

# **Rewriting of the history of special theory of relativity**

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**There has been a rewriting of the history of the special theory of relativity. This in my view is a terrible scandal and blot on physics/science hiding a massive mistake whereby relativity under Einstein has been misunderstood and it should correctly be understood through Boscovich's theory. It is the reason why the mainstream has failed to unify relativity with quantum physics.**

**My main source will be Yves Gingras in his paper “The collective construction of scientific memory: the Einstein-Poincaré connection and its discontents, 1905–2005” [1] he notes that : “The debate on the role of Poincaré in the emergence of relativity theory has been particularly hot in France where amateurs have published books claiming that Einstein plagiarized Poincaré.”**

**The Einstein-supporters of course attempt to dismiss such claims.**

**What we have here is Poincare, a French scientist versus Einstein, a German scientist, so it crosses Nationalistic boundaries etc. (Sometimes it is stated as Poincare-Lorentz theory versus Einstein theory and other variations.)**

**There is controversy over who to give credit to Special relativity, and it has been long ongoing.**

**Claims of plagiarism have dogged Einstein from his early days, because as we look at his 1905 paper on relativity he gives no references, often giving the false impression to some of his fervent fans that there were no precursors.**

**Olivier Darrigol [1] proposed a kind of “peace treaty” on the basis that “it seems wiser to acknowledge that Lorentz, Poincaré and Einstein all contributed to the emergence of relativity. That Poincaré and Einstein offered two different versions of this theory, and that Einstein provided the version that is now judged better”.**

**It is interesting to note that a “peace treaty” asked for between the arguers, and as part of that “peace treaty” be made the proposal that there are two different theories- Poincare's theory and Einstein's theory. In that sense there are two different versions of Special relativity; that due to Einstein and that due to Einstein.**

**This argument between historians of science is usually kept out of the teaching of Special relativity to physics students. Physics students are then allowed to be blissfully unaware of this controversy that there might be two different versions of the theory they are taught.**

**From my perspective – it is Poincare's version that is better and Einstein's that is wrong. And when it comes to teaching relativity theory often students are allowed to come out believing Poincare's version not Einstein's version, and because they have not been told there is two different versions, they don't realise they believe Poincare's version.**

**Then what do this Einstein-believers say, it is as per Darrigol, they say “Einstein provided the version that is now judged better.” Which would be in conflict with what version that many of them actually believe.**

**But who are “they” that judged and why did “they” make such judgement? Their reasons “they” keep secret from a more open public debate of this controversy of Poincare versus Einstein.**

**I can say why I like Poincare's version, because for my perspective - it keeps preferred frame, ether, Newtonian universal/absolute time and many other things which often the Einstein-believers in their version of relativity usually deny the existence of.**

**For me, physics has been messed up by what certain Einstein-believers falsely claim. And that mess extends back to the history of physics where wrong person is being credited with modern relativity.**

**Anyway, Yves Gingras [1] wants to pull apart the peace proposal to the controversy “ it seems wiser to acknowledge that Lorentz, Poincaré and Einstein all contributed to the emergence of relativity. That Poincaré and Einstein offered two different versions of this theory, and that Einstein provided the version that**

is now judged better.”

Gingras gives two reasons, he says: “First it suggests that there was such a thing as a “Poincaré version” of relativity theory accessible and perceived as such by physicists of the times. “

As he points out in the period roughly of 1905-1919, physicists did not discuss any difference between Poincare's work and Einstein's work. That is fair enough; it means that now in retrospect we notice a difference, as he acknowledges.

He says: “It is thus a retrospective reconstruction and not an actor’s category.” - i.e. it did not happen in the period roughly of 1905-1919 that there was any debate. However with the sudden fame of Einstein in 1919 it should have become an issue of what relativity it “is”.

Gingras however wants to take the peculiar nonsensical interpretation of there being no debate before 1919 as being a dismissal of Darrigol's proposal, and that does not help in progressing the issue of determining which relativity between Einstein and Poincare, or decide who came up with the theory first. In other words he is just setting up a diversion.

Anyway, his second issue is: “ A second reason for disagreeing with Darrigol’s proposition is methodological. By suggesting that we give credit to Poincaré for relativity theory, the historian becomes a judge who presides over the appropriate distribution of credit in the memorial operation of writing (and rewriting) history, in this case, that of a central chapter of modern science.”

And the response to that is : so who is supposed to give credit then?

