

“I concluded that the theory is not a theory at all, but simply a number of contradictory assumptions together with actual mistakes.” L. Essen

Letter from Louis Essen to Carl A. Zapffe **By Harry H. Ricker III**

1.0 Introduction

The purpose of this paper is to publish and comment upon a letter written by Louis Essen and sent to Dr. Carl Zapffe. The letter is interesting because it compresses into a few short lines the essence of Louis Essen’s criticism of Einstein’s theory of relativity.

The letter was provided to the writer by Jack Graham, from Dr. Zapffe’s files, upon the request of the author for material needed to write a paper on Essen’s reasons for rejecting Einstein’s theory of relativity. It was a pleasant surprise to receive this transcription from Jack, of a letter written to Dr. Zapffe dated March 25, 1984. The letter begins by thanking Dr. Zapffe for sending a copy of his paper back book and proceeds to give a summary statement of Essen’s reasons for opposing Einstein’s theory.

2.0 Essen’s Letter Transcribed

On March 25, 1984, Louis Essen wrote Carl Zapffe as follows:

"Dear Dr. Zapffe,

"I have enjoyed reading your entertaining book and appreciate your kindness in sending me a copy. You obviously did an enormous amount of reading for its preparation, and I have a feeling that you had a lot of fun writing it and did not expect a rapturous reception. I enjoyed writing my own little book (112 references), although it was outside my field of work, and I was warned that would do my reputation a lot of harm. My experience was rather similar to yours in securing publication, and I decided that the only way was to avoid references. The booklet was invited, as was a lecture I gave at the Royal Institution (Proceedings of the Royal Institution of Great Britain, vol. 45, 1971, p. 141 ff.) My criticisms were, of course, purely destructive, but I think the demolition job was fairly complete. I concluded that the theory is not a theory at all, but simply a number of contradictory assumptions together with actual mistakes. The clock paradox, for example, follows from a very obvious mistake in a thought experiment (in spite of the nonsense written by relativists, Einstein had no idea of the units and disciplines of measurement). There is really no more to be said about the paradox, but many thousands of words have been written nevertheless. In my view, these tend to confuse the issue.

"One aspect of this subject which you have not dealt with is the accuracy and reliability of the experiments claimed to support the theory. The effects are on the border line of what

can be measured. The authors tend to get the result required by the manipulation and selection of results. This was so with Eddington's eclipse experiment, and also in the more recent results of Hafele and Keating with atomic clocks. This result was published in Nature, so I submitted a criticism to them. In spite of the fact that I had more experience with atomic clocks than anyone else, my criticism was rejected. It was later published in the Creation Research Quarterly, vol. 14, 1977, p. 46 ff.

"With best wishes, Sincerely yours"
"L. Essen"

Carl wrote back on April 3, 1984, "Dear Dr. Essen: Your letter of March 25 gave me the kind of reaction that I would get from meeting royalty". He was very happy that Louis Essen had taken the time to read his book, and had written to thank him for sending it.

3.0 Commentary On Technical Issues

The author was greatly pleased when, upon reading the letter, it became apparent that many of Essen's criticisms had also been discovered by the author. This confirmed this writer's reasons for believing the theory of relativity to be false. Here some of the main points will be discussed.

3.1 "the theory is not a theory at all..."

This statement is definitive and certainly needs to be elaborated. Essen goes on to say that it is "...simply a number of contradictory assumptions together with actual mistakes. The clock paradox, for example, follows from a very obvious mistake in a thought experiment..." It is clear that Essen's statement that there is "not a theory" is one which is certain to be challenged. I think he means to say that the theory, does not meet the requirements of what one would consider an adequately justified scientific theory. Obviously one can think any idea is a theory, but a scientific theory is a different matter altogether.

3.2 "Einstein had no idea of the units and disciplines of measurement"

The present writer has tried to make this conclusion the theme of an entire campaign against the relativity theory. This has been documented in a paper by the writer in which the main argument is exactly as Essen says here. Einstein had no idea how to formulate a theory of measurement and the theory he developed takes no notice of the modern approach to measurement and worse, contradicts some of its fundamental principles.

As a fundamental requirement, a theory of measurement always assumes an absolute standard of measurement. The relativity theory begins with its first postulate by making the assumption that no such absolute conception exists. Therefore the theory is dead as a scientific theory of measurement, because no scientific theory at all can be built on the shifting sands of the assumption that any one and all inertial reference frames are equally

valid as a frame within which the standards of measurement can be defined. Such a theory is obviously a contradiction, since no clear meaning can be assigned to any measurement, since all are relatively absolute to each other at the same time. It is true that such a theory can be constructed, but can it be made epistemologically coherent and fit into a consistent theory of measurement? Essen clearly says that the answer is, no.

The reader should notice that it is possible to construct such a theory, but it is clearly not very meaningful, because in order for it to be true, the requirement is that all measurement standards must be universally identical in all the inertial reference frames, and thus the conclusion must be that the measurement standards are all the same in all of the different reference frames, a conclusion which relativity contradicts. Hence any one reference frame must have a standard of measurement identical with all the others and hence there is a universal standard of measure, and since the theory denies this conclusion, it contradicts the theory and the assumption upon which it is based.

