

# Reason as a Biological Function

Received March 11, 2019

Revised March 30, 2019

Accepted April 4, 2019

**Key words**

Reason, biology, spirituality,  
possibility, time

**It is plausible that the so called “reason” is a biological capacity of our species and thus is severely limited as to the understanding of ultimate reality or truth. In many fundamental respects it is similar to our senses of sight or hearing, to our body’s ability to metabolize, or to our abilities to walk or use our hands. Since reason is closely connected to our biological senses I start with the description of their limitations. I proceed to the discussion of some fundamental conceptual structures of reason, which may be deeply flawed in the face of reality as it is in itself, such as the concept of possibility, of time and of the beginning of all. I discuss shortly also the status of logic, scientific theories and language because of their close kinship to reason.**

## 1 Introduction

Whether we are aware of it or no, many of us understand reason as some kind of divine entity. It seems to be as if omnipresent, absolute and objective – not a mere biological faculty of a biological organism. In this paper, I would like to present an alternative approach, an approach which will place reason, as well as its kindred – logic, language and their respective imagination – among the equipment of one species of biological organism, which evolved on this Earth under the curatorship – at least to a significant degree – of genes and Earth's environment. I am not saying that we are only this material organism or that traditionally understood evolution was the sole origin of our biology, but we certainly are at least partly biological organisms and evolution understood in this way can clearly tell us much about our biological design.

When we normally use reason – not understanding fully to this day what it really is, in my opinion – we have a tendency to apply it to every problem which we face. But is the use of reason always appropriate? If reason is similar to other faculties, capacities and abilities of us as biological organisms, it should not be applicable successfully to all problem situations. Let us consider, for example, our faculty of sight – it can be used successfully in many situations, but by no means in all. For example, if there is not enough light, or if we are to find out some properties of things which cannot be revealed by our eyes, sight will be of no avail to us. Or take our hands. We can do many things with them, but they certainly have their limits and not all problems can be solved with the help of them. Because of their physical magnitude, shape, structure, functional possibilities and sensory equipment, they are quite limited. If the reason – and logic, language and so on – are also biological like our sight and hands, here too we can expect serious limitations. Let us look to the matter more deeply.

Since the reason stems and originates in some sense and partly from our sensory apparatus, let us investigate it first. Reason and biological sensory equipment are deeply related and dependent on each other in ways not apparent at the first glance.



### About the author

**Mgr. Ing. Michal Kutáš, PhD.**, is a philosopher interested in spirituality, both current and traditional. His published works include articles on the issues of free will, identity, logic, science, evolution and spirituality, as well as translations of philosophical texts from English to Slovak. His email address is [michal.kutas@gmail.com](mailto:michal.kutas@gmail.com).

## 2 Senses

Let us start with the sight, which is a pride of our species sensory faculties – at least in comparison with our other sensory capacities. As everybody knows, our sight is able to detect electromagnetic radiation from a very narrow segment of the electromagnetic spectrum (from about 380 to 740 nanometers). Thus, we are blind to very many things which really exist in our environment. Visible light does not inform us even about all properties of the objects we see. Also, resolution of our sight is finite and so we are not aware of vast amount of detail on the surface of objects (not talking about their inside, which is typically unseen) – we as if see only a blurred version of them, an extremely approximate picture. It is as if we looked at the globe which does not picture more that countries and greatest rivers and cities – detailed complexity of Earth's mountains are reduced to simplified patches and many important things are not seen at all: we would not see trees, buildings, people, animals, flowers – we would see practically nothing. And the microcosm of our hand, or of a flower is equally full of important complexity. But before our eyes there appears only extremely simplified object containing almost nothing from what is really before our eyes. This real microcosm, which is really significant for us (through its bacteria, viruses, chemicals), is not seen at all by our sight. Almost all important structural and functional aspects are hidden from us. In reality, we are thus practically blind. We do not live – through our sight – in reality, but in almost completely reduced and impoverished version of it. The picture is, in addition, distorted in a very fundamental way, which we will discuss shortly.

If we examine others of our senses, situation is no better. Our hand passes over the piece of wood almost without feeling, as if dead. It is not sensitive to the actual complex shape and microcosm of the piece of wood – of its “mountains”, ravines, deep abysses and great, strange caves. It does not feel life of small insects, parasites, unicellular organisms. Many physical fields holding together its atoms, mingled together in vastly complicated shapes, are not felt but in a simplified version of its solidity – one datum replaces almost infinite amount of data. This almost unlimited complexity is squashed into most reduced overall shape, property of solidity and its degree, with addition of smoothness or roughness and few others.

