

Soul-body-mind in the new paradigm*

by Peter Jakubowski (29th May, 2016)

(* The present article is an extension, including a slight correction, of my previous online article: "Spirit-body-mind in the new paradigm" from 19th February, 2016)

1. The new paradigm according to Ervin Laszlo

Recently, in his book "*The Self-Actualizing Cosmos ; The Akasha Revolution in Science and Human Consciousness*" (Inner Traditions , Canada, 2014), Ervin Laszlo has considered the emerging new paradigm as follows. In Prologue, we read:

"There is a major revolution under way in science today, a transformation that is both profound and fascinating. It changes our view of the world, and our concept of life and consciousness in the world. It comes at a propitious time.

We know that the world we have created is unsustainable: we need new thinking to avert a collapse and set us on course for a sustainable and thriving society. The inspiration for the new thinking can come from science but not, or not only, from science as a source of new technologies. Rather, we need to view science as a source of orientation and guidance, as a wellspring of trustworthy ideas for rediscovering our relations to each other and the universe. The revolution under way in science offers a paradigm that can fill this need.

A paradigm in science is the sometimes tacit but always effective foundation of the way scientists conceive of the world, including the objects and processes they investigate. The new paradigm is an important innovation in science: it allows scientists to piece together the emerging elements of scientific knowledge and perceive the meaningful whole that underlies this complex mosaic of data, theory, and application.

The new paradigm has meaning and interest well beyond science. It provides a holistic, integral view of life and universe, lifting these vistas from the realm of speculation into the domain of careful observation and rigorous reasoning. Although based on sophisticated theories and wide-ranging observations, this paradigm is basically simple and inherently meaningful."

And in Chapter 1 ("*Revolution in Science*"), we read:

"The paradigm emerging in science in the second decade of this century signifies a major shift in the worldview of science. It is a shift from the dominant paradigm of the twentieth century, where events and interactions were believed to take place in space and time and were considered local and separable, to a twenty-first century paradigm that recognizes that there is [a deeper dimension beyond space and time](#) and that the connection, coherence, and coevolution we observe in the manifest world are coded in the integral domain of that deeper dimension."

(Here I - P.J. - have to introduce my first remark to the above text by Ervin Laszlo, in order to give the reader a direct hint to the necessary modification of our all, Prof. Laszlo's inclusive, way of thinking,

or better, of using the traditional concepts of science. This first remark concerns "a deeper dimension beyond space and time". Till now, no need has appeared for an introduction of such "a deeper dimension" or to extend the physical dimensions "beyond space and time" in the new paradigm. What is necessary, is a new order of the used four dimensions. Einstein's (3+1)-dimensional space-time has to be replaced with the Unified-Physics (2+2)-dimensional area-period basic construction. The detail of the new construction will be explained here below.)

2. The body-mind problem in the old paradigm

About a decade ago, Ervin Laszlo and Jude Currivan considered the question: What do we mean by "mind"? in their common book "*CosMos; A Co-creator's Guide to the Whole-World*" (Hay House, Inc., 2008). In Chapter 5 ("*In-Form*") they wrote:

"Einstein, as have many pioneering scientists, saw the world as an integral whole and discerned the creative and all-pervasive presence of mind in the Cosmos. But what do we mean by "mind"?

Generations of neuroscientists have been consumed with finding an answer to this deepest of questions, and numerous books have been written in the attempt to define *mind*. Yet despite the multitude of definitions in use, *the* definition remains elusive and contentious.

The inability of scientists to agree on what comprises "mind" is inevitably a consequence of the intrinsic *immateriality of thoughts, feelings, and ultimate perceptions of experience*. However, the premise, agreed by most neuroscientists, is that somehow immaterial mind - limited, as they have generally assumed, to human and higher-order animals, at most - arises from material brains. But how this assumption could possibly happen remains wholly mysterious.

(Here is a place for my - P.J. - second remark to the above text. The "immateriality of thoughts, feelings, and ultimate perceptions of experience" is an illusion. There are no quantum phenomena independent of - or not consuming - energy. Therefore, thoughts and feelings are not immaterial. Also the ultimate perceptions of experience without even a single quantum of non-zero material component is impossible.)

