CONTRADICTION BETWEEN THE SPECIAL AND GENERAL THEORIES OF RELATIVITY

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THE GENERAL Theory of Relativity is based upon Einstein's Principle of Equivalence.

Imagine, says Einstein, a person being accelerated upwards in a completely enclosed elevator at a rate of 9.80665 m/s^2. This being exactly equal to the acceleration due to the earth's gravity, which is to say 1*g,* the person would never know — or so argued Einstein — by any experiment performed purely *inside* the elevator, whether the elevator was stationary on earth, or was being accelerated upward in empty space.

And so, argued Einstein further, if a tiny hole were made in one wall of the elevator which is being accelerated upward, and a beam of light introduced thereby into the elevator in a horizontal direction, the beam of light would appear to bend downward a bit, and hit the opposite wall at a spot a little lower than the hole. That's because in the brief time it would take the light to go from the hole in the wall to the opposite wall, the elevator which is being accelerated upward would have travelled upward at an increasing velocity.

And since there is no way to tell whether an elevator is being accelerated upward in empty space or standing stationary on the earth, this must be the case — argued Einstein — whether the elevator is being accelerated upward in empty space, or is stationary in the earth's gravitational field. And this would prove that light is affected by gravity.

After that the way was open for Einstein to suggest that light is attracted by gravity because space itself is curved, and time too, and all the rest with the Minkowski world-lines and light-cones and what-not. In other words, the General Theory of Relativity was developed from this simple argument.

However, the Special Theory of Relativity blatantly and shamelessly contradicts the Principle of Equivalence. If an elevator were being accelerated upward at an acceleration of 9.80665 m/s^2, within a few months it would attain a speed very close to the speed of light, and in a few decades it would have attained a speed of 99.999 … 9 % that of light — the number of 9's in the above figure being limited only by the number of decades. Check out the mathematics yourself — use the formula $v=at$.

And according to the Special Theory of Relativity, any elevator — and any person in it — travelling at speeds approaching that of light would increase in mass, the increase being given by the Lorentz <*gamma*> factor, namely $(1–v^2/c^2)^{–0.5}$.

So if *v* is, let's say, 99.999999999999 % of the speed of light, the <*gamma*> factor would be 7,073,895 — in other words, a little over seven million! Work it out: it's a simple formula.

So what the Special Theory of Relativity predicts is, that a man in the elevator having a rest mass of, say, 100 kg would eventually have a mass of more than 700 million kg, or more than 700,000 tonnes — and his mass would be growing daily! And because of the elevator's 1*g* acceleration, he would *weigh* that much too.

(This, of course, provided that there was enough life support stuff for him in the elevator. Let's just assume that there is, without wondering exactly *how* that would be accomplished. Hey: even Einstein didn't explain how the elevator was supposed to be accelerated.)

In other words, such a man — or his descendants — in a well-stocked elevator accelerating at 1*g* in empty space would eventually be squooshed flatter than a pancake, due to his/their having increased in weight far too much. Indeed they should all turn into black holes eventually, and be swallowed up by themselves!

But if the elevator were stationary on the earth, the Special Theory of Relativity predicts — and common sense also confirms — that the man and his descendants could live out their lives very comfortably unto the umpteenth, and even the umpteen-plus-oneth, generation, putting on weight only if they ate too much, or had some glandular or hormonal problem in that regard. (And even then they couldn't possibly put on *that* much weight.)

So the Special Theory of Relativity predicts that the man *would* eventually know, even without conducting an experiment, whether he was being accelerated upward at 1*g* or whether he was stationary in a 1*g* gravitational field — directly contradicting the Principle of Equivalence, which argues that there would be *no* way for him to know that.

(Now let me ask you: what sort of genius doesn't see this elementary contradiction between two of his own theories — a contradiction that even ordinary guys like you and me can see? Was Israel lucky, or what, that Einstein declined David Ben-Gurion's offer to make him the first President of the Jewish State. It would have been the laughing-stock of the world, had he accepted!)

Comments? *E-mail me.*