

## THE QUADRUPLED RATIONAL INTERPRETATION OF DIVINITY

Neculai ANDREI<sup>1</sup>

**Abstract.** *When speaking about the rational interpretation of Divinity, there are three main concepts that we will briefly summarize in this paper. At the end of it we will present a fourth one, namely the symmetric rational interpretation of Divinity, as well as the connections between it and the other three ones.*

**Keywords:** Tzimtzum concept, Coincidentia Oppositorum concept, Continuous Creation concept, Symmetry Concept, Mathematical modeling, Occam's razor

### 1. Introduction

We should mention that the first three concepts belong to the Western World, to the Catholic Church, which for more than 1000 years has made a constant effort for reconciliation between Aristotle (384-322 B.C.) and the Christian Dogma.

We, the Romanians, and actually the entire Eastern world, did not have a Renaissance age, in the general meaning of the concept.

We did not need Renaissance. We had the Holy Eastern Fathers, whose effort surpassed ancient art and philosophy and gave answers to the fundamental problems of the human condition, answers that did not involve their issuing of philosophical systems.

### 2. The Tzimtzum Concept

The most serious attempt to explain the idea of *Creation ex nihilo* is expressed in the theology of Isaac Luria (Arizal) (1534-1572). Considered as being the founder of New Kabbalah, in fact the greatest Kabbalist of all times, he uses the ***Tzimtzum doctrine - concentration, contraction or withdrawal***. Being an intellectual concept of Jewish mysticism, Kabbalah is an area dealt with not only by Hebrew scholars. Kabbalah does not give much importance to the primordial chaos. It conceives the world as an organized system, something that, in the current language, would be considered a system governed by laws (conservation laws) and not by hazard. Kabbalah is essentially a system representing the world through areas of perception and representation, of interpretation of Divinity. According to Luria, the existence of the Universe was possible only through a process of "contraction" of God, i.e.

---

<sup>1</sup>Research Institute for Informatics, Centre for Advanced Modelling and Optimization, 8-10, Averescu Avenue, Bucharest 1., Full member of the Romanian Academy. (e-mail: nandrei@ici.ro).

*”After Genesis, God, keeping intact His essence, has retired within Himself to make way for the world itself, leaving, so to speak, an area inside Him, some sort of mystical space from which He withdrew in order to return to the acts of creation and of revelation”* [Scholem, 1960], [Eliade, 2000, p. 577].

In this view, God's withdrawal is more than a metaphor. It is rather a change in His intensity over the world.

Notice that there are two forms of Tzimtzum, two forms of withdrawal. The first one relates to the withdrawal of the divine being in itself in order to allow the existence of the physical world. The second one is the withdrawal of the "divine will" in order to confer freedom of choice to the human being. However, this meant sacrificing the unity and exclusivity of Divinity. Therefore, the Tzimtzum concept within Kabbalah states that the existence of free-will was conditioned by the destruction of the original order, of the unity and symmetry, which are fundamental attributes of Divinity.

Creating the Universe and making the free-will efficient implied giving up the fundamental principle of science, that of **causality**. At this moment, Tzimtzum is the only place where the principle of causality is not satisfied. This defines and explains the "singularity" mentioned in the Big Bang theory (please see paragraph 4 below), an exception that does not need the principle of causality. The unity of natural laws, their ubiquity in the sense that "*The universe is full of laws*" arises from the unity of the Divine being, of Almighty, and from the Divine will. Giving up the principle of causality in the act of creating the physical Universe and the free will becomes therefore similar to the "withdrawal of God", to Tzimtzum.

Luria's Kabbalah is the greatest victory achieved by the anthropomorphic philosophical trend in the history of Rabbinic Judaism and Hebrew mysticism, the last religious movement with influence in all Hebrew environments and in all countries without exception [Scholem, 1960]. Its significance, as manifestation of rationality aiming at clarifying the act of the creation of the Universe and of the free will, emerges as well from the fact that Tzimtzum, as the essence of Kabbalah, is entirely present in the modern cosmological theory of the Big Bang.

### **3. The Coincidentia Oppositorum Concept**

A second concept in the rational interpretation of Divinity is closely related to the problem of conjecture and was dealt with by the German Bishop Nicholas of Cusa (1401-1464) in his remarkable work *De Docta Ignorantia (Of Learned Ignorance)*, written in 1440. The theme of this original but difficult work is that *most of our knowledge is a conjecture, and admitting this is a matter of wisdom*.