Our smell can inform us about the presence of some chemicals, but not all. We cannot precisely determine the quantity even of those we do smell. And certainly, we cannot detect positions of a molecules in the air before us and structure of their dance in time and space. Similar is true of our hearing and taste, and about all of our sensory apparatus overall.

But our illusion is deeper than that. According to theory of relativity, the space itself is not as straight as we imagine it to be on the basis of our sensory input. Time also is different from what we know about it from our ordinary sensory experience: from the point of view of one observer, time goes slower for another observer who is moving relative to the first one. Moreover, time goes faster when we are farther from the Earth's surface than if we are standing on it: in a stronger gravitational field, spacetime is curved more, and time goes slower. We are not aware of any of these things, although they are a reality everywhere around us. Reality is not quite like we imagine it to be. You may object now, that these things we now exactly thanks to the power of our reason. That is true but let us not generalize from this to its universal applicability and boundlessness.

We are talking still about our biological sensory equipment. Quantum physics introduces even more fundamental surprises. According to it, all elementary particles behave differently from what we are used to expect on the basis of not only our senses, but also, it seems, on the basis of our logic and reason. All of the quantum world is fundamentally different from what we are able to imagine. And this quantum world is all that exists – what we see as macro-objects are just massive parts of this quantum reality. According to quantum theory, particle of matter cannot be said to be in an exact position independently of our measurement of its momentum. The more precisely we measure its position, the more indeterminacy will remain in its momentum and thus in velocity. This particle is in some sense not at one definite space location but exists everywhere with some probability before we execute a measurement. And even after that, there will remain some measure of indeterminacy of its position and its momentum, extending beyond inaccuracy in measurement and therefore inexplicable by it. Very strange fact that measurement and thus observation (maybe, in some way, consciousness) enter into picture as irreducible factor is not known from our experience with physical objects as we know them from our sensory experience. A ball is not everywhere if we are not looking, jumping into some position only because we look at it – or maybe because it becomes conscious. Also, in our sensory experience it is not true that we are able to determine where the ball is only at the expense of determining its velocity. We do not know from our sensory experience a law according to which when we see the ball clearly, we are not able to see whether is it moving or no, and how quickly; and, on the other hand, when measuring its speed, its position does not get hidden from us. Let us note here, that the position of the ball, in quantum world,

would not get blurred because of its speed (when measuring its speed), but because we try to measure its speed precisely. So, the ball, which is “moving fast” (but how can we tell?), would not get blurred, if we would not measure its velocity precisely, and the “standing” ball would be blurred, if we were to try to measure its speed with great precision. But in the real world – because all is quantum at some level, there is no exception – situation is rather like that, although we do not sense it. It is very different from what we are able to imagine based on our senses.

So, according to this very successful scientific theory, objects have no precise boundaries, they intersect with each other and mingle with each other, can jump through each other, can be connected in a mysterious ways of quantum entanglement, and are in a sense not “objects” at all – they are not objects in the sense our senses construe objects for us. The reality is not objectified – not in the sense we know the “objects” – and observation seems to *create* the final version of what we see, not only *reveal* what is.

What we see is thus almost entirely wrong, and what is there is deeply different and extremely richer in detail and complexity – it is strange and different. Reality itself, even according to current, in no way final scientific theories, lives and breathes for the most part beyond our imagination, moves in ways unknown to us. Almost completely blind and deaf giants, not knowing even themselves because they are made from the same stuff as is reality, walk here almost without awareness, not knowing what they do – stepping into relations and fields they do not see nor smell, living on an uttermost surface, seeing all from a great distance, not used to the nature of matter, not able to imagine it adequately. They do not live consciously in the only medium which is and in which they daily swim. Literally, we perceive almost nothing of a physical reality in which we live, and even the surface appearing before our eyes is fundamentally distorted – not only extremely simplified and schematized. Do you see the darkness just before our eyes, the unknown world, the mystery?

The limits of our sensory apparatus have bearing on the limits of our reason, language, and even logic. Reason can stretch itself, with effort and long training, to go as far as the relativistic world. But it is not able to digest and understand fundamental nature of matter and energy in quantum realm. It can feed on mathematical objects representing the quantum world before the observation and also to understand the jump from them to what is observed, but he is not able to enter the picture itself and unite these two parts of the theory. That is why we look at the double-slit experiment with a dull look – not able to unite in our understanding the wave function and its reduction. The problem is not in the complexity of equations, but in the question: which quantum object counts as an observer? Thus at least I understand the problem of the Schrödinger’s cat. If there would be a conscious human being in the box, we would have the answer: he will be either dead or alive – just one of the possibilities – long before we peek into the box, because he observed the situation from inside. If there would be a stone inside the box, the system would jump through reduction in the moment of our observation of the inside of the box – and till that it would remain in the state of superposition of hit and unhit stone. But what about the cat?