See the following for more details: www.wbabin.net/physics/ricker3.pdf, www.wbabin.net/physics/ricker2.pdf, www.wbabin.net/science/ricker14.pdf and www.wbabin.net/science/ricker17.pdf. A summary discussion of the units problem is also given in the following paper: <http://www.helmut-hille.de/units.html>. The complete and correct theory is given by this writer in the papers referenced here. It involves a linear algebra in which the Lorentz transformations are self adjoint, so that there are two sets of transformations, one set transforms the basis of measure and the other set transforms the coordinates of measure. This system is not contradictory as opposed to any system based upon special relativity which inevitably must be a contradiction.

3.3 “The clock paradox...follows from a very obvious mistake in a thought experiment”

This is, I think, a reference to the claim made by Einstein in his 1905 paper that a clock at the equator will run slow relative to a clock at one of the poles. This writer has pointed out that this mistake, is one reason the theory appears to be validated by experiment when there is no validation. The validation is inferred from the result of the Hafele-Keating experiment, which uses an incorrect model for the relative motion of clocks. There is in Einstein’s example, and the Hafele-Keating analysis, no relative motion at all, so how can the clocks be running slow?

See the following for more details: www.wbabin.net/science/ricker41.pdf and www.wbabin.net/science/ricker39.pdf

3.4 “The effects are on the border line of what can be measured”

Here Essen is referring to the attempts to validate relativity, both in Eddington’s famous eclipse experiment of 1919, and the Hafele-Keating result of 1972. It is clear that in both of these cases, the effects observed are marginal and can not be interpreted as definitive

evidence. However, they have been interpreted as definitive evidence, and this is a rather irksome result.

4.0 Commentary On Sociological Issues

In his letter, Essen confirms a number of sociological problems inherent in the scientific establishment, which makes it difficult to publish and distribute a valid assessment of relativity which informs other scientists of its deficiencies which make it invalid.

4.1 “I was warned that would do my reputation a lot of harm”

Essen is one of the few writers who has candidly admitted that expressing a negative opinion upon relativity would harm his professional career, and income prospects. The enormous peer pressure to conform in scientific thinking is well documented. In the case of relativity, this kind of peer pressure has been clearly documented. This should definitively indicate that the theory has no scientific basis, because if its scientific basis was indeed secure, there would be no need for the peer pressure to prevent disagreement with its apparent validity.

4.2 “The authors tend to get the result required by the manipulation and selection of results.”

Here Essen only hints at a very big problem in the sociology of science. This is that scientists prefer to produce results which confirm or prove accepted theories, or theories that they think are true, rather than attempt to disprove them. This tendency was documented in a previous paper that examined the attempt by Dr. Zapffe to interest NASA in his flying interferometer experiment. It seems that NASA only does experiments in order to prove theories, which they believe are true, and they have no interest in disproving theories. Apparently, for monetary reasons, it is better to tell Congress that NASA research will prove certain things to be true, and for bureaucratic reasons they avoid experiments designed to disprove theories believed to be true.

Here the sociological perception seems to be that good science is conducted when theories are proved to be true, and bad science occurs when theories are proved to be false. This is an extension of the optimistic approach to society. People like a positive attitude and dislike a negative attitude.

For the flying interferometer see: www.wbabin.net/science/ricker40pdf

5.0 Conclusions

Essen’s criticisms of relativity physics, which are summarized in this letter, are representative of the viewpoint of critics of that theory. Here the views are summarized.

5.1 The Physical Problem

A physical scientific theory can not be considered even minimally acceptable, if it can not be seen by an expert as being internally consistent in its logical arguments, or deductions. In Essen's case, an expert in time measurement has found the theory, which purports to be a theory about the nature of time, to be unscientific, so as to be judged, "not a theory". Obviously, when an expert in time measurement judges a theory of time to be logically contradictory, that theory is clearly in trouble. It needs to fix its problems, or disappear as a scientific theory. A primary requirement of a scientific theory of physics is that it must have a translation into measurable procedures that are capable of repeatable verification. It is clear that Essen judges the relativity theory to be a failure, because it is unable to meet this very basic requirement.

The essential feature of this inability to translate relativity theory into a physical theory is that relativity fails to incorporate within it a logically consistent theory of measurement in physics. This failure is directly related to its incorrect theory of units of measurement, and the procedures of conducting measurements. Hence, it is not directly capable of verification by valid measurement procedures. So in its essential nature, the theory is fundamentally not a theory of physics capable of empirical verification.

5.2 The Sociological Problem

The sociological problem demonstrates that belief in the validity of relativity physics is not a scientific belief, but a belief in a pseudo-science. Since relativity theory is inherently not empirically verifiable, it is essentially a pseudo-science, because the essential character of a science is its empirical verifiability. The demonstrable fact that relativity physics is claimed to be true, despite that fact that its verification is beyond physical possibility, is proof that it is a metaphysical pseudo-science and not a true physical science.