While new technologies are enabling scientists to understand more and more of mechanics of how mind is *expressed* through the brain, after many years of research this still sheds no light on their central quest - one that we believe is fruitless because the premise on which it is based is wrong. We agree with transpersonal psychologist Stanislav Grof, who, for more than 50 years, has studied human consciousness. Grof has compared the effort of trying to discover how mind arises from the brain to an engineer trying to understand the content of a television program solely by watching what components light up in the interior of the TV set. If someone sought to do such thing, we'd laugh, yet this is the approach that mainstream science has taken and insisted is correct, despite no evidence to support it and a great deal that contradicts it."

In his already mentioned book (*"The Self-Actualizing Cosmos"*), Ervin Laszlo has further considered the body-mind problem. In Chapter 7 (*"Consciousness"*), he wrote:

"Brain and mind are both elements of human experience. We experience things that appear material around us, and we experience the apparently **immaterial phenomenon** (*P.J. there are none*) we call mind or consciousness.

These experiences cannot be entirely independent; they are both part of the flow of human experience. But how is the experience of "matter" related to the experience of "mind"? Although the **experience of matter** (*P.J. - meaning an object to be "observed", the same for all people, thus objective*) and the **experience of mind** (*P.J. - meaning a subjective process of "observation"*) are both part of the flow of human experience, **they are fundamentally different parts** (*P.J. - exactly, as noted just above*). They differ in the way they appear and differ also in the way they can be accessed. Matter, it seems, can be experienced by all people, and perhaps all systems endowed with some form of sensitivity to their surroundings. On the other hand, consciousness is an intensely private experience, available only to the experiencing subject. As skeptical philosophers pointed out, the existence of consciousness in other people is a conjecture based on our own experience of consciousness.

But does matter have an independent reality, and is consciousness associated also with things other than the human brain? These questions have been debated for millennia, and while no definitive answer has emerged, the principal positions that could provide an answer have crystallized. We state them here under the headings of materialism, idealism, and dualism.

For materialism all the things that exist in space and time are material—they are made up of a substance called matter.

For idealism all things in the world are mental, or at least mind-like. Mind and consciousness are the basic and possibly the sole reality.

For dualism both matter and mind are real. Humans, and perhaps all living things, are material as well as mental.

All these positions claim empirical support.

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Despite volumes having been written in defense of one or another of these alternatives, the relation between a **material brain** (*P.J. - observing "device"*) and an **immaterial consciousness** (*P.J. - procedure of "observation"*) remained an unsolved problem. Philosopher David Chalmers (1995) called this the "hard problem" of consciousness research.

When we see, for example, we experience visual sensations: the felt quality of redness, the experience of dark and light, the quality of depth in a visual field. Other experiences go along with perception in different modalities: the sound of a clarinet, the smell of mothballs. Then there are bodily sensations, from pains to orgasms; mental images that are conjured up internally; the felt quality of emotion; and the experience of a stream of conscious thought. What unites all of these states is that they all are states of experience. (Chalmers 1995)

Being in a state where we experience the qualitative flow of sensations is fundamentally

different from observing the states of a material entity such as the brain. Does this material entity produce the immaterial flow we know as our consciousness? But how could a material entity produce something immaterial?

This “hard problem” contrasts with the “easy problems” of consciousness research. For example, our ability to discriminate, categorize, and react to environmental stimuli is a relatively easy problem because it can be solved in principle in reference to neural and artificial computational mechanisms. When our brain engages in visual and auditory information processing, we have visual and auditory experiences. The same holds for our understanding of the way the nervous system accesses our body’s own states.

But the hard problem persists. How can a network of neurons that process nerve signals from the senses produce felt qualitative experience? Philosopher Jerry Fodor (1992) wrote that “nobody has the slightest idea of how anything material could be conscious, nor does anybody even know what it would be like to have the slightest idea about how anything could be conscious.”

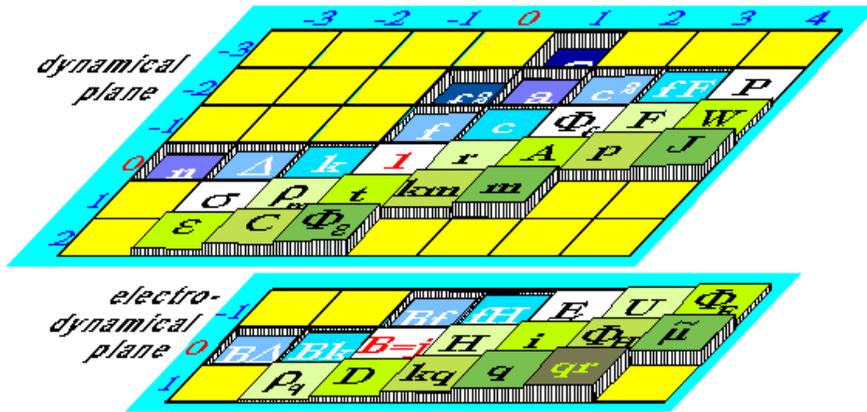
Finding a solution to the body-mind problem is indeed hard— at least when the problem is posed in light of the old paradigm. The Akasha paradigm offers a radically different framework for this problem (*text marked by P.J.*). It suggests that brain and mind do not exist on the same plane of reality, in the same dimension of the cosmos. The brain is a part of the material plane of reality: the manifest M-dimension. Mind and consciousness, on the other hand, participate in, and essentially belong to, the deep Akasha dimension."

