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A Thought Experiment to Prove a Multiplicity of Intelligent Worlds¹

Abstract. The philosophical principle of George Berkeley (1685–1753) ‘*esse est percipi*’/ ‘to exist means to be perceived’ may have the next interpretation: *for its existence, an object should be perceived by someone*. The object being is needed in a subject as a witness which is able to feel and understand the object. If this is true, then the Universe has an interesting structure: its being should be perceived by someone.

In the cosmic scale, the principle *esse est percipi* presupposes an innumerable quantity of intelligent worlds and permanent self-reflection of nature. If sometime humankind ceases its way, then the Cosmos also stops its existence for people. However, while at least one thinking structure is in the Universe, nature cannot transform to nothing. *Nature gives birth to the new and new intelligent worlds in order... not to die*. The Universe affirms and confirms its being by giving birth to every new reason. *Homo sapiens* is one of the witnesses of its physical existence.

Key words: thought experiment, *esse est percipi*, *natura sapiens*, anthropic principle, *homo sapiens*, Cosmos, multitude of intelligent worlds.

Introduction

Heraclitus (born ca. 560 B.C.E.) believed “that which always was, and is, and will be everliving fire, the same for all, the cosmos, made neither by god nor man, replenishes in measure as it burns away” [Heraclitus 2001: 15; Fragment 20].

Sometimes they say about possibility of multi-universes, or multiverse. “But there is only one Universe; where do we find the other possible universes against which to compare our own...” [Barrow, Tipler 1994: 6].

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We believe the infinite Cosmos “made neither by god nor man,” but it always was, and is, and will be everliving nature which constantly gives birth to intelligent worlds as its necessary component. Such Cosmos was not born and will not die but is partially renewing due to the birth and death of its separate areas.

If people have enough reason not to destroy themselves on the Earth, then they will be able to learn to live on other planets of our Universe. Humans as cosmic creatures have a cosmic mission. The Earth is only their cradle and a convenient place to live until the Earth itself stops its course in the interstellar space. By that time, humankind will have to find another suitable shelter.

1. Nature as *Natura Sapiens*

My definition ‘*Natura Sapiens*’ refers to the infinite Universe which permanently gives birth to and contains an infinite multitude of intelligent worlds. The intelligent civilizations can simultaneously be on the different stages of their development: one of them – on the level of genesis, the others come near the end, the third ones reached the acme of development. It means that nature always has reason, constantly thinks itself. If the infinite nature is understood as *natura sapiens*, then reason is seen as its attribute. This cosmic reason necessarily and differently discovers itself in various points of the Universe, and in the form of the human thought as well. *Homo sapiens* is one of many thinking creatures in the infinite world.

Nature does not exist without mind, reason; nature cannot lose it for an instant. Nature and mind are equivalent in the sense that they are always together, they cannot exist without each other. Contrary to materialistic/ idealistic understanding of the primacy of matter/ mind or to the biblical “In the beginning was the Word” [John 1:1], we believe that “In the beginning were Nature and Mind,” where mind is treated as a rational-irrational essence of the natural being.

For us, nature is the absolute, *causa sui*; so, for its existence, it needs no supernatural substance. Nature, as its mind too, is constancy-in-becoming. Nature is becoming that which it is becoming; so nature does not know but wishes to know itself. The thought of the human, of any intelligent subject is at the same time the thought of the Universe which thinks itself by means of an individual and social thought, and this thought is self-reflection of the Universe, i.e., its thinking of the very itself. One's personal reason is a single voice of the infinite Universe; one's individual logos is a continuation of the cosmic logos. Simultaneously, with their thought, with their mind, people create the Universe essence, more precisely, take part in the world-creation. In other words, the humans are not passive translators of the truths of being, but they appear active co-participants of the world-making.

Thus, the definition of nature as *natura sapiens* means that in the endless Cosmos at any moment of time there is at least one thinking entity perceiving nature and evidencing of its presence, greatness, and beauty. *The idea of natura sapiens replaces the anthropic principle in all its versions.*

2. Formulations of the anthropic principle

John Barrow and Frank Tipler comprehensively consider the anthropic cosmological principle in their monograph of the same name [Barrow, Tipler 1994].