According to this concept, Cusa's universe is an expression that is an imperfect and inadequate explanation (*explicatio*) of God, because this explanation occurs within

the sphere field of multiplicity and separation. On the other hand, within God, the universe is present in a strict and indissoluble unity (*complicatio*), a unity that includes all qualities and determinations, which are not only different, but even opposite to one being. In Cusa's interpretation, any single being in the universe represents the universe itself and therefore God himself, in a proprietary manner, characteristic to that very being, contracting (*contractio*) the infinite richness of the universe based on the own individuality of the being itself.

Cusa, who was the last major philosopher-theologian of the Roman Church, one and inseparable, a "*Ianus of philosophy*" in the interpretation of P. P. Negulescu (1872-1951) because he was pointing on one hand towards the Middle Ages and on the other hand towards the Renaissance, argues that *knowledge, which is relative and finite, is unable to grasp the truth, which is simple and infinite*. A great personality of his time, Nicholas of Cusa, until he met Plethon Gemistos Georgios (1355-1452) during a trip to Byzantium (1437) to attend a church council, was oriented towards the Renaissance, a new world which was just being born. The meeting with Plethon, a Greek Neo-Platonist philosopher who had come to Italy and stirred in Florence a great movement of ideas that would later lead to the founding of "*Accademia Platonica*" of Florence by Marsiglio Ficino (1433-1499), also determined Cusa's return toward the prevailing mentality of the Middle Ages. The outstanding all-reaching perspective of his metaphysics can be noticed in his exceptional works *De Concordantia Catholica* (1434) and *De Pace Fidei* (*On the Peace of Faith* - 1453) in response to the fall of Constantinople under the Turks. In these works, Cusa defines *concordantia* as a universal theme. The bold conclusion he reaches, *concordantia*, is drawn with aid from negative theology. Using the same approach he comes to his masterpiece, *De Docta Ignorantia*.

Any science being conjectural, man himself cannot know God. The truth - *the absolute maximum* - is beyond reason because reason is unable to solve contradictions. One must, therefore, transcend beyond discursive reason and imagination and get maximum of wisdom through intuition. But since the intellect cannot express itself using a rational language, Cusa resorts to symbols and, before anything else, to geometric figures.

*Within God, that which is infinitely large (maximum) coincides with that which is infinitely small (minimum) and virtuality coincides with action*. In His infinite simplicity, God hides (*complicato*) all things, but at the same time He is in all things (*explicato*); i.e., *complicato* coincides with *explicato*, which is the *coincidentia oppositorum* principle. By



Nicolas of Cusa (1401-1464).

understanding this principle, our "ignorance" becomes "erudite". Still, coincidentia oppositorum must not be interpreted as a synthesis gained through reasoning, because it cannot be achieved in terms of finitude, but in a manner of conjecture, in the infinite plane [Eliade, 2000, p. 599-600].

This is an exceptional interpretation of Divinity, comparable to that given by Isaac Luria in his New Kabbala.

"By knowing in part" as Apostle Paul taught us in his *First Epistle to the Corinthians* (Chapter 13, verse 9) and *without access to ultimate truths we can only make conjectures*. As long as they withstand the tests, they are accepted. Otherwise, they are rejected, leaving room for other theories to replace them and summarize their experience.

#### 4. The Continuous Creation Concept

Still, the most elaborate concept in the rational interpretation of Divinity belongs to Descartes. Descartes' philosophy starts off with cogito, and it starts from the fact that "*I think*" is an indisputable finding observed directly, not through deductions. The next step in Descartes' philosophy indicates that "*I*", *as a thinking being, am capable of certainties and those certainties are obtained by direct intuition, through direct knowledge*. In this respect Descartes, by intuition and certainty, gives a very solid foundation of *human subjectivity*. Then Descartes raises the question of *how to exit from man's inner world outside into the objective world* in order to gain knowledge of the world around us. His solution is as follows. By thinking, more specifically, through the lucidity of thinking, he reaches another obvious fact, namely the existence itself - *cogito, ergo sum*. Thus, the act of thinking contains within itself the very existence of the thoughtful subject. In this way, through the existence of the thinking subject, the transition to the outside world, to the universal world of "to exist" becomes possible. For Descartes, thinking is primordial to the extent that "*the mind is better known than the body*".

