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 http://www.ekkehard-friebe.de/kap2.pdf

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M: The General Theory of Relativity / Error No. 10

The relativists maintain that one can also regard the earth as being at rest and the fixed-star sky as rotating; a rotating earth (the Copernican view of the world) and a rotating fixed-star sky (Ptolemaic view of the world) are equivalent

H. Reichenbach (1921), following Albert Einstein, has described both explanations (rotation of the earth and rotation of the fixed stars) as equivalent. According to Reichenbach, a gravitational field should be generated by the apparent movements of the stars.

Anderson (1921) analyzed these claims:

- (1) The fixed stars do not, as claimed, (apparently) rotate at all around the centre-point of the earth, but (apparently) around the earth's axis.
- (2) According to Reichenbach, a gravitational field should be generated by the motion of the stars; "In other words, each star makes itself, so to speak, a gravitational field, which drives the star in question in a circle around the heavenly axis. But why do the centre-points of all of these circles form a straight line (the heavenly axis)? Through blind coincidence? And why does this straight line pass through the centre of the earth? Also through coincidence? And why do all of the stars move parallel and in the same direction? Each star could generate an arbitrary gravitational field by its motion in an arbitrary direction!" Col. 35-36).

Anderson foregoes the next logical step of the criticism. The claims of the relativists for the earth (rotation of the fixed-star sky) would have to apply just as well for all other rotating celestial bodies, i.e. the very same fixed-star sky must rotate at the same time (!) in all of the different (!) axes of these celestial bodies. With this, the illusion in Reichenbach's claim is exposed: The Ptolemaic view of the world comes to grief logically in view of several rotating celestial bodies, and there can no longer be any doubt as to the known superiority of the Copernican view of the world.

In the Bad Nauheim discussion Lenard (1920, p. 667) raised yet a further objection to the rotation of the fixed-star sky. In view of its enormous distances from the earth, faster-than-light speeds arose for the fixed stars.

This extravagant case of wilful abandonment of the Copernican findings by the relativists shows two ever-recurring methodical errors of the theories of relativity:

- (1) reduction of the findings to purely kinematic relationships and denial of dynamics, which is bettersuited to grasping physical reality.
- (2) limitation of the fundamental considerations always to only two objects, and subsequently the claim of general conclusions for the entire universe with a multitude of objects.

Logically, this gives rise to a successful strategy for criticism, namely to set all of the claims of relativity in the context of dynamics and then to test them for their physical content, breaking with the artificial limitation to - normally - only two objects and including the multitude of similar objects. Anderson has provided a classical example.

Several authors also discuss the analogous example of the merry-go-round at the fair. Whereas our everyday experience tells us that the centrifugal forces and inertial effects appear only at the merry-go-round and not in the vicinity, the relativists wish to take the view that an equally good explanation is that the merry-go-round is at rest and the surrounding world is rotating. For relativists nothing is impossible.

Reichenbach, Hans in: Astronomische Nachrichten. 213. 1921, No. 5107, Col. 307-310. - Lenard, Philipp: [contribution to:] Allgemeine Diskussion über die Relativitätstheorie; (86. Naturforscher-Verslg, Nauheim 1920, 19.-25.9.) In: Physikalische Zeitschrift. 21. 1920, No. 23/24, pp 666-668. - Anderson, W.: Zur Kontroverse zwischen den Herren Th. Wulf und H. Reichenbach. In: Astronomische Nachrichten. 214. 1921, No. 5114, Col. 35-38.