The expulsion of Man from his self-assumed position at the center of Nature owes much to the Copernican principle that we do not occupy a privileged position in the Universe. In 1974, the Australian physicist Brandon Carter did limit the Copernican dogma by an 'Anthropic Principle' (AP): "our location in the Universe is necessarily privileged to the extent of being compatible with our existence as

observers” [Barrow, Tipler 1994: 1]. This definition is called the *Weak Anthropic Cosmological Principle*.

Also, Carter suggested the *Strong Anthropic Principle*: “the Universe *must* be such ‘as to admit the creation of observers within it at some stage’” [Barrow, Tipler 1994: 6].

In other words, according to the anthropic principle, the structure of our Universe presupposes the appearance of Man, and the knowledge about the Universe has an anthropological character.

Barrow and Tipler underlines that the Weak Anthropic Principle “expresses only the fact that those properties of the Universe we are able to discern are self-selected by the fact that they must be consistent with our own evolution and present existence. ...*Our* observations are restricted by our very special nature” [Barrow, Tipler 1994: 16].

The authors note that the American physicist John A. Wheeler (1911–2008) gave his own interpretation of the Strong Anthropic Principle. His ‘Participatory Anthropic Principle’ states: “*Observers are necessary to bring the Universe into being*” [Barrow, Tipler 1994: 22]. In the authors’ opinion, this proposition is somewhat reminiscent of the outlook of Bishop Berkeley; however, it has physical content when considered in the light of attempts to arrive at a satisfactory interpretation of quantum mechanics [Barrow, Tipler 1994: 22].

Indeed, Wheeler’s formulation is similar to a postulate from the philosophy of George Berkeley. But let me support Wheeler’s statement in such a way: with their knowledge, the observers discover objects and properties of the Universe, give them their definitions, and in this sense the Universe appears before people, begins to exist in anthropological categories. Or: with their knowledge, the humans illuminate the Universe, bring it out of darkness, and in this sense *make* the Universe which arises and begins to exist in terms of the observers. In this

connection, one may transform Descartes' postulate 'cogito ergo sum' / 'I think, therefore, I exist' into 'I think, therefore, the world exists.'

The Strong Anthropic Principle has one more modification as Final Anthropic Principle: "*Intelligent information-processing must come into existence in the Universe, and, once it comes into existence, it will never die out*" [Barrow, Tipler 1994: 23].

In my view, the last statement is too categorical. Man as a subject of 'intelligent information-processing' has no certain development *program*.

We believe that *entitas sapiens* (humanoids) have existed and will always exist in the universe. They appear at different points of the world according to the objective structure of the Universe, which necessarily requires a regular intelligent area for its existence, i.e., one more witness to its existence. *The idea of natura sapiens replaces the anthropic principle, considers it as its own special case*. The anthropic principle is a preliminary postulate, the first step towards the broader idea of *natura sapiens*.

The existence of intelligent civilizations is a cosmic rule (not an exception), a necessary condition and principle of the existence of nature. From this viewpoint, the Cosmos did not produce humanity for some special, higher purpose. *Homo sapiens* is not the chosen one of the Cosmos, and we cannot amuse ourselves with such an illusion. Everything is much more prosaic. Any mother gives birth to her children for life, but not all of them are lucky and prudent. The human planet is not the only abode of reason. The Cosmos creation did not begin with the Earth, and it will not end with the Earth.

Why should we believe that humanity has an optimistic program of progress? No one can know quite definitely the final point of anthropological evolution. The humans have neither hell nor paradise ahead of them. People

themselves arrange either hell or paradise for themselves. Ahead of humans is a changing set of possibilities, behind — their fate.

Thus, there are possible variants: either humanity will become a factor in cosmic evolution, i.e., by its activity, it will take part in the creation of the infinite Cosmos, or it will eventually destroy itself with its internal contradictions and sweet illusions. What we choose, it depends largely on us, on our clear mind, kind feelings, and strong will.

So, the idea of *natura sapiens* presupposes that nature permanently possesses intelligence, permanently thinks of itself through various intelligent beings. We believe the time will come when the logic of the anthropic principle will be replaced by a more voluminous idea of the intelligent nature. The rationale for such view can be suggested as follows.

