

5

ON THE FUNDAMENTAL WORLDVIEW OF THE INTEGRAL CULTURE

INTEGRATING SCIENCE, RELIGION, AND ART: 1ST PART

10

ATTILA GRANDPIERRE

*Konkoly Observatory,
Budapest, Hungary*

15

In the present essay I suggest that the main reason why history failed to develop societies in harmony with Nature, including our internal nature as well, is that we failed to evaluate the exact basis of the factor ultimately governing our thoughts. We failed to realize that it is the worldview that ultimately governs our thoughts and through our thoughts, our actions. In this work I consider the ultimate foundations of philosophy, science, religion, and art, pointing out that they were and can be again in harmony with each other if their ultimate tasks are specified. I specify here the first task of philosophy as considering the philosophical significance of the ultimate principles of physics, biology and man/society. These ultimate principles are in direct connection with the ultimate questions of religion. I show that the fundamental nature of art makes it able to perceive the ultimate destination of mankind and the Universe, the world-to-be. I propose that philosophy, religion and art together are able to supply us with an inter-subjective picture of the world-process, including the inter-subjective picture of the future of mankind and the Universe. Care is taken to enlighten the possible role of values in founding scientific research in the frame of present wide-ranging discussions. It is found that universal values of respect for existence, life and reason represent the inevitable basis of science. The exact foundations of a new, integral worldview are outlined, involving the worldprocess-picture, Nature-picture, images of man, society, self, history and manipulation. A list of our common tasks for founding the Integral Culture is proposed.

20

25

30

35

KEYWORDS: worldview, cultural turning point, the task of philosophy, common foundation of science, art and religion, intersubjective pictures of the world.

40

Address correspondence to Attila Grandpierre, Konkoly Observatory, H-1525 Budapest, P. O. Box 67, Hungary, Email: h7690gra@helka.iif.hu

45

THE MEANING OF OUR LIFE AND OUR PRESENT WORLD SITUATION

5 In present societies, in our personal life there is an unusually high degree of lost direction regarding our personal and communal life conducts. Not only are the directions lost in the growing complexities of the information jungle, and not only is our evaluating ability to recognize the substantial points decreases in a growing rate, but we have also lost our knowledge on the cosmic-natural foundations of our communal, national cultures and their genuine destination. The most important points are not recognized, and the ultimate questions are not answered. Science separated itself from discussing the ultimate questions, and religion became unauthenticated by science. Therefore following the development of the “natural” sciences an enormous void is created in the center of our knowledge in the most essential region of our minds. The existential void exerts a vacuum cleaner effect that drives the richest variability of mutant spiritual directions into life. In this unnatural soil, nihilism, materialism, and physicalism vigorously grow, propagating at a rate unimaginable before.

10
15
20
25 But our life can have access to meaning and significance only when does not stop with the death of our bodies, when the spiritual meanings and values central in our personal life survive in the overall culture of mankind. This is why one of the most central affairs of our personal life is to form our culture into one, which will maintain and pass through the spiritual crystal of our life after our death. But this culture-to-be-formed, so important to our personal life, is losing its basis if it turns against the inner and outer environment of Homo as the present dominant Modernist culture does. The outer environment of mankind is Nature, or Cosmos. The inner environment is our human nature. Therefore, the life of mankind cannot have transcendent, universal meaning, until Homo lives again in alliance with Nature that created both our inner and outer nature. The real destination of mankind is to explore the spirituality of Nature, to know its essence as completely as possible and to develop it forward.

30
35
40
45 Until the time when we will be able to reach a stage of development when culture and the whole life of mankind could return to its genuine natural foundations, our societies and personal life will mostly remain marginalized on to the edge of the life void. The swarming shallowness and apparent proliferation of the modern age, the increasing rate and extension of manipulation, the artificial formation of mass people and consuming robot-men tries to hide the cosmic life void between Nature and Homo, generated by our civilization a few thousand years ago. This life void created an open wound in the heart of our personal and communal life as well. The individual and communal system of values has largely shifted into an inverted scale, since in the presently dominating views material, financial interests and power occupied the previously high-valued places of nobility, spirituality and common good. The roots of the most important and unsolved problems with which mankind is faced today go back to the dividedness of mankind, to the bias in the sensitivity of problems and values. “The conflict between science and religion is the *cause* of all those other problems” (Dolva, 1999). The theoretical foundation of a natural, vital, and spiritual culture belongs to one of the most important tasks of the Integral Culture. The most important tool of integration is available only through working out the

worldview integrating science, religion, art, and philosophy and representing their common basis. Worldview is the universal knowledge of the world as a whole from the point of view of our life-conduct. Apparently, the most fundamental task of the Integral Culture is the exact foundation of the integral worldview. In this essay we make an attempt to fulfill the task founding integral worldview in the hope of calling attention and generating wide-ranging discussion.

5

The original unity of science, religion and art

The separation of science, religion and art occurred a few thousand years ago. The Magi considered the secrets of the heavenly kingdom, played a significant role in ruling society based on ancient cosmogonic order and, at the same time, with their singing and dancing achieved personal contacts with the cosmic-natural-spiritual forces giving meaning and fulfillment to human life. “No priesthood of antiquity was more famous than that of the Magi” (Gnoli, 1993, 80). “Magi had been working impartially and without preconceptions . . . (They are) the most ancient teaching genus, without any doubt” (Stanley, 1731, 250). “Magi were also known as the Chaldeans, the priesthood of Babylon” (Gnoli, 1993, 80). “The Magi were the teachers of some of the greatest Greek thinkers (Pythagoras, Demokritus, Plato)”, and “they were renowned as the propagators of a cult of the Sun in India” (Humbach, 1978, Gnoli, 1993, 80). “Magi: Mager or Magier, Priest-caste, of the Sun-cult” (Lexikon der Alten Welt, 1965). “Chaldean Oracles...certainly included not only prescriptions for a fire and sun cult” (Dodds, 1951, 285). The pre-Christian religions were, remarkably, mostly religions of wisdom. For example, in Zoroastrism the highest Lord was Ahura Mazda, the Highest Wisdom. The Gods following after Him were The Good Thought (Avohu Manah) and The Most Saint Truth (Asa Vahista) (Hinnels, 1992). In the ancient Egyptian worldview, in the First Transient Age (around B.C. 2100) King Heti in his philosophical teaching papers held that the governor of the world was the Sun God under various names. Besides the Sun God the most important ones were Isis, the Great Magus Women; the Word (Hu); the Recognition (Sia); and the Daughter of the Sun, the Truth (Maat) (Kákósy, 1979, 311). In Chinese cosmology the Universe is a living, enormous organism. The three main ingredients of the unified Universe are the Sky, the Earth and Man. This threefold structure is manifested in the physical, spiritual and moral life of humans, and the way to follow in life is Tao, wisdom again (Glaserapp, 1972, 141). Before the mystical religions the traditional conviction of the people, the “folk religion” were built on the foundation of wisdom. In manicheism Mani named the conceptual body of the God as five shelters: Intelligence, Science, Thought, Reflection, and Conscience (Gnoli, 1993, 164). This God is essentially wisdom again.