3. Matter-spirit duality in the new paradigm of the Unified Physics

The Laszlo Institute of New Paradigm Research has organized its Third International Meeting ("New Paradigm in Physics") in Bagni di Lucca (Italy) at the end of January 2016. I had had a honor to held a lecture during the meeting. It was titled "The Unified Physics is the New Paradigm" [1]. I have reported about the newest development in the unification of the whole of physics, which I continue to complete during the recent three decades. One of the main points was the further possibilities to simplify the Unified Family of all physical quantities.

The original Unified Family is a self-consistent order of all possible physical quantities on two related planes, the dynamic and the electrodynamic, which defines all such quantities through just two fundamental ones. Most of all quantities are material-dependent, but the dependency can be very simply expressed through a lifting of the individual quantity up or down in relation to a corresponding two-dimensional plane of the family, as shown in the picture below. The quantities on the same lifting-level show the same material dependency (and thus the same color on the diagram).

Material dependence of physical quantities



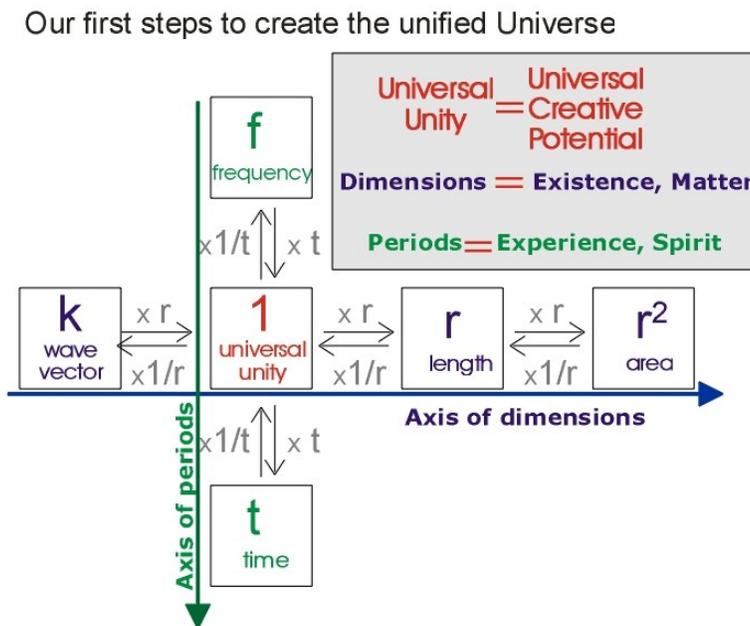
One of further modifications of the original family was an observation that all physical quantities from the electrodynamic plane can be found on the dynamic plane, though only in their squared forms, as shown in the diagram of the united single plane below. Directly located are E^2 , $B^2 = j^2$, $c = H^2$, $F = i^2$, $\rho_m = D^2$, and q^2 .

R/S	-3	-2	-1	0	1	2	3	4
-3					G $6.6816 \cdot 10^{29}$		E^2 $1.7199 \cdot 10^{13}$	
-2				f^2 $2.5885 \cdot 10^{25}$	a $1.3133 \cdot 10^{17}$	c^2 $6.6630 \cdot 10^8$	fF $3.3805 \cdot 10^0$	P $1.7151 \cdot 10^{-8}$
-1			$B^2=j^2$ $1.0028 \cdot 10^{21}$	f $5.0877 \cdot 10^{12}$	$c=H^2$ $2.5813 \cdot 10^4$	Φ_f $1.3096 \cdot 10^{-4}$	$F=i^2$ $6.6445 \cdot 10^{13}$	W $3.3711 \cdot 10^{-21}$
0	n $7.6570 \cdot 10^{24}$	Δ $3.8848 \cdot 10^{16}$	k $1.9710 \cdot 10^8$	1 1.000	r $5.0736 \cdot 10^{-9}$	A $2.5741 \cdot 10^{-17}$	p $1.3060 \cdot 10^{-25}$	J $6.6261 \cdot 10^{-34}$
1		σ $7.6357 \cdot 10^3$	$\rho_m = D^2$ $3.8740 \cdot 10^{-5}$	t $1.9655 \cdot 10^{13}$	km $9.9722 \cdot 10^{-22}$	m $5.0595 \cdot 10^{-30}$	q^2 $2.5670 \cdot 10^{-38}$	
2		ϵ $1.5008 \cdot 10^{-9}$	C $7.6145 \cdot 10^{-18}$	Φ_ϵ $3.8633 \cdot 10^{-26}$				

