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Herbert Dingle was Correct! Part VII

G. J. Whitrow's Refutation Attempt In His Review of "Science At The Crossroads"

By Harry H. Ricker III email: kc3mx@yahoo.com

1.0 Introduction

This paper discusses the attempt to refute Dingle's claim that the theory of special relativity is untenable by G.J. Whitrow. The attempted refutation is contained in Whitrow's review of Dingle's book, "Science At The Crossroads". Whitrow's review was clearly another attempt to discredit Dingle and his views by publishing a negative review. The main point to be discussed is that Whitrow, without giving the reader a chance to investigate and decide for himself the truth of the facts and the issues, declares that Dingle is wrong and appears to prove it in a rather dishonest refutation, which was based on the previous refutation of W.H. McCrea, which we discovered in a previous paper, was a dishonest argument. Whitrow, to his credit, gives a much clearer explanation of what is supposed to be Dingle's mistake. However, in so doing, he reveals the duplicity of the relativity establishment in its campaign to discredit one of its most persistent critics. Here the dishonesty will be revealed.

3.0 Analysis of Whitrow's Argument

Whitrow's demonstration that Dingle is wrong consists of a redefinition of the problem in a manner in which, inevitably, Dingle turns out to be wrong. There is an ironic as well as a dishonest aspect of this presentation. The ironic aspect is that Whitrow gets the mathematics correct, because he uses the correct method as described and discussed by this writer in numerous papers. However, the method he uses is not the method which the standard relativity textbooks claim is the correct one. So there is a problem. Is Whitrow being dishonest is using a demonstration which is not consistent with the claims of the relativity textbooks to prove that Dingle claims are wrong, or is Dingle correct when he uses the standard textbook method and finds a contradiction?

Let me repeat this. Whitrow uses a method which is not the standard interpretation of textbooks to prove that Dingle's claim of a contradiction is false. Dingle uses the standard textbook formula, to prove the contradiction, and asserts that the deduction based upon it is false. It seems to this author that Whitrow, by using a method in disagreement with the standard interpretation of the Lorentz transformation formula, is using the correct procedure, but it is not the procedure that relativists claim is the correct one. So Whitrow is agreeing with Dingle that the standard theory is false. Now you can not prove a contradiction is false by agreeing with it. So the refutation claimed by Whitrow must be a

dishonest one.

The reader should notice the following very important point. Why does Whitrow produce the correct procedure in an obscure book review, rather than when it was requested by Dingle over many years of asking for it? The answer is that the inverse Lorentz transformation is misinterpreted in the standard textbook interpretation of relativity. But, Whitrow never actually explains this important fact. In order to more clearly understand these issues we will consider a detailed analysis of the Lorentz transformation equations.

3.1 Evaluation Solution Of Lorentz transformations

The mathematical method used here is to solve the system of Lorentz and inverse Lorentz equations simultaneously using a specified condition of evaluation. Here the term evaluation is used in the same sense as it is used when a polynomial equation is solved for its roots by setting the equation to equal zero and solving for the indeterminates. The procedure used here is similar. A selected variable is set to zero, and the resulting solutions are obtained. Solutions are obtained by setting one of the following four variables equal to zero, and then solving for the remaining three. The following variables are set equal to zero and the resulting solutions obtained by evaluation: $x=x'=t=t'=0$, each taken in turn.

The Lorentz transformation equations in a simplified form are assumed as follows:
$x'=\beta(x-vt)$ $t'=\beta(t-vx/c^2)$ $x=\beta(x'+vt')$ $t=\beta(t'+vx/c^2)$ $\beta=(1-v^2/c^2)^{-1/2}$
Here there are four equations which express the simultaneous solutions for the transformation of coordinates. These equations are defined in the usual way in terms of two relatively moving reference frames S and S'. Where the origin of frame S' is in motion with velocity v in the positive x direction of S.

Notice that β is greater than unity when v is greater than zero, and that β^{-1} is less than unity when v is greater than zero. An equation of the form $t'=\beta t$ results in a dilation of the variable t' with respect to t because t' is greater than t The equation $t=\beta^{-1}t'$ results in a contraction of the variable t with respect to t' because t is less than t'. The definition of β implies that it is always equal to or greater than unity, and can never be less than unity.

The coordinate frames S and S' are assumed to be orthogonal coordinate systems with the requirement that time is defined such that $t=t'=0$ occurs when the origins coincide; i.e. $x=x'=y=y'=z=z'=0$ at $t=t'=0$. The axes for the x, y, and z directions are assumed to be parallel, and the y and z coordinates are assumed to be identical and coincide when the origins coincide at $t=t'=0$. The purpose of the solutions is to determine the relations governing the transformation of the x and t coordinates according to the Lorentz transform equations.

3.1.1 Results for x=0

Equation 1: $x'=\beta(x-vt)=-\beta vt$

Equation 2: $t'=\beta(t-vx/c^2)=\beta t$
Equation 3: $x=\beta(x'+vt')=0$, Therefore $x'=-vt'$
Equation 4: $t=\beta(t'+vx'/c^2)=\beta t'(1-v^2/c^2)=\beta^{-1}t'$

Notice that equation 4 is the inverse of equation 2 and that Equation 4 is obtained by substitution with the result from equation 3. Therefore, from equations 2 and 4 we have the following solution for the condition x=0: $t'=\beta t$. The solutions for equations 1 and 3 give the results $x'=-\beta vt=-vt'$, from which we conclude that $t'=\beta t$. A result which is the same as obtained from equation 2 which is the solution for the condition x=0.

3.1.2 Results for x'=0 (This is the same solution as in Whitrow's Book Review)

Equation 5: $x'=\beta(x-vt)=0$, Hence $x=vt$
Equation 6: $t'=\beta(t-vx/c^2)=\beta t(1-v^2/c^2)=\beta^{-1}t$
Equation 7: $x=\beta(x'+vt')=\beta vt'$
Equation 8: $t=\beta(t'+vx'/c^2)=\beta t'$.