10

15

20

25

30

35

As Boutroux wrote (1914, 1): “In the antique Greek world, religion was not in antagonism with science, but with philosophy, in the sense that religion became confronted with the rational interpretation of the phenomena of the world and life by the traditional convictions of the people.” We can observe that now we are faced with a worldview unrecognized until now. This is the “traditional convictions of the people”, i.e. the “folk religion”, which shows up as a third alternative worldview besides that of philosophy and religion. The Greek philosophers—apparently led by widespread

40

45

folk convictions—were mostly of the opinion that first of all it is reason that one should regard as having divine character. Aristotle thought that the perfect reason is the real God, the task of which is to know Nature. “The more deep we consider matter and reason, the more they converge, call each other, and unify...if in the Greeks reason turned away from religion, this happened only to find a truer foundation for knowing Nature” –Boutroux remarked (1914, 5). Greek philosophy and science is a late follower of the ancient knowledge of the Magi (Diogenes Laertius, B. C. 200, 3). In present terms, Magi were simultaneously scientists, priests, and artists. The separation of art, science, and religion apparently goes back not to natural, but to economical-historical circumstances, namely, a radical materialization of society (Grandpierre, 2001a), and therefore we should not regard this separation as inevitable. Animism, and its ancient high culture counterparts, the integrated organic worldview of the genuine magic worldview, was the first experience of mankind and their first worldview. Materialism is a very late negation and decayed form of it. Since the first separation of science, religion and art, the disintegrational tendency dominated over the integrative attempts. Not only art, the original integral science (Natural Philosophy) and religion did separate, but modern science also became fragmented into the diverse branches of science. This disintegration and the arising existential vacuum in the central brain of culture led necessarily to the present world situation with its growing rate of alienation, the inverted system of values, the cult of money, success, and power, and the dominance of materialist worldview in the media and universities. But we can observe that the unification of science, art and religion is in principle possible. In the wisdom religion Reason and God had one nature, therefore, in principle, they may regain their genuine, unified nature today, as well.

Attempts for unification

To fill the existential gap, a significant number of spiritual attempts were developed. Regarding mostly the twentieth century, one can mention in this context the ontology of Nicolai Hartmann (1933), General Systems Theory, founded by Ludwig von Bertalanffy, which seemed appropriate to work out the unity of sciences. The mostly controversial and superficial movement of the New Age attracted a significant portion of the public, but it failed to develop systematic and unified conceptual foundations. Organic concept of society was widespread from the ancient Greeks until the end of the nineteenth century, and it resurfaced tangentially nowadays (Heylighen, 2000). Organic worldview flourished in the first part of the twentieth century (Bergson, 1931; Whitehead, 1925/1967), and after its retreat 1950-1970, it showed up again in the organic worldview (Laszlo, 1995; Mae-Wan Ho, 1998; Sahtouris, 1999). Scientific works on worldviews were appearing in the research community (Aerts et al., 1994; The Worldviews Group, 1995; Weber, 1999), the Institute of Noetic Sciences (Harman, 1991), or the Collective Consciousness Research Group of the Club of Budapest (World Futures, 1997, 48). Recently, the eclectic New Age movement seems to be replaced by a new, more definite world movement, Integral Culture (Ray, 1996; Ray, Anderson, 2000). One may mention in this context Integral Science (McFarlane, 1997), deep science, deep ecology and holistic science. The relation between science and religion is a popular subject of research and

important findings are recognized (Dolva, 1999; Payutto, 1993). Ian Barbour won the Templeton Prize for Progress in Religion in 1999.

Most evaluations agree that the status of world affairs, the destruction of the environment and society, the increasing rate of dehumanization may be stopped only with the help of a new worldview. The Universe itself is a unified existent, and this unification involves a cosmic organizational factor (Grandpierre, 2000). Mankind has only one universal foundation for our thinking, this being Nature, creating Mankind and the inner and outer nature of Homo. Mankind is a focus of these inner and outer natures. The people of today need an overall perspective on Nature, society and personal world. The foundation of our picture of man and society should be Nature. Edward Shils (1997, viii), the American sociologist recognized, that the strength and stability of a society depends on a large rate of its general image, and on the rate in which its members are bound to this image and through this image to each other. This image does not only include the convictions related to the society, but also the opinions on the ultimate concerns of life and the order of the universe, which are the foundations of the social consensus, of the collective consciousness. Nobody can escape from the constraint to relate her/his own meaning of life to the order of the society in which she/he lives. This need is termed by Shils (1997, ix) as a fundamental human need of the cognitive order.

The role of worldview in science, art and religion

Based on the book of Burt (1954) about the metaphysical foundations of modern science, we can say that in the formation of modern science the initiative and determinative role was played by a new (mechanical) *worldview*. Bertalanffy recognized (1970) that psychology turned to be a social power, became a formative factor of our picture of man, and mechanical worldview, already governor of society, attempts to form man into a mechanical existent. Remarkably, worldviews necessarily consider the ultimate questions of life (Aerts et al., 1994), which is the same set of questions that are rejected from the scope of materialistic sciences as being overly a human topic. Now if we found worldview at the foundation of modern (and ancient) sciences, it seems to be controversial that this new materialistic science rejects to consider its own foundation. The primary importance of worldview is indicated by the recognition that worldview is such an inner model of man and the world which plays an integrative and orienting role in cognition and practical actions (Oyerman, 1970, 173). Worldview has to be the foundation of education and upbringing of children (Gáspár, 1978). It arises as “the result and foundational basis of the sum of cognitive contents in a unified view, the unified system of the principles explaining the phenomena” (Pedagogic Lexicon, 1979, 456; 1997, 639). Worldview is the integral and unified interpretation of the world and man developed from the purpose to serve man’s need to inquire about how to act and think. Consequent worldview explains the world from a central idea and makes their presuppositions explicit which tacitly form the specific worldview types. In order that they serve not only for interpretation, but also as a framework for our actions, it should regard some values as fundamental (Hársing, 1999, 209). For man, scientific and artistic world-cognition forms are equally important. Art asks answers to the ultimate questions of life and helps the

exploration of values and aesthetic qualities of the world. At the turn of a new millennium there is a need for a new Copernican turn: anthropic way of thinking should be replaced by a universal, Nature-centered view in art and science as well (Orgoványi, 1998). The religious sense is also directed to answer the ultimate questions. The ultimate questions form the basis of human consciousness, reason, so to say its materiality (Giussani, 1999, 137).

These ultimate questions are central in religion and truth-searching art, and so art and religion may be regarded as expressions of worldview. It is worldview that stands behind the uniform, organic system of symbols of folk art, and, what is more, it is genuine worldview that gives its internal seeing and creating power. "This is a really important topic from which a book should be written: the millennial organization of psychical and bodily structure of people's way of life, which is not framed up by politicians to defend some classes of society, but which is an anonymous work of art of the people, such as language. It does not search origins in birth and end in death, instead a personal change in both. And it does not regulate only relations between the people, but that alliance too which we all have to contract with Nature and God. Really it is a life-form in which community is the first and most important person and which is unchanging in its psyche, only fathers and sons replaces one after the other." (Tamási, 1940, 40). The way in which folk artists were inseparable from Nature especially in the organic communities, made it possible the blossoming of their internal natural creative powers, and through them Nature created the way of Her self-expression and manifestation. Their hands were driven by Nature when they did draw, write, paint, sing, dance, in realizing folk music. "Folk music is a phenomenon of Nature. This creation has been developing with the same kind of organic freedom, as other creatures of Nature: flowers, animals etc...such a kind of music in reality is not anything else but the result of the formative natural power acting unconsciously in the people uninfluenced by the urban culture." (Bartók, 1919, 1925/1981, 14, 30). Urban, less transparent relations, and the materialization making illicit profits in that mystified social complexification which takes unfair advantages from the decrease of social transparency, could be the factor that socially suppressed in us our genuine view of Nature and its ability to manifest itself directly and authentically. But if we will be able to regain our ability to perceive and live Nature authentically, we can become rich again and Nature may become again our personal creative power. The tragic schism between Man and Nature could be overcome in that way, and we can return together to the realm of Eden, and a new Golden Age may develop.

