

Norbert Wrobel, Klaus-Dieter Sedlacek

Quantum Consciousness

Natural foundations of a theory
of evolutionary quantum
consciousness

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Norbert Wrobel, living in Berlin, studied medicine and approved in 1984 as a doctor. In a wide-ranging academic basic training at the Free University of Berlin, he subsequently specialized in the fields below internal medicine, intensive care and emergency medicine and later in geriatrics, and has since then been active in the in-patient care. Because of changes in society that produces more and more elderly people, health professionals are constitutively faced with new, unfamiliar and complex situations. This subject, however, to this day, is an outdated mechanistic-physical way of thinking that has developed more than a hundred years ago. Norbert Wrobel has therefore made himself up to move away from this way of thinking and to explore, what actually holds the world together in its innermost.

The mathematician *Klaus-Dieter Sedlacek*, born in 1948, has lived in southern Germany since his childhood. He studied mathematics and computer sciences in addition with physics. After graduating in 1975, and some years of professional experience, he founded his own company which dealt with the development of application software. He run his business for more than twenty-five years. In the second half of his life he has devoted himself to his private research projects. He has set himself the task to investigate deeper the physics of information, meaning and consciousness, in order to reach a wider audience. In 2008 he published a startling fiction book entitled: »Immortal consciousness - spacetime phenomena, evidence and visions«.

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0. Preface of the physician Norbert Wrobel

The interdisciplinary dialogue with Klaus-Dieter Sedlacek, started on the question: „What is disease?“, initially led to a thorough debate in terms of: quantum physics and, in particular, to questions of quantum information theory. This dialogue, held very impassionately, has helped me since to let go the „old“ mechanistic way of thinking and, at the same time, helped me to turn towards the wider concept of „new“ physics. I am convinced now that „modern man“ is regarded as a self-organized, dissipative non-equilibrium-system and that it operates on the same principles as the 4-dimensional world in which we live: by means of elementary information and mere chance (see: booklet “Leben aus Quantenstaub - Life out of quantum dust”).

In this script, I will now undergo a differentiated implementation of the two links: 1) the metric-free vacuum¹ and 2) the real world, namely consciousness, triggered by processing information. Usually, the term „consciousness“ is associated with higher, cognitive performance. In the course of this dialogue however we referred to by our chosen syntax and semantics, consciousness was assigned to in accordance with information-processing, as a principle of quantum physics.

Everything, that exists in this world, that is all quantum objects, are in principle integrated into this process. Information, fluctuation and decoherence, entanglement and evolution included, have congruently been regarded as elementary. With these ingredients it is possible to produce a matter-containing reality in a 4-dimensional world.

Consciousness is associated with something alive, imminently sensed by someone's life-experience. It is intuitively associated with organic matter. For evolutionary reasons we believe that human beings show the highest developed consciousness, due to a long preceding onto- and phylogenetic process.

There is however evidence in the geological history of our Earth, that inorganic matter existed before living matter. If, from a quantum-theoretical point of view, a kind of spiritual interaction of all quantum objects with the metric-free vacuum is possible then the question compulsorily arises, whether not non-organic matter must have consciousness, too. If it has, all information-processing can principally form the world we live in, triggered by all quantum objects.

"All the world is a stage, we are merely players, performers and portrayers, each another's audience outside the gilded cage!" (From: RUSH 'Limelight' in "Moving pictures")

We warmly would like to say thanks to Christian Wrobel for his passionate translation.

Berlin in autumn 2014

Norbert Wrobel

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- 1 A metric free vacuum as a non-local physical field (not belonging to the space-time) contains nothing except the information that is equivalent to energy or matter

1. Preface of the mathematician Klaus-Dieter Sedlacek

It always amazes me what synergies an interdisciplinary dialogue can develop. The first guided, e-mail conducted dialogue with Norbert Wrobel led to the publication of „Leben aus Quantenstaub - Life out of Quantum Dust, engl.“ and, among other things, to the knowledge, where the excess of positive energy or material in the universe originates, a finding that mainstream physics can not explain.

To put it more popular, the excess energy that really should not exist according to the law of conservation of energy, does therefore exist in our universe, because it is „borrowed“ energy that comes from vacuum fluctuations, whose re-payment or compensation is a long time coming until the end of time.

In the new dialogue, there are again exciting results for the reader. Even though I am not at home in the department of microbiology myself, I was able, in co-operation with Norbert Wrobel, to discover something new which a microbiologist, who is specialized exclusively in his faculty, might not have seen. The more I read about the behaviour and life of microbes, the more I was fascinated by microbiology, and questions arose that have obviously not been answered by microbiologists, yet.

