

HYPERMETAPHYSICS



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*Every transformation demands as its precondition "the ending of a world" -
the collapse of an old philosophy of life.*
Carl Jung

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Introduction

I call this book *Hypermetaphysics* just because it is not about the metaphysics of “world”/Universe, it is not even about the metaphysics of EDWs (“epistemologically different worlds”), but mainly about the hypercorrespondences between the EW0 (Hypernothing) and the EW1a-n (these EDWs being the first EDWs which appeared in hypercorrespondences to the EW0). This hypermetaphysics involves the main notion of this book: the EW0 (or the “Hypernothing”) which does not have any ontology but a hyperontology which hypercorresponded to the first EDWs that appeared in the hypercorrespondences to the EW0.

In Part I, in Chapter 1, I will introduce the main ideas about the EDWs perspective. (These ideas have been published in my previous works.) In Chapter 2, I will introduce *Hypermetaphysics*: this chapter contains new ideas about the hypercorrespondences between the EW0 and the first EDWs, the EW1a-n (which appeared in different “places”, in different “periods”). However, I emphasize here that, in this work, I have changed some major ideas from my previous works from my EDWs perspective: for instance, I rejected the idea of “antimatter” (or “the EW-1” from my previous works). In Chapter 3, I introduce some ideas that have been published in my previous works (2022, for instance) regarding the hyperontology of EDWs (but including the major challenge: the rejection of “antimatter”). In Chapter 4, I introduced the main ideas from Friedman’s articles (2009 and 2012) and I applied his “scheme” regarding the “*apriori* relativized knowledge” for a scientific theory and the change/revolution of paradigm in science to my EDWs perspective.

In Part II, I investigate some (more or less) anti-reductionist approaches: Gell-Mann, Spinoza-Velmans, and Heil. I emphasize even here that all anti-reductionist approaches had been created within the unicorn world until I published my article in 2005.

In Part III, related to Kuhn’s notion of “paradigm”, I indicate what kind of “paradigmatic revolution” I have realized through discovering the EDWs within the scientific and philosophical revolutions and changes. I emphasize that my EDWs perspective has been the greatest change in the history of human thinking (including the main sciences, physics, cognitive neuroscience and philosophy) and this is the reason I call it the first “hyper-paradigm”.

I. EDWs, the Hypernothing (EW0) and Physics

Chapter 1

The principles of “epistemologically different worlds” perspective

In this chapter, I deal with general view about my EDWs perspective applied to the entities like objects in the first section. I will only recall the principles regarding self. All main ideas of these sections are from my previous works.

1.1 The principles concerning existence and interactions of objects

In this section, I will present and analyze the principles referring to the existence of objects and their interactions, answering questions such as: who determines their existence, where they are, what traits they have and what the relationships between them are, which objects exist and which objects I believe exist, etc. These principles are valid for any set of non-living objects (natural and artificial or man-made). I will see that the physical (non-living) objects (processes) do not exist, as it has been assumed so far, in the same world (namely the unicorn world), but they exist in EDWs. Let us see how these sets of objects and implicitly these EDWs appeared in the past. According to the actual physical theories that explain the “universe” (the unicorn world) after the Big Bang, there was the quantum plasma (made of quarks and gluons), which had an extremely high temperature. As the plasma became less and less hot, the first microparticles (photons) escaped from that plasma. Later, the planets appeared in this “universe” and much later, life emerged on the surface of at least one planet, the Earth. This view is constructed within the paradigm of the “Universe”; however, as I will see in the entire book, the notion of Universe/world is completely wrong. Let us see how these sets of ED (epistemologically different) objects and, therefore, these EDWs appeared. I will introduce the ten principles concerning physical objects and their interactions:

1. Epistemologically different interactions constitute epistemologically different objects, and epistemologically different objects determine epistemologically different interactions.
2. Any object exists only at “the surface”, due to the interactions that constitute it.
3. Any object exists in a single EW and interacts only with the objects from the same EW.
4. Any EW (a set of objects and their interactions) appears from and disappears into nothing.
5. Any EW is, therefore all EDWs share the same objective reality, even if one EW does not exist for any other EDW.
6. The I/self/mind (life) corresponds to a body (organism/cell). The self does not exist for the body, the body does not exist for the self.
7. The I is an EW. Therefore, the I/self has no “illusory spatio-temporal framework”, while the body exists in a “illusory spatio-temporal framework”, i.e., “nothing”).
8. Having a certain set of components, from our point of view, the body corresponds to (but it is not “composed” of) an amalgam of macro-objects (arms, legs etc.) (or cells) and their relationships. The body and its corresponding parts (or cells) belong to the same macro-EW. Also, a body corresponds to a certain set of microparticles (and the ED entities) belonging to the micro-EW (the EDWs)
9. Certain mental states and processes represent the knowledge which is the I.
10. As an entity, the I has unity as an indeterminate individuality (it does not have “spatial” dimensions, or better, the I has no “nothing” as part of it).¹

¹ More details about these principles in my previous works.

