

Einstein's method of moving the goalposts

Roger J Anderton

R.J.Anderton@btinternet.com

Ideally science should be about testing theories, but Einstein managed to latch onto a method of moving the goalposts. So, when we try to test his theory of SR (special relativity), the goalposts are moved, and we can't properly test his theory. The theory is not precisely defined and so what it is supposed to be is moved around.

1. Moving Goalposts

One of the troubles with Einstein is that he has confused a lot of people by making all the changes he made.

It means that many people can't understand the old straightforward Newtonian way of doing things; and worse they think the old Newtonian way is wrong. They think the Einstein way of doing things is correct because they have been told its correct, although they can't fully understand it.

If a person presents a flaw in Einstein (and related) theories- then they think it's some subtle point that is somehow cleared up by some other genius in some other complicated paper that they don't understand OR an issue that some future genius will solve.

They just cannot seem to comprehend the possibility that the transition from Newton to Einstein was a mistake; and cannot mentally grasp the idea of reconsider the old way.

They think the old way is disproved because they are told it has been. They believe the new way (of Einstein and co) because they are told it replaced the old way. They can't fully understand the new way (of Einstein and co) but they just accept that they can't fully understand it, OR they deceive themselves that they do understand it with certain issues still to be tested.

People don't understand Einstein's SR, but they have heard some other people say that Einstein is the world's biggest genius, so they believe that.

Simple experiments show the speed of light is larger in one direction and smaller in another direction.

Looking at things from the Newtonian way of doing things: In GPS it has already been shown that signals travel faster from West to East than from East to West, but the advocates of Einstein tell those people that GPS would not work without SR. That's the way it is, lies are told all over the place (world).

There is adjusting the clocks by using light synchronizing going on by the Einstein fans. Some would deem this to be cheating and needs to be disclosed. But another way of looking at it is that adjusting the clocks seems to be part of the "theory" as what one does.

Einstein's philosophy for Special relativity (SR) seems to be that one adjusts the observations to fit the "theory".

So how can a "theory" like that be tested (?). The procedure is to adjust the clocks and whatever else to fit SR.

After the adjustment, SR is then supposedly confirmed every time.

You could argue (a) that the adjustment should not be made.

But how are you going to get ordinary people to agree to proposition (a)?

The counter argument is proposition (b) that one makes the adjustment as part of the theory of SR.

You might disagree with proposition (b), but how are you going to get ordinary people to be against proposition (b)?

And your position against proposition (b) is countered by proposition (c). Proposition (c) being - that one should test a theory in the way that it asks experiments to be done

And so, a rejection of proposition (b) would be deemed as not being a fair test of SR etc.

This would be a method I would call "moving the goalposts" – changing things so that Einstein's SR cannot be overturned.

That's why L. Essen called SRT a "joke or swindle". Einstein succeeded to replace well working theories of Newton and Lorentz (Ether) by a theory which was not much different from them but full of errors and by doing this he made himself "the world's greatest scientist". Of course, he would not have succeeded without the help of many well-organized supporters.

As per the method of “moving goalposts” – why there is almost no hope to get rid of SRT. There is no way except recognition by everyone that SR is “joke or swindle” and there does not much chance of that.

(“moving goalposts” – when a flaw or flaws is pointed out in SR then the goalposts are moved to try to cover that up.)

2. Einstein and Eddington the myth

As consequence of the moving goalposts - The idea that one theory can be tested against another theory is now pretty much a myth; i.e. false.

Historically, any supposed test episode is a farce.

If a theory A predicts a wrong result to an experiment (and the experiment survives lots of repeats) then the theory can be amended. Why sometimes theory A is not amended, but instead replaced by another theory is just arbitrary whims of people.

We have from Copernican revolution that Newtonian physics replaced Aristotelian physics. The fault with Aristotelian physics was it had the earth as absolute centre of motion (i.e. the only centre of motion) for the universe. If one merely amends Aristotelian physics to having motion as relative, then the rest of it could have carried on. There are even people who argue that Aristotle was misunderstood on the issue of relative. Thus, we could have had a mere amended Aristotelian physics from the Copernican revolution. But that did not happen and by mere whim changed to another theory's way of describing things.

