

## Existence is Difference and is expressed by Information

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Abstract.

With this work we want to give a model which expresses the “cosmos” before and after the big bang. This model describes the situation before the big bang as information and difference, without evolution, and the situation after the big bang as information interaction transfer and progress of the information.

Introduction.

The ancient Greek Philosopher Plato taught the people the concept of the “Ideas”. He believed that there was an external world outside the natural world where the ideas lived.

In this work we identify the idea with the information and give a model in which the information of every concept existed before the big bang in the world of information.

The big bang is the creation of material. Since we can understand the notion of time only as motion of material and the notion of space as distance between material bodies, we conclude that before the big bang there was no time, no space and no material.

So the world of in information has nothing to do with space and time.

The situation before the big bang.

We suppose that the big bang is the beginning of the world as we humans recognize it today. Before the big bang there was no material. Now time can be understood only as motion between material bodies and space as distance between them, so before the creation of matter there was no time and no space.

Time space and matter are strong connected with each other that no one of them can be understood in the absence of the other two.

For our logic it is impossible to accept that something can be created from nothing and for the universe to be created there must existed something to create that. So

it is unavoidable to ask: What could exist before the creation? What can exist independent of time, space and matter?

The dialectic theory is based on the following three concepts: Thesis which is an intellectual proposition, antithesis which is the negation of the thesis, the reaction to the proposition and synthesis, which brings the thesis and antithesis to a new thesis.

Hegel believed that the evolution occurs through a dialectic process. So following his theory we conjecture that before the beginning of time there was the ideas-information. They expressed the thesis and the antithesis but there was no way for synthesis because that needs evolution i.e. time.

Now the synthesis is realized with the creation of space matter and time. The science logic is based on cause and effect and can be work only in relation with time.

So the question who created the Ideas-information cannot be answered unless we use other methods of thinking than these used by the scientists. Although it seems naïve, if not ridiculous, we can suggest as such method something like meditation or any other system not based on space and time.

So it is natural that we cannot find logical explanations for things that are beyond the reasonable proofs.

After the big bang.

Before the big bang the existence was expressed as information in form of thesis and antithesis. There was no way for synthesis which needs time to be performed.

We suppose that the genesis is the creation of synthesis of information, it began together with the creation of space time and matter and is expressed with the law of "cause and effect". The beginning of the world is the ability of interact and transfer information.

The information takes place and is transferred in space with the aid of the dots which are the main part of the whole.

The space is the dots. A dot carries the elementary information and has two possible states, "on" and "off". All dots are equal and created during the expansion of the universe. The speed of their creation is the maximum speed in the world since every other information is transported through them.

The maximum velocity of the information from one dot to the next is the speed of light. The amount of information in the world of ideas was immense and as we see from the expansion of the universe which goes on, the synthesis of the information and the genesis of the dots continues. The number of dots is very great, but in any

case finite. For the representation of an elementary particle, e.g. photon, we need much more than  $10^{30}$  dots.

What is the relation between the dots and the ether?

The dots as we said before constitute the space and carry the elementary information. The transmission of the information, e.g. the motion of a photon, is the alternation of the dots from the stage "off" to the stage "on" and vice versa.

Physicists proposed the existence of a medium, the ether, thought to be necessary as a medium for the propagation of electromagnetic waves. After Mickelson-Morley's experiment they abandoned the existence of it.

The dots have nothing to do with this. They simply transfer the information. The speed of light in vacuum is independent of the source or receiver; it is included in the information. To explain physics with the theory of dots is as to explain things ex post. The dots have the scope to transport the information. The rule of how the information is transported depends on the synthesis. Thesis and antithesis create the physical laws, which do not preexisted in the world of Ideas, because they are dependent of time space and material. It follows that physical laws are not constant through the evolution of the universe. They change according to the addition of new information to the cosmos from the world of the Ideas.

A question arises. How does nature store and process information?

Information is dynamical and changes constantly. So it is stored nowhere and everywhere. It is created from effect of the precedent information. The laws created at the beginning were related to the material world. These laws together with information added from the world of Ideas created new laws e.g. laws concerning life, then laws regarding rational beings, societies, etc, and the evolution continues.

Conclusion.

And after all this?

Will evolution come to an end? Everything that has to do with time has a beginning and an end. So it is logical to conjecture that this overrules time itself. The end of material time and space will be a new state, a new thesis, which will create a new antithesis and the process, will continue.

Does there is a hope for us human beings to learn the truth about the lows governing the universe?

We do believe that rational beings have the ability to understand all that take place in the cosmos, because they are part of the world of the Ideas which created the universe.

Naturally the whole knowledge is some very distend matter.

As we have mentioned above, for the conception of the future of the universe and the new status which will occur after the end of the time, we need apart of the of the physical sciences, other methods of thinking which do not use matte, to approach the truth.

During the previous years the main concern of the humans was their survival. So they developed sciences and technology for this purpose. Now this technology acts against our existence, since we have not looked ahead to save the environment, which is indispensable for our survival.

It is time to evolve a new way of thinking.