### 3 Reason and the Senses

It seems to me then, that in the present state of science, reason is really not able to cope with the quantum nature of matter and energy, which is revealed even in the simplest experiment with two slits. It would also be good to ponder that we do not normally view objects as functions of probability and as in superposition of possibilities which will get a partial definition only after our observation. Our reason has difficulty to picture this state of affairs, and is not able, it seems to me, to overcome the barrier I presented in the previous paragraph. But our understanding of objects as distinct entities which are as they are, with their properties clearly defined and independent of our observation, is a part of our reason itself – part of its presuppositions. Not only our common sense, but also our philosophy and to a significant extent also science, is based on our sensory experience, and this includes also our concepts. Concepts, which are an important part of our reason, are to some extent determined by our sensory experience. It is not a coincidence that when we think about physical objects, we imagine definite and distinct objects with definite shapes, moving in definite speeds and placed in definite locations. We presume they are there independent of our look. They have definite properties, which are connected with a given object. Yes, we can train our imagination to become familiar with a relativistic view, and to some extent also with the quantum one. It is worth noting that this demanded of us to change our concepts and building blocks of our imagination. Maybe you want to say now that concepts are not part of our reason and that it therefore needed not to be changed in the process of such training. We can accept this, if we want, because, even if it would be better to say our reason was changed, he was certainly capable of doing so. Anyway, we were able to change our concepts, including very fundamental ones, like those of time and space. Thus, the reason seems to be potentially very wide in its range of application and in its potential. But – I want to say again – there seems to be, at least for now, one clear sphere of science, in which no amount of training of reason will suffice for us to fully understand the subject matter, and that is the quantum nature of matter and energy, visible already in the most simple version of double-slit experiment.

As an intermezzo, let us consider the question of how it was possible for us to survive, if we perceive so little and in such a distorted way. Let us look at a bee. This is a biological organism, well able to survive and to pass its genes to the next generation. But how much this bee understands of the world around it, and how much it perceives? Sensory apparatus of the bee is extremely limited, just as that of humans, yet it can collect the information needed for the survival of its genes: a bee can find the appropriate flowers repeatedly, fly to and from the beehive, build and repair it, feed the young, and so on. It does not matter that its sensory possibilities are quite limited. It can be unable to perceive almost everything, as long as it can collect the minimum amount of information from the world, if it is just the right information needed for its activities. But, what about its knowledge and understanding? The bee certainly has in its nervous system some representation of the world around it, which is typically sufficient to execute all of the actions it needs for passing its genes. This model and procedures running on it can be called a knowledge or understanding of some kind – it is some kind of internal informational representation of some aspects of reality with a dynamic aspect enabling the adequate action, used for determining these actions; it is also based on its sensory input. But, as we can see, this “reason” of the bee, its “logic”, and also its “language”, are extremely limited – yet they suffice for the genes. Are we different from that? Why should we be? We are – as far as we are biological organisms – also the product of evolution. Yes, we can do much more than bees, and our understanding is much better. But would it not be reasonable to expect that our reason is also severely limited, in ways maybe which we are not able to imagine – just as a bee is not able to imagine its limitations? After all, our reason is, at least to a great extent, if not entirely, based on the workings of our brain, which is, as we all know, just a biological organ, “originally created” by evolution only for the passing of our genes to the next generation – just as our sight, hearing, our legs or our metabolism. It can be expected to be significantly limited as to the ability to comprehend reality as it is in itself.

Our senses and our reason can be thus in a very similar position to those of a bee, and maybe the true situation of our sensory perception and mental categorization is adequately described by a spiritual teacher Eckhart Tolle: *“A tree is far more than a tree. Every label reduces it immediately as if you knew what is there. Every mental label gives you the illusion of knowledge. You don’t know what that is. How could you know? It’s a mystery that remain a mystery. It is a beautiful being. The surface – it looks like a tree – perceived through the senses. But it is a mystery, everything is a mystery, and it’s only mental labels [that] give you the illusion that you know. The moment [you say] ‘Oh, that’s a tree’ – What do you know? Nothing. It’s just sound coming out of your mouth.”* (Tolle 2001).