The existence of a (physical) object would generally require a “spatio-temporal” framework. However, in my book 2016b, I indicated that space and time (or spacetime) could not even exist, i.e. space and time could not have any ontological status. The existence of any ontological status for spacetime would produce strong ontological contradictions in both paradigms: the EDWs framework or the wrong unicorn world (the universe/world). Every object exists in one single epistemological world (EW), which means that any object exists and interacts only with entities from the same EW. These notions, “existence” and “interaction” (“perception”) are strongly interrelated. (See our previous works)

The great English philosopher Berkeley said that “to exist means to be perceived”. From my perspective, the “interaction” is a kind of “perception”, so these two notions are quite equivalent in our discussion. So, the proposition (1) or Berkeley’s slogan can be rephrased in the following way: “to exist means to interact”. The planets existed and had existed long before man appeared on the Earth and the planets would exist even if the human beings would disappear in the future. The planets (like all macroscopic objects) exist one for the others in the macro-EW. This statement is valid for the microparticles (and the electromagnetic waves) which exist in the micro-EW (the field-EW), as well. Man is not the only entity who “perceives” or who “interacts” with different objects/entities. If an object is constituted by certain interactions with other objects, what does “constitution” mean? The interactions constitute the surface of an object. When a person perceives an object with the help of her eyes, she actually sees only the surface of the object. For example, a person looks at an apple on a table in front of him. She simply sees the apple peel (a part of the apple, as a whole), but she does not see anything “inside” the apple. In order to see what lies inside it, the apple needs to be cut. If the man cuts the apple in two, that apple no longer exists as an object, but only two parts of that apple exist now. However, the person cannot observe with her eyes the microparticles, she would need an electronic microscope (which does not furnish a direct image of the microparticles).

In this context, I will make a very important observation: the apple is perceived not just by men, but also by other animals; also, the apple interacts with other objects. Let us suppose that the apple is placed on a table. As I have written above, we know that the person interacts with (perceives) the apple which, in its turn, interacts with the table. In the EDWs perspective, since the apple and the table interact (they “perceive” each other), these objects are in the same EW, the macro-EW. Of course, an apple does not interact only with the table, but it can interact with other objects, as well (e.g., with other apples placed in the same fruit basket). The essential thing is that these actions are precisely the ones which “constitute” the apple and the table; in other words, these interactions furnish the ontological status for these objects. Without these interactions (more exactly, with no interactions), the apple (like all macro-objects) would simply not exist. The same observation is available for the microparticles or the electromagnetic waves. I emphasize that the apple (like any macro-object) does not exist for an electron (for any microparticle/field) and vice-versa. If we send an electron toward an “apple”, the microparticle will interact with an amalgam of microparticles which for us it is an apple. That is, an EW does not exist for any EDW. We can use the same reasoning in the case of “planets”. If there were a single planet in this universe, without anything else existing outside of it, that planet would not exist because “it would not interact with anything”. A

planet exists only because it interacts with other planets, in other words, those interactions “constitute” that planet. It is, therefore, quite absurd to claim that the planet would exist “by itself” or it would exist because of the presence of “God”. Instead, what it would exist, there would be the microparticles corresponding to the planet, since one microparticle would interact with many other microparticles.

