
Contents

Foreword	ix
Introduction	xiii
Chapter 1. A Presentation of the Paradigm of Information in the 21st Century	1
1.1. After technology, the philosophy of information.	1
1.1.1. Information, issues and paradigms of the 21st Century	1
1.1.2. Philosophizing means being concerned	3
1.1.3. Technology affects us	4
1.1.4. Information affects us	6
1.1.5. Where can we situate a philosophy of information?.	8
1.1.6. The two philosophies, technology and information	10
1.1.7. What is information?	11
1.1.8. Universal thinking	14
1.2. CRISPR-Cas9: from mechanism to information in biology.	15
1.2.1. Brief review of a significant scientific discovery	15
1.2.2. From Monod's biology to information biology	17

1.3. Toward a theory of the information act	22
1.3.1. Image act, the power of images.	22
1.3.2. Thoughts about Horst Bredekamp's study, the theory of the image act	23
1.3.3. Language and image resonances	28
Chapter 2. Communication Influences the "Mechanisms" of the Living World and Society	31
2.1. Philosophical approach to cancer through information and immunity	31
2.1.1. A note on a potential dead end in the research on cancer	31
2.1.2. An alternative hypothesis: Darwinian carcinogenesis	33
2.1.3. Leaving the current paradigm behind	34
2.2. Fanaticism and fantasies, a "pathology" of information and its interpretation	36
2.3. Scientific communication and modernism in contemporary societies	39
2.3.1. Distinguishing between technological and mediated activity through social norms and subjects	40
2.3.2. Destructuring the subject and semantic mediations	41
2.3.3. Scientific contamination of ideology and depoliticization of society	42
Chapter 3. Form, Information and Content	45
3.1. Form and content, an old story that still affects our existences	45
3.2. Ontology of form and content	48
3.3. Brief remarks about a type of philosophical and scientific research	51
3.3.1. Structure and order of Content: logic and/or structure of form	51
3.4. Ontology of form and Content, ending the issue of machines before machines end us	53
3.5. The ontological difference and the path toward Being.	55
3.6. The three colors of Being and modernist perdition.	59
3.7. Brief notes on the oblivion of Content as ontological difference revealed by decline.	63

Chapter 4. Mass, Charge, Gravity and Rays: Distinguishing Between the Two Kinds of Universal Physics	69
4.1. Masses, arrangement and mechanics	69
4.2. Electric charge, spin and dynamics of information	71
4.3. Light-like and time-like geodesics in relativistic cosmology	74
4.4. Overview of the dynamics of arrangement and information.	77
4.5. Einstein and the question of the field in physics.	80
4.6. The cosmological alternative in the 21st Century	82
4.6.1. Provisional conclusion: what kind of physics for the 21st Century?	83
Chapter 5. From Objects to Fields, Reinterpreted Contemporary Physics and the Path Toward Quantum Gravity	85
5.1. Fields, arrangements, communications	85
5.1.1. Cosmology of communications	87
5.1.2. Cosmology of arrangements	88
5.2. Einstein's treatment of the hole argument	90
5.3. Quantum gravity, the greatest scientific challenge of the 21st Century	92
5.3.1. From gravitation to entanglement	92
5.3.2. Quantum gravity elaborated as physics of information	96
5.3.3. A digression about the Microscope mission and the notion of gravity-quantum geodesic	101
5.3.4. Quantum gravity, a way of conceiving matter, and the <i>Logos</i> of the universe	105
5.4. Do gauges reveal the secrets of the universe?	107
5.5. The universe as stage and theater of animated objects	112
5.5.1. Overview, the actors and the stage	113
5.6. Rethinking matter: a summary first glance	116
5.7. A second summary view of a universal type of physics: mass, charge, spin, photon	118

Chapter 6. Physics in the 21st Century in Relation to Information and Arrangements	121
6.1. Action and information, digressions about philosophy and contemporary physics	121
6.2. Seeing, perceiving, receiving: Leibniz and Newton	125
6.3. Postmodern philosophy of nature and the meaning of existence.	129
6.4. A universal outline, from quanta to the cosmos, information and arrangement	131
6.4.1. The origin of the two kinds of physics	131
6.4.2. The two cornerstones of physics in relation to communication and arrangement	131
6.5. Time and stage: from quanta to the universe	135
6.5.1. Aristotle, Newton and Einstein	135
6.5.2. Relativity, of course, but so many mysteries!	137
6.5.3. Time and stage	139
6.6. Information, memory and order	142
6.6.1. Dialectical relationships between information and arrangement in the universe and the living world.	142
6.6.2. Two kinds of memory, action and perception	142
6.6.3. Arrangement, perception and information in nature.	143
6.7. Some connections between science and the metaphysics of philosophers.	144
6.8. A new paradigm, information in communication, arrangement and transformation	147
6.8.1. To enter the age of information.	148
6.9. Overview: from quanta to the gravity-quantum apparatus and the universal stage	150
Conclusion	155
Postface	159
Bibliography	161
Index	163