

CAN AN IDEALISTIC SCIENTIFIC PARADIGM BE MORE SUCCESSFUL THAN THE MATERIALISTIC ONE? *

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THE BEING OF SCIENCE

In introduction to the colloquium, I would like to summarize the results of my research and pose the central question we are meeting to consider. Scientific knowledge is a *process*; it is a thought-organism, in which some parts are already fixed and certain, verified by so-called „hard“ methods. Other parts are less certain, but probable. And finally there are indications, assumptions, working hypotheses and ideas, which are highly variable and malleable. It is no different in the book I wrote: Facts with varying degrees of certainty are placed next to each other.

Science does not reside in considering only what is a hundred per cent certain, with everything else excluded. *Scientificness* lies in whether we are aware of the process of origin of our ideas. We know about every idea, how it originated, what is its basis and we can assess the degree of its certainty. This is how scientific thinking differs from thinking based on accepting prepared ideas from authorities.

A person who wants to see in science only what is fixed is like someone, who only wants to see the skeleton instead of a whole person. Theories are like skeletons. They are the final result of movement, formerly of fluid, vivid processes, they are the deposit of the past. Science is an adventure. Its heart beats where there is creative activity, where the phase of ossification has still not arrived. Let us not be afraid to participate in this adventure – as long as we are aware of every step we take!

SUMMARY OF THE „ANGELOLOGY OF HISTORY“

Firstly, it is necessary to know that all the elementary facts I mentioned in the book were taken from historical and archaeological literature. Where an event or its date are not certain, I have preliminarily taken into account the most probable possibilities. I have tried to build on the areas where individual historical schools agree, not on where they differ. If there are inaccuracies in the book in spite of this, I will be grateful to colleagues, who help to eliminate them from the second edition. If the findings up to now shall be revised in the light of newly discovered documents and excavations, I will accept them. It is not my ambition to establish new historical evidence, but to rely on the experts who know best. Therefore, the question of facts should not be a subject of dispute.

What is new in my book is the way I have connected generally known facts and the method by which I understood their causes and significance. As a trained mathematician and linguist, I was not burdened by any of what is taught in the university departments of the historical sciences. This enabled me to look at history with fresh intuition and entirely new eyes.

I studied five types of phenomena or connections, which form the core of the book. As far as I know, I am the first to study these types of phenomena systematically on the world-wide level from the Stone Age to the present day. Angelology is a synthesis, it is a philosophy of history. There are many philosophies of history, but this is the first, which can be supported also by exact mathematics.

The first phenomenon I studied is *cultural physiognomy*. Let us look at the example of a plant – the rose. The individual parts of the plant – leaf, flower, fruit and seed – are not accidental, but have

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forms, which belong together. If we mixed birch with oak or attached rose leaves to a lily flower, it would strike anyone's eye that they do not belong together. A plant forms an aesthetic unity; it is built up in an integrated artistic style. It is as if behind all its parts stood a single *entelechy*, a single forming idea. It also applies to the human body. Therefore, a typologist can work out from the physiognomy of one part of the body, the physiognomy of the other parts. For example, the form of limbs can be estimated from the form of the lower jaw, or the width of the pelvis can be guessed from the width of the cheek-bones.

We can also speak of the physiognomy of cultures in a comparable way to these examples from nature. If we have a culture with a certain ideational content, it will also have a certain type of social structure, a certain type of philosophy, science, art and religion. Cultures are also organisms, in which part corresponds to the whole and is not accidental. Therefore, if we have two cultural features found together, there are two possibilities: either these two features are found together in time and space by accident, or there is a deeper connection between them and they occur together regularly. This means that if we find one feature in a given culture, we can very probably expect further features connected with it.

Some of these connections are known and it appears to us that we see natural reasons for their existence. For example, the connection of the Enlightenment type of rationalism with the development of cities. Or the fact that naturalism in art is associated with the philosophies of materialism and sensualism. Other connections are less clear at first sight. For example, why are great poets harbingers of revolutions or what connects plasticity in architecture with the coming of a good novelist. Further connections may appear to be really unexpected and incredible. For example, when pointed forms appear in fashion, the death rate increases.

Thus, individual cultural features naturally cluster into groups according to their increased co-occurrence („clustering“). This enables us to speak of *cultural types*. I identified seven such main cultural types and a multitude of sub-types arising from combinations of them. We should realize that the concept of cultural type enables us to deduce significant findings, especially in cases, where only a fragment of the researched culture is known. For example, the Altamira cave paintings enable use to consider the social structure and world view of Cromagnon man.

The second type of phenomenon I studied is *synchronicity*. Jung introduced the concept of synchronicity as a meaningful coincidence in time of two or more events, without an external causal connection between them. The most famous synchronicity in history is Jaspers' „axial epoch“. After 600 BC, great thinkers and religious founders appeared at the same time in the whole Old World. Confucius, Lao Tzu, Buddha, Jina, Zoroaster, the Greek philosophers and Jewish prophets were contemporaries. They not only appeared at the same time, but also proclaimed common main ideas. Similar social trends appeared everywhere independently. Jaspers described this epoch, but up to now nobody could explain its causes.