Another important question is: “How did natural objects, such as planets, appear?” According to the current physical theories, after the “Big Bang”, the first things that appeared in the “Universe” were a “fire” very hot in which all four forces were unified. Tyson indicates the history of matter after Big Bang: 10^{-43} seconds the Universe had the diameter of 10^{-35} (these being Plancks’ quantities); 10^{-35} seconds (the separation between electroweak force and strong force; later it was a separation of electroweak force in electromagnetic force and strong nuclear weak force); the interaction between matter and energy continues and produces photons which transform spontaneously in particule pairs matter-antimatter; the universe is a hot soup of quarks, leptons and their antimatter particles, plus bosons (necessary for interactions of matter); after a million of seconds, the hadrons appeared and produced protons and neutrons and other heavy particles; after one second, the universe has grown to a few-years light across (and one billions degree), the electrons appeared; the universe becomes colder (below a hundred billions degrades), and the atoms are formed (protons and neutrons), 90% of these atoms being hydrogen, 10% being helium; two minutes have passed since the beginning; during 380,000 years the electrons still run free among photons; suddenly, the temperature falls below 3000 grade Kelvin, all free electrons combine with nuclei; in the first billion of years the universe continue to expand and cool, the galaxies (hundred of billions) appear; after nine billions of years, the Sun is formed and the Earth with life appeared. (Tyson 2017, pp. 34-38). “What happened before all this? What happened before the beginning? Astrophysicists have no idea.”¹ (p. 45) So, in this “scientific” picture, there were the microparticles, the corresponding electromagnetic waves (which belong to the field/field-EW), and the planets² - formed later when, due to gravity, a huge amalgam of microparticles became unified. Therefore, can we say that the microparticles “form” a planet? The notions like “compose” and “form” do not have any ontological background. Anyway, the planet does not exist for the microparticles and the microparticles do not exist for the planet. Moreover, one of the elementary rules indicates that two objects (or sets of objects) cannot exist in the same place, at the same time. The apple exists only for other apples, for the plate, for the table, for the planet Earth. The microparticles “by themselves” exist, too, but only for other microparticles, not for the planets or the tables. So, there is no point in claiming that the microparticles “form” or “compose” a table or a planet. “Composition”, “emergence”, “supervenience” and “identity” are all wrong notions that created many other pseudo-notions in various branches of science (for instance, cognitive (neuro)science, physics, biology) and philosophy. (See our previous works) Such notions are simply inventions (“illusions”) of human mind. That is, why we can say that a planet appeared spontaneously “out of nothing”. The planet Earth, for

¹ Tyson indicates that some people introduce “God” (obviously, a “non-scientific” hypothesis) in this equation. As I indicated in my previsou works, “God” could not even exist.

² Again, we have to be aware that any macro-entity (a planet, for instance) corresponds to (a) a huge amalgam of microparticles within the micro-EW and (b) an amalgam of electromagnetic waves within the wave-EW.

instance (which belongs to the macro-EW), appeared out of nothing, but it corresponded to the EW of microparticles, the micro-EW. Of course, without the existence of microparticles, we would be unable to speak of the existence of planets, but I repeat this does not mean that the microparticles exist for/compose the macroparticles. In this case, the macro-EW does not exist for the micro-EW, the micro-EW does not exist for the macro-EW, and only the human being, changing her observation conditions, can observe (indirectly, through correspondence) one or another EW, but one EW does not exist for any EDW. I recall that, because of its interactions, only the surface of an object exists, therefore notions like “internal existence”, “internal determinations” or “essence” are meaningless notions, when it comes to characterize a macro-object. An object exists only as a whole, i.e. the “surface” has no “parts”. The components of that table (for example, its legs) are not separate from its surface, so they do not exist independently of it. In other words, the legs of a table do not exist as “objects”. They exist only as “parts” of the table in the mind of a person who perceives the table from a certain viewpoint, but they do not have any ontological status; only the table as a whole has an ontological status. If we take the legs of a table away from the tabletop, the table would cease to exist, but the legs and the top would exist in the same EW as the table, namely the macro-EW. (For more details, see our work 2016) In other words, the whole does not exist for the parts, neither vice-versa. Certain particular traits are an object and these “characteristics” (the object) can be perceived by men, others cannot. Moreover, the human eyesight adds signs to the objects, i.e., certain characteristics which do not actually exist (for instance, color). Within the unicorn world, nobody could have explained the “color”. Everybody believed that colors do not exist in objects themselves, it is the “perception of the light by the human eyes”, the reflected electromagnetic wave has a certain frequency/wavelength by the surface of an object. However, this explanation about color is quite wrong, from the EDWs perspective. A physical entity (electromagnetic wave) has the main role in this scene, it interacts with other electromagnetic waves which correspond to the eyes (but inside the head, there is no color). From our view, the color is part of the human mind (which corresponds to the entire brain/body). This is the reason, the human being does not perceive the “thing-in-itself” (which does not even exist, from the EDWs perspective), but, in this case, she has a “mental representation” (part of the mind) of macro-objects (a table, stones, planets, etc.) which exist in the macro-EW. A planet can “perceive” (i.e., interacts with) another planet even though we cannot say that a planet “observes” the same “characteristics” which a human being perceive. Still, some traits remain the same (what the English 17th century philosopher Locke called the “first-order” traits), while other traits are “different” (the “second-order” traits). Moreover, a bat perceives objects from the macro-EW as having very different traits from those we perceive. For example, colors do not exist for the bats. And yet, the walls of a cave, for instance, exist both for bats and for humans, even if the second-order traits greatly differ. Because EDWs really exist or, more precisely, they are, the question “Which world truly exists?” has no sense, because all EDWs share the same objective reality and the world/universe does not exist, being in fact just a human mind creation, until the discovery of EDWs.