3. A Thought Experiment and the Proof of the Multiplicity of Intelligent Worlds

In my view, the philosophical principle of George Berkeley (1685–1753) ‘*esse est percipi*’/ ‘to exist means to be perceived’ may have the next interpretation: *an object for its existence should be perceived by someone*. The object being is needed in a subject as a witness which is able to feel and understand the object. If this is true, then the Universe has an interesting structure: its being should be perceived by someone. For its existence, the Universe requires a mirror, an endless number of the mirrors that they could reflect its infinite properties and wonderful beauty.

Let us assume that there is not a single person capable of seeing the external world. There is no human now or in the future. Then nature will turn out in the darkness. Only the mind contemplating nature will be able to release it from that

darkness. Nature is needed in the thinking spirit to actualize, discover itself in the light and color of the reasonable perception.

Here is a very curious discourse of the ancient writer Lucian of Samosata (120–180) in his story about Prometheus on Caucasus. One of the accusations against Prometheus was that he “made these human beings; creatures of unparalleled wickedness...” [Lucian 2007: 52]. Prometheus answered shrewdly, addressing Hermes: “...Can any good thing whatsoever, be it gift of Nature or work of our hands, give the full measure of enjoyment to its possessor, *when there is none to see, none to admire?* ...But *for mankind, the glories of the universe must have been without a witness* (my italics. — N.O.); and there was little satisfaction to be derived from a wealth which was doomed to excite no envy in others” [Lucian 2007: 55]. In a word, according to Lucian and his Prometheus, the presence of goodness and “the glories of the universe” presupposes a witness.

Let us also recall Michel de Montaigne who wrote: “As our birth brought us the birth of all things, so in our death is the death of all things included.” “A thousand men, a thousand animals, a thousand other creatures, die at the same moment that you die...” [Montaigne 2019: 47, 49].

As Martin Heidegger noted, “man alone of all beings... experiences the marvel of all marvels: that what-is *is*.” [Heidegger 2004: 261]. In other words, only man is a witness to reality.

Indeed, the objective world exists for me thanks to my consciousness. Darken this screen, and everything will disappear for me, turn out into nothing. In other words, an individual contemplates the world in the light of reason. Switch off this light, and a human will find him/ herself in the full darkness. But the other people will remain and observe the natural and social reality. Now imagine that all humankind is deprived of its reason. In that case, who could testify that the world does exist? Nobody, since the intellectual display is switched off. No object is

without a subject, no event is without a witness. Therefore, all nature, all being is dying together with the extinction of the earthly reason. The non-being of reason means the oncoming of the great Nothing.

In a word, nature is needed in a witness of its existence. The human is such subject on the Earth. If humanity dies, then the other intelligent creatures will tell about the natural being. Nature gives birth to the new and new worlds that they were the observers of its existence; without its witnesses, nature will turn out into nothing.

In the cosmic scale, the principle *esse est percipi* presupposes an innumerable quantity of intelligent worlds and permanent self-reflection of nature. If sometime humankind ceases its way, then the Cosmos also stops its existence for people. However, while at least one thinking structure is in the Universe, nature cannot transform to nothing. *Nature gives birth to the new and new intelligent worlds in order... not to die.* The Universe affirms and confirms its being by giving birth to every new reason. The presence of reason in the world proves the existence of nature. *Homo sapiens* is one of the witnesses of its physical existence, humanity is one of many intelligent creatures of the infinite *natura naturans*. So one must not conceive of the human as a completely alone and abandoned entity in the Cosmos.

4. Criticism of Berkeley's Subjective Idealism

In his main work *A Treatise Concerning the Principles of Human Knowledge* (1710), George Berkeley argued that the objects of human knowledge are either ideas actually imprinted on the senses, or else such as are perceived by attending to the passions and operations of the mind, or lastly ideas formed by help of memory and imagination, either compounding, dividing, or barely representing those originally perceived in the aforesaid ways. As several of these ideas are

observed to accompany each other, they come to be marked by one name, and so to be reputed as one thing. For example, a certain colour, taste, smell, figure and consistence having been observed to go together, are accounted one distinct thing, signified by the name ‘apple’. Other collections of ideas constitute a stone, a tree, a book, and the like sensible things. In a word, for Berkeley, an object and its sensation are the same thing [Berkeley 2012: 83, 85; part 1, §§1, 5].

