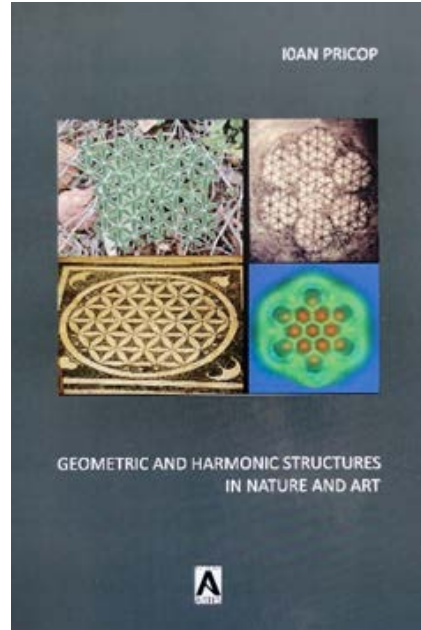


Geometric and Harmonic Structures in Nature and Art

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Ioan Pricop**, *Geometric and Harmonic Structures in Nature and Art*, Artes Publishing House, Iași, 252 pages.



The book to which we are dedicating this review systematically explores the relationships of direct determination between the characteristics of geometric and numerical harmonic structures present in the composition of microscopic organisms and macroscopic creatures belonging to the kingdoms of the natural world and those of the visual arts world, highlighting the synchronicities of identity or the similarity of the principles that govern the morphology but also the semantics of the two territories. Structured in four chapters, thirty-eight subchapters, an inspired introduction, a substantial number of case study images, this volume is completed with a welcomed conclusion series and a substantial essential bibliography. The book, published by the "Artes" publishing house of the "George Enescu" National University of Arts from Iași, represents the results of the doctoral research carried out by the author on this interdisciplinary, exciting and welcomed topic in contemporary visual arts field.

The author introduces us to his laboratory and personal investigative methodologies, stating that nowadays cultural, social, psychological and

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spiritual characteristics allow us to discover and know more precisely the previous eras, from the most remote times to the present day. The hyper-technological communication context of our age allows us to get a panoramic view of the art history and to synthesize information from different fields of knowledge, so that we can better understand the elements that contributed to the birth of the remarkable artistic events of the visual arts culture.

The structure of Ioan Pricop's book consists of two distinct parts: an eminently theoretical one and the other with an empirical nature, configured from relevant analyzes and case studies. In the first part, that covers the first two chapters, the author focused on defining the general concepts that start from the idea of Nature and stated the main characteristics of the three kingdoms: mineral, plant and animal. The approach is made both from the perspective of Nature (Real) and from the perspective of cultural tradition (Reality). In chapter I, entitled "Universe, earth and man", the relationship between man and Nature is explored through the visual-artistic message, with Nature as the real referent. In the second chapter, entitled "About sign and symbol - geometric structures", the sign-symbol binomial is addressed as a communicative act, through which real information is floated through conventionalization. In this sense, the constructive principles of the main types of geometric, two- and three-dimensional figures are analyzed, which also represent information from Nature, but as an act of form representation.

The theoretical approach is illustrated in the practical part of the thesis, where a geometric projection of structures and models from Nature is presented, which also reflects the symbolic message of a cultural tradition that is always present in visual art. Chapter III, entitled "Artistic structures and models from Nature", addresses the historical evolution of the first artistic manifestations, from Paleolithic to the beginnings of the modern era. In Chapter IV, "Landscape Aesthetics", the focus is on landscape as an artistic genre in itself, highlighting the feeling and meanings of the perception of Nature in landscape art both in West and East. This chapter also covers other modes of artistic expression such as organic architecture or cinematic productions such as Disney animated films.

Regarding the creation process, the author states in the first part of the book, contemplation plays a decisive role in establishing the relationship between Nature and art. This relationship can be explained by the mythical theory of a human being's privileged presence in Nature or by the hypothesis of the evolutionary accumulation of a high degree of consciousness, the act of contemplation remaining decisive for all types of the human being's actions in relation to the surrounding organic and inorganic environment. In this sense, according to the logic developed by Ioan Pricop in his research, art proves to be a process of sublimation and representation of the harmonic properties and qualities of Nature. In this sense, the art and culture carrying ancestral traditions revealed the connection between the organizational

structures of the natural kingdoms and those that direct the configuration of the human being and also of an artwork. As for tradition, the term derives from the Latin word "traditio", which means "to transmit", "to remit", "to be given for storage". In its form of manifestation, tradition can mean the set of conceptions, customs, traditions and beliefs that are established historically within some social or national groups and constitute for each social group its specific feature. Less well known is Tradition (with a capital letter), which means the set of religious or moral doctrines and practices, transmitted from one century to another, originally by word or example, and the set of information, more or less legendary, relating to past, initially transmitted orally from generation to generation. In this sense, the *Primordial Tradition* or *Perennial Philosophy* includes various traditions, such as Christian, Jewish, Islamic, Buddhist or Hindu, and its origin is metaphysical.¹

In today's culture and technology, structural patterns governed by proportion and harmony, present in nature, are important in art, architecture, philosophy, and science. These models can be used for the elaboration of aesthetic and functional edifices, the exploration of the supersensible world or simply as a subject of contemplation. Geometric structures are fundamental forms with an organizational role in the configuration of Reality, being considered invisible reinforcements of visual images.

