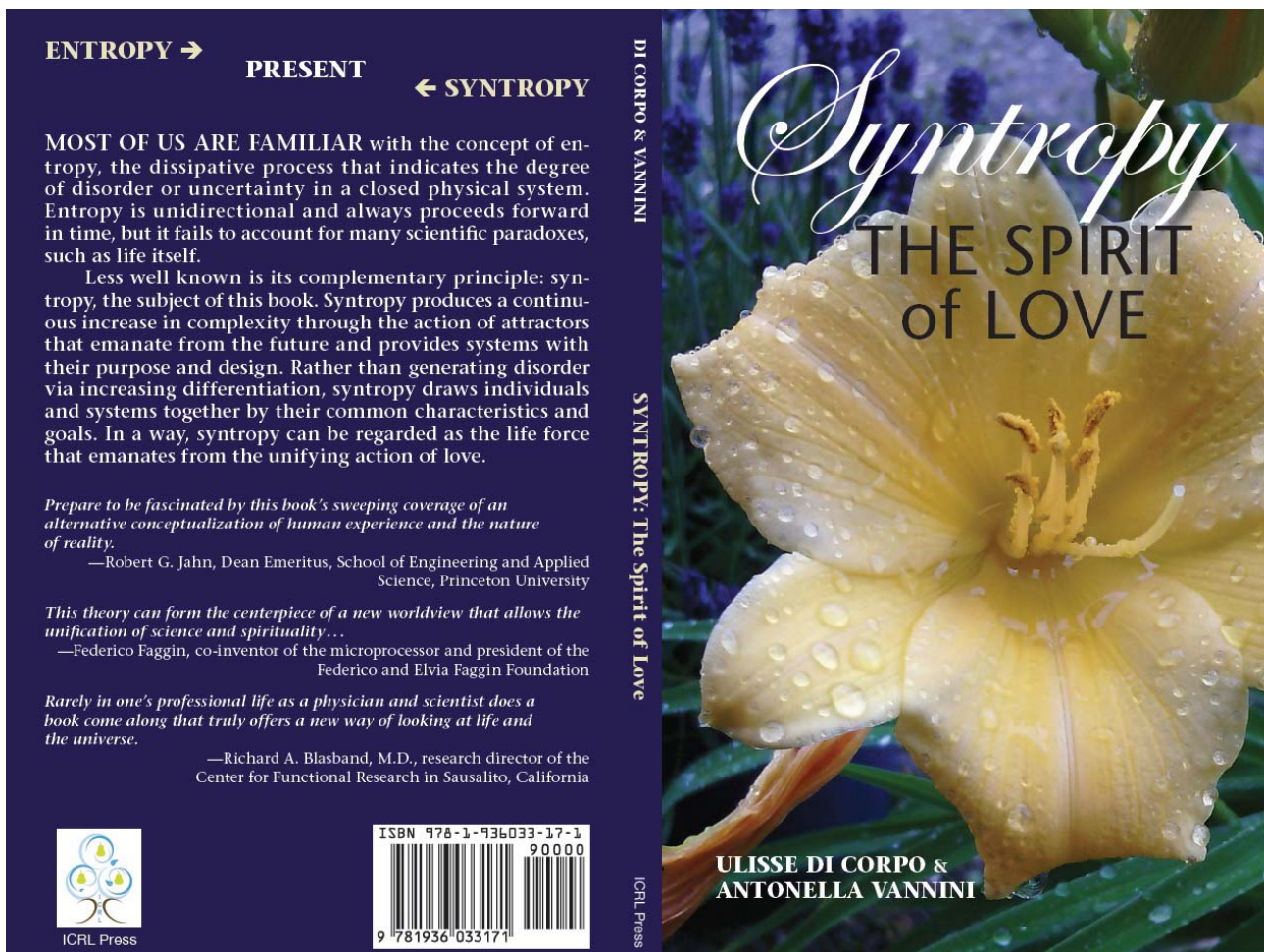


Syntropy the Spirit of Love

Ulisse Di Corpo¹ and Antonella Vannini²

Abstract

The book *Syntropy the Spirit of Love*, published by ICRL Press, is available from mid-January 2015. Whereas most of us are familiar with the concept of entropy, the dissipative process that indicates the degree of disorder or uncertainty in a closed physical system, less well known is its complementary principle: Syntropy.