Berkeley’s philosophy knows only one substance, i.e., mind, or spirit, — and only one reality — ideal, spiritual. This reality is distributed among God and minds, or spirits created by Him. All the objective world (Cosmos, nature, society) exists only within God and those minds, or spirits; its autonomous existence is excluded. Berkeley wrote [2012: 145, part 1, §150]: “But if by ‘nature’ is meant some being distinct from God, as well as from the laws of nature and things perceived by sense, I must confess that word is to me an empty sound...” He defined the philosophical notion of matter as ‘nothing’ [Berkeley 2012: 114, part 1, §80].

In my view, Berkeley’s doctrinal mistake consists in that he assumed just one ideal reality, the world of ideas. He declared the whole world to be ideal, and all the ideal objects exist in the human mind and in God. Any object has a mental essence. In fact, an object is a part of the immense and single mental reality distributed among people and God. All nature, matter transforms into a mental modification and is conceived in mental categories. Berkeley’s philosophy is an absolute subjective idealism. His subjectivism is possible when the external world is forgotten.

Accepting his formula *esse est percipi*, but contrary to Berkeley’s idealism, we assume the obligatory presence of a material object for the perceiving subject. There is no object without a subject, as there is no left side without the right one,

and vice versa. Obviously, there is no mistaken idealism in this opposition, but here is an indication of the real correlation.

Traditional materialism agrees the left side and the right one exist just against each other, but at the same time does not accept that there is no object without a subject. It is strange since the latter opposition is also possible only in the presence of both sides. Together with materialists, it is admissible to believe that nature is capable of existing without humanity, but under one condition — with the extended interpretation of the subject. For example, to the question “Who can perceive written or other historical, artistic, archeological evidence?”, the obvious answer will follow: “Of course, real people.” However, if they do not exist, then, hopefully, other intelligent creatures, *entitas sapiens* will narrate about nature: there is no object without a subject. This logic is applicable to the infinite Cosmos due to the idea of the multiplicity of intelligent worlds.

The principle of the subject and object interdependence gives birth to the new philosophy and epistemology, to the new world-vision and world-understanding.

5. The Human Position in the Cosmos

In his novel *The Unbearable Lightness of Being* (1984), Milan Kundera quoted the German saying ‘*Einmal ist keinmal*’ which means ‘once is equal to never’ [Kundera 2002: 15]. From this viewpoint, if humankind turns out a onetime phenomenon, it can be said that humanity was like never. Then you should state that the humans did not take place in the Universe, and they deserve to name a strange cosmic casus.

The cosmic loneliness of man is easily associated with his randomness. For example, Jean-Paul Sartre (1905–1980) believed that “...it is merely an accident of the appearance of the human race on earth” [Sartre 2004: 366]. In the absence of

God, the humans found themselves one-on-one with the whole Universe and with one hope to themselves. For Sartre, “we are left alone, without excuse” [Sartre 2004: 353].

However, *we are not alone*. Our cosmic loneliness is removing with the idea of the multiplicity of intelligent worlds. We consider the birth of thinking structures as an ordinary fact in the infinite Universe. We say about *natura sapiens*, therefore *homo sapiens* is not a single intelligent creature in the Universe. The idea of the multiplicity of intelligent worlds saves mankind from the cosmic loneliness.

Professor of Philosophy Susan Wolf (University of North Carolina, Chapel Hill, USA) discusses the problem of the meaning of life in connection with her main idea: “the human being is a tiny speck in a vast universe” [Wolf 2007: 69, 70, 72].

A human as a small particle in the Universe does not have a privileged position in comparison with other similar human-particles. Therefore, individuals have no reason to focus only on themselves as the center of the Universe, and egocentric life is called solipsistic by the author. The meaning of life is given by the individual’s appeal to the world which has an objective value. Due to such transcendence, persons learn their real position in the world. “By focusing one’s attention and one’s energies at least in part on things, activities, aspects of the world that have value independent of you, you implicitly acknowledge your place and your status in the world” [Wolf 2007: 70].

In Wolf’s opinion, if “there is no God, then there can be no meaning, in the sense of a point or a purpose to our existence. We are simply a product of physical processes — there are no reasons for our existence, just causes” [Wolf 2007: 63]. In the absence of God, we can only be meaningful to each other, to creatures as tiny as ourselves. “We want to be important, but we cannot be important, and so our lives are absurd” [Wolf 2007: 71].

This remark is rather interesting: the absurdity is associated with the personal insignificance, and this insignificance is postulated initially, since a person is declared a tiny speck in a vast universe. And in this endless physical world, in the world without God, no one and nothing can make a person meaningful.