The constructive and harmonic principles underlying valuable artistic expressions are found in the formation of natural structures from the three kingdoms that existed before the human species: mineral, plant and animal. Many times, artists assign symbolic meanings to the beauties of the natural order, studying them with attention and reverence, integrating them into a protective and justifying artistic framework. In this thesis, we will examine various categories of symbols which, while not being natural laws of proportion - being cultural constructs - can become laws of proportion when the human mind gives them authority and projects them into the world of numbers and shapes.

In Nature, Ioan Pricop explains, the main geometric shapes, that are two and three-dimensional ones, can be observed, and the proportions and growth rates of crystals, plants or animals are governed by special numerical numbers and ratios. There is an obvious relationship between numbers, which belong to the family of arithmetic entities and shape, which belongs to the family of geometric entities, known since Antiquity. However, for two millennia, mankind considered these to be two distinct worlds, an irreducible duality. For example, Pythagoras, the great geometer, preferred the primacy of numbers over forms, but Plato argued the opposite, granting the primacy of forms over numbers, as appears on the pediment of the Academy founded by him, where he wrote: "He who is not a geometer should not enter under my roof".

¹ Read Aldous Huxley – "Filosofia perenă", Polirom Publishing House, Iași, 2020

In this text, two different ways of thinking about the relationship between man and the environment are debated, under the sign of atomism and systems thinking, considered two contradictory currents in the history of human thought. Atomism tends to reduce reality to our ordinary experience in space and time, while systems thinking admits the existence of a self-consistent universe with its own laws. It appeals to the idea of levels of reality, where the Real denotes the natural universe (Nature) and Reality refers to what endures in our human experience and involves the human stewardship of the Real, namely cultural tradition. Thus, man is aware of two possible realities: Nature and Reality, and is often in conflict between the desire for cosmic unity and the desire to realize his individuality.

Ioan Pricop constantly argues, throughout the chapters and themes explored, that man's perspective on nature is directly and effectively influenced by any form of cultural or artistic expression, and this perspective undergoes a continuous transformation and adaptation in order to conform the demands of each civilization type. This process is cyclical, as humanity periodically goes through the same frameworks and formulas for understanding the meaning of existence, as well as representing this understanding in visual arts field.

Since the beginning of his existence, human being has had an intuition about the cosmic flows of information and the forces that regulate any form of manifestation. Throughout time, there has always been a sense of nostalgia for a pure and immediate contact with nature and people have always wanted to understand the needs of nature, the laws by which it's built and which have triggered a wide range of feelings and thoughts in their souls and consciousnesses - admiration, respect, fear or delight, for example. All the important phenomena of the natural world had, most of the time, a natural manifestation in the intimate or collective people's lives.

During the development of his research, Ioan Pricop emphasizes that man's relationship with nature is tripartite: he can relate to it through knowledge, through direct interventions on nature and through the resonance obtained through the contemplation of the harmonic and vibratory aspects of the natural world. Through this form of receptivity to the natural world, a connection is created to a strong influx of psychological and affective energy, which we call the aesthetic sense of nature.

According to the research carried out, the author comes to the conclusion that an important aspect of human thinking related to the revelation of the mysteries of the natural world is related to the understanding of the aesthetic dimension of Nature's intelligence. Moreover, his exploration focused exclusively on the harmonic and aesthetic aspects of the elements of the natural world.

By developing the four chapters of his book, artist and visual researcher Ioan Pricop came to the conviction that all categories of visual arts

reflect the desire to understand the relationship with the world order of the natural kingdoms. Nowadays people are increasingly interested in rediscovering the wisdom embedded in the natural world's rhythms of growth and transformation.

Seen from a broad perspective, the relationship between the universe, earth and man was explored, by analyzing the place and importance of Nature in the context of art, science, philosophy and traditional knowledge. The author observed a general trend of female personification of Nature and subordination of entities from the natural kingdoms, an aspect that influenced all areas of human knowledge and creativity. To recover these aspects, he compared the mineral, plant and animal kingdoms, focusing on the symbolic meanings of mountain, water, crystals, mythological or real plants and animals. The analysis of the relationship between sign and symbol led to the identification of common geometric patterns in the macro-cosmic world of Nature and the Universe, as well as in the micro cosmic world of the subatomic particles. At the heart of this interaction there are the human dimension and knowledge, which go both ways. Primal geometric shapes such as circle, square, triangle and spiral have held fascination and symbolic power for any era or cultural tradition. The harmonic rhythms of Nature captured in the calendars of humanity are the consequence of direct observations on the succession of seasons, human ages, lunar, solar and stellar cycles.

As a result of theoretical research and visual experiments carried out to support the first category of studies, the author came to the conclusion that visual arts have always been inspired and influenced by the primordial relationship of man with nature. Going through the important moments in the art history allowed him to outline analysis paths of the presence of the feeling for nature, manifested in the artistic consciousness specific to each period. In such a perspective, the gradual transformation of the relationship between humanity and nature can be defined as a consequence of shaping the entire spectrum of knowledge possibilities.

Nature, as Ioan Pricop concludes in his investigative journey, has always been a source of interest and inspiration for artists, philosophers, mystics or scientists of all times. Human consciousness has perceived nature through an intense aesthetic dominance given by the presence of life, beauty and wisdom that fascinates regardless of the passage of time. Through the seriousness and complexity of the proposed explorations, this volume proves to be a useful corollary not only for professional visual artists, but for all those willing to discover the miraculous aspects of the laws that govern our level of Reality.