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Endorsements

“The ICRL Press takes great satisfaction in offering this provocative treatise by Ulisse Di Corpo and Antonella Vannini, fastidiously edited by Brenda Dunne, ICRL’s Editor-in-Chief. The book presents, in a readily readable format, a rare review of the work of the celebrated Italian mathematician Luigi Fantappiè regarding the concept, interpretation, and implications of the complementary principle to physical entropy, which he named syntropy. Along the way, the authors skillfully touch on a blazing array of related issues, ranging from the Klein-Gordon relations of relativistic quantum mechanics and their advanced wave solutions, to issues in evolutionary theory. Presenting pertinent empirical data to support their thesis, they also discuss the relevance of syntropy to time and water, negentropy and information, determinism and free will, and a host of correlative matters rich in implications to be contemplated and explored. If you are now holding this remarkable book in hand, scan the Table of Contents and prepare to be fascinated by its sweeping coverage of an alternative conceptualization of human experience and the nature of reality.”

—Robert G. Jahn, Dean Emeritus, School of Engineering and Applied Science,
Princeton University

“For many years now, Ulisse Di Corpo and Antonella Vannini have been furthering the revolutionary ideas of the Italian mathematician Luigi Fantappiè who in the 1940’s coined the term syntropy to indicate order-producing influences propagating from the future into the present; a concept complementary to the disorder-producing entropic influences that propagate from the past into the present. Their message is getting crisper and more convincing, as they bring ever more evidence in support of this theory. They also show evidence that feelings, in particular love, may in fact be the form in which non-specific information from the future manifests into the present. These ideas bring a welcome sense of purpose and meaning into our worldview, absent if only the disorganizing entropy exists. This theory can form the centerpiece of a new worldview that allows the unification of science and spirituality into a new paradigm where our inner aspects, exemplified by our thoughts and feelings, can be unified with the physical aspects that alone are now granted reality by science.”

— Federico Faggin, co-inventor of the microprocessor and president of the Federico
and Elvia Faggin Foundation

“Rarely in one’s professional life as a physician and scientist does a book come along that truly offers a new way of looking at life and the universe. Such a book is that of Ulisse Di Corpo and Antonella Vannini on syntropy. A physical function in opposition to entropy has been sought for scientists for hundreds of years, especially for explaining the existence of life. Here, based on the original work of the mathematician, Luigi Fantappiè in the 1940s and recent experimental evidence on

retrocausality we have a credible and well fleshed out presentation of the implications of such a function in the principle of syntropy. The authors are to be congratulated for their courage and dedication to science for this work.”

—Richard A. Blasband, M.D., research director of the Center for Functional Research in Sausalito, California

“While they continue to elucidate the rational fabric of the universe, few scientists these days give much thought to the meaning of their theories. But their left-brain world is far from being the whole story. Thus the authors of this book take an enormous stride by expanding science to connect our rational world to our emotional world—which, after all, is what really matters to us. Who would have thought that there could be a science of love? And one just as precise and formally correct as the science most of us have been brought up with?”

—Roger Taylor, PhD., independent researcher on subtle energy, and formerly Reader in Immunology, University of Bristol

Introduction to the book

Most of us are familiar with the concept of entropy. Based on the second law of thermodynamics, it is a dissipative process that is a measure of the amount of thermal energy in a physical system that cannot be used to do work, and indicates the degree of disorder or uncertainty in that system. For example, it predicts that when heat flows from a region of high temperature to a region of low temperature the hot region becomes cooler and the cold region becomes warmer over time. This process occurs spontaneously without the need for any extra external energy. When it occurs we say that the entropy of the system has increased. The entropy of an isolated system always increases as it loses information and becomes less ordered. Expressions such as "you can't unscramble an egg" or "you can't take the cream out of the coffee" indicate the irreversibility of such processes.

Entropy is unidirectional and always proceeds forward in time. It explains the activity of many physical phenomena but fails to account for many others where order appears to increase spontaneously, where complexity develops from simple systems, or where disordered atoms form molecules. One can find such examples in ecological systems, certain characteristics of water, quantum entanglement and non-locality, retrocausality, healing, evolution, and life itself.