In 1919 Einstein became famous with relativity, it is an interesting question whether the theory is due to Einstein or Poincare. Gingras position seems to be that he does not want historians to judge that. In 1919 Einstein was given credit for relativity theory, it is possible that a mistake was made, and it should have been credited to someone else. But Gingras' position seems to be any mistake that happens just ignore it.

Science is split between different specialists, there is teaching of physics, theoretical physics, experimental physics, history of physics. The only department to specialise in history of physics is the historians, it is a history question of who should have really got credit, was a ghastly mistake made at the time. And Gingras' belief is that historians should not deal with such history problems. There is no other department to deal with it, so he wants it ignored in the department that should deal with it.

**Often I hear from scientists that science is a self-correcting process. Well who corrects these mistakes? It is possible that mistake was made in 1919, and the response of historians that are of same point-of-view as Gingras would be to ignore any such possible mistake, effectively in other words cover it up and carry on. It's one of those notorious workers who refuse to do some task by saying its not their job.**

**Anyway, Gingras gets to the issue: “the “Einstein-Poincaré connection” is largely a memorial reconstruction dating from the mid-1950s, revived on the occasion of the celebration in 1994 of the two-hundredth anniversary of the founding of the École Polytechnique, and culminating with the 150th anniversary of Poincaré’s birth in 2004 and the 2005 World Year of Physics.”**

**So the controversy over who to credit relativity theory started about mid-1950s, and as Gingras says: “By contrast, it was not an issue among the scientists involved in the period 1905–18, that is, before Einstein became celebrated as a public figure following the confirmation of his general relativity in November 1919.”**

**So in 1919 a mistake could have been made, and it was not realised until mid-1950s.**

**Next Gingras interestingly enough calls it a “mystery”: “I thus propose to solve the ‘mystery’ of the Einstein-Poincaré connection by showing that the physics community (rightly or wrongly) never hesitated between Einstein and Poincaré when it dealt with questions related to relativity (that is, “theory of electrons” and “electrodynamics of moving bodies”, to use contemporary terms) and that the ‘mystery’ is an artefact of projecting backward a particular reading of scientific papers that does not correspond to what the actors of the time saw in them.”**

**It is interesting to note here his words “rightly or wrongly” - in other words it might be that the Physics community “wrongly” gave credit to Einstein in 1919.**

**Anyway, he is pointing out that the people involved with relativity at the time circa 1919 were not thinking in terms of Poincare version of theory versus Einstein version.**

**Next he says: “It is now well known, as I have already noted, that as early as 1906, the theory was very often referred to as the “Lorentz-Einstein” theory, thus explicitly connecting Lorentz to Einstein.”**

**So the theory was not thought of as solely due to Einstein in that time period.**

**There is then controversy because Lorentz version of it does not seem fully the same as Einstein version of it, and Lorentz seems more along lines of Poincare (since both Lorentz and Poincare were in correspondence working together).**

**Gingras then gets to tell us about the rewriting of history: “Following the confirmation of Einstein’s general theory of relativity by the British eclipse expedition of 1919, Einstein became an instant worldwide celebrity. I will now argue that this event greatly contributed to the rewriting of the history of what was now known as the “special” theory of relativity.”**

**Note the phrase “rewriting of the history.”**

**Einstein became suddenly famous in 1919 and suddenly physics history had to be rewritten to be made to agree with that claim of fame for Einstein.**

**In my view - Einstein became famous in 1919 and then physics history had to be rewritten to try to conform to having Einstein justified as famous.**

**Gingras: “ As we have seen, no debate ever erupted in the physics community before the War on the value of the relative contributions of Poincaré and Einstein. Scientists did acknowledge Poincaré’s work by citing his papers, but they saw a stronger connection between Lorentz and Einstein, who both played a central and continuous role in the development of the electrodynamics of moving bodies. Now that Einstein was famous, and seemed to attract all glory to himself, some scientists were irritated by a celebrity they felt distasteful and found reasons to recall or ‘rediscover’ Poincaré’s role in a theory that was now famous around the world.”**

**Or rather it is more likely the possibility that: Einstein became famous and some scientists rather than being “irritated” could have recognised that Einstein was getting overdue credit for what others had done, and wanted to redress the balance with Poincare.**