Since, by definition, such synchronicities cannot be explained in the framework of the materialistic scientific paradigm, attention is not devoted to them, as curiosities, which fall out of the system. In my work, I proved that synchronicities are not the exception in history, but the rule. There are hundreds of them. I will give only a few examples of parallel events in the West and the Far East. It was not only in the 6th century BC that the greatest philosophers appeared in both regions. In the 4th century BC they had the greatest logicians, around the turn of the eras the greatest historians, in the 8th century the greatest poets, in the 15th century painters and in the 17th century the greatest dramatists. Around the 11th century, the rhythmic element was emphasized in architecture throughout the world, whereas in the 13th and 14th centuries sharp pointed forms became dominant everywhere.

I emphasize that synchronicity is something different from the migration of cultural elements. Migration occurs with a time delay, so that it is not synchronicity. Typical synchronicity resides in the parallelism in time of two *original* cultural achievements, which are comparable in character, but have different forms, so that one cannot be a copy of the other. The Gothic cathedral did not develop from the Chinese pagoda, but both are significantly rhythmic. Indian and Chinese medicine are not based on Hippocratic principles, but they originated at the same time as Greek medicine.

Therefore, the principle of synchronicity means that if we have a cultural type or feature somewhere, there is a significant probability that this type or feature developed independently at the same time in another part of the world. Let us take the classic mystery of the decline of the Mayan

civilization. In the light of this principle, it ceases to be a mystery. It was part of a global wave of destruction at the end of the 8th century. It joins the Viking and Magyar raids, and the confusion in which Tang China disintegrated.

The third researched phenomenon is *rhythm*. Similar cultural types not only appear synchronously in time. These synchronous waves also return on the diachronic time axis in a regular rhythm. Below, we will see, using the examples of the history of poetry, medicine and history, that the peak periods of creativity in these areas return every 500 years. I also systematically worked out this and some other rhythms or hints of rhythms.

Thus, the principle of rhythm means that if the statistical frequency of a phenomenon over the five or ten thousand years of the known past increased periodically, we suppose that it was the same in the unknown past, and will continue in the future. This has a great impact not only for archaeology, but also for futurology. It enables us to make predictions. Not only short-term predictions by extrapolation of existing trends, but to predict entirely new trends for future centuries and millennia.

The fourth phenomenon I researched is the *connection between historical epochs and the developmental phases of an individual person*. From developmental psychology, we know the psychic characteristics of individual age periods in human life. For each age another configuration of mental faculties and qualities is typical. For example, pictorial thinking, flexible fantasy, playfulness, ability to imitate, so-called childish phenomenism, childish presentism are characteristic of children of pre-school age. The mental configuration typical of this age is also typical of some historical periods, such as the Baroque. It is clear in architecture, painting, comedy, novels, sensualist philosophy and hedonist morality of this period.

The properties prevailing in old age include conservatism, rigidity, orientation towards the past, emphasis on respect for order and norms, loneliness and introversion. Whole historical epochs have features of old age. They bring absolutism, florescence of history writing and monastic movements.

We all know the features of puberty. It is the time of first love, romanticism, great idealism, but also of revolutionary temper and rejection of convention. We see the complete picture of puberty in romanticism. In history, romanticisms returned regularly and not only in Europe, but throughout the world.

The fact that historical periods strikingly correspond to age phases might not have metaphysical importance, if a further circumstance is not added. These psychic configurations alternate regularly in history and the sequence in which they alternate in the world soul and in the soul of the individual is identical. Both are subject to one and the same temporal order! I will not analyse what this means for the whole of psychology and sociology.

The fifth and last phenomenon I researched is the *analogy between cultural forms and forms in nature*. Synchronicity and rhythms also exist in the evolution of plants and animals. Similar forms and functional units developed simultaneously in different species, which do not inter-breed with each other. The stem of plants and the backbone of vertebrates developed at the same time. So did also the rhythmic system of plant leaves and ribs in the rib-cage develop simultaneously. There was a period in which flowers and the coloured feathers of birds developed and the whole of nature has been flooded by colour. Or a period when living creatures grew all kinds of spines, antlers, horns and tusks.

Similarly, we have historical periods when, for example, in architecture vertical elements such as columns predominated; or rhythmic elements such as the ribbed vault; or floral ornament such as rosettes and stained glass windows; or all forms were made pointed and sharp. Again, this could mean nothing more than that the architects and artists were simply inspired by themes from nature, if it were not true that evolutionary periods in nature, cultural waves in history and the developmental phases of the individual are subject to one and the same temporal order.

I intend to study the synchronicities and rhythms in nature in a separate volume. If they shall be confirmed as in history, it will mean for neo-Darwinism that so-called accidental genetic mutations cannot be accidental. Creative impulses directed in an intelligible order influence the evolution of nature, world history and the personal life of the individual. Please forget for a while that the world view of the materialist contains no forces, which could have such an effect in all these three areas at the same time. Whether such forces exist or do not exist is precisely the subject of our research. We cannot begin from the pre-conceived idea that they do not exist.