All the fundamental questions of education and pedagogy are converging in worldview. Kornis (1933) recognized that the ultimate aim of politics is given by the "ideal", the pattern that determines how to form the life of the state. Conduct of the state is based on the political worldview of the politician. It is the worldview which can tell what is the reality of the world, and, what is more important in the practice, what counts as value, meaning and significance, and what values should be realised with our life. Therefore, we can recognize that if we need to reconcile science, art and religion, we have to work out a more integral worldview than the presently dominating materialistic one, because it is worldview which is the common basis and motivational power of art, science and religion, as well as moral life, education and

politics. We may become able to recognize the fundamental constituents and driving factors of Nature and personality if we have the proper worldview for it. It is worldview, which can supply us knowledge of scientific quality. Science is fundamentally determined by its method that is its backbone. Scientific method is determined by the worldview, especially at the formation and paradigm changes of science. Worldview is an overall, well-organised elementary unity of knowledge, which may act with the essential power of art, religion and science, therefore empowering them in their multiplied coherence. The worldview is the crystal, the world essence, and the key to universal knowledge. As far as I see, the ultimate, valid and universal foundation of Integral Culture should be such a new worldview, which declares explicitly the norm of precise, transparent and universally clear knowledge. This new worldview has to be suitable not only to solve the most important questions of mankind, but also to make us able to cope with the factors dividing the presently atomised humans from each other.

On some fundamental inadequacies of previous worldviews

Accepting that we need a new worldview, we have to be critical, because there are at present not only one, but some other fundamental worldviews. It looks as if almost all ages are different from their predecessors because of their new worldview. Now how can we obtain a proper and universally acceptable worldview, if we need a worldview also for evaluating the worldview itself? I suggest that a proper method could be to revise the presuppositions of science, judge and evaluate them and keep only the correct ones, acknowledging that our decision on correctness may be also the subject of further, collective revision or confirmation. This step would posit presuppositions of science as the first subject of scientific investigation. What we need is a worldview with clarity - understandable for everybody - with a maximum possible validity. First of all, we have to recognize that material worldview led to some of the most significant distortions in our societies, and therefore some of its parts have to be wrong. We should recognize these fallacies and learn from them. Here only the most important points of this question are mentioned.

The starting point of inquiry of modern and post-modern scientific cognition is not clarified and more and more is lost in awkwardness. Originally cognition was directed toward obtaining universal truth. Apparently, science gave up the requirement of universal truth, and follows instead the principles of esoteric and utilitarian pragmatic knowledge. Acceptance of esoterism developed to such a rate that not only most of the public are excluded from the understanding, but such a high prestige people like Feynman tolerate esoterism. In his book *QED. The strange theory of light and matter* (1985, p. 9.) Feynman introduces the readers in the following way: "What I am going to tell you about is what we teach . . . you're not going to be able to understand it. You see, my physics students don't understand it either. That is because I don't understand it. Nobody does." I see the cause of disintegration of science, art and religion just in this modern attitude. The idea of science is attached to a closed, self-satisfying scientific community, which do not have a real responsibility for society and people. This view of science led to a growing rate of esoterization and separation of science from such "unable people" like philosophers, artists, and

theologians. This step seems to be crucial in the fragmentation of the worldviews penetrating so deeply into our societies. In the present world one of the elements of the fragmented worldview, materialized science is put in the central place in determining the worldview governing the societies. Moreover, this partial science itself became more and more fragmented, losing its ability to review its field and responsibility, and is turning to become a mere agglomeration of practical knowledge, accepting a materialistic worldview in the fields in which science does not regard itself to be competent, too. The idea of such utilitarian science thus is paralleled with a growing influence of physicalism (the worldview of inanimateness) in the fields of life and of society. This pragmatic, positivistic science is in conflict with the idea of universally accessible, transparent and exact truth. We should replace or add to the utilitarian starting point of science a starting point which is able to reveal the knowledge necessary to recognize our place in Nature, our situation and given conditions and human drives, as well as to build up a man-, life- and Nature-centered worldview. The most important aim of cognition replacing the present materialistic one should be to develop a theory and practice serving the deepest human nature, more human and more natural society. Modern science ignores its genuine task, which is to help people in building up a proper society and solve the arising social and human problems in coherence with the destination of mankind. In the absence of recognizing such genuine social and human aims, the union of society necessary to develop a human society had been failing to develop. We need a social consensus in clarifying the ultimate concepts and in establishing the most fundamental communal values in our societies. We should free ourselves from the hypnotizing power of materialistic Modernism.

The declared aim of present mainstream science is to submit and subjugate Nature to the practical needs of consumption society. At the same time the object of cognition is Nature again. Therefore, the object of cognition and the aim of cognition are in conflict, which leads necessarily to a bias in developing the methods proper to understanding on the field to know. The practice of science is necessarily biased towards the exploitation and subjugation of Nature, mankind included. Science decays at an increasing rate to serve only brute material interests, and fundamental human needs become utterly marginalized, excluded from communal life and allowed mostly in private sphere only. Subjugation of Nature is a wish based on an absolute anthropocentrism. How can a science based on absolute anthropocentrism require the absolute norm of desanthropomorphism? The anti-natural position of materialist science is necessarily self-controversial.

Another fallacy of science is its present inexactness. Even if physicalism would be regarded as an almost exact branch of knowledge (which is not, since it did not formulate explicitly even its central concept, the concept of matter), it cannot be extrapolated to other, independent fields of inquiry, and so it can never form a claim to become a worldview. The inexactness of materialism obtained as an uncritically extrapolated physicalism offers rich possibilities for awkward, arbitrary, ambiguous interpretations and manipulations, especially when the concept of matter is transferred (and seriously transformed) to such substantially different fields like Nature and society. The accidental and inexact nature of the dominating worldview opened the way before a wide and uncontrolled manipulation of every field of our societies.

The dehumanisation of worldview led necessarily to the dehumanization of our societies and our personal life. The way out is to formulate a scientifically valid exact worldview with controlled presuppositions, with the main task to serve man, life and Nature instead of dominance of material aspirations. This idea leads to the recognition of a need for a higher-than-present significance of culture in our societies instead of the present absolutized role of economy, and work out the constitution of the “cultural state”, too.