Look at a bee and imagine how incompletely it perceives a flower through its senses and through processing their input in its brain. But if we are a biological organism just like it, it is probable that our perception of a tree is very limited and distorted in a similar manner, so that the tree is really something much more mysterious and rich than we deem it to be if we base our understanding on our senses and our mental equipment.

## 4 The Concept of Possibilities

Let us look now at some possible shortcomings of reason as revealed by our reasoning itself (as if we were discovering the limits of some tool by trying to use it). Important, although maybe not necessary, part of our reason is the concept of possibility. Possibility splits in our thinking into two categories: empirical possibility and logical possibility. We can step out of the limits of the empirical possibility by considering determinism to be true. It is relatively easy to imagine that all phenomena are determined (maybe by previous phenomena and by some laws). In that case there would not be any real empirical possibility. All of the empirical possibility (an idea that things could have been otherwise while in accordance with the actual natural laws) would exist “only in our head”. Maybe it is only a result of our subjective ignorance: we think it is possible both that the train will be late and that it will come on time not because both of these scenarios are really possible, but because we do not know which one of them is determined to happen in the future.

On the other hand, to deny the logical possibility seems to be very difficult. This kind of possibility seems (for reason) to exist under the empirical layer of possibility: we have a tendency to say: yes, it may be that the coming of the train is determined by the laws of physics and the initial state of the universe, but it is logically possible that the initial state of the universe or the natural laws could be different; we are able to imagine such a (logically, not empirically possible) “state of affairs”. But does this ability to imagine such things prove their reality? What if there is no logical possibility? Maybe, also this, is only a product of our imagination. Its functional reason may be similar to that of empirical possibility: it is practical for us, beings with a limited knowledge, to count not only with more than one possible hypothesis for future scenarios for a given hypothesis of initial state and natural laws, but also to count with more possible hypotheses about natural laws and initial state themselves. We do not know with certainty what natural laws are in operation in the universe and what was its initial state. So, somewhat similar to gamblers, we have to split our bets, in order to be ready for more “possibilities”, although in reality even laws and initial state maybe could have not been different. The realm of possibilities itself maybe split to two kinds – empirical and logical – because of empirical and practical reasons. For example, if we want to formulate empirical laws, we maybe need a language which permits us to formulate many candidates for such laws. And so, it seems that these are in some sense possible. But they can be only the product of our thinking, or of evolution of our language or reason.



Let us examine the concept of possibilities in a more philosophical way. What does this concept probably (e.g. given most plausible formulation of it) imply? In order for possibilities to be real, they should be. But where are they? We are not able to empirically perceive or touch any of them. Is this not suspicious? Would it not be much more reasonable, and also in accord with Ockham's razor, that they are in fact only the product of our thinking, without any real grounding in reality? Introduction of possibilities to ontology presents a significant problem. What is the nature of their being? If they somehow exist, we should probably posit a new kind of being: to so called actual existence we should add potential existence. But the concept of the actual seems to exist for marking which one of potential states of the world is actually real: it serves for marking what exist: the existent is actual. But if what is potential also exists, many questions arise: What does it mean that something is actual and something only potential? Why one – and only one – state of the world is actual? Is it not strange that from the fixed set of possibilities, which exist in some other way than that which is, every moment one is chosen as actual and then instantly discarded in order to be replaced by another? What is the purpose of this peculiar mechanism? And what decides which of these possibilities will become actual? Does this deciding principle exists yet in another, third way? If we look at this whole clockwork mechanism, dynamic part of which works over something like the world of Wittgenstein's *Tractatus*, or over something like the universes postulated by various logics (like for example propositional or predicate logic), it seems rather like our own tool, part of the equipment of our cognitive apparatus – not as a part of the world itself. It resembles rather our own construct, which is practical for us to use. But the idea of possibilities is very strange both from empirical and philosophical perspective.

We should note that in quantum physics there is something in some sense similar to possibilities: superposition of quantum states. But this is different from our ordinary idea of possibilities in various respects. Superpositions disappear after observation, not after decision. Since observations can take place many times in the universe, superposed possibilities are constantly reduced. On the other hand, they constantly arise due to nodes of possible histories of quantum world. And, after the event of observation, indeterminacy does not disappear altogether, but is only reduced. This idea of possibility, based on real investigation of the world, is nonetheless very interesting: real possibility, as we can find it in quantum physics, seems to be different than we expected. The real world is usually – or always? – different from what we con-

ceived in our mind by thinking previous to observation and experience, and even from what we constructed only based on our unaided senses. Pure thinking (reason without senses) in particular does not seem to reveal the reality, but rather breeds our own constructs, which have very limited use and mirror the reality very poorly, but most of the time not at all. We look at these constructs, products of our own mind, when thinking without experience and observation, and not at reality itself.