As we saw in the introduction, one of the main problems in the history of human thinking was the relationship between different “entities”. “Causality” is one of these problematic relationships. Obviously, the notion of relationships is strongly related to the notion of “levels”. Used under an ontological framework, the notion of “levels” entails

causalities which really exist. Used under an epistemological framework, “levels” becomes an empty notion, since different “levels” cannot exist in the same place, at the same time. For instance, throughout the last centuries, there have been strong debates regarding different pairs of levels: the mental-neuronal, (i.e., the mind-brain problem), the micro-level (with microparticles like electrons and protons) and the macro-level (with macro-objects such as planets or tables). However, the standard view has been that of the identity between these “levels”, therefore, it has been just “epistemological levels”. From my viewpoint (from any viewpoint), it is not possible for a “table” and its “microparticles” to exist in the same place, at the same time. The acceptance of different types of levels has created incredible Ptolemaic epicycles (wrong notions and wrong arguments) in the history of human thinking. For instance,

- (1) The notion of “levels of analysis” used by many contemporary philosophers is just a “linguistic game” which used to dominate the analytical philosophy;
- (2) The notion of “levels of organization” used by some scientists and philosophers led to contradictions regarding the identity of certain entities; and
- (3) The notion of “ontological levels”, introduced by Descartes, still used today by some people have produced ontological contradictions within the unicorn world.

Therefore, we have to replace “levels” with EDWs: both the micro-EW and the macro-EW (for instance) exist/are, but one EW does not exist for any EDW. I will draw your attention again upon the fact that, if we reject the EDWs perspective, strong contradictions and anomalies will continue to dominate philosophy and sciences. In this context, I introduce here a very important postulate, *the postulate of correspondence*:

Since an EW does not exist for any EDW, the “correspondences” between entities/processes that belong to two EDWs cannot have any ontological status. Therefore, the notion of “causality” between ED entities which belong to EDWs is a completely wrong concept.

Working within the unicorn world, scientists and philosophers have produced many wrong notions and ideas. Moreover, the notion of “correspondence” has produced many illusions (pseudo-notions) in particular sciences and philosophy, in general. As I will see in this book (as well as in our previous books), the causality between entities which belong to EDWs has been often used in the past, but this causality is completely wrong since one EW does not exist for any EDW. How can we attribute the causality (a law or something similar) between entities which belong to EDWs and, therefore, these entities do not exist one for another?

Let me investigate the notion of “correspondence” related to space and time (spacetime), for instance. In my previous books, I showed that space and time (or spacetime, as you wish) cannot even exist, simply these notions being just creations of the human mind. The concept of “space” appeared in the mind of the human being just because of the correspondence between brain (which has a “surface”) and mind (which does not have any surface). The brain/body is an entity which belongs to the macro-EW, while the mind is an EW. These two EDWs do not exist one for the other. Therefore, there cannot be any causality between the brain/body and the mind. There are, for instance, certain very approximate correspondences between (a) many surfaces which interact with the light which interacts with the human eyes and produces certain neuronal inputs in the brain and (b) certain perceptual mental images/representations. These

perceptual images produced the illusions of “space” as a feature of the external objects. The verdict that mirrors the illusion of space in our mind is the following:

The Kantian spatial intuition in human mind is just the representation of “nothing” within the mind which corresponds to certain neuronal areas (that have certain volumes) in the brain and its interactions with the external environment. This “nothing” (which “belongs” to the macro-EW where the brain is placed) corresponds to the wave of the brain (the field-EW) or to the Higgs particles (the micro-EW). Also, the external “nothing” between two entities (two chairs, for instance) has no ontology, but it corresponds to ED entities which belong to EDWs (for instance, to different certain electromagnetic waves which belong to the field-EW).

Since Galileo, we know that “motion” is a relative notion. “Nothing happens until something moves.” (Einstein) For instance, a stone placed on the surface of a planet does not move in relation to other stones from the same planet, but it moves in relationship to a stone from another planet. Moreover, that stone corresponds to the motion of certain microparticles (electrons that move around the nucleus) and certain forces/interactions involved in those movements. These entities (the microparticles) and their forces belong to the micro-EW. I point out that “motion” does not exist in itself (i.e., it cannot have any ontological status), but we can describe an object being “in motion” or “static” only in a particular framework furnished by the relationship (no ontology) between a human observer or other entities from the same EW. We know that, according to Galileo’s framework and Einstein’s special relativity, depending on the observer (or a framework), an object is in motion or not. The same idea is available for the “presence of nothing” (which always it has to correspond to something).