Some of those equivalences have been already partly expressed in numerous physical equations used in practical applications of the traditional electrodynamics. For example, it was clear, that force F can be

related only to a square of the electric current (i^2), but never to a single current alone. Similarly, only the square of the electric field (E^2 or D^2) could be directly related to energy W . The same is true for the magnetic field (B^2 or H^2). However, our united plane presents now a rule valid for all electrodynamic quantities. The individual electrodynamic quantities of the original electrodynamic plane of the Unified Family retain their theoretical meaning only when used in purely electrodynamic considerations. In all dynamical problems including energy, power, and force, the original electrodynamic plane becomes superfluous. The Unified Family can be thus reduced to a single plane. It can be easily confirmed when analyzing the universal values shown in the above diagram below the quantities names. For example, $q^2 = m \cdot r$, and indeed we have $2.5670 \times 10^{-38} = 5.0595 \times 10^{-30} \cdot 5.0736 \times 10^{-9}$.

The central part of the plane can be considered as the Unified-Physics definition of the first step towards the theoretical creation of our unified Universe. This central part, shown in the diagram below, connects the definition of both axes of the plane, the axis of dimensions and the axis of periods, as resulting mathematically from the Universal Unity, and conceptually - from the Universal Creative Potential.



As suggested in this diagram, the axis of quantum dimensions defines all those objects we are used to name material objects, having a non-vanishing quantum area. We consider them as really existing. The axis of quantum periods defines all possible changes of the material objects defined "along" the matter axis. Furthermore, the diagram suggests that an abstract, temporarily unchangeable piece of matter alone cannot be spiritually (or mentally) realized; it cannot be considered as a part of reality. That means, matter not experiencing any change in time cannot be a part of our reality, similarly like a time "flow" or circulation not combined with a non-zero material area of a quantum, cannot be considered as

a part of our reality, too. **Quantum area (space) and quantum period (time) are two inseparable aspects of our quantum reality.**

The next step of simplification of the Unified Family of all physical quantities is to abandon its remaining superfluous elements. Let us consider the complete definition of our single plane on the diagram below. The left upper corner contains the general definition of all physical quantities. Each single of them can be defined as a multiplication of the material parameter μ , the universal length r_u , and the universal period t_u , all in powers depending on the position of the defined quantity in column C and row R of the unified plane. As we see, all electrodynamic (squared) quantities are located in the odd columns of this plane, the columns containing exclusively vector quantities. Here we reach one of the fundamental practical questions concerning our new-paradigm point of view. Do we really need any vector quantities in our Unified-Physics description of Nature?

Let us note the drastic difference of some of our definitions of the main physical quantities in comparison with the traditional physics. Time, frequency, and energy are all two-dimensional quantities (mathematically called bivectors; marked in the diagram with \circ). The traditional Einsteinian (3+1)-dimensional space-time has to be replaced in our quantum description with (2+2)-dimensional quantum area-period. The third "spatial" dimension of a quantum is always determined through its area, it cannot be varied independently. The independent definition of a quantum volume is superfluous. Also is any equivalent quantity, like momentum p , and all its temporal relatives, like force $F (= dp/dt)$.

