

Translation into English: [Chapter 2 - Catalogue of Errors for Both Theories of Relativity](#)

from the German documentation of G.O. Mueller

"On the Absolute Magnitude of the Special Theory of Relativity - A Documentary Thought Experiment on 95 Years of Criticism (1908-2003) with Proof of 3789 Critical Works" - Text Version 2.1 - June 2004
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E: Motion / Error No. 2

Assertions made by the STR as to real length contractions and time delays in only one of two inertial systems contradict the principle of relativity of the STR, which maintains that there is complete reciprocity and symmetry between all inertial systems

According to AE 1905 (p. 895), his principle of relativity says that for two coordinate systems exhibiting constant rectilinear motion relative to each other ("in gleichförmiger Translationsbewegung befindlich"), the same physical laws apply. This leads to the complete reciprocity and symmetry of the relationships of both coordinate systems to each other, i.e. in each system the same relative motion would be determined with respect to the other.

According to v. Laue 1913 (p. 34) there is even "a threefold endless great diversity of equally justified systems which move with constant speeds with respect to each other". Laue named them "justified systems" for short. On p. 38 v. Laue introduces two celestial bodies with two astronomers, each of whom regards himself to be at rest: "According to the principle of relativity this is non-determinable, each of the suppositions being completely equal," to which the critic must ask where celestial bodies in inertial motion are supposed to exist, if gravitation controls events in space.

*All of the claims as to real contraction of bodies and real time delays in only **one** inertial system are in contradiction to this statement on the complete equality of all inertial systems (all: threefold endless great diversities). This asymmetry cannot be justified by the STR.*

*Consequent application of the principle of relativity would require the conclusion that these effects, if they are real, must be real in **both** inertial systems. This in turn would raise the question, for both systems, as to why objects within the system should shorten and why clocks should run more slowly just because another inertial system moved relative to it. Without any physical cause and effect one ends up in a realm of ghosts and spectres.*

Until the contradiction between one-sided real effects and the principle of relativity and reciprocity has been resolved, the entire kinematics of the STR are invalid, because all supposed conclusions of the kinematics section of the theory are based on these claims of asymmetry: length contraction, time dilation, abolition of simultaneity, the twin rejuvenation. - Especially for length contraction, cf. Errors E 11, E 12, E 13 and E 14. On time dilation, see Errors D 6, D 7 and D 8.

Since 1960 at the latest, Herbert Dingle has confronted the physics establishment in Great Britain with the invalidity of the STR in that he puts the question ("Dingle's Question") as to which argument from the STR supposedly justifies the alleged one-sided effects of a real contraction of the body and a real slowing-down of clocks in only one inertial system (out of endlessly many possible inertial systems). There is no such argument in the STR.

Dingle received no obvious answer to his question and he reports on the results of his years-long enquiries and on his experiences with the various facilities and committees in the field of academic physics in Great Britain in the years 1972 in his book "Science at the Crossroads". His initiative was of special importance, thanks to his outstanding vocational position and to the fact that he himself, until the 1950s, had supported the STR as valid. As in all solely-true religions, in the physical church of the world of relativity backsliders and heretics are mercilessly pursued, cf. the publications of Ian McCausland, who after the death of Dingle made efforts to gain appropriate recognition of, and response to, his question, in vain.

It must be assumed that public questioning as practiced by Herbert Dingle would be ignored by the powers that be in physics in all countries of the western world at least as much as in Great Britain.

AE 1905. - Dingle, Herbert: Relativity and electromagnetism. In: Philosophy of science. 27. 1960, pp 233-253. - Dingle, Herbert: Science at the crossroads. London: Brian & O'Keeffe, 1972. 256 pages - McCausland, Ian: Why n o t discuss relativity. In: Wireless world. N. Y. 86. 1980, October, p. 55. - McCausland, Ian: Science on the defensive. In: Canadian electrical engineering journal. 5. 1980, No. 2, pp 3-4. - McCausland, Ian: The twins paradox of relativity : a composite reply to correspondence arising from Professor Dingle's October article. In: Wireless world. N.Y. 87. 1981, No. 1546, pp 73-74.