In cognitive linguistics, there arisen an interesting outlook on possibilities. Although it is interested primarily in language, metaphysical (ontological) question enters the problem also, although not as a primary issue. Croft and Cruse introduce this approach through introduction of these metaphysical questions: "*In a truth-conditional semantics, the standard way of representing the status of situations is as possible worlds: there is the real world, and then there are worlds with situations that are possible but not (necessarily) actual. Possible worlds are then identified with a person's beliefs or wishes or some other mental attitude. Possible worlds pose metaphysical problems for many people, however. Do possible worlds exist? If so – or especially if not – where are they?*" (Croft and Cruise 2012, 33). In the words of Croft and Cruse, cognitive linguist Gilles Fauconnier "*proposes an alternative model of representing the status of knowledge that is metaphysically more attractive and allows for elegant solutions to a number of problems in semantic and pragmatic analysis. Fauconnier replaces the notion of a possible world with that of a mental space, and argues that the mental space is a cognitive structure. That is, the allocation of a situation to 'Gina's desire,' 'Paolo's belief' or 'The hypothetical situation' is done in the mind of the speaker (and hearer), not in some as yet unclear metaphysical location.*" (Croft and Cruise 2012, 33) [1]. The main advantages of the Fauconnier's approach do not lie in the solution of the metaphysical problem of possibilities (he in fact argues that cognitive structures postulated by him are even more useful as constructs – in ordinary thinking outside of science – than full possible worlds), but, nonetheless, his solution seems much more reasonable also from the point of view of ontology. We see that the difficulty of postulating possibilities as existing outside of our mind is felt by many.

Maybe, in living in the world of possibilities, we do not live in reality, but in illusion. Maybe what is, "have to be" like it is. Maybe it could have not been otherwise: what is, just is.

## 5 The Concept of Time

Let us look now at what is possibly another problematic offspring of our reason and senses. Let us consider the idea of time. Most scientifically sounding image of time is that of a dimension, as for example in physics. Both Newtonian and Einsteinian theories of gravity present time as a dimension of a mathematical object (the Universe), which is at the same time – according to a given theory – physically real. But this object itself is not in time, nor outside of it. Time is one of its dimensions, alongside those of space. But it is not well imaginable how this object exists, if it is not in time. Whether we say it exists only for certain duration of time or whether we say it exists always, we are introducing a second time, so that a time itself remains not fully explained. This way thus does not seem satisfactory. But if we say that time is only a dimension of this object, we are not really able to imagine how this object itself exists. If we say it exists out of time, I am not sure whether we are able to really understand this. It seems to me that we always, although implicitly and tacitly, presuppose that what exists also exists in time, not outside of it. For how long does this object – the universe – exist? If neither always nor for certain amount of time than does it exist for no amount of time? But that would mean it does not exist at all. Maybe we can say that the duration for which a given space-time object exists is the longest line parallel with time dimension, which can be drawn through it, and that consequently also the whole universe as a greatest possible object exists for a duration which correspond to a longest line parallel with the time dimension, which exists in it. But, even then, I personally quite cannot comprehend how the overall universe-object exists, taken as a whole. And if we return to the thesis that this object exists out of time, the questions arise: What it even means to say that something exists out of time? Does the word “exist” functions properly with the phrase “out of time”?

We are able to imagine this object as containing time as a dimension because we abstract from the idea of time (we see a static space-time object) and we ourselves stand (not being necessarily aware of it) outside of this object when imagining it. Thus, we look at it in our imagination and thinking for certain duration of time, as we would look on a vase. But this object, in itself, should stand outside of time in which we are, and we should be only part of it.