R\C	-3	-2	-1	0	1	2	3	4
-3	$\mathbf{x} = \mu^n \mathbf{x}_u$ $n = C + 2R$ $\mathbf{x}_u = r_u^C t_u^R$				-5 \vec{G} gravity factor		-3 \vec{E}^2 el. field sq.	
-2					-4 $\circ f^2$ frequency square	-3 \vec{a} acceleration	-2 \vec{c}^2 light-speed square	-1 $\vec{f} \vec{F}$ temporal force change
-1		-3 \vec{B}^2 mag. ind. sq.	-2 \vec{f} frequency	-1 $\vec{c} = \vec{H}^2$ light speed	0 $\circ \Phi_f$ flux of frequency	1 $\vec{F} = i^2$ force	2 \vec{W} energy	
0	-3 \vec{n} spatial density	-2 $\vec{\Delta}$ Laplace operator	-1 \vec{k} wave vector	0 $\circ 1$ universal unity	1 \vec{r} length	2 \vec{A} area	3 \vec{p} momentum	4 $\circ J$ action
1		0 $\circ \sigma$ electric conductivity	1 $\vec{\rho} = \vec{D}^2$ mass dens.	2 \vec{t} time	3 $\vec{k} \vec{m}$ linear mass distribution	4 $\circ m$ mass	5 \vec{q}^2 el. charge sq.	
2		2 $\vec{\epsilon}$ dielectric factor	3 \vec{C} electric capacity	4 $\circ \Phi_{\epsilon}$ optical area	$r_u = 5.074 \text{ nm}$ $t_u = 0.197 \text{ ps}$			

A real quantum cannot be one-dimensional. It means, that also quantum length, r , is superfluous. The same is true for its temporal relatives, like quantum speed of light c ($= dr/dt$), acceleration a ($= dc/dt$), and gravity G ($= da/dt$). We see that the answer to our last question is negative; **we don't need any vector physical quantities in the new-paradigm definitions of physics**. Consequently, if we abandon the odd (vectorial) columns of our united plane, we obtain the following compact form of the Unified Family of physical quantities.

$R \setminus S$	-2	0	2	4
-2		$-4 \overset{\circ}{f}^2$ frequency square	$-2 \overset{=}{S}$ radiation intensity	$0 \overset{\circ}{P}$ power
-1		$-2 \overset{=}{f}$ frequency	$0 \overset{\circ}{\Phi}_f$ flux of frequency	$2 \overset{=}{W}$ energy
0	$-2 \overset{=}{\Delta}$ Laplace operator	$0 \overset{\circ}{1}$ universal unity	$2 \overset{=}{A}$ area	$4 \overset{\circ}{J}$ action
1	$0 \overset{\circ}{\sigma}$ electric conductivity	$2 \overset{=}{t}$ time	$4 \overset{\circ}{m}$ mass	
2	$2 \overset{=}{\epsilon}$ dielectric factor	$4 \overset{\circ}{\Phi}_\epsilon$ optical area		

This form explains directly, why the quantized energy transfer remains the single usable interaction in our Unified Physics. More of the general consequences of the presented simplification of the Unified Family has been presented in my newest presentation "Saying goodbye to the traditional physics" [2], being destined to become discussed during the coming "Infinite Consciousness Conference" of the Laszlo Institute of New Paradigm Research (in July 2016). Here we are interested directly in the ultimate definition of the central part of the united plane, because it relates directly to our present topic of the soul-body-mind problem. This ultimate definition of the quantum creativeness is presented in the following diagram.

The single starting point, we have to assume as really existing before we begin to create our Universe, is our Universal Unity of the Unified Family. It can be endowed with a universal creativeness, the Universal Creative Potential to create everything else in our (2+2)-dimensions of the Universal Quantum Field, a physical realization of such ancient fields as the Akasha. It should be underlined here that the Universal Quantum Field (or Akasha) is not assumed to exist previously. It becomes reality only through the two axes created directly from the Universal Creative Potential. As explained above, the axis of quantum dimensions (area) defines the universal quanta of all material objects, whereas the axis of periods (time) defines all possible changes of those material objects. Let us remember:

Typical values for all possible classes of quanta of matter-spirit

Class	Quantum	Size	Frequency	Temperature	Velocity	Voltage
4	<i>superbrain cells</i>	<i>0.5 m</i>	<i>~2/hour</i>	<i>2.4 μK</i>	<i>0.26 mm/s</i>	<i>1 MV</i>
3	brain cells	5 mm	5 Hz	240 μK	2.6 cm/s	10 kV
2	nerve cells	50 μm	50 kHz	24 mK	2.6 m/s	100 V
1	tissue cells	0.5 μm	500 MHz	2.4 K	260 m/s	1 V
0	membranes	5 nm	5 THz	240 K	26 km/s	10 mV
-1	molecules	50 pm	50 PHz	24 kK	2.6 Mm/s	100 μV
-2	atoms	0.5 pm	500 EHz	2.4 MK	260 Mm/s	1 μV
-3	atomic nuclei	5 fm	5×10^{24} Hz	240 MK	26 Gm/s	10 nV
-4	<i>quarks</i>	<i>50 am</i>	5×10^{28} Hz	<i>24 GK</i>	<i>2.6 Tm/s</i>	<i>100 pV</i>