5

A criticism of modern materialistic worldview

10

In a consequently material, inanimate world, life could not have human dimension. Every effort, desire, and emotion should necessarily fall in the opposition of the alien, inanimate cosmic environment surrounding mortal human life. In such a materialist view even the Universe shows up mostly as a confronting, dangerous, hostile place to live, which threatens the remaining stability of our life. Life cannot be anything else but absurd, suffering without any ultimate meaning, and able to access at most some material goods. Physicalism, dominating already in the universities and academies and diffusing to the unaware and unprepared societies regards man as a mere machine, a speaking tool, and a domestic animal serving utilitarian, and financial needs. The worldview of such a physicalism should alarm us, regarding its life-destructive and soul-collapsing powers. *Mankind should recognize that the alien character of materialism against man, life and nature is not an accidental side-branch that may be improved, but it is a direct consequence of the central dogma of materialism.* Materialism states that the law, which determines the behaviour of inanimate matter, is the dominant factor in shaping our life. We should select and decide, and what is more important for us: to live for the completion of our fundamental, human, natural drives, most noble urges. We should work out a more exact and more comprehensive science which should consider also the ultimate questions of our human life, or we decide to accept the loss of significance of our life, and we are satisfied with the vegetation and amorality of our life, with the complete destruction of the human dimensions, being “compensated” with material goods.

15

20

25

30

The exact fundamental fact of worldviews: responsibility

By a physicalist study of the “inanimate” world of phenomena one cannot obtain answers to questions really important for everybody: how to shape and conduct our life, what is the vocation and destination of Man. Accepting the interests and values of human nature, life and Nature as the starting point of human cognition it is inevitable to put as first-order urgency questions the real, vital questions of life into consideration. If we lose from sight the importance of these questions, we could be easily misled in our conduct of life to a different battlefield where we can but lose the game. It is this circumstance what sets up the catch for hundreds of years of insolubility of problems from which philosophers, scientists and theologians suffer, in the field of questions about *free will* for example. Even today the answer to the question of the existence of free will seem to be unsettled, and the solution is thought to be found in the fields of quantum physics and other fields of physics (see the Tucson conferences on consciousness, or the Nobel laureate Eccles). If we want to escape

35

40

45

from the catch of physicalism, we have to recognize that the main task of cognition is to solve our real, vital human problems. And when recognizing this fact in its whole significance, we may observe that the central question of our whole cognition should be conduct of life and formation of our common future. Therefore, our whole worldview cannot be based on physics, but only in an exact study of the essence of Man, society, and Nature. The world does not have an exclusive physical nature, but at the same time it has a natural, alive and social, human substance. Therefore the worldview we need should be based on exact conceptual formulation and foundation of the threefold, natural, alive and communal levels of existence, and exploring connections between them and us (Grandpierre, 2001b). There exist such scientific questions that have a real significance for our worldview. Such questions are the origin and nature of the Universe, development of life, the question of Becoming Homo, origin and evolution of society, which are approached from the materialistic viewpoint as Big Bang, Darwinism etc. But we have to see that still these questions are under serious dispute and consideration. Therefore, they are not suitable to give a valid foundation for the worldview we need, only accidentally, if a proper and exact solution will be found, clear and bright for every human being, and not only to a few overspecialized scientists accustomed to the implicit materialistic expectations of their science.

But we may also observe that there exists a natural-social fact with an utmost, fundamental significance for worldviews: this is the fact that human and social life is based on responsibility. We are responsible for our acts, and this responsibility cannot be challenged, since not only our individual everyday life is based on it (which as an important point is ignored for a materialistic scientist), but also the whole everyday practice (and law and order) of our society. Without responsibility, one cannot bring up our children. Under a rigorous materialistic treatment, education and nurturing are completely illusionary, since spooky spiritual aims and wishes cannot direct our material body. Therefore families, schools, and law and order should be immediately erased from society under strict physicalist considerations. Moreover, we may become aware to the fundamental and inevitable fact, that every worldview is constructed in order to influence our decisions, to exert such a kind of spiritual attraction, which may act in our decision-making process in a significant way. Formulating this recognition otherwise, every worldview is based on the spiritual principle that recognition may influence our bodily activity. Therefore, every worldview is necessarily a spiritual worldview implicitly accepting the fact of responsibility, even if a worldview explicitly denies the possibility of responsibility like physicalism does. Therefore, free will, free decision, and responsible action are fundamental and inevitable facts of human life and every worldview. I will term such a fact as a *world-fact*. With this term, my thesis is that responsibility uncovers that *the spiritual government of matter is a world-fact*. Responsibility is possible only if the decision about the initiation of the action is practically in our hands, and, more precisely, in our spirits. Which is not a big difference, since already our hand belongs to the government of our spiritual consciousness. This world-fact is more fundamental, than all the scientific questions with worldview significance. This fundamental character is expressed by Nature who made it universally accessible and so this truth is available for everybody, without any kind of esoteric specialization in sciences. We should

recognize that *Nature has a feature that the really important facts are accessible to everybody*. The dispute over the Big Bang's existence does not touch our vital problems as closely as such face-to-face problems. These vital problems, like e.g., will the spiritual message of our life survive us, and will we and our family have a better, more human future than the one to which physicalism tries to constrain us, touch us more closely and fundamentally than abstract scientific questions.

5

THE FUNDAMENTAL VALUE OF SCIENTIFIC COGNITION: THE UNIVERSAL TRUTH

10

For enlarging the scope of science it is remarkable that for example Schrödinger (1961, 51) had a view of science that regards as central the ultimate question of our life: who are we? "I consider science an integrating part of our endeavour to answer the one great philosophical question which embraces all the others...who we are? And more than that: I consider this not only one of the tasks, but the task, of science, the only one that really counts."

15

If we commit ourselves to effectuate our human nature in the process of our earthly life, we have to recognize that ultimate questions touch every field of our life. The most touched is our life as a whole. Such questions must have a solution universally clear, exact, understandable, accessible and satisfying. These questions do not necessarily need some special "expert activity", but our general human abilities and perception of reality in working out the most exact solution. Responsibility is a world-fact, and so every one of us has a world-fact given for us by Nature and not by modern societies. The world-fact of responsibility is the Archimedean point of the suggested science of worldviews, from which point every worldview can save the world from the invasion of physicalism. This world-fact may also influence rationalist followers of the one-sided materialistic faith.

20

25

The fact that the presently dominating materialistic attitude ignores fundamental questions of life has an effect to exclude an increasingly high percentage of people from the mainstream scientific cognition. I would release a warning to people accepting this attitude with the claim that people should not be ignored, or be looked down as mere side-existents, epiphenomenal existents, factors which do not count in the building up of science. Instead, people (including mostly non-experts) do represent such an existent with overall significance, which are the substantial base, starting and endpoint of every cognition, therefore their existence has an utmost importance for the development of science as well. Actually, this means that rejection of the norm of unambiguousness will lead necessarily to distortion of truth and to inexactness. Either science, art, and religion stand for exactness, or if not, esoteric knowledge will result with an inevitable bias in its most fundamental aspects. Truth and universal clarity goes hand by hand.

