

## **Evolution of Philosophical Strategies for Interacting with Chaos**

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## Abstract

After the discoveries of such scholars as J. H. Poincaré, E. N. Lorenz, I. Prigogine, etc. the term 'chaos' is used actively by representatives of various scientific fields; however, one important aspect remains uninvestigated: which attitude one should have toward chaotic phenomena. This is a philosophical question and my dissertation aims to find the answer in the history of philosophy, where chaos theme has had its investigators from ancient philosophy to the philosophical theories of the 21st century. My dissertation is based on the idea that sciences and philosophy can achieve significant success in exploring chaos theme when their efforts are combined. This dissertation research is designed to help in the planning of conscious, rational actions towards chaotic phenomena, since it is aimed at exploration and systematic presentation, as well as comprehension of possible systems of such actions – philosophical strategies for interacting with chaos.

Results of the dissertation are the following. I reveal, reconstruct, and explain the content of six possible strategies for interacting with chaos that were worked out in history of philosophical thought: ordering, avoiding, transfiguring, preventing, controlling, and integrating. I argue that the first philosophical strategies for interacting with chaos were worked out in the 19th century by German philosophers K. W. F. Schlegel and F. W. Nietzsche on the basis of their rethinking the ideas which were expressed by different thinkers during classical antiquity, the Middle Ages, and the modern period. I show that ideas of strategic views towards chaos were also elaborated by such 20th-century thinkers as H. Rickert, N. Berdyaev, I. Prigogine, H. Haken, G. Deleuze, Q. Meillassoux, and others. I outline the main stages of the evolution of philosophical strategies for interacting with chaos as well as its regularities. The dissertation shows perspectives of further development of each one of the six strategies for interacting with chaos.

In contemporary scientific and philosophical research on chaos, my exploration contributes to the new approach to improving the understanding of aims of acts towards chaotic phenomena. I think that knowing a range of different strategic views of chaos help researchers of chaotic phenomena to choose the most appropriate and rational reactions. In the area of history of philosophy, my research contributes detailed data about development and conceptual transformations of the notion of 'chaos' through all periods of Western philosophy.

The dissertation consists of five chapters: 1) Literature Review, Methodology and Key Research Terms, 2) Ancient and Medieval Philosophical Ideas about Chaos, 3) Genesis of the First Strategies for Interacting with Chaos, 4) Strategies for Interacting with Chaos in the 20th and 21st Centuries, 5) Regularities and Prospects of the Development of Philosophical Strategies for Interacting with Chaos.

In the first chapter I analyze more than five hundred books, articles, and other philosophical and scientific sources in which the chaos theme is raised. I also argue the necessity of applying methods such as analysis, the structural method, the hermeneutic method of interpretation, and the comparative method in my dissertation research. Moreover, in this chapter, I define key terms for my dissertation – 'chaos' and 'philosophical strategies for interacting with chaos.'

Then, in the next chapter, I analyze the appearance and development of Ancient and Medieval philosophical ideas about chaotic phenomena and order. Particularly, I explore thoughts of philosophers such as Anaxagoras, Anaximander, Heraclitus, Empedocles, Plato, Aristotle, Augustine of Hippo, Bernard Silvestris, Ramon Llull, etc. In this chapter I also compare the first Western ideas about chaos with similar thoughts from Eastern philosophy, analyzing Indian and Chinese philosophical ideas about disorder.

In the third chapter I explore transformations in understanding the meaning of the term 'chaos' in philosophy from the 15th to the end of the 19th century. I analyze ideas about chaos and order from thinkers such as M. Ficino, Paracelsus, F. Bacon, P. Bayle, Voltaire, J. G. Herder, I. Kant, F. W. J. Schelling and other philosophers from the Renaissance, the Age of Enlightenment, and the German idealist period, showing that these thinkers' new approaches to interpreting the notion of 'chaos' were the background for K. W. F. Schlegel's and F. W. Nietzsche's creations of the first strategies for interacting with chaos in the 19th century. I finish the chapter with detailed analysis of K. W. F. Schlegel's strategy for transfiguring chaos and F. W. Nietzsche's strategy for ordering chaos.

The development of philosophical strategies for interacting with chaos in the 20th and the beginning of the 21st century is the topic of the fourth chapter. I research new ideas about ordering chaos (H. Rickert) and transfiguring chaos (N. Berdyaev). Also, I reveal thoughts about avoiding chaos (A. Camus), preventing chaos (J. Ortega y Gasset), integrating chaos (G. Deleuze, Q. Meillassoux). Moreover, I analyze a philosophical component of the strategy for chaos control (I. Prigogine, H. Haken).

In the final fifth chapter of the dissertation I trace the major features of philosophical strategies for interacting with chaos and find out the main conditions and periods of their development. Then I outline the prospects for the development of the philosophical strategies for interacting with chaos and show the most productive ways of their progress.

**Subjects/Keywords:** Chaos; Philosophy; History of Philosophy; Ordering Chaos, Transfiguring Chaos, Avoiding Chaos, Preventing Chaos, Integrating with Chaos, Controlling Chaos, Chaos Theory, Philosophy of the 20th Century.

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