

Einstein has been mistranslated II

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Additional information on the mistranslation of Einstein's 1905 paper on special relativity.

I should have mentioned a few other things in my article "Einstein has been mistranslated." [1]

As per Charles Scribner Jr. in 1963 [2] there has been a mistranslation in the usual translation of Einstein 1905 paper on special relativity (STR).

The relevant translated passage from Einstein, translated by Perrett and Jeffrey, with the problem part enclosed in square brackets:

"But it is not possible without further assumption to compare, in respect of time, an event at A with an event at B. We have so far defined only an "A time" and a "B time. We have not defined a common "time" for A and B, [for the latter cannot be defined at all unless we establish *by definition*] that the "time" required by light to travel from A to B equals the "time" it requires to travel from B to A."

The square bracket section:

[for the latter cannot be defined at all unless we establish *by definition*]

Should read: "the latter time can now be defined in establishing by definition that the 'time'".

There was a comment to this article made in 1963 from J.B. Skyes [3]:

Comments on "Mistranslation of a Passage in Einstein's Original Paper on Relativity"

IN your issue of May 1963,¹ you published a letter under the above heading from Charles Scribner, Jr. It may be of interest to remark that the error to which attention has now been called was probably due, not to "an unnecessary elaboration of the text on the part of the translators," but to their misreading the word *nun* (meaning *now*) in the phrase "Die letztere Zeit kann nun definiert werden, indem . . ." as *nur* (meaning *only*). With that reading their translation would be correct. The consequences of their error should be a reminder to all of the constant care which a translator must exercise in his work.

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¹ C. Scribner, Jr., *Am. J. Phys.* **31**, 398 (1963).

The full quote from the German [4]:

Die letztere Zeit kann nun definiert werden, indem man durch Definition festsetzt, daß die "Zeit", welche das Licht braucht, um von A nach B zu gelangen, gleich ist der "Zeit", welche es braucht, um von B nach A zu gelangen.

Google translates as:

The latter time can now be defined by defining by definition that the "time" the light takes to travel from A to B is equal to the "time" it takes to move from B to A. reach.

If it were *nur* instead of *nun*, then translates as:

The latter time can only be defined by defining by definition that the "time"

the light takes to travel from A to B is equal to the "time" it takes to move from B to A. reach.

So, the problem in translation seems to have been the result of mistaking "nun" for "nur".

There are many examples of people going by the mistranslation such as Burt Jordaan who says [5]: "One-way Speed of Light a Convention?" who says [5]: "In his 1905 paper on Special Relativity, Einstein wrote: *"We have not defined a common 'time' for A and B, for the latter cannot be defined at all unless we establish by definition that the 'time' required by light to travel from A to B equals the 'time' it requires to travel from B to A"*. One can reasonably read Einstein's *"by definition"* as *"by convention"*."

He is going by the mistranslation and is now trying to interpret what was translated as "definition" as now being better described as "convention". Going by the correct translation, it would seem to best have "convention" instead of "definition"; so that constancy of (one-way) lightspeed is only a convention and have option that can go by other conventions.

References

[1] Einstein has been mistranslated

<http://gsjournal.net/Science-Journals/Research%20Papers-Relativity%20Theory/Download/7671>

[2] Mistranslation of a Passage in Einstein's Original Paper on Relativity, American Journal of Physics 31, 398 (1963);

<https://doi.org/10.1119/1.1969543> Charles Scribner Jr.

<https://aapt.scitation.org/doi/10.1119/1.1969543>

[3] American Journal of Physics vol.31 no.9 September 1963 p. 734

<https://aapt.scitation.org/doi/10.1119/1.1969806>

[4] Zur Elektrodynamik bewegter Körper; von A. Einstein

http://myweb.rz.uni-augsburg.de/~eckern/adp/history/einstein-papers/1905_17_891-921.pdf

und B gemeinsame „Zeit“ definiert. Die letztere Zeit kann nun definiert werden, indem man *durch Definition* festsetzt, daß die „Zeit“, welche das Licht braucht, um von A nach B zu gelangen, gleich ist der „Zeit“, welche es braucht, um von B nach A zu gelangen. Es gehe nämlich ein Lichtstrahl zur

[5] One-way Speed of Light a Convention?

[Burt Jordaan](#) posted on January 25, 2010

<https://www.engineering.com/Blogs/tabid/3207/ArticleID/519/One-way-Speed-of-Light-a-Convention.aspx>

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