Notice that equation 6 is the inverse of equation 8 and that Equation 6 is solved by substitution with the result from equation 5. Therefore, from equations 6 and 8 we have the following solution for the condition x'=0: $t=\beta t'$. The solutions for equations 5 and 7 give the results $x=vt=\beta vt'$, from which we conclude that $t=\beta t'$. A result which is the same as obtained from equation 8 which is the solution for the condition x'=0.

Apparently there are two different sets of solutions. The solution set of 3.1.2 being the one given in G. J. Whitrow's book review and a second one given in paragraph 3.1.1. These solution sets are mutually contradictory, since if both are true solutions the resulting answer reduces to the trivial solution that t=t', and this contradicts Einstein's theory. So ether the solution set of 3.1.1 is true or the solution set of 3.1.2 is true but not both. This is the essence of Dingle's contradiction or inconsistency. In this case Dingle would ask, which of these solution sets is the correct one, since both can't be true simultaneous solutions?

Actually Dingle did not derive the complete sets of solutions but considered only the two following sets of equations as solutions. These are, as Dingle points out, the traditionally accepted solutions in the special theory of relativity. The two solution sets are either equations 2 and 8, or equations 4 and 6. In relativity textbooks, we never encounter equations 6 and 8 as the claimed solutions. So why does Whitrow claim these give the correct solution?

He does this in order to prove Dingle wrong, despite the fact that his solution is not the standard one given in relativity textbooks. Whitrow resolves the problem of Dingle's contradiction in a simple manner, he claims the solutions of 3.1.2 are true and ignores the other solution set. However, given the principle of relativity, there is no way to rule out the solution set of 3.1.1, so the contradiction can only be avoided by choosing a solution

in violation of this principle.

4.0 Sfarti's Claimed Solution Of The Twins Paradox

In a paper titled "The 'Twins paradox"--- Demystified" available at the following address: http://www.mrelativity.net/Papers/29/TheTwinsParadox1.pdf , A. Sfarti publishes essentially the same solution as given by J.G. Whitrow in his book review. This again attacks Dingle, but gives a solution which Dingle would have welcomed as the answer to his long attempt to get the relativity textbooks changed. This simple answer could have been given during the many opportunities that were available to Dingle's critics, while Dingle was still living. However, they never gave this simple answer. The reader should understand why they didn't. The answer is that it contradicts the following pronouncement given in Einstein's 1907 and 1910 papers on relativity:

"In general, according to the principle of relativity each correct relation between "primed" (defined with respect to S') and "unprimed" (defined with respect to S) quantities or between quantities of only one of these kinds yields again a correct relation if the unprimed symbols are replaced by the corresponding primed symbols, or vice versa, and if v is replaced by -v." (This statement is quoted from the 1907 paper word for word. A similar, but not identically worded statement appears in Einstein's 1910 paper.)

If we examine the solutions to the Lorentz transformation equations given in section 3.1, we see that Einstein's procedure leads to the following two sets of equations as solutions: equations 4 and 6 or equations 2 and 8. Dingle simply repeats what Einstein required in his statement, and obtains the result that using either of these two sets of equations leads to a contradiction. Therefore, he concludes the theory that requires these equations must be wrong. Notice that both Sfarti and Whitrow obtain solutions that are not in accordance with Einstein's procedure. Hence, they deny the validity of the principle of relativity in their solutions.

One of the more dishonest aspects of this controversy, is that relativists produce arguments that agree with Dingle's conclusion that using the equations consistent with Einstein's pronouncement result in the wrong conclusions, yet they place the blame for the error on Dingle, when all he is doing is faithfully following Einstein's pronouncements. Relativists can not bring themselves to admit that Einstein ever made a mistake, so they blame the mistake on Dingle instead, and claim that Einstein was right all along.

5.0 Summary and Conclusion

It is certainly strange that Whitrow would reveal to the world in an obscure book review, what relativists had refused for years to do at Dingle's repeated insistence. Hence, it must be concluded that Whitrow had no idea what he was doing other than to make a good looking refutation of Dingle. This had to be done in a way which would not vindicate

Dingle in any way. The resulting argument by Whitrow, reveals the correct way to solve the problem posed by Dingle. But is it a refutation of the claim that there is a contradiction? No it isn't. Whitrow, in showing that the correct method is different from the one used by Dingle, is confirming that what Dingle had said was correct. Hence what Dingle was pointing to as a mistake, was mistaken, and he was correct all along. This was that the standard formulas and interpretations of relativity, as based on Einstein's above pronouncement, were contradictory. You can not contradict an argument by agreeing with it, so either Whitrow is wrong or dishonest. Since we know he is right, then why did it take so long to discover the correct solution?

The answer is that the relativity establishment doesn't actually claim that Whitrow's solution is the correct one. His solution was merely a way to refute Dingle's specific claim. No textbooks were revised to give the correct method of solution, and when this writer attempted an identical solution to this problem, he was refused publication because the editor thought he was wrong. So by the standard reasoning of relativity, Whitrow's reasoning is wrong and Dingle's is correct. That is hardly a reasonable way to resolve a difficult disagreement.

The final result of this analysis is that Whitrow's refutation doesn't refute Dingle's claim that the theory of relativity is untenable, in fact it supports that claim. Whitrow, who is definitely an expect on relativity, has shown that the correct solution to the problem contradicts Einstein's principle of relativity. S. Sfarti is also in agreement on this point. Hence, the principle of relativity must the reason that the special theory of relativity is untenable,
as Dingle so clearly demonstrated. Herbert dingle was correct. Again.