

## The Concept of Time in Yoga

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**Abstract:** *In this paper, we consider our everyday linear concept of time, from where we draw the conclusion that time is only one perception, and that it depends on someone who perceives it. We put major emphasis on the Yoga concept of time for which we believe that it has common points with the quantum concept of time. In yoga, time has a cyclical nature. The concept of time is closely linked to the cycles of creation and dissolution of our Universe. Time is eternal, with neither the beginning nor the end. In yoga there is no division of time to past, present, and future. There is only the eternal NOW which is contained in all our past and future. In this paper, we also point out practical benefits to the daily life, which follow from adopting the yoga concept of time.*

**Key words:** *yoga, time, concept of time*

### Everyday perception of time

The concept of time has always been one of the main subjects of religion, philosophy and science studies. Issues related to the true nature of time attracted the attention of many thinkers, both philosophers and scientists. Aristotle, Augustine, Kant, Hegel, Newton, and Einstein are just some of them, who were dealing with the question of the essence of time.

There are various explanations to the question what is time depending on the concept how it is perceived. Usually, talking about time refers to the time, which we measure in everyday life. Measuring the passage of time gives us information about the chronological order of events, when the event happened and how long did it last. Our everyday comprehension of time is based on a linear concept. Within this concept, time passes in only one forward direction, and everything has a beginning, a middle and an end. Everything what happened before the given moment is called the past. What will happen after the given moment is called the future, and what happens at this moment is called the present.

Each of us perceives in a subjective way. A same time interval for someone may seem very long while for others it may seem quite short. This leads to the conclusion that time is something very relative and related to the one who is watching. The fact that time is passing, and that it is passing only forward is our subjective feeling. All this points to the fact that time is nothing absolute, and that it is one form of perception. In order to align our perceptions of time with everyday life, various systems of time measurement as clocks and calendars are designed. Since time is a perception and since it is related to someone who perceives, it is a relative term.

What is actually time and whether it actually exists? What is the true nature of time? Is the concept of time we have only a matter of our subjective perception, or is time actually something completely different? These are just some of the questions that have tickled the attention of many seekers of truth.

In contrast to our everyday understanding of time, time in Yoga is understood in a different way. Time, the Sanskrit "Kālā", represents the manifestation of God, i.e. the essence. Permanence or eternity is the main feature of time in yoga. Time has no beginning and no end. Past, present, and future exist simultaneously at every

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moment of existence. Yoga leads us to the importance of living and acting in the present moment, i.e. NOW (Nikić, 2010a).

In yoga, it is considered that the nature of time is cyclical. There are cycles of time, so-called Kalachakra-s, which represent the cycles of creation. Life and death is just one of many cycles of creation and dissolution. Understanding of life and death as something final is just one big illusion. Only after the feeling of limitation by time is overcome, immortality is achieved according to the teachings of yoga. In this concept of time, death is not the end but the door to the next cycle and the new birth. Because the process of creation and dissolution is eternal, i.e. it never ends, everything begins at the end and ends at the beginning.

Before we further consider the yoga concept of time, let us look briefly at the concept of time that is present in modern science.

### **Scientific concept of time**

Speaking with the language of science, time is one of the physical quantities by which we determine the position of an object in space-time continuum. In physics, time is closely connected with the movement of the body.

English physicist Isaac Newton introduced the concept of absolute time and space. According to Newton, time and space are independent aspects of the objective reality. He defines time as a continuous series of moments that take place one after the other. He separates the absolute time, which exists independently of any observer, from the measurable empirical time. According to Newton, the absolute time is the right time, contrary to the time based on the conventions of the measurement systems. According to Newton, time is one of the main features of the Universe and it propagates in pace of its expansion. In the formalism of classical mechanics, the term of absolute space is replaced by the idea of the inertial reference frame, in which the coordinate system is defined by a uniform motion of objects in the same direction with the same speed. Since the Newton's physics is deterministic, time and its passage are determined, i.e. time flows from past to present and further into the future. All time events occur in a predetermined way from the beginning in the past to the end in the future. This is the classical Newtonian understanding of time.