**There was a big meeting of people opposed to Einstein's ideas in 1920, Gingras reports it as: “While the anti-Semitic feelings of some scientists lay dormant, the sudden celebrity of Einstein could only awaken them and it is not surprising to find that the first attempt to divorce relativity from its celebrated author came during a meeting in Berlin in August 1920 of what Einstein called the “anti-relativity company”.”**

**Note the word “anti-Semitic” its one of the terms used to smear critics of Einstein, when not all critics are anti-Semitic. It's another of the diversion tactics. Rather than being able to stick solely to the physics, divert instead onto name-calling.**

**At that meeting it was suggested that Einstein was a plagiarist. The criticisms of Einstein's relativity have not been properly addressed and issues raised by that meeting is still ongoing.**

**Looking at the relativity issue there is the possibility of crediting Larmor before Poincaré, Gingras says: “it is indeed intriguing that contrary to Poincaré, Larmor has not been the subject of any sustained movement championing his role as ‘precursor’ of relativity, although in 1986 M. N. Macrossan spoke for a number of physicists when he noted that “the credit for the first presentation of the Lorentz transformations, including the crucial time dilation, belongs to Larmor (1897)”, after C. Kittel had observed in 1974 that “It has long appeared an historical anomaly that Larmor’s work, which preceded Lorentz’s by four years, is so little known among physicists”. But such statements have not given rise to anything like the passionate debates surrounding Poincaré’s contributions to relativity.”**

**It is a bit of a diversion to go onto Larmor. First issue is whether fame been unduly given to Einstein for things that Poincaré was dealing with. If the answer to that is “yes” then we could go on to look at what happened before Poincaré; and I will mention someone earlier than Larmor anon.**

**The first person to point out Poincaré's priority over Einstein is Edouard Guillaume, as Gingras points out: “The first clear statement that presents Poincaré’s work as a “génial précurseur” of Einstein is provided by the Swiss physicist Edouard Guillaume, who, writing in 1924, finds it “incredible” that his memoir “is little known and almost never cited”. Guillaume is thus the first to mention the lack of citations of Poincaré’s paper. He deplored the fact that the document was difficult to find, and commended Gauthier- Villars for making it available again through a new printing for which he wrote a long introduction.”**

**Gingras thinks this is a response to Einstein having made a visit to Paris, and says: “But it is certainly more than a coincidence that this printing came only after Einstein’s visit in Paris, in a context where relativity was everywhere and many French books, some translated from German, presented the theory to a lay audience without giving much credit to Poincaré.”**

**So it was an attempt to give the French some credit for what Einstein was being made famous for.**

**Gingras thinks it serves two purposes: “In promoting Poincaré, Guillaume was in fact doing two things at once: as a foreigner he could call attention to the French contribution to relativity (hence the title of the book) without being seen as “nationalist”, and he also used the occasion to promote his own interpretation of the theory by enrolling Poincaré on his side. For Guillaume believed in**

**absolute time and this is why he promptly noted that Poincaré's route to relativity was not based "on the relativity of time and space" as it was the case for the "relativist school". He devoted about half of his introduction to a presentation of his own peculiar interpretation of relativity, based on a varying speed of light."**

**This physics as per Guillaume sounds like what I would agree with.**

**Gingras notes that Guillaume was an old friend of Einstein, who like him was working at the Patent Office. So it is worth looking at Guillaume in more detail. I go now from information from Maths pages. [2] There were actually two physicists by the name Edouard Guillaume, so care must be taken in referring to the correct one, the one we are interested in was the friend of Einstein.**

**Mathspage reports: "Edouard Guillaume (1881-1959), also got a doctorate in physics, and worked as a patent examiner at the Swiss patent office in Bern. It was there that Edouard met Albert Einstein (1879-1955), another graduate of the Polytechnique, who worked as a patent examiner in the same office from 1902 until gaining his first professorship in 1909."**

**So that is kind of interesting.**

**Mathspages: "There is no record of the personal relationship between Edouard Guillaume and Einstein while both were patent examiners in Bern, but they were surely acquainted with each other. During the years between 1905 and 1909 Einstein gained international renown based on his remarkable papers on the theory of specific heats, Brownian motion, the photoelectric effect, and especially relativity. The latter subject seems to have rankled Guillaume, and beginning in 1913 (after Einstein had left the patent office to become a professor, first at Zurich and then Prague), he published a series of papers in the Archives des Sciences Physiques et Naturelles in which he argued for a Lorentzian electrodynamics that retained the concept of a universal time."**