According to Wolf, only God gives humans importance and value, because humans are primarily His creation. And humans are invited to accept the fact of their “cosmic insignificance”: “Get Over It” [Wolf 2007: 71]. But, let me note, accepting cosmic insignificance, we agree with our life insignificance.

In this regard, one may say that nowadays the status of man as a cosmic creature capable of cosmic changes is becoming more and more obvious. Therefore, it seems that the thesis about man as a tiny speck, lost and inconspicuous in the Cosmos, will go back to the past when man was such. Humans are tiny specks in a vast Universe in their physical dimensions, but they are majestic cosmic entities in their spiritual qualities.

Here let us remember that negative definition of the human which is expressed in the known formula ‘man is a mistake of nature.’ In his paper *Humans and History* (1929), Max Scheler discussed this conception [Scheler 1994: 86–93].

The negative version insists upon the unavoidable decadence of the humans in their 10.000-year history and sees this decadence cause in the very essence and origin of this creature. To the question ‘What is man?’, such an anthropology answers: man is a deserter of life, of its main values, its laws, its sacred cosmic meaning. According to Theodor Lessing (1872–1933), “man is a kind of predatory monkeys, gradually earned the delusion of grandeur on his so-called ‘mind’.” But in fact, man is a dead end and disease of life [see Scheler 1994: 86].

Scheler polemized with the negative conception of humanity. In his opinion, the human being is not a freak of the Universe. He argued a *special metaphysical*

position of the human. The philosopher cited Leopold von Ranke (1795–1886): “Humankind in itself bears an unlimited number of the possibilities for development; humankind is more mysterious and more majestic than they usually think of it.” For Scheler, man is not a thing, he is a direction of the *movement* of the very *Universum*, of the very its foundation [Scheler 1994a: 105]. We share this deep insight of the founder of contemporary philosophical anthropology.

It is possible to present Heraclitus’ image of river as a model of the Cosmos. If all new and new waters flow on the creature entering the same river, if it is impossible to enter the same river twice, then the extrapolation from the given observation to the Universe occurs without much difficulty: all the things are moving like flows, everything not *is* forever but always is arising and becoming.

From that time a lot of water has flowed away, and today there is little sense to think only with Heraclitus’ example. The human is a microcosm, an image, a model of the Universe. So it is possible to study nature upon the human example, who is a prompt for understanding the Universe. Peering into the human, we can catch the Cosmos essence. The essence face of nature is shining in humanity. The human is the fullest manifestation of the Cosmos. In terms of religion, you may say together with Scheler [1994b: 12]: “...*The being of the human as a microtheos is also the first access to God.*” In my view, the being of the human as a microcosm is the first access to the Cosmos.

The idea ‘the human being is a microcosm’ is turned to the future. It is more productive for an interpretation of the world than the notion of river. The river is more simple and so inadequate symbol of the Cosmos. Treating the human as a microcosm, we get a chance to catch the multidimensional essence of nature. For instance, proceeding from this idea, we may assume *natura sapiens*, an infinite multitude of the intelligent civilizations.

Conclusion

In *The Ash Wednesday Supper* (1584), Giordano Bruno believed (in the fifth dialogue) that “...annihilation is impossible to Nature itself, therefore it renews itself with the passage of time in some order, altering, changing, and transforming all of its parts” [Bruno 2017: 213]. He told that it was already known about the difference of the bodies in the ethereal sphere to Heraclitus, Epicurus, Pythagoras, Parmenides and Melissus. “...They recognized an infinite space, an infinite region, infinite matter, an infinite capacity for innumerable worlds similar to this one, rounding their circles as the earth rounds its own” [Bruno 2017: 206].

To my mind, in his work *On the Infinite, the Universe and the Worlds* (1584), the philosopher anticipated the future knowledge when he spoke in the fifth dialogue: “The twelfth and final argument, which is that since there is a perfect world, there is no requirement or desire for *other ones*, I say, such are not required for the perfection and sustenance of our world; but *are necessary for the proper sustenance and perfection of the universe, which is infinite*” (my italics. — N.O.). In his opinion, “...each of these worlds are inhabited and cultivated by their own living beings” [Bruno 2014: 206, 199].

As before, Bruno’s metaphysical insights impel us to meditation on the Universe and humanity.

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