But what about time as a dynamic concept? In this case, the questions arise regarding the nature of past, future and present. How past exists? If it does not exist, then how it is different from that which also does not exist in the present but also did not exist (in the past)? And if future also does

not exist, how it is different from the past, if past also only does not exist? In our ordinary language, we seem to distinguish between what is possible but did not exist, what is possible and did exist, what is actual, what will exist, what can (but not necessarily will) exist in the future, and so on. So, it seems that what is past is not simply non-existent. And if it makes sense to speak about the past as distinct from what could have been but was not, then what is the difference between them? It looks like the “actual” past has some kind of being, but not the being of the kind present has. But, was not the word “existing” reserved for what is, and thus for what is actual and present? What is this new kind of being corresponding to what “is” in the past? And future, since it is different from both the past and present, should presumably get its own kind of being assigned. Suddenly, many kinds of being arise, alongside the being as being possible from our previous discussion. This is little strange and suspicious. Cannot these concepts be only our mental tools for coping with the world, and nothing more? They are very strange and when we look at them more closely, they do not seem to work very well – although they work (to a certain degree) in our practical life. But, when we try to make sense of them or analyze them, they seem rather like tools for handling the world as presented by our senses than like vessels of knowledge, mirroring the true nature of reality. In thinking more deeply about the past, future and present, we get baffled and confused – what are these, exactly? But this does not need to mean that past, future and present are mysterious – maybe they just do not exist as such in reality; maybe they are only our projections, which are to a great extent erroneous, but to some extent practical in the sense that they were able to help our genes to survive to this moment (which, in reality, may not be the moment – the present as we imagine it to be). What if the whole of our mental equipment connected with the idea of time is deeply flawed in the face of reality and catches only the minimal glimpse of it, needed for our survival?

Thus, the mysterious present, as imagined by us, may be to a great extent only a result of our “imagination” too. What if there is no specific “moment”, a “point on a line”, an “intersection”, a “snapshot” or a geometrical object between past and future? What if so-called past has not ceased to exist, but penetrates to a so called present? And what if so-called future, imagined as not yet existent, also trickles down to our imagined “present point” or influences somehow the present moment? We imagine the present as a point on a line, or as a snapshot of a movie. But are such ideas accurate? It is quite possible that past, present and future are much more mys-



terious than I just described – to the extent that something distantly similar to them really exists. Even the idea of connectedness of past, future and present probably presents the reality which we try to comprehend by our concepts related to time-idea very poorly. What is really going on may be well beyond our strangest speculations. When mystics and ancient spiritual texts speak about eschatology, end, final salvation, nirvana and so on, they are not able to grasp properly this reality even with the help of paradoxes, let alone with the capacities of reason. Let us ponder the following statement, for example. In *Lankāvatāra Sūtra*, a text from Mahāyāna Buddhist tradition, we read: “*But no beings are left outside by the will of the Tathāgatas; someday each and every one will be influenced by the wisdom and love of the Tathāgatas of Transformation to lay up a stock of merit and ascend the stages. But, if they only realized it, they are already in the Tathāgata’s Nirvana for, in Noble Wisdom, all things are in Nirvana from the beginning.*” (*Lankāvatāra Sūtra*, Chap. XIII, Nirvana) [2].

The thought that all is in “eschatological time” already, if we only realized it, occurs repeatedly in Eastern spirituality. “Eschatological reality” as if covered from “above” all time like an umbrella and transcended time barriers. Mystics and spiritual teachers often spoke of ultimate reality as being beyond time. Yet, from their reports it seems that reality is not simply out of time in the sense laws of nature presumably are or in the sense in which the space-time object we described earlier is out of time. It cannot be grasped by reason.

It seems that for example Tolle imagines the present moment differently than a point on the line of time or a snapshot of the movie of reality. I speak here of “imagining” only regarding his texts and speeches, in which he uses also concepts and language. I do not claim that his understanding of present moment in his experience is his imagination or mental construct. But in his teaching as embodied in his texts and words we can certainly discern conceptual structure. And in it we can see that his understanding of present, based of course on his experience and feeling, is different from at the first sight rationally easily comprehensible images of point on a line or a snapshot of the movie – or the like. Tolle speaks of present not only as of a present moment (in time) but also as some “active agency with intelligence” from which intelligent and adequate action, words or thoughts can arise. Sometimes his present seems to be identical with “pure consciousness” or “pure observer”. These and similar aspects suggest that he understands by present something in many respects different from our ordinary understanding. It cannot be adequately understood as a point in time or a snapshot, or some mathematical object between two different mathematical objects: past and future. His understanding of a present

cannot be fully grasped by reason. It seems that only experience similar to his can show what he means by present. This does not mean that his understanding does not partly grow from our ordinary experience of a present. But this ordinary experience does not fully and on a whole adequately contain experience which he is talking about. Present moment as ordinarily experienced thus can be the starting point of our understanding of what he means by present, but this experience has to be deepened and developed. And this is done also with the help of other ordinary experiences, like that of a consciousness or observing, which at first seem to be clearly different from the experience of the present moment.

