



The relevance of René Thom : the morphological dimension in today's sciences /

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Monografía

The body of work presented in this book comes from research carried out since 2017 as part of the international "Actualit de Ren Thom" project. This project was initially entitled "Morphology and qualitative dynamics: Knowledge of forms / Forms of knowledge". Subsequently, the name "Relevance of Ren Thom" was chosen for its clarity and evocative power. The aim of this research project is to promote the scientific relevance of Ren Thom's thinking on forms, and to demonstrate the importance of his method and discoveries. It is based on discussions of Thom's thinking and the method he proposes - i.e., to seek out dynamic structures in order to understand changes of form in nature and at the human-social level, to explain the transformation of these dynamic forms, to study the morphologies of process in various fields in order to advance scientific knowledge... The relevance of this thinker has manifested itself in the form of monthly sessions of a research seminar, held from 2017 to 2022, as well as in the form of international congresses (2018, 2019), bringing together the greatest friends and continuators, both of the work of Ren Thom himself, and of reflection on morphogenetic dynamics in the most diverse disciplines. This created a space for dialogue and listening between the exact sciences and the social and human sciences. Indeed, the fields of study are necessarily interdisciplinary, since, as Ren Thom teaches us, morphological organization, or form, in its exchanges with matter, must be considered as "independent" of its substrate, i.e. the environment in which this morphogenesis unfolds. Finally, this book marks a symbolic moment: it takes shape in the year that marks the centenary of the birth of Ren Thom, who was born in the French town of Montbliard in 1923. To mark this centenary (1923-2023), a number of initiatives have been launched to celebrate the discoveries and advances of this mathematician-philosopher, as he liked to call himself. The publication of the present book is one more, which we hope will shed light that will stimulate the morphological gaze Thom so urged us to adopt

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