THE QUESTION OF FACTICITY

The first question facing this colloquium is the question of facticity: **Do synchronicities, periodicities and rhythms in history really exist, as empirical facts, which can be proved?** My work suggests that they exist. Only one serious objection was raised against this up to now. The objection that I might have selected the facts already in the light of the theory, which is yet to be proved. That is, I would select from history only those facts, which fit into my scheme and would not pay attention to others. I overcame this objection by leaving the selection of facts to the opponents. Dr. Viktor Krupa of the Department of Oriental Studies of the Slovak Academy of Sciences proposed two of the most important control studies. They are: „Configurations of Culture Growth“ by the leading American anthropologist Alfred L. Kroeber and „Social and Cultural Dynamics“ by the American sociologist of Russian origin Pitrim Sorokin. Both were published before my birth, so I could not have influenced them.

Instead of the expected falsification, of which various opponents were certain in advance, both studies largely confirmed my suppositions. I will mention only a few of the less complicated examples. Sorokin's detailed study of revolutionary indices in the history of Europe unambiguously confirmed a level of revolution 50% higher than usual in the periods supposed by me. A further study by J. S. Lee confirmed the same rhythm in Chinese history, synchronous with Europe.

I asked Prof. Miroslav Mikulecký from the Institute of Preventive and Clinical Medicine to perform the analysis of Kroeber's data. He proposed the standard mathematical tools used for identifying unknown rhythms in chronobiology. The author of the mathematical algorithm for analysing data is Prof. Ladislav Kubáček, former director of the Institute of Mathematics of the Slovak Academy of Sciences.

First we analysed the history of ancient Greco-Roman medicine. The programme received no other input data than the dates of birth of the most important physicians. The task of the computer was to find out whether the history of medicine shows any statistically significant rhythms, and if it does, what kind of? One such rhythm really exists here. It has the period-length of about 500 years. We also researched the history of Indian and Chinese medicine. We not only found some periodicity in them, but the length of the period is the same in all three cultural areas, and all three rhythms are synchronized with each other in phase. Excellent physicians appeared in different parts of the world at the same time and returned in a regular rhythm.

And now comes the most significant fact. The acmes of creativity in world medicine coincide with the periods of rule of the god Nabu in the old Babylonian sacred calendar. The old Babylonians used a calendar, in which seven deities associated with heavenly bodies cyclically alternated as spirits of time. Each of them ruled for 72 years, then was replaced by another. The same deity returned to rule again every 504 years. Nabu, later in Christian times the Archangel Raphael, was identified with the planet Mercury and was the patron of physicians. And the most important physicians really lived in the periods of his rule.

We analysed Greco-Roman and Chinese historians. Rhythms are also found here. These rhythms agree in length, again lasting 500 years and are synchronous. However, the phase of culmination is different than in the case of medicine. Famous historians appear during the reign of Ningirsu, the Babylonian Cronus, lord of time and patron of historians. We also analysed the history of Japanese, Chinese, Arab, Persian and Greek poetry. World poets are also synchronized and reappear every 500 years. Poetry culminates in the periods of the Babylonian goddess of love Inanna or Venus. We scrutinized the waves of creativity in Western, Byzantine and Indian philosophy. Great philosophers appear in parallel flow-tides, once in 500 years, during the reign of the god of Sun and truth Shamash. We analyzed the periods of political instability and chaos in ancient Egypt and China. They recurred each 500 years during the reign of the Babylonian god of war and death Nergal, Mars.

We calculated the cross-correlations: If there is a wave of good historians, it is probable that a wave of physicians will arrive 120 years later, a wave of poets 180 years later and a wave of philosophers after 280 years.

I have just mentioned eighteen studies from ten countries and five branches of culture, each of which independently confirms one and the same thing: the rhythm of seven Babylonian gods in the

order – Sin, Nabu, Inanna, Shamash, Nergal, Marduk and Ningirsu. What the computer uncovered is nothing other than the sacred calendar of the old Babylonians, several millennia old. The Babylonian priests correctly predicted the coming of great cultural waves for millennia into the future. And we have just verified their prediction with an eighteen times repeated double blind experiment.

In my monograph, I offered a more sophisticated method, which also enables the decomposition of complex rhythms into independent qualitative components. I think that my work is enough to make us realize that we are concerned here with something more than insignificant accidental coincidences or mere personal belief of the author. Rhythms and synchronicities in history do exist and this should be a stimulus for further research into them.

Let us recall that throughout the 20th century, the scientific community almost unanimously rejected historic rhythms, and, therefore, they were not seriously researched. Popper's book „The Poverty of Historicism“ set the tone. According to Popper, there are no laws or rhythms in history, so no long-term predictions are possible. In particular, he says that nobody can predict the coming of revolutionary periods. Popper was mistaken. His argument is theoretical and speculative and has a very weak relationship to reality.