35

40

Science looks to find truth, which is independent from accidental personal wishes, which may be shared and recognized by everybody in the world. Our mathematics teacher in the secondary school tried to put the idea into our heads that we understand a statement only if we are able to make it understand for a Papua New-Guinean man. The norm of universal truth extends to every human being, not only for scientists. It is the logic that makes us ready to recognize such universal truth that is

45

sensitive, susceptible and responsive to the essence of our life and our world. The universal, integral human logic is a wonderful inner power that is able to perceive the ultimate basis of our natural existence. This perception and discourse between logic and the world forms a reason-full union. This union may develop into words and logical form as well. This sensitive logic is the magic logic of ancient mankind of the Golden Age (see E. K. Grandpierre, 1992, 2000). This integral logic is to be distinguished from the formal, superficial, outwardly determined logic operating only by pre-made patterns and schemes. This magic logic is the one that is able to perceive, live and magically identify itself with the focus of its attention. This magic logic is the one being able to recognize universal truth and the essence of the world and the Universe. The great truths – it is easy to realize after the problems are solved and we became familiar with them – are always simple, understandable by each and every human beings with a clarity like $2 \times 2 = 4$. And if we accept this view, then the ultimate questions touching the meaning of our life, our destination and life conduct, should have unambiguously clear and transparent answers that – in normal cases - are easy to obtain for everybody. If we accept the approach formulating exact knowledge on universal truths as science does, then the cognition attempting to reveal universally clear truth about ultimate questions may be termed as “science of worldviews”. This term would also call attention to consider the ultimate fundamentals of religions.

The large world-religions are mostly mystical religions nowadays. This means that they do not attempt so much to acquire knowledge with a systematic, thorough, cautious examination, instead they are satisfied with the acceptance of some beliefs without any further examinations. The followers of a mystical religion should accept central beliefs as dogmas without any substantial critics or arguments. Therefore, even if mystic religions do not reject to form opinions in questions of ultimate affairs, they gave up the requirement of universal, clear and understandable truth accessible to everybody and therefore they constrained their activity to inexact considerations and requirements.

Did mankind evaluate how significant the value of universally understandable truth is? Is it known how different life and society could be if everybody would know the fundamental truths of human life, clearly, as a helping power? If we would have this knowledge, then mankind could form a fundamentally unified community. And it is known that our abilities can be developed much more easily on such a clear ground. With such a fundamental help, mankind immediately could have insights to reasonable prospects of our life, could start thinking about our common life conduct, and about how to fulfill the destiny of Homo. Mankind could start to live a responsible communal life with a free will, and that would be a difference from the almost complete inertia characterizing so many present human affairs in spite of continuous attempts to recover. Remember Shakespeare’s famous warning (“the time loosed its order”) and the widespread recognition of crisis in the last centuries. Everyone could understand what is the destination of mankind, what to do as a natural and naturally social human being, and could perceive the meaning, beauty, mystery and attracting power of life. Mankind could live in the Cosmos as a giant Nature-hearted communal organism, with integrated reason cohering with the living world. Mankind’s older brother is Animal Kingdom, his older sister is the Kingdom of Plants, his mother is

Earth (Gaia), his father is the Sun, and grandparents are the Heavenly Stars! In this way our family would have such members as the Universe itself! How close could come to us the starry canopy! We could reach the stars much closer than any starship could transport us!

How significant is the universally comprehensible truth! We can evaluate, if we think it over, how tremendous the damage is caused by dividedness. The wars continuously accompanying our history are caused by the tragic dividedness of men. Is it really true, as Modernism teaches us, that separation, dominance of individualism and deviancy, or any denominational dispute, any subculture is more important, than our common culture? Is it really true that separation of different communal cultures is so important that we should give up for it wholeheartedly our safety, life, human clear-sightedness, and give up not only our own life, but that of others, and give up the destination of human community? Is it an inevitable natural necessity that we should live our life not as communal, wholeheartedly—social beings, but as mere individuals atomized to ultimate loneliness, even if we feel the pains of being closed from our fundamental human empathy and sympathy with Nature? Or this separation may have such an overall importance for us only in a society that is based on false or unclear foundations?

What should we think about a leaf of a tree, who does not regard about itself as a leaf of a tree, but a mere leaf, a unique, separate being, having a completely separated essence different from the essences of every other leaf and of his tree? Could we remember how many different essences belong to Nature? Does Nature have essences in a number of many billions? Or only a few essences exist for which it is worth to live? I wonder whether the essence of a leaf, and its belonging to the tree, to living beings are not essential? And if the leaf rejects these essentials because of their universality, in order that its separate essence become dominating, than what kind of essence will remain to these “leaves”? And if they still will have some kind of “essence”, will this remaining, non-common and certainly inexpressible essence more important than all the essences of leafness, tree-leafness, all its more general natures like to be a plant, a living being, an existing being, and all together? And what happens if all the leaves of a tree think similarly, and the leaves could not agree on which tree they were grown, and after an overly long discussion they agree that it is not possible to solve this question? And if they regard the question to which tree the leaf belongs, as a matter of personal decision? And what will happen if the leaves of a tree regard themselves to belong to many different trees, or do not belong to any tree at all? And what will happen with the tree? What will happen if the leaves with the energy and knowledge arising from our star, from the Sun will not supply the tree? How the tree becomes able to circulate its vital liquids from its roots to the leaves? And what will happen if the tree becomes sick and most of the leaves become ill as well? What will happen with the life of the leaves if they will fall down to the soil, desiccate, and they will rattle in the wind? Is this the life we human leaves need, the life of the freedom of being alienated? And thinking about this, could it not be better to change our minds? Could it not be better if we frozen and rattling human leaves look around and search how to form a larger unity, a common circuit of feelings and aspirations of belonging together? And if we could form our communities together, integrating ourselves to the tree we could revive, start to develop towards our comple-

tion, and the tree could grow its roots towards the Earth, Nature, towards the central life organ of the Universe?

The world is one! How nice could it be, if we could agree that we need first of all one worldview, the one which is directed towards the universally accessible truth. We could save our separateness, leafness, and individuality too only if we agree in the basics, if we could recognize its place in the universal world order. Only then could we preserve our roots, our historical, national culture, and our continuity with the more universal natural-cosmic world process. If we could agree that it is not only the already existing things are important, but at least in the same rate the world-to-be. If we could agree that Man is born for some reasonable life, for a life to participate in forming a reality, which is worth to exist. If we could recognize that all of us suffer for the same fundamental problems, that all of us have to solve the same fundamental problems, we can proceed if we share our problems and solve them together. What could happen if we could recognize that we could live a more human life if we feel together with each other and help each other! If we could realize that we have a common fate, we could accept responsibility for our communities, and that we can validate the spiritual contents of our life only together!

Science should be directed toward a study of existing phenomena, irrespectively of their material or non-material nature. Therefore, science should be committed towards the respect of existent facts and phenomena. This commitment is manifested in such values as impartiality, universality, and systematic study towards the exploration of deeper laws. In the process of exploration of the deepest laws of Nature, it should be directed towards the ideal of impartial, many-sided study, and to the respect of reason found in reasonable manifestations of the deepest laws of life. Similarly, science should be expanded to the study of phenomena of the human world, and should respect the deepest natural spirituality expressed in ultimate laws of human existence. Such reasonable commitment evidently is the primary basis of science. It is this reasonable commitment which is manifested in such fundamentally manifested natural phenomena as the commitment to creation of theories, as the universal need of deep understanding and the aim to recognize natural reason present in the process of theory creation.