When Descartes says "*cogito, ergo sum*" he does not refer to his existence, but to his existence as "*thinking matter*", as mind itself, leaving the body as an annex to be handled some other time. In total agreement with St. Francis of Assisi (1181-1226) who refers to "*his brother, the body*", Descartes realized that in order to be strengthened, the formula "cogito, ergo sum" needs to be continued with something further on. Indeed, it is very possible for an evil spirit (*malin génie*) to delude and mislead him, so that everything he thinks would become an illusion.

To avoid that, Descartes needs the idea of God, whose existence he supports through the *ontological argument*, as Anselm of Canterbury (1033-1109) did for the first time 500 years before. Thus, *Good God* is the guarantor of all truths, for He is never wrong

and, given His nature, He cannot delude us. However, even if we ignore the logical error contained in the ontological argument, there is another problem that appears instantly: God guarantees the truths of the world, but there are eternal truths - *the truths of mathematics*. What is then God's relationship with these truths like? Eternal truths cannot be changed. Therefore is God subject to them?

Descartes gives a masterly solution to this problem introducing the concept of **continuous creation**: *the free relationship between God and His creation is the same from the very beginning to the end and it is a creative connection at every moment*. This implies that, along with the continuous creation which Descartes attributes to God and parallel with it, the implicit emergence of a continuous doubt keeps human certainties awake. And so, in its essence, Descartes's conception contains the universal doubt. All modern culture, all our achievements are based on

doubts and certainties, or as Anton Dumitriu (1905-1992) [1986] says so beautifully in *The Book of Admirable Encounters (Cartea întâlnirilor admirabile)*, in the essay *Descartes or the Endless Doubt*: "on doubts about the doubts and certainties, on doubts about the doubts and the certainty of certainties in a regresus in infinitum, that is to say, a continuous re-examination of all values and certainties".



René Descartes (1596-1650).

## 5. The concept of symmetry

We saw that the rational interpretation of Divinity's continuous creation places God in free relationship with His creation, in a creative relationship that is present every moment and at every point of the Universe.

In the current outlook regarding the formation of the Universe known as the *Big Bang theory*, proposed by Georges Lemaître (1894-1966), our Universe began its existence 13.7 billion years ago as a very small *singularity*, extremely hot and of very high density. During this period of billions and billions of years it expanded and cooled, so as to reach the current size and temperature. The Big Bang theory is supported by the so-called "*Hubble's Law*", named after Edwin Hubble (1889-1953), who, in 1929 discovered that galaxies move further and further from us at a speed that is proportional with distance. The further a galaxy is from us, the faster its distancing speed. Objects that are the farthest seem to be moving away from us with the speed of light. Therefore, one may as well assume that at some moment back in time, the Universe was concentrated in a single spot, with very high density and temperature. We then see that the Universe, being in the beginning

only a spot with the above mentioned properties, was symmetrical, perfectly symmetrical.

The Big Bang did not happen in space and time. According to the current acceptance, space and time felt as such were created during the Big Bang. So, to ask what had been before the Big Bang makes no sense. Meanwhile, it must be noted that the concepts of space and time are characteristics of human consciousness. The human being lives in the past, present and future. Only the Divine is in a perpetual present.

One remarkable aspect of this cosmogonist theory is the following: as we go back in time the Universe gets hotter, denser and the symmetries, now destroyed, are restored. In other words, while going back in time towards the Big Bang moment, the Universe and the interactions between particles become increasingly symmetrical. This shows that the Universe becomes more simple and symmetrical.

In a somehow more simple way, without making much of a mistake, we can say that life is organised matter or energy, based on differentiation. If the Universe is perfectly symmetrical and uniform and totally ordered, then within this Universe there is no complexity, no structure can be identified, no form of life, no consciousness. In other words, in a perfectly symmetrical and uniform Universe, as it was at the moment of the Big Bang, life and consciousness were not possible.

In the general acceptance of the Big Bang we see that the Universe was originally a point containing an amorphous, relatively uniform energy mixture. This uniformity was destroyed with the start of expansion and the energy transformed itself into a mixture of elementary particles. As the Universe expanded, these particles packed, forming galaxies with stars and planets and other celestial bodies. As the differentiation grew steep and the initial order was destroyed, the structure and complexity of the Universe increased. In the end, the differentiation was broad enough to inbreed living things, brain and consciousness. In other words, life can appear only in a Universe in which symmetry is not total, and this can continue only by transforming the pre-existing order into chaos.

