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 <a href="http://www.ekkehard-friebe.de/kap2.pdf">http://www.ekkehard-friebe.de/kap2.pdf</a>

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E: Motion / Error No. 13

## In connection with length contraction it is said that the measurements of the contracting body perpendicular to the direction of motion remain unchanged (selective contraction)

The claim of the STR as to length contraction in the direction of motion only, with no change in length whatsoever in the direction perpendicular to the direction of motion, is merely a claim without any physical justification and it has never been observed in the course of 100 years. This does not prevent the relativists from propagating length contraction as an indisputable, guaranteed effect.

This is why it is necessary to confront the relativists with the assumption of a rotating round body (rotor, e.g. a motor armature) which is at rest in an IS, with its rotating plane parallel to the direction of motion of the IS; the rotor with its round cross-section must, in keeping with the STR, deform permanently to an ellipse in the event of real contraction, because its radius in the direction of motion of the IS must permanently shorten (contract), whereas the radius perpendicular to the direction of motion is said to remain unaltered. The material of the rotor would thus permanently deform, whereby two problems arise:

- (1) How can the theory on contraction perpetuate solely in the direction of motion?
- (2) How could the permanent work of deformation in the body of the rotor be explained, and what could be the source of energy for this work?

With such simple questions as to the physical realization, the theory can here - as in the case of almost all other fundamental claims - be quickly confronted with problems that can't be solved.

The point of criticism presented here does not even relate to the existence of length contraction, but only to the alleged selective consequence of this effect, the problems of which, as applied to the rotation of a body in an IS, can be conclusively demonstrated and must be justified, but cannot be justified, regardless of any justification for length contraction itself.

The origin of this bizarre idea of a multi-selective contraction - namely (1) only in the "length" of the moving body and not in its other two dimensions, and (2) only in that "length" of the body that lies in the direction of motion - is completely clear: because the arms of Michelson-type interferometers are characterized by having their length and alignment in the direction of motion of the sought-after ether drift, and because the length contraction of FitzGerald and Lorentz was only intended to serve as an ad hoc hypothesis to explain the Michelson-Morley experiment, which is why it was integrated in the transformation formulas of Lorentz and then in those of Albert Einstein.

There is no better demonstration of what an ad hoc hypothesis actually is and of the damage it can cause if one forgets its origin and purpose.

By the way, neither Albert Einstein nor his successors have ever discussed the idea that their moving rigid bodies might perhaps have a third dimension - apart from the "length", that is said to contract, and the "dimension perpendicular to this", that is said not to contract. And what happens to this? Does it contract or not?

All propaganda accounts assume as a matter of course that this third dimension too does not contract, although Albert Einstein issues no decree on this. But when one knows that in the Michelson-Morley experiment the "width" of the arms of the interferometer play no role, then one also understands why it fails to play a role by Lorentz or by Albert Einstein. This physics of the ad hoc stopgaps is indeed that primitively organized.