatever postulate, however it is fully unscientific to change the postulate of a particular theory fundamentally, but still maintain the result of that theory, without creating a new theory based on that new postulate.
If such an unscientific act is also more or less carried out sneakily, given the fact that there exist no reference explaining this fundamental change of Einstein's hypothesis, this very much looks like fraud.

Conclusions

1. Einstein's mathematical errors force us to conclude that he should not be regarded as the widespread praised most intelligent scientist ever. He looks much more like a physicist who has, developing his Special Theory of Relativity, practiced physics in an extremely unscientific manner. One can hardly avoid to qualify it as fraudulent science.

2. The scientific establishment has made, about halfway the previous century, an unpardonable mistake by not exposing openly Einstein's unscientific behaviour, regarding his Special Theory of Relativity, but even worse by fundamentally altering Einstein's postulate regarding the speed light and still retaining the same result, without presenting a new theory leading to that same result. Such behaviour also looks much like fraudulent scientific behaviour.

3. The influence of Einstein's unscientific behaviour on the health of physical science is dramatic: all modern physical models and phenomena that are, more or less, based on his Special Theory of Relativity, have to be rejected too. For example: the phenomena space-time, black hole and last but not least: $E = mc^2$!

References

[1] Translated original article of Einstein:
On the electrodynamics of moving bodies, By A. Einstein, June 30, 1905
http://www.fourmilab.ch/etexts/einstein/specrel/www/

[2] Original article of Einstein in the German language
http://users.physik.fu-berlin.de/~kleinert/files/1905_17_891-921.pdf