

A look at the September 2015 issue of Scientific American Part I

By Prof. Omar Shabsigh, PhD

I was fascinated by the title of the September 2015 issue of Scientific American. I read with interest every word from cover to cover.

Beginning with the review of the contents on page 32 by the editors, I noticed a certain tendency to show even mistakes made by Einstein, to be big achievements. The observations made by Eddington *et al* were explained wrongly as being due to bending of light by the sun's gravity while actually it was a simple case of light diffraction. On page 33 we read a baseless declaration saying that relativity revolution "influenced philosophy, art, politics and pop culture".

The curvature of space time was never proved in contrast to what was mentioned. He never had anything to do with the atomic bomb. He is hailed for the protection of the Jews and as an outspoken critic of racism and an activist for civil rights. That is all good, very good and should be praised for it. But did he defend the rights of the Palestinian Arabs when they began to be slaughtered by the European Zionist racist gangs and expelled in the hundred thousands from their country of thousands of years? Or was he against racism against the Jews only and defended only their civil rights? What can we call that?

Then the editors claim, that the fame of Einstein established the "20th century as the age ushering a technological transformation that we are still living in." What did relativity have to do with technological transformation? A falsehood.

On page 34 the editors talk about a moment of inspiration. Is this science or metaphysics? At the end of that article the following drew my attention: "physics is waiting for the next general relativity?" This is a very strange announcement. To me it means that the present general relativity is not valid. If so then why do the scientific media refute publishing any criticism to general relativity?

This preface to the September 2015 issue is full of holes and contradictions as if it has been prepared by more than one person.

In his article "Why He Matters", Brian Greene cannot find a better praise to Einstein than to talk about psychiatric signs of mental deterioration considering them as something good: "... sticking out his tongue, staring at us with those penetrating eyes....." Let any psychiatrists take a look at those eyes and let him tell us what the void in them means. Mr. Greene, on page 34 claims that in May 1905 Einstein proved that matter is made of atoms. This is a false statement. In 1803 John Dalton "suggested that each element was made up of unique atoms". As for deriving $E=mc^2$, several scientists reached more or less the same result, some with a prefactor appended to the right hand side of the formula.

Einstein made a big issue of that constant when actually nobody has verified experimentally the correctness of the formula. In this formula Einstein presumed that c was the speed of light and is constant and the ultimate speed in the universe. All of which are just assumptions on which he built his special relativity together with another assumption that any speed of a material body v has to be $v \lll c$. These are all Einstein's own assumptions.

On page (36) Mr. Greene declares in a theatrical gesture that “the scientific establishment could sense the reverberations of Einstein's work were shifting the bedrock understanding of reality”. I am sorry to say that I couldn't find any information that shows the earthquake Mr. Greene is talking about. Scientific achievement? maybe but reverberations no.

On the same page Mr. Greene states that “Einstein established that nothing can travel faster than the speed of light”. In fact his presumption as indicated above was that $v \lll c$ always so how can Einstein talk about trespassing the speed of light. Controversy. And Mr. Greene what does this assumed limitation have to do with gravity?

Actually what Max Plank told Einstein was correct, in spite of the halo of propaganda that accompanied Einstein after the world tried to make him sacrosanct.

Again the words of praise “...adds luster to the astonishing and overwhelming beauty..”, do such declarations prove science?

Mr. Greene is a very clever writer he starts to connect many cultural personalities such as T.S. Eliot, Picasso, .. etc. to the so-called achievements of Einstein, but later retracts saying he could not find evidence of that. This is a very devious way of insinuating, it is psychologically correct, but is not suitable for Scientific American. (Here, I wonder if the editors of Scientific American have a peer reviewer to check on the correctness of what they are writing.)

At the bottom of page (36) Mr. Greene states that general relativity gave birth to modern cosmology without any proof. This is false. Modern cosmology has nothing to do with general relativity.

If what Mr. Greene is stating about Einstein resisting the notion of an expanding universe to the extent of inserting a cosmological constant is true, then that shows a side of Einstein's character: he was ready to use forgery to attain what he wanted. How can one change a mathematical formula to his liking to suit his think games?

Now a thrilling confession by Mr. Greene: “.. he is why we imagine that some one can, in the privacy of his or her own mind, think hard and reveal cosmic truths” COSMIC TRUTHS! just by thinking? No observation? No experimenting? Isn't that scientific fiction in its broadest meaning? Come on folks at Scientific American, what is going on?

“Einstein had the right mind at the right moment to crack a collection of deep problems of physics”. What godly miracles! No observations! No experimentation! Mr. Greene culminates his illogical praise in his last sentence: “ a thrilling example of what the human mind can accomplish, ... what we as a civilization will deem as precious.”

I would like to congratulate Mr. Brian Greene for all the niceties he spoke about Einstein that included a great deal of false remarks and fictional romantic exaggerations. We did really enjoy it.