A physicist would give you a formula of an object in motion (speed or acceleration) using space and time (or Einstein’s spacetime). But neither motion, nor spacetime can have any ontological status. “Extensions” and “duration” have been just certain human mental inventions that helped us, somehow, to investigate the external or the internal “realities”. (See our work 2016 in which we indicate that spacetime cannot have any ontological status) The “correspondence” (which does not have any ontological status in any case) is “responsible” for “nothing” (which also does not have any ontological status) and creates, in our minds, the illusions of “space” and “time” (or “spacetime”). For instance, the Higgs field corresponds to “nothing” in the macro-EW. I repeat, for the planets, the Higgs field does not even exist; this field exists for other fields (each field/wave from the field-EW only corresponds to a microparticle from the micro-EW). However, the planets move not in “space” (“spacetime” which does not even exist), but in “nothing” (which does not have any ontological status) which corresponds to the Higgs’ field (which belongs to the field-EW). Therefore, it is not “space” that is curved by planets, but “nothing” (which does not have any ontological status!) which corresponds to the certain electromagnetic field/waves. So, a microparticle is placed in “space” (more correctly, in a “relational framework”), but neither “space”, nor the relational framework” can have any any ontological status. For instance, where does the electromagnetic waves move in? These waves move in nothing which correspond to something which belong to
(a) a pre-Big-Bangs-EW¹ (probable, many pre-EDWs, not only one).

¹ I believe that there were “many Big Bangs” (not only one), more exactly, there were not the Big Bangs, but just the appearances of different matter which corresponded to the matter from the pre-Big-Bangs-EW.

- (b) the mega-EW¹.
- (c) the Hypernothing-EW (with its hyperontology).

If one eliminates “space” (and “time”) from discussion, many other phenomena will be situated exactly in the same “voodoo” position as “entanglement”. This is the “reality” of the unicorn-world in which the human minds have placed all ED phenomena until our discovery of EDWs.

By changing certain conditions of observation (difference between them being an epistemological-ontological threshold), we observe EDWs. In other words, there is an “epistemological-ontological threshold” between ED entities which belong to EDWs. We think that we possess certain knowledge about the “world”, but many parts of this knowledge have been counterfeits. These distortions do not stem from our knowledge about certain entities (that really exist or are), but from the pseudo-relationships (causalities or not) between them. As a dictator-observer, the human being enforced the domination of the unicorn world. From a human being’s viewpoint, it seems that all entities are within the same spatio-temporal framework. From another entity’s viewpoint, an entity can “observe” only the entities that interact with it. The interactions between certain its take place in a “spatio-temporal” framework. The framework of a non-living entity (for instance, a microparticle) is not the same as the spatio-temporal framework of a biological human organism, since a microparticle does not “observe” a macroparticle. Therefore, the microparticles and the macroparticles are in epistemologically different “spatio-temporal” frameworks. This is the main reason why we have to reject the idea that all entities are within the same “spatio-temporal” framework, i.e. the unicorn world. Obviously, assuming the same spatio-temporal framework can be helpful in our daily life. However, in science the fundamental problems require the EDWs paradigm. An entity needs to have unity, a concept that represents its identity (even for the indeterminate individuality).

The *ontological-epistemological threshold* represents the threshold for observational conditions which must be passed in order for the human observer to go from observing an entity belonging to the EW1 to observing another entity (or a mixture of entities) which belongs to the EW2. The entity in the EW1 corresponds to the mixture of entities (and their interactions) which belong to the EW2. The *organizational threshold* represents the threshold for observational conditions which must be passed in order for the human observer to be able to move from observing, for example, an entity, to observing a set of entities. For example, a forest represents a whole for a human observer who is far away from it. For the same observer, who is at a very small distance from the forest, the forest no longer exists, being replaced with the trees which “form” the forest. Both the forest and the trees are in the same EW, but the forest does not exist for the trees, while the trees do not exist for the forest.

At the end of this section, I introduce a very important principle referring to the explanation of the ED phenomena which belong to EDWs: the “Epistemological Principle of EDWs” (the EP of EDWs):

¹ There are some EDWs (that we know about them) in certain order: Hypernothing, the field-EW, the micro-EW, the macro-EW, life-EW (or mind-EW) and the mega-EW. For instance, the supercluster BOSS Great Wall (clusters, voids and galaxy filaments) corresponds to certain mega-entities which belong to the mega-EW.

Certain phenomena from a particular EW can be explained only by appealing to correspondences of those phenomena with the ED phenomena which belong to EDWs.