The possibility of unification of science and religion

The concept of God is defined as (Ipolyi, 1857/1987): “God is the Highest Being”. My proposal is to interpret the “higher being” determination as denoting a “more comprehensive (higher), living organism (being)” as referring to the natural organization sequence appearing in the series nation-mankind-living kingdom-Universe. I use the capital letter with Universe when it refers to every existent, integrating material, living, and spiritual world (thoughts, feelings, and intuition). Nation was regarded as a higher organism in the organic theory of society from Pythagoras to Plato, Stoics, through Middle Ages, and it was a dominant view until the end of the 19th century (Gierke, 1881; Durkheim, 1899). In the ancient Hungarian mythology the God of the Hungarians plays an important role, as well as the God of the Living Beings, El, the Living God or God of Life, (Grandpierre, K. E., 1996), and Milky Way, too. Following this sequence of higher beings we reach the ultimate higher

being as the Universe, which involves in it the cosmic organizational power, the reasonable, life creating organizational principle active in our inner world and organizing it into a living whole, integrated, responsible unity (Grandpierre, 2000, 2002c). In this way we recognize a remarkable logical chain of higher beings, the series of Gods. This concept of God differs from the mystic one in that its conceptual foundations are clear and transparent, and therefore suitable for scientific research, for reasonable approach, for a more complete understanding of God. And since Gods show up forming a sequentially self-inclusive chain, therefore this concept of God is in a close relation with the immanent God living in our inner world as well as with the transcendent God living outer to material universe. In this way, the proposed concept of God is very close to the one given in the Encyclopedic Dictionary of Religion (1979) and the Facts on File Dictionary of Religions (1984), where the concept of God is given as the “immanent and transcendent person”.

5
10

Now if we turn to a unified concept of God, and we regard God as the unity of the series of Gods, the unity of the internal and outer cosmic organization powers, the apparent paradox of “immanence” and “transcendence” disappear. The unified concept of God joins us to the spiritual-alive-material Universe, which is the creative and created Nature, as well as joining us to the natural-historical world process, to the process of Becoming Homo and to the history of mankind. This contact is a religion to our natural, cosmic and historical continuity, in a way that the main factor of the world do have a divine character, and therefore their soul-formative, reason-formative, human-formative role is preserved in their natural completion. We may recognize that the main principle of God and the self-inclusive chain of Gods is the creative principle of community. We can rejoin ourselves to the Ultimate Being through a consecutive sequence of natural-cosmic communities.

15
20
25

The religious sense (Giussani, 1997, 63) is directed towards answering the ultimate questions: what is the ultimate meaning of life? From what and for what does reality exist? The religious sense manifests itself when our self is faced with life itself and this is documented by the ultimate questions. The ultimate questions create the essence of human consciousness, human reason, as these ultimate questions were the “material of consciousness” (Giussani, 1997, 137). Now if cognition would be directed of the aim of acquiring universal understanding through a thorough, systematic, careful investigation to find ultimate answers, the separation of religion and science could be largely dissolved. And if the ultimate questions are considered in the context of relations between the different levels of existence, in relations between Man and higher communal, organizational levels, religion and science could come even closer. Consideration of the ultimate existents, the world-as-a-whole, scientific investigation of the relations between Man and Nature may even create an organic union of religion and science, if science will be able to open up to such yet taboo domains as human and religious sensitivity. Therefore, the unification of religion and science can be reached through the development of a universally comprehensible, clear worldview. The frequently-told saying, that man cannot know all the truths, is true. But the essential truths are universally comprehensible and should be socially available. The exact worldview could offer help just in the universal development of ability of seeing and visioning the essence of our existence.

30
35
40
45

ON THE FUNDAMENTAL WORLD-FACT OF ART

5 Accepting the norm of universal and universally accessible truth opens the way to
 unification of science and religion in the perspective of the “ultimate science” or
 “exact religion”. How art belongs to the circuit of unified worldview? The approach
 of art is significantly different from that of science. Science is directed to form a
 10 mere picture of reality, seen by an outer observer. Art is approaching the world to
 start with the inner reality, to observe the inner world, to observe reality which lives
 hidden in our internal world but we feel it wants to live in the outer world, too. Art
 attempts to manifest the reality that should exist by our most significant internal laws
 of reality. In this way, art is in its essence a human cognition, contrary to the implicit
 15 norm of modern science “desanthropomorphism”. An important element of “real-
 ism” which is the first presupposition of modern science as given by Bunge (1967,
 291ff) is that “natural science, in contrast with prescientific views such as animism
 and anthropomorphism, does not account for nature in terms of typically human
 attributes, as it should if nature somehow depended on the subject. Thus, we do not
 account for the behavior of the object in terms of our own expectations or other
 20 subjective variables but, on the contrary, base our rational expectations on the objec-
 tively ascertainable properties of the object as known to us.” Desanthropomorphism,
 the norm of ignoring human existence at the description of nature, in an integral
 context is a horrifyingly unnatural gesture. This is as if scientists should be some-
 thing like outer observers, intelligence spies arriving from outer space, living here
 only provisionally, and their task would be delimited to work out usable reports on
 their findings and not allowed to think about the reasons and why’s. Understanding
 25 the workings of the whole apparently does not belong to the task of modern scien-
 tists, similarly as secret agents are not allowed to question about the reason of the
 orders of their chiefs.

30 Art, on the contrary, attempts to contact with the human realms, and watches what
 kind of natural power lives within us. Our internal world becomes more and more
 alive when the light of attention shines into our internal world. This revitalized inter-
 nal world is the attracting pole of art, especially when it becomes alive in such a rate
 that it starts to manifests its own message, to express its ultimate foundations, when
 it develops by its own laws, being driven by its own life-conditions, meanings and
 deeper reason-fullness. The point-like internal viewpoint of the scientist expands in
 35 the creative process of art into a revived vision-world, growing from an infinitesimal
 point towards an infinity-attracted universe of internal organization. Therefore, the
 obligatory subordinate relation of science with its point-infinity relation in the ob-
 server-Nature contact changes in art to a new relation: the equipartition of artist and
 Nature in a world-world relation.

40 It should be an important fact for empirical sciences, that this world-world rela-
 tion has a basically emotional character. Therefore, the mere existence of art argues
 strongly that Nature does have an emotional essence, an emotional, soulful nature
 (Grandpierre, 2000). And when art with its ability to elicit cathartic realizations be-
 comes able to convey also the spiritual message besides the emotional one, then art
 45 indicates something similarly important: the spiritual essence of Nature. With the
 approach of art directing its attention to human world, to the world that should exist

if the entire world would depend on human beings true to our inner nature, a moral worldview is manifested. And this is another world-fact, revealed by the mere existence of art. *The world-fact of art consists in the universal fact that man is able to perceive the destination of mankind, in relation to the destination of the Universe.*

The existence of art have a wide-reaching significance, telling that our human essence is morally bounded to Nature, which is destined to participate in constructing a better, more noble, more human society. The world-fact of art with its fundamental worldview significance makes it necessary and possible to explore scientifically the nature of the world living within our most saint convictions, urging us for realising it in a morally and reason-fully clear reality. Therefore, we have all the possibilities to work out the proposed science of worldview.

