The contribution of Carl Adam Petri to our understanding of 'computing'

Giorgio De Michelis*[1]

[1]University of Milano-Bicocca – Italy

Abstract

Carl Adam Petri (1926-2010) is well known in the Computer Science community for the nets having his name. It is less known that, from its very early introduction, net theory was, for Petri, the kernel of a radical shift in scientific knowledge. In this paper, I want to make one small step for overcoming this limit trying to popularise in a larger community the radical novelty and, of course, the relevance of the approach Carl Adam Petri used for developing scientific knowledge of physical and social phenomena. This has, as we will see, much to do with the concept of computing and, indirectly, with the relations between science and philosophy. Without entering into further details, let me recall that the answer of Petri to the question: "What is modelling?" is that he prefers to the widespread view, considering it a partial function from reality to model, the view that it is a translation from a shared informal model to a formal model. This talk will summarise three aspects of Petri's thinking, deserving a wider attention: the notion of model, the new algebraic foundations for a theory of modelling and its application to Pragmatics.

*Speaker