By the way, one of the most surprising discoveries of chronobiology in recent decades is the fact that throughout the natural world from single-cell bacteria to man, we find the so-called circaseptan rhythms, based on the number seven. I have discovered circaseptan rhythms in history. Both only confirm age-old occult knowledge, that seven is the number of time.

Therefore, as the first conclusion, I propose that we re-evaluate our relationship to medieval angelology and ancient mythology. They are not superstitions or an extravagant fantasy game with no relationship to reality. They contain knowledge, which expresses in pictorial form, things that are also an empirical reality for science.

THE METHODOLOGICAL QUESTION

Let us progress to the second and more interesting question of this colloquium. **If historic synchronicities and rhythms are facts, what causes them?** Is it possible to explain their existence by means of factors known to science up to now? **And if an idealistic episteme enables science to make more exact and more successful predictions of sociological development (for millennia into the future) than the materialistic-sensualistic episteme, what really entitles us to continue insisting that the materialistic episteme is the only one permissible in science? ***

The classic historical explanations for this type of phenomena are inadequate. For example, it is not possible to explain the origin of Greek philosophy from the circumstances in Greece at the time of its origin. Philosophy originated simultaneously in several widely separated places. These synchronicities have a global character, and return periodically over tens of thousands of years. They cannot be explained by any cause limited by place or time. A cause corresponding to them would need to have a global and long-term – perhaps geophysical, climatic or cosmic nature?

We know that the Sun, Moon and even cosmic radiation from the stars influence the biosphere on Earth and so also man. Prof. Mikulecký shall attempt an explanation by means of periodic cosmophysical fields. However, I think that we encounter insurmountable obstacles in this direction. It is difficult to imagine how, for example, swings in the magnetic field could stimulate poets at one time, but mathematicians, physicians, historians or painters at another. We are concerned here with the periodic alternation of the quality and not only the quantity of creative personalities. An equally great obstacle is that the Babylonian Zodiac calendar is only intermittently cyclic. At the end of every Platonic month is a break, just as in the ordinary calendar, where we begin every month again from the first. No really periodic physical field can explain such a system.

By definition, synchronicity cannot be explained in a materialistic way, because it is a matter of a meaningful coincidence of two or more events, with no material factor, which could connect them. Of

* episteme = the sum of a priori and unconsciously accepted world-view presuppositions in a given period, which influences the way of knowing. Foucault's notion of *episteme* approximately corresponds to Kuhn's notion of *scientific paradigm* and Sorokin's notion of *system of truth*.

course, the present type of science will insist that some material factor must be always hidden here, so that it is not a matter of synchronicity, but of systematic accident. But „systematic accident“ is a *contradictio in adjecto*. A systematic phenomenon cannot be explained everytime *ad hoc*, in any one case by another agreement of accidental circumstances. Science of the present type will recommend investing all human efforts in the search for a material factor, even if it was unsuccessful for a thousand years, because non-material factors fall outside the framework of its competence. The episteme of present-day science is materialistic. We would progress a step further, if we realized that the above mentioned facts will remain for ever incomprehensible in the framework of a science, which is connected with a materialist world view.

There are other epistemes, for example, the Renaissance episteme, based on analogical thinking, or the medieval Scholastic episteme, based on spiritual realism. In these epistemes, our mysterious phenomenon appears as something natural: Seven spiritual intelligences or archangels alternate in a cycle as spirits of time and inspire humanity. This answer has an astonishing beauty, elegance and simplicity, because it unites a multitude of facts by means of a cohesive explanation. It is not unlike the way Kepler grasped the irregular orbits of the planets with a single model.

However, there is one objection here: This unifying and simplifying factor is not material. The so-called Dickerson's rule, which scientists observe today, says that science should be a game with one determining rule: It should attempt to explain the world only by means of material causes. Allegedly science does not exclude the possible existence of a spiritual world, but this world cannot be the subject of scientific knowledge. It can be (so it is said) always only the subject of faith or of metaphysics. In the eyes of scientists, metaphysics is only unjustified speculation about things we can know nothing about.

Since the time of Bacon until today, an idea of science has prevailed, starting from empirical observations only. However, it cannot stop with observations alone. It must progress by induction to the ideas, forms and laws governing a given class of phenomena. But how could an idea govern a phenomenon, if it exists only in my head? Strangely enough! Sometimes, there is no other way, than to consider this unifying idea as identical with some unperceivable, but really effective reality.

Newton thought of an idea, a mathematical relationship, which explained both the movements of the heavenly bodies and the tides of the sea. He came to the conclusion that there must be some invisible force, which acts at any distance, even through empty space. Leibniz and others criticized him for introducing an „occult factor“ into science. Newton defended himself: „*Gravitation must be caused by a factor acting constantly according to fixed laws, but whether it is a material or a non-material factor, is a question I will leave to the consideration of my readers*“. For fifty years his theory remained unaccepted. In the end people recognized that there was no better way to consider this matter than to imagine, that this phenomenon, in which bodies attract each other in indirect proportion to the second power of distance, is caused by a „force of attraction“.