In my research, the entanglement problem and the nonlocality from quantum mechanics are exactly in this situation: only appealing to the EP of EDWs, we could explain these processes. The same situation was for dark matter and dark energy or the mind-brain problem. In reality, there are many problems in each main science (physics, CNS, biology) and philosophy which could have been explained only using the EP of the EDWs.¹

1.2 Epistemologically Different Worlds (EDWs)

“Hyperverses” is an abstract notion, ontological-epistemological speaking, and it represents the sum of all EDWs. Ontological, independently of our existence/observation, the entities of a particular EW do not exist for those which belong to an EDW. What does the expression “epistemologically different” actually mean? Obviously, it does not mean the same thing as “ontologically different”, which refers to the ontologically different substances or different types of matter. There is no ontological meaning for this expression. The difference is neither ontological (as Descartes believed was the case for the mind and the body/brain), nor linguistic (the way Carnap, a famous philosopher belonging to Vienna circle, believed it to be). The notion of “epistemological difference” imposes certain hyperontological limits related to the limits of each entity in any EW. “To exist” or “to be” means to have certain limits which entail determinations. Even the living being/the I as an indeterminate individuality has limits (the self is not infinite in anyway) or, more precisely, it has certain epistemological-ontological limits. As mentioned in the previous section, if someone were a planet (or an electron), it would interact with another macroparticle (or with microparticles). If that individual were a cell, it would interact with the environment specific to a cell. However, the living being (life) that corresponds to a cell does not interact with anything else, since it is an EW. It has to be very clear that the expression “epistemologically different” eliminates many of the speculations (Ptolemaic epicycles) that philosophers and scientists have developed over centuries. It eliminates the “ontological-epistemological” contradictions typically available within the unicorn world. The human organism needs to change its conditions of observation in order for a human being to observe (indirectly, through correspondences) certain epistemologically different entities which belong to EDWs. Now, we can clearly understand the expression “epistemological-ontological”. Changing certain conditions of observation (the difference between them being an “epistemological-ontological threshold”), the I observes EDWs (indirectly, through correspondence). In other words, the threshold is an epistemological-ontological one between the ED entities which belong to EDWs. I believe that the knowledge we have about the “world” is certain, but many parts of our knowledge have been quite distorted or even false. These distortions, instead of representing the truth about certain ED entities (objects or minds/lives that really exist or are), present the pseudo-relationships (causalities or not) between them. In the position of the dictator-observer, human being has imposed the tyranny of the unicorn world, and therefore, the entire knowledge has been constructed inside this pseudo-paradigm of thinking.

¹ About “the principles Concerning the Brain/Body and the Corresponding I (the Self/Mind)”, see my previous works.

From the human point of view, it would seem that the number of EDWs is not too large. If we extend the conditions of observation/interaction to all entities, however, the number of EDWs increases considerably. If we accept that “being is” and it corresponds to an organism, we have to reject the notions of “levels, attributes, supervenience, composition and elementary particles”. The “being” (or the life-EW) corresponds to an organism, therefore we have to hyperontologize all classes of entities that do not interact or emerge or are identical (those that have an epistemological difference). An entity needs to have a unity that represents its identity, even in the case of an indeterminate individuality such as the self/mind/life. In this context, I will introduce the next proposition, *the principle of hyperontologization*:

(11) The I is, therefore EDWs are and Hypernothing hyperis.

The unity of the I/self/life and the unity of a planet have an ontological character: both are/exist. If I were just decomposable organisms, or if the “I” lacked unity, I would be unable to acknowledge the existence (being) of EDWs and the “I” would not be an entity. Only the “I” (self with its unity) is able to discover the being (existence) of EDWs. The relationships between the mind and the brain (between life and an organism, or between the whole and its parts) such as “identity” or “emergence” (any kind), are all rejected.

Even if in 2008 book, I provided ample proof that the EDWs perspective is, in a way, an extension of Kantian philosophy, I would continue to develop this analysis here. For Kant, the representations of the external world are the self. The body/brain exists as an entity in the macro-EW, while the mental representations of body are the I. Kant wanted to construct the philosophical fundamentals of Newton’s theory in order to explain the world. Today, under Einstein’s influence, Friedman felt the need to relativize Kant’s theory. (Friedman 2001, see Vacariu 2008) One fundamental element in Einstein’s special relativity theory is the postulate regarding the constancy of the speed of light in relationship with any point of reference that, according to Friedman, acquires the status of “coordinating or a priori constitutive principle”. To extrapolate Kant’s idea, principles of this sort define the “fundamental spatio-temporal framework of empirical natural science”. (Friedman 2001, p. 43) Each scientific theory has certain *a priori* constitutive principles that define its proper space of the empirical possibilities (Friedman 2001, p. 84) or the conceptual frameworks that “define the fundamental spatio-temporal framework within which alone the rigorous formulation and empirical testing of the first or base level principles is then possible”. (Friedman 2001, pp. 45–6) (for more details, see Vacariu 2008) For Einstein, the coordinating principles constitute a new framework for space, time and motion (Friedman 2001, p. 107) and therefore all empirical laws have constitutive meaning only in the framework created by a priori constitutive principles. Even the individuation of entities requires such conceptual frameworks. This is necessary not only because the entities in motion belong to a certain “spatio-temporal framework”, but also because the “knowledge of physical rigidity presupposes the knowledge of forces acting on the material constitutions of bodies”. (Friedman 2001, p. 110) From the EDWs perspective, the interactions individualize (constitute) entities within a “spatio-temporal framework” (more exactly, nothing) and rigidity of a physical object is just its surface.