Before Einstein developed his special theory of relativity (STR), the concepts of absolute space and time were considered independently of each other. He connected time with the motion of matter. If there is no motion, according to him there is no sense to talk about time. The theory of relativity does not allow the existence of absolute time due to the non-existence of absolute simultaneity of events. Absolute simultaneity means that two or more events occur simultaneously for all observers in the Universe, who are located at different locations. After he had introduced the postulate of a constant speed of light, he linked time and space into a four-dimensional space-time continuum, in which time is the fourth dimension. Consequence of the existence of the maximum velocity of propagation of information is the fact that it makes sense to speak about some events that occur simultaneously at different locations only with respect to a particular observer.

Before Einstein published his STR, H. G. Wells in his novel "The Time Machine" from 1895, defined time as the fourth dimension as follows: "There is no difference between time and any of the three dimensions of space except that our consciousness moves along it". Einstein formulated the four-dimensional space-time geometry, in which time is just a kind of space as Wales wrote in his novel. In the theory of relativity, time and space are mutually dependent. Therefore, instead of considering space and time separately, as in the classical physics, the theory of relativity naturally regards them as a whole, as a unique space-time continuum. Nearly a decade after STR, Einstein came up with the so-called General theory of relativity (GTR), in which time and space are no longer considered as absolute, but the space-time near massive bodies is curved. This curvature is usually perceived as gravity. According to GTR, the space-time metrics is determined by mass and its distribution. In other words, the space acts on the mass determining its motion and the mass acts on the space determining its metrics. According to the GTR, the rate of time passage is relative depending on observer's state of motion, but also the entire structure of space-time is inextricably linked with the distribution of matter. Time flows differently in different parts of the Universe with different rates of curvature of space. As gravity is stronger, time passes more slowly.

The field of quantum physics offers one additional aspect of a perspective of time. Quantum theory, which was developed in 1925 by W. Heisenberg, provides a mathematical description of particle-wave dual nature of matter and energy. The time evolution of a physical system in quantum mechanics is described by the so-called wave function that represents the probability that the system is found in a given state at a given moment of time. Without going into very technical physical-mathematical explanations, and in order to understand the basic principles of quantum theory and to connect them with our everyday understanding of reality, we mention some principles of quantum mechanics in a simplified form.

The first principle tells that every quantum wave function (i.e. the probability wave function), contains all possible forms of reality. All these states exist as an possibility with a certain probability that they will be realized. Until the state of a system is realized, it is just one of many possible forms of reality. According to quantum theory, each measurement (i.e. monitoring) of the system has an impact on the system itself, changing the state in which the system is found. We can not say that something exists, unless it is observed (i.e. selected). The act of observation affects the outcome of the observation. Observation leads to the so-called "collapse of the wave function". At this moment, all forms of reality reduce to only one, i.e. a superposition of all possible states of the system to only one occurs. We can conclude that each quantum system is quantum-mechanically connected to other quantum systems and they influence each other. If consider ourselves as one of these systems and if we put ourselves into the role of observers, then we can say that we are the ones who choose and create our reality. As the subjects of our reality we see the reality around us as our awareness "illuminates".

According to quantum physics, objects exist in a non-manifested state until the act of observation, which leads to a collapse of all possible states only in one manifested outcome. An observer can not know what will happen with any system until he does the research. But the very act of research and the expected outcome affect how the system behaves in the past and in the future. The basic principle of time in quantum physics says: "The past does not exist and it can not exist until it is created by the presence and the presence can not exist until it is created by the future". Or, as physicist John Wheeler said: "The quantum principle shows that there is a sense in which what an observer will do in the future defines what happens in the past".

We can conclude that all forms of reality exist with a certain probability and that the final outcome of the manifested reality will depends on "selection". Does this mean that all forms of reality always existed and will exist and that our awareness shapes them based on what was selected in the past and what we want to be in the future? Searching for the answer to this question we also consider the yoga concept of time about which we say something more later in this paper.