Therefore, are we entitled to postulate the independent essence of a phenomenon, which is real, but is not reducible to any other known elementary forces? The history of science answers this question positively. Nobody ever caught gravitons. According to Einstein, we do not even have to deal with gravitation, but with curved space. Newtonian gravitation is only a conceptual supplement, a bolt with something missing in the area of empirical data.

Since the time of the quantum-relativist breakthrough, this approach to science became evidently progressive. The philosophy of science did not notice this. Present-day physics teems with quantities, which can be detected neither by our senses nor by any instruments. Quarks and strings are the result of „thought-experiments“, they result from equations. We only think the supposed structure of matter, which is behind what can be perceived. It is meta-physical. From the multitude of ideas, those which are useful, which explain that which is visible, fit in with other knowledge or enable to make predictions and propose experiments, which are being confirmed, are considered to correspond to reality.

Therefore, can we not also consider the existence of a group of seven principles, which act in history? Nobody ever saw the force of gravity itself, but always only its effects. Similarly, we do not have to see archangels to be able to understand that they exist. The facts of the world, consistently examined to the end, unavoidably lead to recognition of them.

What then is the source of the opposition of scientists to metaphysics? It is because, in the past, it was very unspecific and unfruitful as a scientific hypothesis. We found metaphysics full of abstract

phrases about concepts empty of content, such as „God“, the „Absolute“, „Being“ and „soul“. It does not help a scientist to explain any specific phenomenon, to say that God caused it, because that was what he decided. Such an explanation is equally good for explaining the presence of any phenomenon, or for explaining its absence. It does not allow to predict or explain anything. It is not fruitful.

Let us note that, in the case of Newton's hypothesis, the important thing was not whether the unknown factor was material or non-material, but the fact that it was specific. It was given by a mathematical formula. This enabled the derivation of specific, verifiable results. It was not even important that contradictions disproved Newton's hypothesis. It could not explain the shift of the perihelion of Mercury or the real orbit of the Moon. These cases did not imply that the force of gravity did not exist. But it was later proved that other factors worked alongside gravity.

Dickerson and his adherents did not notice, what makes science scientific. The soul of science does not lie in limiting itself only to what can be perceived with the physical senses, but in doing everything in terms of specific and precise concepts. Dickerson and his followers implicitly connect the idea of the lawful, regular, distinct and logical only with the material world, and the spiritual world only with the idea of an irrational, unpredictable, one-time act of a non-transparent divine will. Therefore, it is impossible to think about it. What right do they have to foist us this idea that the spiritual world is not intelligible and rational, that there is nothing lawful in it? Why, according to the best philosophical traditions, the spiritual cosmos is the realm of universal reason, in which perfect order and harmony prevail.

The unexpected thing about Angelology is that it is a specific metaphysics. It contains a sufficiently clear and sharp image of supra-sensory forces and processes, which enables us to formulate specific hypotheses, and falsify them or make verifiable predictions. Therefore, it falls within the framework of science. It enables us to simplify great variety of phenomena, it is stimulating, useful and fruitful in solving the riddle of the world. And that is the decisive attribute, because of which the method used in Angelology shall assert itself as a pilot example of the coming scientific paradigm. We shall gradually get used to the fact that there is no better way of thinking about cultural waves than to suppose the existence of an independent noosphere, a sphere of thought, in which consistent processes occur.

I propose as a second conclusion: Let us accept that what our ancestors called angels, whatever they are, are something real, which act and have effects.

IS THE CONCEPT OF ANGEL THEORETICAL OR EMPIRICAL?

We have concluded that empirical observations naturally lead to a need for a concept comparable to the medieval concept of the angel. That is, if we apply only the ability of rational consideration consistently to sensory perception, we are inevitably led to the recognition that angels exist, although they are invisible. The English biologist Rupert Sheldrake came to this conclusion in discussions with the former Dominican monk Matthew Fox in the book „Physics of Angels“. Sheldrake called these unknown forces beyond nature and history „morphogenetic fields“, but both agreed that it is a concept equivalent to Aristotle's *entelechy* or the medieval *angel*.

Therefore, if from all human abilities, we want to use only one – reason – it appears that the concept of angel is only supposed, thought, theoretical. It is unavoidably following from empirical observations, but itself not empirical.

Man is also equipped with other abilities, for example imagination. Do we know what is its actual ability and potential? The notion of angel did not originate in history on the basis of theoretical deductions, but on the basis of experience. There were always specific people, who claimed to have had revelations or visions, that a messenger (angelos) or god had come to them. They received inspiration, images containing volitional and moral impulses, which powerfully changed their lives. For example, after 600 BC sages appeared independently in different parts of the world, who had the experience that the spiritual intelligence of the Sun appeared to them and gave them knowledge about balance and the golden middle way. In the cyclic alternation of ages it was indeed Michael, Archangel of the Sun, the one holding scales in his hands, who came to the fore precisely in 600 BC, and ruled until 246 BC.