Take, for example, the so-called moon-milk, researchers had discovered in the depths of a tyrolean ice cave. Each drop of this moon-milk contains a huge amount of microbes living in a community. It is hard to imagine that, under the extreme dark and frosty conditions of the cave, the

members are able to survive and to multiply. Well, some of the microbes may serve as food for others. There is a beginning of the food chain, though. And: how do microbes, at the beginning of the food chain survive and replicate?

Where does the energy for their metabolism come from? Which kind of information- processing ensures their survival? And finally a question, the answering of which I am particularly interested in: might information-processing fulfil criteria of a rudimentary form of consciousness, which is necessary for their survival? If so, this would have far-reaching implications for our understanding of the evolution of life. I think we have found answers, and Norbert Wrobel even formed a new theory, that now everybody can refer to.

Spain in autumn 2014

Klaus-Dieter Sedlacek

2. Quantum-associated aspects of the development of life (Phylogenesis)

2.1 Consciousness as onto- and phylogenetic development processes

@ Dear Mr. Sedlacek (following KDS):

... the term "consciousness" is usually associated with cognitive brain functions. In the dialogue we had so far ², we directly assigned consciousness to information-processing, according to the way we speak and think (syntax, semantics). According to DIN IEC 60050-351, information-processing provides the connection between the metric-free vacuum and the real world³. Everything in this world, that is, all quantum objects, are principally involved in this process. We have agreed that

- Information
- Fluctuation⁴ (=mere chance) and decoherence⁵
- Quantum mechanical entanglement⁶
- Evolution

is regarded as elementary⁷. With these ingredients it is possible to generate matter-containing-reality within a 4-

dimensional world.

From one's own life experience, we connect consciousness with something alive and assign it intuitively to organic matter. For evolutionary reasons we next assume for humans that they show the highest level of development, speaking in terms of consciousness.

If this is indeed the case, a long ontogenetic and phylogenetic development process (Haeckel, Darwin) must have preceded. Aprioristic organic consciousness (Kant), on the other hand, can probably be ruled out, as the history of development of our planet Earth has shown that inorganic matter came before life.

On the basis of the unity of nature, consciousness is understood as a universal property of all "beings" within the 4-dim world, which consequently means that an inorganic substance must have consciousness features, too.

How could one now approach the problem from a scientific perspective, to find a solution for something, which totally contradicts to our experience of life? Should even a boulder have consciousness, too?

A much promising way is to look for evidence-based knowledge from natural science: great naturalists such as Ernst Haeckel⁸, who

„... demonstrated a special way in the battle of worldviews for the individual honest reader, who struggles for pure reason-based-knowledge. To his firm conviction, this alone would lead to the truth as one possibility: empirical natural science and the hence founded monistic philosophy“⁹.

With respect to another work by Haeckel, the "Natürliche Schöpfungsgeschichte " (History of natural creation, engl.),

Darwin¹⁰ in full recognition said:

"... if this work had appeared before my essay (The Descent of Man) had been written, I should probably never have completed it. Almost all the conclusions to which I have arrived I find confirmed by this naturalist, whose knowledge on many points is much fuller than mine " ¹¹.

In: "Die Welträthsel - Wonders, engl.", Haeckel now raises the issue on consciousness, especially ontogenetic and phylogenetic development aspects respectively, and in the psychological part of "Die Seele - The Soul, engl." he carries out among other things:

"Soul is a sum of vital phenomena, which are tied to a specific material substratum, which I shall call psychoplasm, because this substrate has been detected as belonging to the group of plasma body. Even for atoms the simplest form of sensation and will is inherent, too¹², as a most primitive type of a universal "soul".

Following his "Theory of Consciousness", he hypothesized on conscious and unconscious mental life. Consciousness is, as any other mental activity, a natural phenomenon and therefore subject to the law of substance. A distinction is made between the awareness of the outside world as the "world consciousness", and an inside mirroring of all our ideas, feelings and strivings or volition, known as "self-consciousness".

He assumed that the earliest human ancestors, unicellular **protozoa** - from the systematic unity of protists such as the amoeba - are only "inspired", without consciousness, and brought this property in connection with special plasma molecules (**plastidules**):

"The mental processes there are thus the bridge which connects the chemical processes in inorganic nature with the mental life of animals¹³".