## 6 The Concept of the Beginning of All

Let us think briefly about another problem connected with time idea, the problem of the beginning of all. Both possibilities imaginable by reason – a universe with beginning and a universe without beginning – are, after deeper analysis, nonsensical to the reason. In the case of beginning, we are not able to explain why anything began, from what, and how it is possible. If we say that time also began with the beginning of cosmos, this does not answer how the beginning was possible. Why beginning happened? If we brand this question as nonsensical, an issue is still unexplained and unintelligible: without reason, from nothing, and without “how”, universe began. If you look at it, it does not make much sense. But the image of a universe with no beginning is problematic too. Although we need not explain now how, why and from what it began, we are not able to imagine well infinity of the past. Every moment of the universe arises from the previous state, but, since infinity means there is no first point in time, it is not determined from what universe arises ultimately. If we say that for every moment it can be said from what it arises, namely from the previous one, and that we cannot speak of ultimate “from what” (it arises), because it just not has a beginning, problem still remains. If infinite amount of time already passed, then universe could have not come to this state, which is infinitely distant from some other past state. And such infinitely distant past state has to exist, because if all past state were only finitely distant, that there would be a beginning. Now infinity means that you cannot go to the end, because there is no end, and thus it cannot be traversed. In consequence, infinite distance between any of the infinitely distant states in the past and the actual state could have not been traversed and universe could have not arrived at this state, so this state should not exist – but it does. And if we say that infinite distance can be traversed, but only in an infinite amount of time, this does not work

either. Just like infinite distance cannot be traversed, e.g. it is not possible to reach its end, because there is none, also the infinite amount of time cannot pass, e.g. it is not possible to arrive at the end of the infinite interval of time by a passage of time, because such an interval just does not have an end.

Thus, it is not well imaginable that past is infinite. And what would it even mean? Do we know? So, both possibilities, that of a beginning and that of no beginning, are indigestible for reason. Yet, according to its logic (or maybe only according to the classical logic), there are no other possibilities. Let us note finally that positing an instance out of time like is for example a God existing beyond time, also does not solve the problem. His act of creation is an act, and act is not imaginable out of time. But he presumably created time too. On the other hand, if he did not create time, but acted in it, the question moves to him: is he eternal or did he also have arisen? Both of these possibilities we already discussed, and with no success as to understanding them fully by reason. To me, both – and seemingly only possible – answers seem nonsensical.

## 7 Logic

Let us look now at the issue of logic, so intimately connected with reason. Classical logic, in past considered to be the only logic, or *the* logic, is, as we know, not the only possible logical system. To this day, many different logical systems were developed, including intuitionistic logic, many-valued logics, fuzzy logics and so on. Many of these non-classical logics are developed as well and soundly as classical logic is. From this point of view, they are not worse than classical logic; they are not less logics than classical logic is. As logical systems, they can be defined as well and as exactly as classical logic, and also studied in the same manner. Does it even make sense to ask which of the many developed logics is the right logic? In some senses no, and in some senses yes. In logic understood as a study of logical systems, many non-classical logics are equal to classical logic (those, which are fully developed and exactly defined), and it does not make sense to ask which one of them is the true logic or *the* logic. But, if we are interested in what logical systems may be involved (and to what extent) in our actual reasoning and in language (for example in its connectives), or which of them are useful for the description of the world, for example in physics (hidden in mathematics, which is a tool for description of a physical world), the question of the right logic has a meaning. Maybe we should, though, reframe the question from “Which logic is the right logic?” to “Which logic is used, useful or practical and so on, to what extent, and where?” And I think the only

sure thing we can say about the relation of logics to reality in respect of knowing it is just that. We cannot say with much confidence that any logic mirrors some deep or universal aspects of reality, but we can say, for a given logic and given set of problems, whether this logic is useful tool for solving these problems and to what extent.

## 8 Scientific Theories

This is connected with the question of truth, including the truth of scientific theories, which are the offspring of reason, investigation, experiment and so on. In my view, we cannot confidently say that our scientific theories are true. The only thing we know with a sufficient degree of confidence is that thanks to these theories we were able to do some things which we were not able to do without them: for example to go to the moon, to construct a computer, to travel faster, to see what is very distant or to communicate over great distances almost instantly, and so on. These achievements cannot be questioned. But do we know more about scientific theories than that they enabled us to do these things? I think we do not. We do not know to what extent they are true. Although I do think that if something is useful there also has to be some grain of truth in it, it needs not be more than this grain. It is quite possible, that even our most advanced scientific theories taken together do not reveal more than this tiny grain of truth from what is real.