**So makes it sound like envy. But on the issue of the "theory" I argue for Lorentz theory which I equate to Poincare theory (Poincare-Lorentz theory) as better over Einstein's theory. So Guillaume was arguing the same.**

**Mathspages continue: "This was directly contrary to Einstein's relativistic interpretation, which Guillaume consistently deprecated. As Einstein's fame grew and the "theory of relativity" gained acceptance, Guillaume become more and more determined to convince the scientific community that it was misguided. He announced at one scientific gathering that "I will destroy relativity"."**

**That is one of the central things – Einstein changed the meaning of time (and other things) in his “theory”. It was like a philosophical change of interpretation. Under the existing physics pre-Einstein observers had to have the same rate of time, but Einstein wanted to allow observers have time going at different rates. I argue the old way still works, and when it comes to clocks of observers they should be set to go at the same rate, if they are going at different rates then it is not “time” itself going at a different rate but instead the “clocks”. It is a subtle difference between it being a “time” effect and a “clock” effect. Under Einstein's philosophy he seems to interpret both “clock” effect and “time” effect as the same thing, which is a philosophic mistake.**

**Einstein thinks what Guillaum is saying is nonsense, but its interesting to note what Einstein thinks “nonsense” means : “that it was nonsense, this must be understood with reference to me, or better yet, to the present state of my brain; nonsense is what one calls whatever one cannot grasp; there is no other criterion.”**

**So what he means by “nonsense” is when something cannot be understood. In other words when there is a fundamental breakdown in communication.**

**Einstein lays the claim of “nonsense” against Guillaum, because Einstein cannot understand him; and many anti-relativists lay the claim that Einstein talks “nonsense” because they can't understand him.**

**In general we can infer that talking about relativity leads to communication breakdown where parties of opposing views cannot understand the other's view.**

**Grossmann reports to Einstein [2]: “As you see, a cult is forming around Guillaume that thinks it must correct essential points of your concepts. “**

**So its not just Guillaume with this point-of-view, but it's interesting that although there are a few with this point-of-view contrary to Einstein's view they end up getting dismissed.**

**Einstein's view [2] on the problem with Guillaume is: “This world is a strange madhouse. Currently, every coachman and every waiter is debating whether relativity theory is correct. Belief in this matter depends on political party affiliation. Most amusing, though, is the Guillaumiade [Guillaume contest]. For in it, someone using scientific jargon has been serving the most pitiful nonsense to the illustrious experts in the field for years on end, and this with impunity, without being reprimanded. Thus one sees quite clearly how the judgements and values prevailing among the flock of scholarly sheep rest on the narrow foundation of a few discerning minds. Refutation is not such an easy matter, though, when one is not even in a position to understand**



**the other's assertions. I took every trouble: I thought about it, corresponded with Guillaume for a long time, but met with nothing but mathematical symbols devoid of any sense. A factual sparring is absolutely unthinkable; rather, one can only state an opinion."**

**Once again Einstein dismisses what Guillaume says as nonsense; recall what Einstein really means by "nonsense" or its use deceives.**

**From my point-of-view some of the things Einstein says about his theory (or theories)of relativity is nonsense and has deceived his supporters. (see my attempt at trying to make sense of things which I call "Andertonian relativity" etc.)**

**Einstein: "In the past few years Mr. E. Guillaume has repeatedly stated his position about the theory of relativity in this journal and, specifically, attempted to introduce a new concept (universal time) into this theory. At the repeated prompting of the author himself as well as of other colleagues in the field, I consider it necessary to declare the following: Despite taking the [greatest] trouble, I have not been able to attach any kind of clear sense to Guillaume's explications. Even by a lengthy exchange of correspondence conducted with utmost patience, I could come no closer to this goal. In particular, it has remained completely unclear to me what the author means by "universal time." My ability to understand does not even go far enough to be capable of a substantive rebuttal. I can only state my conviction that no clear chain of reasoning underlies Guillaume's explications."**

**So Einstein does not understand what Guillaume is saying, its not clear from this whether Einstein rejects universal time or just can't understand Guillaume's version of it. i.e. as per usual in my reading of Einstein, he is vague and ambiguous in his statements, and if he is clear in a statement he often changes his mind and says different later.**

**From my position – universal time exists.**

**Einstein later says to Guillaume: " It is impossible to assign, in any meaningful way, a universal time to the totality of inertial systems."**