However, we maintain that these experiences are not really empirical experiences. That they are not *perceptions*, but only *constructions* of our imagination. On what basis do we maintain this? On the

basis of a pre-conceived idea, an unproved assumption, which is part of the materialistic episteme: „*There is nothing in mind, which was not in senses before*“. An alternative episteme arises, when we abandon this thesis and replace it with the old Platonic-Scholastic thesis about the direct observation of ideas by reason. The problem does not lie in the fact that this idealistic episteme was not empirical, but in the fact that Locke *prohibited* spiritual empiricism! Locke's thesis implies that the originators of the greatest moral and cultural impulses of humanity were all either psychotics or liars.

In reality, the human soul is open to two worlds – downwards to the material and upwards to the spiritual. It receives perceptions from both. Our imagination can receive stimuli from our sense organs, but also „*an angel moves our imagination*“ as Aquinas says in *Summa Theologica*. If we prove the non-existence of the spiritual world by pointing out, that some people may create erroneous ideas about it, the same also applies to the material world. Hume proved this. We directly perceive only our own soul and can never really know what happens outside us. We do not know whether we do not live in virtual reality. But in life we must act so that if two perceptions always occur together, if they act on us independently of our will and other observations also confirm this, we must take them seriously. However, this applies to *all* perceptions, whether they come through the physical senses or by another route. After all, what are the reasons for supposing the material world to be more real than the spiritual?

The view that ideas do not come from inside, was never the subject of proof, but was Locke's *experience*. It is a generalization of Locke's own spiritual constitution and that of his contemporaries. At the end of the 17th century, humanity found itself at an extreme turning point, in which it so immersed itself in the material that it lost its internal connection with the supra-sensory world. The light of ideas within human beings was extinguished. However, in history, humanity passes through regular periods in which the supra-sensory essence of man alternately penetrates deeper into the material or disengages from it. Locke's thesis was progressive in his time. It stimulated the development of the empirical sciences, but for a long time now it has been a brake. Once alive, because it was rooted in the spirit of the age, in the sub-conscious impressions of the people of the time, but today it spooks in academic institutions like the mummy of something, which was formerly alive and fruitful. The present spirit of time is working towards a new Organon of supra-sensory empiricism, which we can expect to crystallize around 2100.

So how can we decide between two scientific paradigms or epistemes? In the first place, we should not take one as the measure and criterion for the other. The adherents of the materialistic episteme have usurped nowadays the monopoly on scientificity. They generously allow us to believe in a spiritual world, but only in a non-scientific, subjective way.

Why is it not scientific to talk about the spiritual world? Spiritual realities are allegedly not empirical, nobody ever observed them. Why? Because, although they were observed, this could not be true according to Locke's assumption, and must involve something else! This scientific method contains as a dogma, that if somebody observed something, it could not be the spiritual world, and then argues that nobody ever observed the spiritual world. This is a *vicious circle*. The presuppositions already contain the conclusions, which are only to be proved.

A leading member of the Department of Philosophy of an unnamed Slovak university is a good example of this approach. He published an expert article on the theme of whether we can know what comes after death. First of all, it was necessary to define death. Therefore, he chose the definition that death is when a person definitively loses consciousness. Then he analysed various near death experiences and concluded that these people were still not dead, because they were still conscious. That is why we can never be conscious of what is beyond the threshold of death. If we are conscious, we are, by definition, not dead. It is enough to replace this definition with the older definition, that death is the separation of the soul from the body. Then follows, that a mystic or a philosopher can die even when alive. If he is capable of renunciation and detaches himself from carnal things, he enters the same state of consciousness, in which he will be after the disintegration of the physical body. Various experts and specialists know much, but they do not know themselves. They are not aware of the hidden presuppositions and origins of their own thinking. Knowledge without self-knowledge turns into ignorance.

Archangels are a factor by *experience*, not by theory. *Everybody* perceives them. The hierarchies of angels work in the supra-conscious of humanity and demons in the sub-conscious. For example, the

alternation of spirits of time is always felt by every person in the world up to the last inhabitant of the most remote island. Different images, dreams, desires and life-feeling begin to emerge from within. Although only the initiates can make clear the origin of these impulses, and geniuses can creatively transform and express them in the form of arts, philosophy, leadership and others. The masses perceive them instinctively, as a general mood.

These impulses emerge from the human subconscious, about which material science knows absolutely nothing. It follows only from its central dogma that this activity must be enclosed in the nerve pathways in the cranial cavity of the individual. The synchronicity and rhythmicity of mental waves in the world soul contradict this so clearly that it strikes the eye. The thousands of experimental series with transmission of thoughts include dozens that made the most obstinate sceptics run out of fantasy in inventing objections. This endless search for material factors even where they do not exist, is the real materialistic mysticism, which is maintained even at the price of sacrificing healthy reason. Present-day empiricism betrays its own principles, when it attempts to fit all findings onto the Procrustean bed of the materialist philosophy.

