## Chaos Theory in Politics - A Book Review

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*Abstract* – The objective of this work is the book "Chaos Theory in Politics", 978-94-017-8690-4, from Springer Series "Understanding Complex Systems" review:

Banerjee, Santo, Sule Ercetin, Sefika, Tekin, Ali, Editors of this book present its three main achievements as: 1. Examines current phenomena such as the Arab Spring and how complexity relates political forecasting using principles of chaos theory.



2. Provides mathematical models as applied to political and economical concerns.

3. Incorporates applications of fractals in political science.

It is composed of four parts:

• Part I

- Politics, Uncertainty and Peace Intelligence.
- Part II
- Politics, Complex Systems, Basin of Attractions.
- Part III

Leadership, Political Science, Chaos and National Security

• Part IV

Sex Complexity and Politics in Literature.

The authors are: Part I: Politics, Uncertainty and Peace Intelligence. - Organized and Disorganized Chaos a New Dynamics in Peace Intelligence; Ş. Ş. Erçetin et al. - Uncertainty and Fuzzy Decisions; I. Özkan, I. B. Türkşen. - Understanding Arab Spring with Chaos Theory: Uprising or Revolution; Ş.N. Açıkalın, C.A. Bölücek. - Part II: Politics, Complex Systems, Basin of Attractions; Economic Decision Making: Application of the Theory of Complex Systems; R. Kitt. - Basins of Attraction for Generative Justice; R. Eglash, C. Garvey. - Chaos in World Politics: A Reflection; M. A. Martins Ferreira et al. - Large Spatial and Temporal Separation of Cause and Effect in Policy Making – Dealing with Non-Linear Effects; J. McCaskill. - Part III: Leadership, Political Science, Chaos and National Security. - Chaos and Political Science: How Floods and Butter have proved to be relevant to move tables closer; J. P. Plaza i Font. - Working towards the Fuhrer: A Chaotic View; U. Cakar. - New Communitarianism Movements and Complex Utopia; K. Gediz Akdeniz. -Counter-Intelligence as a Chaotic Phenomenon and its Importance in National Security; G. Kuloğlu et al. -Part IV: Sex Complexity and Politics in Literature. -Sex Complexity and Politics in Black Dogs; I. McEwan et al.

The keywords and the related subjects presented below, also supplied by the Editors, complete the understanding about the subjects approached in this book and also on the research methodologies employed. The whole book is written in very correct, even stylist, and accessible English. It is rigorous and impartial. The contributors have a great expertise on this field.

**Keywords** - Chaos and Political Science; Chaos in the Arab World; Deterministic Chaos Theory and Social Change; Fractal Theory and Politics; Modelling the Arab Spring; Non-linear Analysis in Political Science; Nonlinearity in Political Economy; Political Forecasting.

**Related subjects -** Complexity; Political Science; Social Policy / Labor / Population Economics.

## 1. The review

The purpose of this book is to investigate global politics and political implications of social science and management, making use of the tools supplied by complexity and chaos theories. Complexity and chaos appear often tied in many research fields, in particular in the study of very complex phenomena there occurring.

Developed basically inside mathematics, complexity and chaos theory were first applied to study phenomena in the scope of the applied and natural sciences. But soon it became intuitive its possible application to the humanities and social sciences.

In fact their mathematical models, intuitive reasoning and metaphors as the "the butterfly effect" and the "drop of honey effect", the first with more adequacy to the applied and natural sciences and the

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second to the humanities and social sciences, gave rise to the hope of fruitful applications in this last field.

This is patent in this work, where these analysis technics are applied to investigate global politics and political implications of social science.

In this sense the book is methodological because it exemplifies in a very interesting way the use of such technics. And, complementarily, the conclusions and results obtained, much of them quite surprising, show the success of these research methodologies application in this investigation field.

This book is original in the use of deterministic chaos and nonlinear analysis that have not been a focal point in this area of research.

Through this book, political, social, economic and media phenomena are studied since very old times till nowadays. This fact enriches very much this work because it gives the historic perspective essential to catch the essence of this kind of phenomena. The text has very great quality. The innovative approach of these phenomena makes its reading essential for social scientists and students and also for the general public.

## 2. Overall review

This is a methodological and original book, scientifically rigorous, fundamental and valuable. Very well written by highly reputed contributors it is an essential reading for social scientists and students, and also very interesting to the general public.

## Reference

 Banerjee, Santo, Sule Ercetin, Sefika, Tekin, Ali, (Eds.). Chaos Theory in Politics. Understanding Complex Systems, 2014, X, 201
p. 13 illus., 7 illus. in color. ISBN: 978-94-017-8690-4. DOI: 10. 1007/978-94-017-8691-1.