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THE TEMPORAL INTERPRETATION OF MODAL LOGIC

Summary

The temporal interpretation of modal logic consists in replacing possible worlds with temporal states of the world or any time determinates and the accessibility relation with a relation of passage of time. That issue has been raised by A. N. Prior, who was thinking of propositions as things which could change their truth-values (could become true or become false) with the passage of time. Under such interpretation Prior was reading a formula ($\Box\varphi$) as: it (is and) will always be the case that φ or: it (is and) has always been the case that φ . The formula ($\Diamond\varphi$) should be read respectively.

In the present paper the interpretation in question is examined. Its sources are presented and its consequences are analysed. It is claimed that the interpretation is highly disputable because of its disagreement with the physical meaning of temporal statements, established in the special relativity theory.

Summarised and translated by Marcin Tkaczyk

Słowa kluczowe: logika temporalna, logika tensalna, logika modalna, semantyka relacyjna.

Key words: temporal logic, tense logic, modal logic, relational semantics.

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