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Popularization and teaching of the relationship between visual arts and natural sciences: historical, philosophical and didactical dimensions of the problem.

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Summary: The need for a convergence of the visual arts and the natural sciences within the framework of both formal (schools, universities) and non -formal education (museum) at the level of dissemination and popularization of this knowledge is something that has preoccupied the communities of artists, scientists and educators. In the present work we aim to present in a concise way certain positions with regard to the historical, philosophical and didactical dimensions of the problem of popularizing and teaching the relation between the visual arts and the natural sciences. More precisely, we intent to show the existence of this relation throughout history and within the society by reference to certain typical examples of how scientific ideas about nature and the propagation of light influenced the practices of the neo-impressionists or the early abstract painters in relation to the use of colour or the way the visual arts aid in the representation of scientific objects and/or ideas. At the epistemological level, we are going to put forth Levy-Leblond's idea that the relation between the visual arts and the natural sciences is a relation of meeting, controversy or even conflict but definitely not a relation of confusion or fusion. Furthermore, at the didactical level we aim to present the popularization and the teaching of the relation between the visual arts and the natural sciences as a problem of the didactic transformation of knowledge and reference practices and not as a clearly pedagogical construct.

Classification: M50 M80 E20

Keywords: historico-philosophical and didactical dimensions of the relationship between the visual arts and the natural sciences in education;

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