In the end, the criterion of the correctness of a paradigm can only be its usefulness and fruitfulness. As Goethe says: „*only what is fruitful is true and beautiful*“ or: „*By their fruits shalt thou know them*“. If a given episteme is able to form concretely verifiable hypotheses, explain much and simplify and make successful predictions, it will certainly continue to be used. The Angelology of History proved this, to a degree beyond the dreams of sociologists and historians up to now. It showed that science can be done also in connection with the idealistic episteme, and that it can be, at least in some areas, incomparably more successful than materialistic science. Therefore, I propose that the method used in Angelology be recognized as scientific. I intercede for that both the materialist and the idealist epistememes should develop together, side by side.

A NEW DIMENSION IS OPENED TO SCIENCE

We came to the remarkable conclusion that idealistic science does not differ from materialistic science in its scientificness. It is also rational and empirical. Moreover, it is not one-sided, it does not deny sensual experience. Materialistic science attempts to explain the supra-sensory half of human experience away as non-existent. Supra-sensory experience is obtained by introspection, but otherwise it is verified just like sensory experience: by observation, by active experiment, by comparison with other supra-sensory experience from an independent source, by formulation of predictions. In addition, supra-sensory experience is verified with the help of sensory experience. A genuine vision is in harmony with sensory observation. Sensory and supra-sensory empiricism supplement each other, and only the two together form one whole. The first is the touch-stone for the other and the second is the explanation of the first.

Let us think about why science up to now is not only unable to recognize the spiritual world, but also to explain a great part of the material world. These material phenomena have a spiritual essence. Let us return to Popper's example of revolutionary periods. What was it, that enabled us to predict the curve of revolution indices? How did we proceed?

The seven archangels include two, who act especially on our emotional nature (Anael and Samael). They influence the person during the two most emotionally unstable and conflicting periods of life: puberty and the mid-life crisis. Anael is Inanna, the ancient goddess of love and passion and Samael is Nergal, god of hatred and death. Another two (Zachariel and Rafael) strengthen thinking. That is, they calm and cool the head as an antidote to the passions. Rafael is Nabu, the healer god, while Zachariel is Marduk, the embodiment of law and order. This is a supra-sensory observation, of how these beings appear to the inner vision.

Our hypothesis is as follows: Anael and Samael will increase revolutionary tendencies. In a period, when one of these two acts as spirit of the age alongside other archangels, revolutionary tendencies will increase and culminate at a time when both spirits act together. Zachariel and Rafael will reduce revolutionary tendencies. When at least one of them acts, revolutionary tendencies shall reduce and shall be the lowest when both act together. Opposing angels can act at the same time, and their effects will cancel each other out. In periods of Anael and Rafael or Samael and Zachariel, the level of

revolutionary tendencies will neither be very high nor very low. Revolutionary tendencies will also be average, when none of these four are active.

On this basis, we compiled a hypothetical curve of revolutionary indices. The real curve of revolutionary indices significantly correlates with it (correlation index = 0,7). Our hypothesis was not compiled *ex post* or *ad hoc*. Firstly, because it preceded the control studies. And secondly, because we deal with one and the same sevenfold rhythm, which is valid for all times, countries and branches of culture. We do not produce a new hypothesis for every new historical phenomenon.

Why did anthropologists such as Kroeber or Sorokin find no regularity or system in their own curves? They always sought only a trivial regular rhythm and when they did not find it, they concluded that everything has an accidental character. Deciphering the curve of revolutionary tendencies required a clear vision of the number and nature of invisible forces, and about the qualities and rhythms of their activities. The result of the confluence of these forces is a complex trajectory, which does not have a regular appearance at first sight. Scientists lack precisely such a vision.

Present-day science places extreme emphasis on the rational method, by means of which hypotheses are verified. Measurement and mathematical processing of data are also emphasized. However, every new discovery has two phases. The first is formation of a hypothesis, the second is its verification. In the first phase, more irrational approaches related to art are applied: imagination, intuition. The researcher may dream a hypothesis or it may only occur to him. Present-day scientific methodology is silent about this first phase as if it did not exist. However, both phases are equally important. If the first phase prevails, a reverie arises without a firm foundation. But if the second phase predominates, we get a sea of meaningless data and no idea.

The first phase is synthetic, the second analytic. The instrument of the first phase is the right and of the second the left hemisphere of the brain. The same functional differentiation applies to the terrestrial organism as a whole. The eastern hemisphere received introspective religious truths, while the western hemisphere created experimental science.

Supra-sensory and sensory experience must be in balance, if real knowledge is to arise. Supra-sensory perception supplies the hypothesis for the sensory and its explanation. It is that, which the empirical observation demands as its inevitable conceptual supplement. Thinking becomes true in the moment when it changes into a perception organ of the spiritual world. Present-day science concentrated almost exclusively or identifies with the second phase and with the analytic method. And religion left itself the first. However, both phases become unfruitful in isolation. Scientist and priest must merge in one person!

The research, for which Roger Sperry was awarded the Nobel Prize, confirmed that the most creative people are those, who can use and flexibly connect the two hemispheres of the brain. A good researcher must live in rhythmic alternation between the introvert and extrovert, passive and active, male and female aspects of his psyche, between receiving of inspiration from higher worlds and its rational verification in the external world. One-sided use of the left hemisphere of the brain cannot lead to anything other than a materialistic world view.