The creations of art, aesthetic beauty (and natural beauty) can be imagined the most simple way if we guess that they are the slits in the world through which reason may enter into the deeper ranges of the world. The creations of art always fill us with depth. The natural beauty is always thrilling and amazing us. The appearance of beauty and truth is always accompanied by surprise. What is the one, what surprises us in them? When we feel deeply the truth, gladness arises, the consciousness of a greater safety, and with it the experience of a reciprocated love. The feeling of beauty is nothing else but to be attracted to truth. It is not we who find something aesthetic. It is the universe who does it. The person separated from the universe is a result of a false idea. Many people regard beauty as being subjective and changing in dependence of cultural era, and fashion. But this is not true at all. The artistic beauty is philosophy visible. It is not only the beau, but the feeling of beauty too belongs to the characteristics of the universe. And with this step the circle closes itself. The genuine beauty hidden in the world has a meaning for us similar to the warmth of the fire at winter. We love it. Art brings to the surface the beauty hidden in nature, in order to make it more comprehensible for us. It is as if the universe itself would whisper directly to human spirit. The natural beauty is similar to the artistic/aesthetic quality, except that its connections with the depths of the world are more direct (Varga, 2000, Sect. 11, 60ff).

Genuine works of art and literature socialize people into their community and give insight into the relations that bind them to each other and to the cosmos. They give perceptible form to humankind's perennial intuitions of the oneness of life and nature (Laszlo 2001, 141).

The science of worldview, unifying science, art and religion, agrees with the ultimate basis of art expressing the threefold: sensible—feeling mediated—understandable essence of reality in its recognition that the material, the soulful (moral) and the reasonful (mental, social) together form the essences of Nature (Grandpierre, 2002c). Therefore the building up of science, religion and art to a unified basis is not only possible, but it is also a necessary condition of the new pathways of development of mankind. The organically unified science-art-religion includes most of the fundamental aspects of culture, including the traditions and views preserved from such unmanipulated cultures as folk culture, until philosophy of state and political worldview. Therefore one may term this attempt to acquire the universal and universally comprehensible knowledge, to explore the world and life and realize our natu-

ral essence as Integral Culture. It is a remarkable fact that this term becomes recently used in a social context (Ray, 1996).

About the norm of “desanthropomorphism” of science

5 Modern science accepted materialistic worldview without a thorough scientific investigation of this fundamental dogma. This was a result of the mere success of the Newtonian mechanistic paradigm. The irrational step was to extend Newtonian picture towards such far-reaching realms as biological and social phenomena. But a short consideration may uncover that the norm of “desanthropomorphism” is in conflict with the norm of the universal truth. If science attempts to consider all realities, than it has to include the realm of humans. The human realm is a significant and autonomous part of the realms of existence. If science regards Nature as substantially “desanthropomorph”, devoid of humans, this is a factual distortion of Nature and reality. For not only Nature belongs to Man, but also Man to Nature. It is not excluded a priori, that Nature’s essence is human, and Man’s essence is Nature, if Man and Nature has one and the same nature. But if one would claim separateness of the essences of Man and Nature, this would be a dualism that would consider Man and Nature as following different determinations. Regarding the circumstance that the concept of Nature includes not only the already materialized part of existents, but the drive behind it with its creating laws and characteristics (Grandpierre, 1999), the substantial separation of Man and Nature would deprive Man from all the essences Nature have: materiality, emotionality, and spirituality. But could it be scientifically valid that Man is by its essence immaterial, unemotional existent devoid of spirituality? Moreover, the essential separation of Man and Nature would consider Nature as having different essences from that of human’s. But if the essences of Man were its spirituality (reason-essence), emotionality (soul-essence) and materiality (physical essence), this requirement would necessarily lead to state Nature as an entity unemotional and immaterial, and devoid of spirituality. Therefore, the statement of the separate essences of Nature and Man would lead to the consequence that Man and Nature both are immaterial, unemotional and unspiritual existents. But this would mean their complete essential coincidence, contrary to the initial claim of their separateness. This self-falsifying claim would lead to the statement that Nature and Man are both devoid of any essential characteristics. But this prescription is not suitable as a starting point of cognition, since it is unimportant to cognise an unessential existent. Moreover, this prescription is self-contradictory, therefore unacceptable and unscientific.

And if science would partially give up the prescription of “desanthropomorphism” and would pick up a materialistic view of Nature, declaring that Nature is physical, while Man is also emotional and spiritual, this would be already a partial equal-essentiality. The real question would be to ask how could it be known that there is a partial or a complete agreement between the essences of Nature and Man? Why should the agreement between the essences of Nature and Man be only partial and not complete? I think that one should look for answers to this question, too, by thorough, careful, scientific investigations, without accepting any materialistic presuppositions. I think it is clear that the wish for a universal acceptance of statements

born without previous proper considerations is a dogmatic one. But if the Universe is a living organism (Grandpierre, 2002d), and if Nature possesses a spiritual essence (Grandpierre, 1999), then the agreement between Man and Nature is not only partial but also essentially complete. And if this is the case, then modern science picked up a false prescription when selecting the requirement of “desanthropomorphism” as a norm, as a presupposition of any scientific knowledge. 5

The above consideration calls attention to the fact that the nature of the Universe, if it is physical, alive or spiritual or each, should be one of the central questions of science. And if the dominant science, which is built up by thousands and millions of unsuspecting scientists by their collective, organized efforts, is based on false materialistic foundations, then there is a prompting need to revise the building of science from the grounds. Regarding the dominating effect of science on our societies, we should revise our construction of societies, responsibly. It is an enormous but inevitable task to organize and build up a new science free from the materialistic, factually wrong premises of modern science. The new, integral science should be based on an exact, universally transparent integral worldview. In this huge task we can expect help at first mostly from ourselves. But if Integral Culture is a movement attracting 100-150 millions of people in USA and Western Europe alone, and if it is true that just the people interested in Integral Culture are the ones who are socially initiative in the highest rate (as being the Cultural Creatives), then the task is not hopeless. Making our activity coherent would be one of the first steps on the way to develop and discuss widely an exact worldview. The answers of the integrated worldview should be “true, accurate, and reliable, as open to question, criticism, revision, and improvement, as the rest of science” (D’Adamo, 1997, 18). The primary requirements of science actually demand a scientific study of the fundamental presuppositions of materialist science and to formulate reliable fundamentals of the integral scientific investigations. 10
15
20
25

REFERENCES 30

- Aerts, D., Apostel, L., De Moor, B., Hellemans, S., Maex, E., Van Belle, H. and Van der Veken, J. 1994. *World Views: from fragmentation to integration*. Brussels: VUB Press.
- Bartók, B. 1919, 1925/1981, *On the folk music*, Magvet?, Budapest, 14, 30 (in Hungarian).
- Bergson, H. 1931. *Creative evolution*, Authorized translation by Arthur Mitchell, Ph.D. New York: H. Holt and Company 35
- Bertalanffy, L. 1967. *Robots, men, and minds; psychology in the modern world*. New York: G. Braziller
- Boutroux, E. 1914. *Science and religion in the philosophy of the present era*, (in French) 1–5.
- Bunge, M. 1967. *Scientific Research* 1: 291.
- Burt, E. A. 1952. *The metaphysical foundations of modern science*. Revised ed., New York: Doubleday. 40
- D’Adamo, A. J. 1997. *Science Without Bonds. A Synthesis of Science, Religion and Mysticism*. Dictionary of Hungarian Language. 1979. *Philosophy*, Akadémiai Kiadó, Budapest, II, 817 (in Hungarian).
- Diogenes Laertius, cca. B. C. 200/1958, *Lives of Eminent Philosophers*, transl. R. D. Hicks, Cambridge, MA., Vol. I, 3. 45
- Dodds, E. R. 1951. *The Greeks and the Irrational*. Berkeley: University of California Press.