What does “practically rigid bodies” mean for Kant? In order to describe the forces, Einstein used geometry. Essential for the EDWs perspective is Friedman’s footnote on

page 55 about Einstein, who adopted a perspective on the relationship between a necessary geometry and entities as “practically rigid bodies” which ignores the microphysical forces. (Friedman 2001, p. 114) We simply need strong reasons to ignore the essential forces within the “world”. The only solution to ignore such forces is the introduction of EDWs. Obviously, analyzing the phenomena which belong to the macro-EW, we can ignore the microphysical forces (which belong to the micro-EW), since the micro-objects and their forces (electromagnetism, weak and strong forces) do not exist for the macro-objects and their force (gravity) and vice-versa. Without the EDWs perspective, we appeal to a postulate (which by definition is not proved) that brings us to the realm of so-called “empty notions”.

In the context of the EDWs perspective, it is important to answer the following question: “What was there before the Big Bangs?” Most physicists would tell us that this question is meaningless for the only reason that they do not have any plausible (scientific) answer. From my point of view, this question has a plausible (philosophical) answer. I believe that there was an EDW (or maybe that EW still exists), which I will call the “pre-Big-Bangs-EW”. (See also Vacariu 2012) In my previous work, I wrote that many Big Bangs happened in many places not in an infinitesimal point; also, the Big Bangs did not happen in one point but in many points simultaneously (or in a very short period of time). In this way, we can reject Alan Guth’s empty notion of “inflation”. (For more details, see Vacariu 2014) Also, it is possible that many other “universes” except for our “universe” appeared at the same time or even earlier or later (“multiverse”¹). However, the micro-EW (or the macro-EW) did not appear from the “pre-Big-Bangs-EW”. There are no causalities between any two EDWs. We know that any kind of “causality” between ED entities which belong to EDWs is meaningless. Obviously, there are some correspondences, but we cannot speak of “causalities”. Any EW appears from and disappears into nothing. Then what is the role of that “pre-Big-Bangs-EW”? There were some correspondences between the ED entities and processes which belong to the pre-Big-Bangs-EW and the plasma-EW (this is allegedly the EW that first appeared after the Big Bangs). Again, “what was there before the pre-Big-Bangs-EW?” Was there an EDW? Then there could be an infinite chain of EDWs. How can we stop the expansion of this infinite chain? Moreover, how could we avoid having a theoretically small or big infinity? In the case of the “small infinity”, imagine dividing a table in infinite parts, while in the case of the “big infinity”, we can imagine traveling in infinite space and time. Within the unicorn world, nothing could stop us from thinking of such infinities. We can only rule them out by using the EDWs framework.² Before the pre-Big-Bangs-EW, there might have been an EDW, and before this EW there could have been an EDW and so on, but we do not have an infinite chain of EDWs. We can stop this infinite chain of EDWs by assuming that, in this chain of EDWs, there was the first EW, (the EW₀ or the Hypernothing). It is possible for this EW₀ “to be” because there is an EDW that lacks “spatial dimensions” (the mind-EW) and some entities exist without a “temporal coordinate” (e.g. photons) which belong to a particular EW (the micro-EW). Therefore, if we have an EW without even the illusion of “space-and-time”, the question “Why was there the EW₀ in the chain of EDWs?” is rendered meaningless. If we talk about the EW₀, the questions referring to a pragmatic “spatio-temporal framework” of the entities

¹ “Multiverse” is an old idea but it has nothing to do with my EDWs.

² See my previous works in which I reject the existence of infinity (regression *ad infinitum*) and God.

belonging to this EW are meaningless. Therefore, we cannot divide a table in “infinite” parts, neither can we theoretically travel in infinite “space and time” because, at “a certain moment”, we move into the EW0 that has not even such pragmatic “spatio-temporal framework” (i.e. the “nothing”). What is it important to remember from this example is that, within the EDWs perspective, we rule out any kind of “infinity” (see Vacariu and Vacariu 2017). Notions such as the world, infinity, God and many others have been created by the human mind within the unicorn world. It is now time to renounce to these invented notions which have always created great problems for the human understanding.