The scientists have dug up mountains of information, to which they cannot give any meaning. They cannot find any logos, any idea in it. The prevailing part of the world appears to them to be chaos, an accidental event. The history of the world, the evolution of nature, human dreams – everything is chaos, blind and meaningless accident. Where could Kroeber acquire a clear picture of the nature of individual archangels and the relations between them? He collected data for thirty years, but he had no idea. If he had had the idea, he could immediately have confirmed it, but it did not occur to him.

The majority of phenomena do not openly reveal their idea. It is necessary to do something in the mind like vector decomposition of the phenomenon into its independent components. If rhythms in history should become visible to us, we must be able to break them down into components originating from various spiritual causes. For example, to distinguish spirits of time from spirits of nations. Spirits of time act globally, they bring waves of creativity in one area of culture across all nations of the world. The spirits of nations act locally, inspiring groups of great personalities of all kinds, but limited to one nation. The spirit of a nation and the spirit of time have their own rhythms, and if we cannot distinguish them mentally and mix everything together, we cannot see any regularity in history.

If we proceeded in physics the same way as in cultural anthropology, we would not be able to prove even the existence of the force of gravity. A leaf dancing in the wind or a rocket flying away

from Earth would have to be taken as evidence that bodies only sometimes move downwards with uniformly accelerated motion. Therefore, the law of gravity is not a law. However, the true answer is that the attraction of the Earth always acts, but other forces act alongside it. The trajectory of bodies is the result of interaction of these forces.

The magnificent perspective of science does not lie in the further perfecting of rational instruments. This is not work for computers. It must begin with deliberate perfecting of the human imagination, to achieve balance. The ennobled, purified imagination changes into the organ of sight of the spirit. However, this demands that the scientist also perfects his emotional and volitional life, not only his intellect.

In this, the sophiological method really differs from Baconism: Spiritual science requires the adept to master all the abilities, which materialistic science requires from its adherents. But it also requires something more. That is first of all a versatile development of the human being as a whole, not only of some of his faculties. It requires further the ability to create not only quantitative, but also qualitative concepts. Material science is a subset of the spiritual, and spiritual science is the extension of the material to higher worlds.

Materialistic science is only really successful in research into the mineral realm. It is the part of the world, which can be understood well in connection with quantitative terms, that is with mathematical equations. The higher realms – vegetable, animal and human – require a different creation of conceptions. They represent matter enlivened, ensouled and spiritualized by higher principles, which penetrate and organize it. To decipher this organization means to be able to create such concepts, which correspond to these living ideas, which act behind these realms as creative forces. It will never be possible to understand history, except by means of inspired concepts, because those who act in it are the spirits of inspiration – the archangels.

This new dimension, which is opening to science, lies in the refined creation of concepts and ideas. Science has stagnated for a long time, not because of lack of measured data, but because of conceptual blindness. The astro-physicists are vainly seeking an equation of the universe. Beings, which embody aesthetic and moral qualities and virtues are active around us. As soon as we are able to create these virtues and qualities in ourselves, they will become visible to us.

Our hypothesis about archangelic powers does not differ from Newton's hypothesis about gravitation in not being empirical. Both speak about a sort of supra-sensory essence. But it differs in that the content of the concept archangel is qualitative, it has aesthetic and moral content. This is the more essential frontier, on the threshold of which science stands. Angels are not invisible, but we are aesthetically and morally blind!

As soon as we raise ourselves to the inner experience and clear vision of a spiritual being, we are able to recognize, even to quantify his expressions in the world around us. This approach is scientific to the degree to which we are able to create non-mathematical concepts exactly and unambiguously, but it is no different in psychology, history and all the other humanities. Until they are not in state to create accurate concepts corresponding to non-physical realities, they are not sciences.

These sciences feel that they are not really entitled to produce any synthesis. For example, the historian never knows whether two partly similar events can correctly be grouped under a common term, let us say the French Revolution and the revolution in Vietnam, which happened in the same year. They think, together with Benedetto Croce, that every such term will be only nominalist, subjectively created by the narrator. Henceforth we know that in this case there exists an idea (in the sense of spiritual realism), which links the two events: it is the archangel Anael. The Angelology of History is the first modern age philosophy of history, the first historic synthesis, which also achieved its methodological justification.

Therefore, where can we, as researchers, obtain correct hypotheses, which fit as a key to the lock of the world? Only from those beings, which really act within these things as living ideas and creative principles! Here is the way to overcome Kant's subject-object split. Within ourselves, we can unite with things in themselves, with the actual creative forces, which are the ideas of these things. Otherwise, we know the idea only in the case of artefacts created by man, because we are ourselves their creators. Whoever understands the idea of the combustion engine, knows everything substantial about it. In the same way there are beings, which stand behind nature and history as their ideas. Love and respect awaken the latent ability of our souls to connect with them. All of them together form one harmonic whole, as the limbs of one being, Sophia, the Heavenly Wisdom.

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