Due to similar elementary structures, such as cell and plasma, he concluded that **even plants must be animated.**

In his molecular genetic theory, he formulated a tentative hypothesis, according to which the original development processes emerged strictly mechanically, and from physicalchemical elements:

„Die Perigenesis der Plastidule“ (Perigenesis of plastidules, engl.), or the “Wellenzeugung der Lebenstheilchen“ (Waveprocreation of the vital particles, engl.).

He assumed that:

- **protoplasma¹⁴** is the physical basis of life,
- the simplest forms of life such as *Protogenes primordialis* (Protomonas) have homogeneous, structureless protoplasm - similar and homogeneous as is a crystal, and stand on the borderline of organic and inorganic that is of the so-called animate and inanimate nature,
- life is also bound to formless substances of certain physical properties and chemical composition,
- properties of the organic is worthy to inorganic matter, too, and thus common to all natural bodies , and - ultimately, of the atoms,
- each atom has an inherent sum of force and is in this sense "inspired",

- without the assumption of an "atomic-soul", the phenomena of chemistry or physics, such as attraction and repulsion, or motion of the atoms, are inexplicable in the sense of **feeling and will**,
- each ground atom is equipped with a constant and eternal soul is therefore immortal,
- only the countless and ever-changing compounds of atoms are mortal, though.
- plasma molecules (plastidules) have a **memory** at their disposal - which is essential for reproduction, and can be described as vital particles,
- branched undulations of plastidules are regarded as mechanical cause of the biogenetic process (= periodic mass movement)¹⁵.

In his extensive elaboration "Generelle Morphologie - General morphology, engl." (Haeckel, 1866) and later in his finely profiled "Natürliche Schöpfungsgeschichte - History of natural creation, engl." (Haeckel, 1868), he described **cellular psychology** (cellular theory of consciousness) as a life characteristic of each cell. In contrast, in his "atomistic theory of consciousness", according to which **each chemical element would have elementary consciousness**, he especially featured "unconscious mind" characteristic to inorganic-inanimate.

Under no conditions he would allow transcendent explanations for supernatural phenomena of certain brain functions:

"The neurological problem of consciousness is only a special case of the universal cosmological problem, namely the substance question".

Methodologically, however, he accepted an introspective approach as subjective, inner method, according to which the immediate certainty of the ego should emerge as "selfconsciousness": "Cogito, ergo sum - I think, therefore I am" (Descartes).

With regard to the wealth of Haeckel's elaborations, a set of questions arises quite inevitably:

- Are the nearly 150-years-old findings transferable to the present day at all?
- Can these findings, mainly from the then usual protists classification (primeval being, first fruits) - a group of related unspecified microscopic organisms such as algae, protozoa or some few fungi - that have been derived as a systematic unity, be transferred to today's living-being-classification with the domains bacteria, arachaea¹⁶ and eukaryotes?
- How to verify some sort of consciousness in inorganic-inanimate at all?

The vacuum theory¹⁷ conducts fundamental physical information processes, which take place within the metric-free vacuum. Comparable with a store, in which all processes (interactions) from space-time¹⁸ are recorded and never deleted. Information-processing there would fulfill the criteria for consciousness. Therefore, they can also be described as units of consciousness. The consciousness units consist of an information type which is equivalent to energy or mass¹⁹.

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Terms

- A **metric-free vacuum** is a non-local physical field (i.e. not belonging to the spacetime), containing nothing but information, being equivalent to energy, or matter
- **Quantum - biology** is the denomination given to a branch of bio-physics. It deals with the influence of quantum effects on living cells of an organism. Energetic processes and changes that may be in the range of atoms and molecules, are examined²⁰.
- As **plasmon (physics)**, referred to as the quantized variations in the charge carrier density in semiconductors and metals; quantum-mechanically they are treated as quasi-particles (= excitation in the many-body system). The term is a common abbreviation for plasma quantum oscillation. What the photon represents for electromagnetic waves, is the plasmon for oscillations for the fermigas²¹ of metals²².
- **Plasmon (biology)** means: 1) physical plasmon, the physical totality of extrachromosomal, plasmatic hereditary factors of a cell or organism. For the physical plasmon chondroma, the (physical) plastome (in plants) as well as the genes of other plasma factors are counted. 2) typical plasmon, the totality of the types of extrachromosomal genes of a cell, e.g., the entirety of their typical chondroma and plastome; the joint features that make two cells or individuals in terms of extrachromosomal genetic factors, genetically identical.