Marcel Chelba

"The Paradox of Time: Why It Can't Stop, But Must"

Comment on the article **"The Paradox of Time: Why It Can't Stop, But Must"**
by **George Musser** in **Scientific American,** September 1, 2010

https://www.scientificamerican.com/article/could-time-end/

Revised and added on December 25, 2023

KANTINOMUS

Kantinomus Verlag, Tübingen, 2023
https://kantinomus.com/

ISBN: 978-3-911041-09-6

Comment of Marcel Chelba (Kantinomus)

The new epistemological paradigm of modern science, since the discovery of relativity and quantum mechanics, is no longer *logical consistency*, but *logical completeness*: the rational integration of *opposites* into a single system. This is precisely the case with modern science: *opposites are no longer contradictory, but complementary* (as Niels Bohr put it).

For the same reason, the modern sciences have become theoretical sciences (transcendental sciences, in Kant's sense), in which we first try to *imagine reality* and only then try to *make it evident* through various experiments.

In Kant's transcendental epistemology, *time is a form of our inner sense*, a matrix of our faculty of representation. It is therefore natural that our new relativistic models of the universe should be somewhat subjective and that "physical time" should be somewhat flexible, like our "subjective time" (i.e. compress or expand according to the density of events taking place in the "life of the universe").

In fact, both quantum mechanics and relativity are more metaphysics (ontologies) than physics (experimental sciences, in the classical sense).

I discussed this epistemological problem of modern science at length in my book:

Marcel Chelba, *Introducere critică. Despre posibilitatea metafizicii ca știință în perspectiva filosofiei critice kantiene*, Crates, 2004 (*Critical Introduction. On the Possibility of Metaphysics as a Science in the Perspective of Kant's Critical Philosophy*), not yet translated into English.