Same thing happened with the supposed Einstein revolution. The light bending experiment supposedly disposed of Newtonian physics replacing it by Einsteinian physics. But merely amend the Newtonian theory a bit and we could have kept it. Before Einstein did his calculation for light bending, there were others (Mitchell and Soldner) who did the same calculation within context of Newtonian physics; they were not claiming a new theory, merely claiming an amendment to the existing theory. On the recent TV drama of “Einstein and Eddington” they dramatize it as Einstein made a prediction of light bending from his theory, but Newtonian physics did not predict light bending; hence Einstein right and Newton wrong. But truth is Newton was unclear if light bent under gravity. Those Newtonians who came after him had choice of assuming light bending within the context of Newtonian physics or not. The change that Eddington's experiment gave was Newtonian physics with light bending should be accepted as opposed to Newtonian physics without light bending; i.e. an amendment to Newtonian physics. That did not happen, and on a whim - theory was changed and there was a supposed revolution in physics.

To try to overcome the difficulty that a light bending calculation could be done in the Newtonian context, later what happened -- a calculation was made within context of Newtonian physics for light-bending and was compared to prediction from calculation by General relativity; and it was declared the Newtonian calculation wrong and Einsteinian calculation correct. But the truth is the calculation within the Newtonian

context was done incorrectly. So, on a whim what happens was -- do a calculation incorrectly within one theory compare it to calculation from another theory and go for the latter theory.

So-- the whole test theories thing-- when it happens is a farce.

I checked both theories -- Galilean relativity and Einstein special relativity -- and both can be made to work. What can go wrong is that those working within either theory can do their calculations incorrectly, and that confuses the issue by making it seem one theory gives wrong result and the other the correct result.

The truth is that both theories can be used to mathematically describe physical reality.

But the myth of testing theories is that scientists want to say one theory wrong and the other is correct.

3.Thinking processes

Layered on top of this moving goalpost approach to science, we have the general trend:

Thinking process of science/physics from Copernican revolution:

Motion relative → atomism of Boscovich → Evolution → no God; randomness (1)

This chain of thinking the religious fundamentalists have been opposed to, their chain of thinking is something along the lines of them first believing in existence of God then working out the consequences of that.

God exists → God must be communicating with us → word of God must be in Bible (2)

The chain of thinking is to have an initial belief/assumption(s) then work out the consequences of that; that is the mathematical method (logic) of believing a certain set of axiom(s) then deriving the theorem as consequence; if axiom(s) true and steps from axiom(s) correct without contradictions then theorem is taken to be true and proven.

Now the philosophy which the Copernican Revolution was based upon was Pythagorean. That is the belief that the universe/Nature is mathematical. This way of thinking about things is contrary to the majority of peoples' way of thinking. Most people believe their senses. But the mathematical way is not to believe one's senses; the world (everything) we see is like a conjuring trick; and behind this illusion is maths.

So, method (2) is based upon believing what our senses tell us; believing what "we" personally see, touch, smell et al., through our senses; i.e. based on our personal experiences.

Method (1) totally rejects all of that as illusions.

The first illusion is the motion of the sun across the sky; those who base their experience on what they see, such as those living in a pre-Copernican medieval society would take this at face-value and believe the earth was centre of the sun's motion. It would take them a lot of effort to conceive of things the contrary way that motion is relative; they have no experience of motion relative to anything other than the earth which they stand; so, for them the earth is the only reference frame. The mathematical way rejects this illusion and says there are lots of reference frames that we do not directly experience.

A next big step was the idea that everything was made of particles; from our daily experiences if we were living in a medieval society we would not experience that either.

And another step is evolution – we do not in our daily lives notice evolutionary changes; they generally happen in time scales beyond our life spans.

So, the long chain of thinking process of method (1) is to reject everything our senses tell us and go for the maths instead. As part of that tradition, I think my statement that —speed of light being c is an illusion—fits happily within it. Our modern experiments measuring light speed give us the value c , but I reject what our senses tell us, and just go for the maths as method (1) wants so that – speed of light being c is an illusion.

As to method (2) well the people who follow this thinking process, it is entirely natural to them to believe their senses; to believe their personal experiences, and to deny their personal experiences is completely unnatural making no sense to them. I have talked to a few religious people, and from my understanding it is entirely natural for them to experience the world and believe it was due to God; this is what their senses and personal experiences tell them.

So, we have a difference in thinking between people.

Note

Part of the above based on conversations.

c.RJAnderton2012

Typo corrections: 9 Oct 2018