In 1942 Luigi Fantappiè proposed a law symmetric with entropy, which he named syntropy. Syntropy produces a continuous increase in complexity through the action of “attractors” that emanate from the future and provide systems with their purpose and design. Rather than generating disorder via increasing differentiation, syntropy

draws individuals and systems together based on their similarities. In a certain sense, syntropy can be regarded as the action of love, which Louis de Broglie described as *“that force which directs all of our delights and all of our pursuits. Indissolubly linked with thought and action, love is their common mainspring and, hence, their common bond.”*³

Concluding observations

The implications of the extension of science to include the negative energy solution was described by Fantappiè in the following letter to a friend:

“In the days just before Christmas 1941, as a consequence of conversations with two colleagues, a physicist and a biologist, I was suddenly projected into a new panorama, which radically changed the vision of science and of the Universe which I had inherited from my teachers, and which I had always considered the strong and certain ground on which to base my scientific investigations. Suddenly I saw the possibility of interpreting a wide range of solutions (the anticipated potentials) of the wave equation which can be considered the fundamental law of the Universe. These solutions had been always rejected as impossible, but suddenly they appeared possible, and they explained a new category of phenomena which I later named syntropic, totally different from the entropic ones, of the mechanical, physical and chemical laws, which obey only the principle of classical causation and the law of entropy. Syntropic phenomena, which are instead represented by those strange solutions of the anticipated potentials, should obey the two opposite principles of finality (moved by a final cause placed in the future, and not by a cause which is placed in the past) and differentiation, and also be non-causable in a laboratory. This last characteristic explains why this type of phenomena has never been reproduced in a laboratory, and its finalistic properties justified the refusal among scientists, who accepted without any doubt the assumption that finalism is a “metaphysical” principle, outside Science and Nature. This assumption obstructed the way to a calm investigation of the real existence of this second type of phenomena; an investigation which I accepted to carry out, even though I felt as if I were falling into an abyss, with incredible consequences and conclusions. It suddenly seemed as if the sky were falling apart, or at least the certainties on which mechanical science had based its assumptions. It appeared to me clear that these

³ L. de Broglie, “The Role of the Engineer in the Age of Science.” In *New Perspectives in Physics* (1962), trans. A.J. Pomerans. NY: Basic Books, p.213.

syntropic, finalistic phenomena which lead to differentiation and could not be reproduced in a laboratory, were real, and existed in nature, as I could recognize them in the living systems. The properties of this new law, opened consequences which were just incredible and which could deeply change the biological, medical, psychological, and social sciences.”

The introduction of advanced waves in physics would be primarily theoretical, but in the life sciences such as biology, medicine, psychology, or sociology it would carry important pragmatic implications. These disciplines now approach pathologies, illnesses, and social crises in a causal mechanistic way, which leads, in an increasingly alarming fashion, to incorrect diagnoses, inefficiency, and increased costs.

Social and cultural milestones are marked by counter-intuitive discoveries. For example, it was once intuitive to believe the Earth flat and that the Sun revolved around the Earth. Today it is intuitive to imagine that time flows from the past to the future, but counter-intuitive to imagine that past, present and future coexist. In the paper “*A novel interpretation of the Klein-Gordon equation,*” K. B. Wharton concludes that:

“It is obvious that quantum mechanics is counter-intuitive, but it must be counter-intuitive for a reason – some human intuition that fundamentally contradicts some physical principle. One example of this would be the well-known conflict between our direct experience of time and the more symmetric treatment of time in fundamental physics. If the counter-intuitive aspects of quantum mechanics could be explained via classical fields symmetrically constrained by both past and future events, then it would be a mistake to reject such a solution based solely on our time-asymmetric intuitions.”⁴

The change that is emerging on the horizon involves the paradigmatic shift from the mechanistic vision to the new supercausal and syntropic vision which requires the counter-intuitive fact that time flows differently from how we perceive it in our conscious everyday experience.

While dealing with mechanistic and simple systems, the cause and effect approach is adequate. But in dealing with complex living systems retrocausal forces take a prominence, as quantum forces enter into the equation of life. In human life, and in

⁴Wharton, K.B. (2009). “A novel interpretation of the Klein-Gordon equation.” *Foundation of Physics*, 2009, 40(3): 313-332.

all living and self-organizing systems, both causal and retrocausal forces continuously interact.

Although much of this book has focused on the logical and pragmatic implications of the entropy/syntropy theory, perhaps the most profound aspect of it is that it introduces *love* into the realm of modern science. Syntropy, like love, has the power to transform and unite the disparate elements in our lives. As the organizing principle of creation, evolution, and life itself, love deserves a primary role in our world view.⁵ Nobody has expressed this recognition better than Pierre Teilhard de Chardin, when he predicted that

*“Someday, after we have mastered the winds, the waves, the tides and gravity, we shall harness for God the energies of love. Then for the second time in the history of the world, man will have discovered fire.”*⁶

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⁵ Di Corpo, U. (1996). *Syntropy: the Theorem of Love, Kindle Editions*.

⁶ P. Teilhard de Chardin, *On Love*. NY: Harper & Row (1967), pp. 33-34. (From P. Teilhard de Chardin, “The Evolution of Chastity.”)

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