Our first conclusion from what has been said previously is very important: **the global (or universal) consciousness cannot be immaterial**. It is a physically describable product of superbrain [2]. Our brain is not yet developed high enough (not large enough) to be able to correlate with a global consciousness directly. At our present physical configuration of our average body of about 180 cm and our brain diameter below 25 cm, we can only "use" our "belly-brain", our gut conglomeration of neuronal connections, to "feel" the global consciousness activities. It is the reason, why we are calling the records made in our "belly-brain" as sub-conscious. Merely a mirroring of those records through our (still to small) brain is recognized as conscious activities or decisions.

4. Soul-body-mind ideas in the new paradigm

Now, we are already very close to the new-paradigm point of view upon the trio of the philosophical concepts of soul, body, and mind. It seems that our body forms the purely material (timeless) dimension of our reality, whereas our mind forms the purely temporal (matter-less) dimension of this reality. However, we have already argued that without any material component of our reality, it means, without any quantum extension (quantum area, or quantum action) we have nothing to experience with our mind. On the other side, without any temporal component of our reality, it means, without any quantum duration (quantum period, quantum cycle) we have nothing to experience with our senses. Only through the perfect duality of body and mind, realized through an ideal coexistence and cooperation of these two components of our reality, we can live in permanent relations with the Universe; conscious relations on the level of our already fully evolved brains, and subconscious relations on the level of our still partly developed super-brains (presently located rather in our gut, and not in our still much too small head).

However, the new-paradigm point of view cannot be completed without a proper understanding of the superior element in the entire process of the Universe creation. This superior element, the quantum creativeness, has to be considered as the very origin of the above defined dimensions of body and

mind. On our example of a single human being, where we locate the terms body and mind, the best term corresponding to the quantum creativeness seems to be the widely used (and differently defined) concept of soul. Nevertheless, a more precise correlation between the trio of ideas soul-body-mind and our individual consciousness and the global (or universal) consciousness, is the nearest research task for the Laszlo Institute of New Paradigm Research. In a compact form, our new-paradigm definitions of the three ideas can be given as follows:

Creativeness (soul) ---

- the Universal Unity;
- the Universal Creative Potential;
- the potential extension (creation) of a quantum in our Universe;
- the expression of Oneness (Creator, God);

Matter (body) ---

- the material creation of the Universal Creative Potential;
- the necessary condition for a physical existence;
- the spatial extension (size) of a quantum in our Universe;
- the expression of material (body);

Spirit (mind) ---

- the temporal creation of the Universal Creative Potential;
- the necessary condition for a physical experience;
- the temporal extension (duration) of a quantum in our Universe;
- the expression of spirituality (mind).

5. Some additional remarks to consciousness and spirituality

As to consciousness, Laszlo and Currivan wrote 2008:

"As is the case for the definition of *mind*, there is no agreed definition of *consciousness*. Nonetheless, it is generally considered an attribute of mind, characterized by an entity being aware of itself."

In 2nd Section here above ("*The body-mind problem in old paradigm*") we read that consciousness will be sometimes identified with mind. In accordance with our new-paradigm definition of mind, we have to differentiate between consciousness and mind, because mind is just one of the two fundamental components of our reality, but consciousness should relate not only to our experiences but also to our sensations due to stimulating of our sense organs, like touching, smelling or hearing, where the material component has to be included as well. On the other side, we see that the "hard problem" of consciousness research disappears now. Consciousness cannot be considered as emerging in the "material" brain alone. The "material" component of our brain, without a corresponding duration of each quantum interaction, is never capable to contribute to our thoughts, feelings, or dreams. By the way, it is also the reason why we cannot find any thoughts or feelings in a "dead" brain (as well as meridians in a "dead" body), when the corresponding quanta had already lost their energetic "identity".

As to the manifold use of the term "spirituality", we have to modify our way of thinking now, because,

according to the new definition, every single quantum of our Universe is a spiritual object. Its spirituality is thus nothing extraordinary, and there are, for example, no non-spiritual people among us. If we wish to relate our "internal" life to our religious feelings, we have to use the religious term "soul". Most religions consider the soul to be man's divine or God-given essence. While some religions believe that the soul will exit the body after death others believe that souls exist in all living things as well as in non living things.

References

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