## 9 Language

As to the issue of language, which is also deeply related to reason, I would like to give the word to Geoffrey Samuel, who when describing the Mahayana Buddhism concept of emptiness, explained it like this: “*Mahayana Buddhism holds that there cannot be an ultimately valid and accurate language in which the universe can be fully and definitively described. [...] Phenomenal reality is ‘empty’ or ‘void’ in the sense that our understandings of it are empty and illusory; the ultimate reality that lies beyond it is also ‘empty’ in that emptiness is all that can be positively asserted about it.*” (Geoffrey 2012, 55). But, “*‘emptiness’ is not quite the same as there being nothing there. The universe is not a void in the sense of an absence of anything real, in some ways quite the opposite. It is rather void or empty in the sense of the absence of any specific thing, concept, feeling or state that human processes of consciousness may assume is there.*” (Geoffrey 2012, 55). Here, inadequacy of our mental biological equipment is extended even to our feelings and conscious states. Although the question of our feelings and conscious states is not the focus of this paper, it is interest-

## 10 Conclusion

ing to consider that probably also our feelings, to the extent they are creations of our biological equipment, do not correspond very well to reality itself; the knowing-potential of our conscious states opens even deeper question, which we will refer to briefly in the conclusion. Anyway, it is quite possible that our language is severely limited in its ability to grasp the true reality of that in which we live.

We looked at scientific language when we considered scientific theories. Ordinary language seems to exhibit additional problems (which can also be its strong side in many respects), which are connected to its vagueness, nature of meaning and categories and so on. It is worth consideration in relation to our topic that cognitive linguist George Lakoff says that so called cognitive models need not be consistent. He and other cognitive linguists postulate these cognitive structures as an explanation of how we understand words and concepts, but also of how our knowledge of the world, or at least that part of it which is connected with the structure of language, is implemented: *"We use our cognitive models in trying to understand the world. In particular, we use them in theorizing about the world, in the construction of scientific theories as well as in theories of the sort we all make up. It is common for such theories not to be consistent with one another. The cognitive status of such models permits this."* (Lakoff 1987, 118). Lakoff investigates both scientific and folk cognitive models and finds that indeed they do not need to be consistent with one another. This gives them, in my opinion, paradoxically also their strength, because we can grasp some phenomena of the world even if we are not able to construct complete, consistent and exact theories about them. On the other hand, this inconsistency may suggest that our language is really not able to grasp reality in its fullness.

What we said earlier about scientific theories holds also for our philosophical theories, for religious conceptions and so on. Because of that it maybe would be wise not to take them so seriously and to consider them rather to be only the tools which help us – to work on us, to suffer less, to live better and more meaningfully, to be happy and joyful, to be better, and so on. If they work, there has to be some truth in them, in my opinion, but it need not be, as we said about science, more than a keyhole view at what reality really is. Here, the question of spiritual and mystical experiences opens up: Are these experiences of unity, connectedness, peace, unconditional love, stillness or being beyond time a way to experience reality as it is in itself? We do not know, although according to the reports, it often feels like it. But even here there seem to be differences, including maybe the differences in depth and stage. So, looking from outside, we should be humble. These reports also often talk of deep (and peace-bringing) not-knowing, anyway.

## Notes

- [1] Fauconnier explained his concept of mental spaces in his works (Fauconnier 1994) and (Fauconnier 1997).
- [2] In this context, the word *Tathāgatas* can be understood as referring to those who realized *Buddhahood*.

## References

- Croft, William, and D. Alan Cruse. 2012. *Cognitive Linguistics*. Cambridge: Cambridge University Press.
- Fauconnier, Gilles. 1994. *Mental Spaces*. Cambridge: Cambridge University Press.
- Fauconnier, Gilles. 1997. *Mappings in Thought and Language*. Cambridge: Cambridge University Press.
- Geoffrey, Samuel. 2012. *Introducing Tibetan Buddhism*. New York: Routledge.
- Lakoff, George. 1987. *Woman, Fire, and Dangerous Things*. Chicago: University of Chicago Press.
- Lankāvatāra Sūtra*. Accessed March 8, 2019. buddhasutra.com.
- Tolle, Eckhart. 2001. *Eckhart Tolle at the Omega Institute*. Accessed March 8, 2019.youtu.be.