### **Yoga concept of time**

Although the ancient yogis did not know the theory of relativity, they knew that time is not something absolute and linear. As it is recorded in the ancient Vedic scriptures, time represents a cyclical repetition of non-manifested field of possibilities to the manifested reality. According to the Vedas, the cosmic time is divided into cycles of four Yugas, Satya Yuga or the golden age, Treta Yuga or silver age, Dvapara Yuga or copper age, and Kali Yuga or iron age. These cycles are repeated forever. Our humanity is currently in a transition from the copper to the golden age. Speaking from the scope of human life, time seems to be limited, but essentially it is eternal, without the beginning and without the end.

The cyclical nature of time repetition (or Rta in sanskrit) represents also the cosmic pulsation. Pulsation is one of the main aspects of the essence. It is present in every aspect of existence, in both the Universe and our bodies, and in every aspect of our live. Under the influence of eternal time, cosmic manifestations of creation (srishti), maintenance (sthithi) and degradation (laya) are cyclically repeated. These time cycles start with creation, last for a while and then a cycle of degradation starts. After a short break the cycle begins anew. These three aspects of time are connected as principles with the gods: Brahma, Vishnu and Siva. Brahma is responsible for creation, Vishnu for the existence and Siva for the decomposition.

Time in yoga also represents the aspect of existence (Prakriti) i.e. the reality which consists of pure consciousness, but also of limited elements of the material world (Tattvas) such as time (Kaala), space (Niyathi), knowledge (Vidya), feelings (Raga) and power (Kala). These five elements limit our being and only when an individual overcomes them, full liberation can be achieved, a state of pure consciousness (Chit), in which time does not exist. The travel of the awareness through these five elements towards the pure consciousness is the movement of time. Speaking in the spiritual sense, time exists when we are in a state of duality. It ceases to exist only when we are in a state of unity (Samdhi).

In yoga, Kālā, besides the meaning of time, has another meaning, and it is the death. The death is a limiting factor of the human life, which gives a feeling of limitation by time. This creates a sense that for each individual time on the Earth begins at the moment of its birth and ends at the moment of its death. But it is not the end, but a new beginning. The soul of each individual lives forever. Our essential "I" does not know time, it is timeless, without the beginning and without the end. This understanding represents the essential nature of time in the Yoga.

In practical terms, yoga funnels us to the present moment, i.e. to live the fullness of the present moment (Nikić, 1994). All what is happening right now is what should occupy our attention. If we succeed to focus our mind, i.e. to concentrate on the present moment, then the term of time loses its meaning. The more the attention is present and focused, the greater depth of the experience is achieved. The past should not occupy our attention, because at the moment of our existence it does not exist any more, we can not change it but we can learn from it. The future does not exist but we can plan it and build it right now. This leads to a conclusion that all our past and future are reflected in our presence.

Living at the present moment means to live where life is going on. Past and future are only illusions, they do not exist. According the yoga, living in the present means to live in acceptance, i.e. to accept life as it is now, and not as we would like it to be. When we live in acceptance, then we realize that everything is exactly as it should be. If there is anything that we would like to change in our life, the best time to do it is just now. Living in the past and worry about the future makes no sense because it will not change the image of our current reality. The only place where we can change our reality and thus create our future is the present (Nikic, 2010a).

## Conclusions

Presenting different concepts of time, we conclude that each of us has a subjective sense of time. Our linear concept of time is just a perception that creates a sense about limitation and finiteness of time. Yoga teaches us how to overcome this linear concept of time i.e. how to experience an infinite, timeless, dynamic and eternal NOW.

In yoga, time is just one aspect of the illusory world in which we live. Our senses are those which limit us and give us the illusion of limited time. Overcoming these constraints and achieving the state of pure awareness leads to an experience, in which no division of time to past, present and future exists. In the eternal NOW is contained all the past and future. And everything that exists now will exist in the future. There is only the present moment, continuous and eternal state of existence, in which there is only the consciousness of "I AM".

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