- Dolva, B. 1999. *Why should we reconcile science and religion?* <http://w1.451.telia.com/~u45105506/whatsapoint/>
- Durkheim, E. 1899/1960. *Le Suicide*, Paris: Presse Universitaire de France.
- Gáspár László, 1978. *Unified worldview: complex subject-matter*. Budapest: Tankönyvkiadó (in Hungarian).
- 5 Gierke, O. 1881. *Das Deutsche Genossenschaftrecht*, Berlin.
- Giussani, L. 1997. *Il senso religioso*, Milan: Rizzoli.
- Glaserapp, Helmuth von. 1972. *Die fünf Weltreligionen*, Eugen Diedrichs Verlag, Düsseldorf, Köln (in the Hungarian edition)
- 10 Gnoli, G. 1993. Magi. In *The Encyclopedia of Religion*, Ed. M. Eliade, 79–81. New York: Macmillan.
- Grandpierre, A. 1999. *Man and Nature* (in Hungarian). Elixír, 1999 szeptember.
- Grandpierre, A. 2000. The nature of the universe and the ultimate organisational principle, *Ult. Real. Meaning*, 23: 12–35.
- Grandpierre, A. 2001a. Pythagoras and the Scythians. *Magyar Demokrata*, 2001 augusztus 9: 15 16 (in Hungarian).
- Grandpierre, A. 2001b. World logics. *Vár Ucca M?hely*, 2001/2–3: 49–98 (in Hungarian).
- Grandpierre, A. 2002a. *On the ultimate principle of man and society: the Principle of Consciousness*, in preparation.
- Grandpierre, A. 2002c, The Fundamental Principles of Existence and the Origin of Physical laws, *Ultimate Reality and Meaning*, 25: 127–147.
- 20 Grandpierre, A. 2002d. *The Book of the Living Universe*. Budapest: Válasz Könyvkiadó (in Hungarian).
- Grandpierre K. E. 1992. The Buried Age of the World: The Magic Era. *Harmadik Szem*, 1992 április (in Hungarian).
- Grandpierre K. E. 1996. *The Religion of Life* (in Hungarian). Budapest: Titokfejt? Könyvkiadó.
- 25 Grandpierre K. E. 2000. Collective Fields of Consciousness in the Golden Age. *World Futures* 55: 357–379.
- Harman, W. H. 1991. *A Re-examination of the Metaphysical Foundations of Modern Science*, Research Report, Causality Project CP-1, Institute of Noetic Sciences, Sausalito, California, USA.
- 30 Hársing, L. 1999. *Világnézet*, In: Tudományelméleti kisenciklopédia, Bíbor Kiadó, Miskolc, 209–210.
- Hartmann, N. 1933. *Deutsche Systematische Philosophie nach ihren Gestaltern*, Herrmann Schwarz.
- Heylighen, F. 2000. Foundations and Methodology for an Evolutionary World View: A Review of the Principia Cybernetica Project. *Foundations of Science* 5: 457–490.
- 35 Hinnels, J. R.: *Persian Mythology*, 1985, Newnes Books, a division of the Hamlyn Publishing Group Limited, Middlesex
- Humbach, H. 1978. *Mithra in India and the Hinduized Magi*, in *Études mithraïques*, ed. by J. Duchesne-Guillemine, Tehran and Liege, 229–253.
- Kákósy, L. 1979. *The sons of Ré* (in Hungarian). Gondolat, 1979, 311.
- 40 Kornis, Gy. 1933, *The man of the state. The consideration of the political psyche*. Franklin Társulat, 84 (in Hungarian).
- Ipolyi, A. 1854/1987, *Hungarian Mythology*, Európa Könyvkiadó, 1987, 1 (in Hungarian).
- Laszlo, E. 1995, *The Interconnected Universe*. World Scientific, Singapore
- Laszlo, E. 2001, *Macrosift. Navigating the transformation to a sustainable world*. Berrett Koehler Publishers, Inc. San Francisco, 141.
- 45 Lexikon der Alten Welt, 1965, *Magi*, Artemis Verlag, Zürich and Stuttgart.
- Mae-Wan, Ho. 1998. Organism and Psyche in a Participatory Universe In *The Evolutionary*

- Outrider: The Impact of the Human Agent on Evolution, Essays in Honour of Ervin Laszlo.*
Ed. Loye, D., 49–65, city: Praeger.
- McFarlain, T. J. 1997. *Integral Science: An overview*, 13th Annual Meeting of ANPA West, Stanford, California, USA
- Orgoványi Anikó 1998. *M?vészet és természeti nevelés*, Új Pedagógiai Szemle, 1998/3. 5
- Oyzerman, T. 1970. *History of Philosophy – Metaphilosophy*. Kossuth, 170 (in Hungarian).
- Payutto, B. P. A. 1993. in *Toward Sustainable Science*, chap. *Towards a unity of science and religion*, 1999, online version, http://www.budsir.org/Toward/2_religion_4.htm
- Pedagógiai Lexikon, 1997. *Worldview*, f?szerk. Báthory Zoltán, Falus Iván, Budapest, Kereben Könyvkiadó, III. kötet, 639 (in Hungarian).
- Ray, P. H. 1996. The Rise of Integral Culture. *Noetic Sciences Review* 37: 4–15. 10
- Ray, P. H., and Anderson, S. R. 2000. *The Cultural Creatives: How 50 Million People Are Changing the World*. New York: Harmony Books.
- Sahtouris, E. 1999. *Earthdance: Living Systems in Evolution*, Available at: <http://www.ratical.org/LifeWeb/Erthdnce/foreword.html>
- Schrödinger, E. 1961. *Science and Humanism, Physics in our Time*, Cambridge University Press, 51. 15
- Shils, E. 1997. *The virtue of civility*. Indianapolis: Liberty Fund.
- Stanley, T. 1731. *Historia Philosophiae, III*. Venetiis.
- Tamási, Á. 1940/1990. *My Native Land*, Szépirodalmi könyvkiadó, Budapest, 40 (in Hungarian).
- The Worldviews Group. 1995. *Perspectives on the World: An Interdisciplinary Reflection*. Brussels: VUB Press. 20
- Varga, C. 2000. The exploration of the 8th Art, or adventures in the universe. *Minores Alapítvány és Frig Kft.* 11: 60. (in Hungarian).
- Weber, E. 1999. Introduction, *Foundations of Science* 3: 231–234.
- Whitehead, A. N. 1925/1967. *Science and the Modern World*. New York: The Free Press. 25
- World Futures, 1997, special issue on collective consciousness, Vol. 48.

30

35

40

45