Given the balance that exists in the Universe as well as the uniformity of the cosmic background radiation and the luminescence that fills the Universe, its expansion evolves in a homogeneous and isotropic way. That is to say, the expansion of the Universe has no privileged directions. Therefore, at the moment of the Big Bang, the Universe, which was only one point, a singularity, was destroyed in an infinite number of symmetries, but at the same time, given the homogeneity and isotropy of the Universe, on another level, the original symmetry has been preserved. So the essential and remarkable aspect of our Universe is that of preserving the symmetry at a global level (the macroscopic-scale, the entire Universe), as well as locally, in the sense that at any time and at

any place we are surrounded by concepts that arise in dual-symmetric pairs, i.e. we are immersed in an ocean of symmetries. And so, the concept of continuous creation completes and reinforces itself as the following rational interpretation of Divinity: *God's free relationship with His creation is the same from the very beginning to the end, that is, a continuous creative relationship in dual-symmetric concepts at any moment.*

## 6. Fundamentals of mathematical modeling

Mathematical modeling is an activity of high intellectualism through which a certain part of the Universe is represented in mathematical symbols. The goal of mathematical modeling is to build a mathematical tool that would provide the understanding of the movement which takes place in the part of the Universe we are interested in and to make accurate predictions of its evolution. Mathematical models are presented in a variety of forms. The most important seem to be: linear or non-linear, deterministic or stochastic, static or dynamic, discrete or continuous, etc. They come in any shape, all of them satisfying the principle of causality.

*Mathematical models are written based on conservation laws that represent the essence of the Universe.* These, in turn, as demonstrated by Emmy Noether (1882-1935), arise from symmetries, which form the basis of our knowable Universe. Being surrounded by an ocean of dual-symmetrical paired concepts, the result is that *the conservation laws have a very serious base that ensures the adequacy of mathematical models. In this respect Descartes' view of continuous creation is completed in the sense that, the free relationship of God with His creation continuously creates symmetrical concepts.*



Emmy Noether (1882-1935)

The complexity of a given model always involves equilibrium, a balance between its simplicity and its accuracy in representation. What is important here is Occam's razor: *out of the models that have the same power of representation and prediction, it is recommended that the simplest should be chosen.*

The idea is that the model should be as simple as possible, but not simplistic. Increasing the complexity of a model improves its realism, therefore its power of representation, but it creates difficulties in understanding and analyzing the model and raises computational questions about the size of the model and about the numerical instabilities in the solving process. Therefore, a mathematical model, in the perspective of infinite similarities with reality, is characterized by simplicity imposed by conservation laws.

## REFERENCES

- [1] Andrei, N., (2006) Eseu asupra fundamentelor informaticii. Editura Yes, București, 2006.
- [2] Andrei, N., (2009) The Pre-eminence of Existence versus the Pre-eminence of Mathematics, November 2, 2009. [<http://camo.ici.ro/neculai/n47a09.pdf>].
- [3] Andrei, N., (2009) Aspecte ale evoluției filosofiei și a științei. Mai 4, 2009. [<http://camo.ici.ro/neculai/n31a09.pdf>]
- [4] Andrei, N., (2011) Împătrita interpretare rațională a Divinității, Manuscript, June 8, 2011. [<http://camo.ici.ro/neculai/r10a11.pdf>]
- [5] Curley, E.M., (1984) Descartes on the creation of the eternal truths. The Philosophical Review, vol.93, No.4, (Oct. 1984), pp. 569-597.
- [6] Dumitriu, A., (1986) Eseuri. Știință și Cunoaștere. Alétheia. Cartea Întâlnirilor Admirabile. Editura Eminescu, București, 1986.
- [7] Eliade, M., (2000) Istoria Credințelor și Ideilor Religioase, Editura Univers Enciclopedic, București, 2000. (Traducere și postfață de Cezar Baltag.)
- [8] Matthew McMahon, C., The Doctrine of Continuous Creation. [<http://www.apuritansmind.com/ChristianWalk/McMahonDoctrineContinuousCreation.htm>]
- [9] Scholem, G., (1960) Major Trends in Jewish Mysticism, New York, 1946, (ediția 4, revizuită și adăugită, cu bibliografie suplimentară), 1960.