**So he is rejecting universal time – but what is that supposed to mean, because he would have to understand what is being proposed to know if it is "meaningful" or not, and he admitted he did not understand! So he appears to contradict himself. Ideally he should still be saying that he does not understand the idea. So that it should have been said: HE CANNOT FIND a "meaningful way" to understand universal time. But the way that he writes it, it is pontificating the claim as a fact, when really it isn't , just merely his**

**personal opinion based on not being able to understand.**

**The trouble with Einstein is he keeps changing his opinion, presumably he does not fully grasp comprehension of the concepts he is dealing with and blunders back and forth.**

**Thus [2] : “Guillaume persisted to the end of his life attempting to convince people of the unsoundness of Einstein’s relativity. In addition, Guillaume championed the cause of Poincare as the true originator of special relativity. In this respect Guillaume was similar to most other critics of Einstein’s relativity, from the Anti-Relativity Company Ltd. in 1920 all the way to the present day. The two-fold argument is basically that (1) relativity is completely and self-evidently wrong, and (2) even if relativity is right, it was plagiarized from someone else. (This is somehow reminiscent of the joke about a lawyer who says “Your honour, we will prove, first that my client was never in possession of the plaintiff’s car, second that he returned it in perfect condition, and third that it was already dented when he borrowed it.”)”**

**Exactly, that is the situation today. There has been long standing opposition to Einstein's relativity by those sometimes called anti-relativists.**

**And it's all a very bad joke of confusion between Einstein's relativity and Poincare's relativity. Where some who are opposed to Einstein's relativity are supporters of Poincare's relativity, so calling them anti-relativists is a misnomer. And some in the Einstein's supporter camp are unaware of the confusion between Poincare and Einstein, and some unaware that they really support Poincare.**

**“... Guillaume continued to promote his views and went to Paris during Einstein’s 1922 visit to confront him. Newspapers reported in detail how he made a fool of himself in front of Einstein and Langevin.” [1]**

**The whole sorry controversy continued with other people such as Appell who insisted “on the fact that Poincaré has been the precursor of the special theory of relativity”.**

**Then Louis de Broglie took up the issue [1] : “in his talk on the occasion of the centenary of the birth of Poincaré in 1954. Speaking in front of dignitaries at the Sorbonne, de Broglie, a Physics Nobel Prizewinner and Secrétaire Perpétuel of the French Academy of Sciences, explained that Poincaré “had all the elements of the theory of relativity” but was stopped from making the last step provided**

by Einstein because of his “somewhat hypercritical turn of mind or perhaps due to the fact that he was a pure mathematician”, which led him to a nominalism that is ill-suited to physics. Like many before him, he mentioned the “Poincaré pressure” as an important contribution to physics and concluded that “without Lorentz and Poincaré, Einstein would not have succeeded”.

The fact that Poincare was a “pure mathematician” really means that Poincare was a better mathematician than Einstein, and most of the problems in relativity are due to Einstein's bad maths. If go by the better mathematician Poincare then most of the maths problems are sorted out. De Broglie and others like him try to make the impression that Poincare started relativity theory and Einstein completed the theory, when really it should be understood as Einstein messed things up.

Going by Poincare now had the better relativity theory.

Dusan Nedelkovich (original 1922) [3] : “A century and a half after Boscovich, Henri Poincare develops almost identically, the relativity of space and space itself, in a way very similar. See especially Science and Method. pp. 95-122. The relativity of space.”

Thus Poincare's relativity and Boscovich's relativity are much the same thing. So Boscovich's theory deals with relativity in the correct way. Further quantum physics came from Boscovich's theory. [4] Thus when modern physics goes on about the difficulty of combining relativity with quantum physics, the problem was relativity was messed up by Einstein and the correct version of combining them already done in the unified theory of Boscovich.

## References

[1] THE COLLECTIVE CONSTRUCTION OF SCIENTIFIC MEMORY: THE EINSTEIN-POINCARÉ CONNECTION AND ITS DISCONTENTS, 1905–2005, Yves Gingras, Université du Québec à Montréal Hist. Sci., xlvii (2008)

[2] <http://www.mathpages.com/home/kmath627/kmath627.htm>

[3] Natural Philosophy and Relativity of R.J. Boscovich, by Dusan Nedelkovich (original 1922) Translated by Roger J Anderton ISBN 978-1-291-34450-9 p 69

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