Around 380.000 years after the Big Bangs, it is known that the first entities that escaped from that “fire” (“quantum field fluctuations”) were the photons and the corresponding electromagnetic waves. Then, can we reduce everything to the electromagnetic waves? No. First of all, from the interactions between the waves, parts of these electromagnetic waves became curved. These curves from the field-EW corresponded to photons that belong to the micro-EW. Microparticles cannot be reduced to waves. There are completely different set of properties that cannot be reduced one set to another just because there are EDWs. Moreover, the accumulations of microparticles *corresponds* to macroparticles. Again, one set of properties is different than the other set of properties. For instance, at quantum “level” there is no “gravity”. These correspondences are more important regarding the mind-brain problem. A mind cannot correspond to an amalgam of microparticles; a mind always has to correspond to a macro-entity (the brain/body place within a macro-environment). The amalgam of microparticles does not have essential properties necessary for the correspondences between mind and brain. The beings only from the micro-EW would exclude the mind from their existence. Moreover, we cannot reduce macro-entities to waves-entities. For instance, we cannot claim that the person who is writing these sentences on the computer now “is an amalgam of electromagnetic waves”. It is quite impossible for any amalgam of electromagnetic waves to write something on a computer, isn't it? Can a reductionist claim that these sentences have been written by an amalgam of electromagnetic waves? Such reductionist would be a quite crazy person. From the EDWs perspective, we cannot reduce the process of writing on computer not even to the brain/body itself. In reality, the mind is writing on the mental image of the computer with the mental hands that correspond to the real computer and the hands of the body.

“Hypernothing hyperis”, that means, it is beyond the following dualities:

- (a) “To be or not to be”: all EDWs are.
- (b) To exist or non-exists: all ED entities exist.
- (c) Material-spiritual (material-immaterial): mind is (not material), brain/body (material) exists in the macro-EW.
- (d) Observable-unobservable: we can observe certain material entities (planets, tables), we cannot observe a mind.
- (e) Interactions-no interactions: it is meaningless to talk about the interactions between the EW0 and EDWs or inside it; there are no “entities” inside it. These interactions are available for ED entities which belong to EDWs (except the mind-EW and Hypernothing).
- (f) Unity-disunity or parts-whole: the EW0 is beyond unity or a whole, the mind has a unity (whole) and its mental states are parts of it; also a table is composed of certain parts (the parts do not exist for the table as a whole, anyway).

(g) “Beginning-end”: it is meaningless to talk about beginning or end of Hypernothing. Time does not exist, anyway, but the EW0 has no processes/entities which can be *associated* with the “beginning of its time”. When we ask “Where is the EW0?” or “When did the EW0 appear?”, we can assert that these questions are meaningless just because of the hyper-relationships: direct hypercorrespondence between the EW0 and the EW1a-n and indirect hypercorrespondences between the EW0 and all other EDWs (except the EW1a-n). More clearly, “the EW0 hyperis”, while “all the EDWs are”.

1.3 The chains of EDWs

Obviously, I have to add that there have to be other such relationships, for instance, between the EW0 and the EWa (possible followed by the EWb, the EWc, etc.), between the EW0 and the EW1a, (followed by the EW1b, the EW1c, etc.) and so on. In the past (when I think the Earth is flat), all the human beings believed, until I discovered the EDWs, in the existence of one world, the “Universe” (obviously, the “multiverse” idea has constructed within the same wrong idea, the “world”/“Universe”/same spatiotemporal framework). However, I don’t want to follow the same mistake to believe in the existence of only one kind of EDWs. More exactly, now, I can empirically illustrate different kinds of EDWs: the field-EW, the micro-EW, the macro-EW, the life (mind)-EW. This “chain of EDWs” is “based” on the field-EW, therefore I call this chain the “chain of field-EW”. Nothing can stop us to think that this is the only chain of EDWs. Therefore, there has to be other chains of EDWs. The rule is the following: since “spacetime” cannot exist within EDWs (see Vacariu 2016), there is no reason to believe in the existence of only one relationship between the EW0 and a single chain of EDWs. Therefore, I postulate the existence of many different chains of EDWs. Nothing can force me to think that only the “chain of the field-EW” really exist. After you die, your mind will disappear; however, your body will be disintegrated in the macro (bones) and the micro-entities and much later, your bones will be disintegrated also in the microparticles. But all the microparticles correspond to the electromagnetic waves (which belong to the field-EW). All these elements correspond to the ED entities from the previous EDWs and so on in the line of chain of “matter” produced after the “Big Bangs”. If there was “matter” after the Big Bangs, then we know that this matter corresponded to “plasma” or electromagnetic fields (also a kind of matter). Therefore, according to our physical laws, after the Big Bangs, there were the electromagnetic waves which belong to the field-EW. How many chains of EDWs are? I have no idea. What are the rules of formation for these chains of EDWs? These rules are “accidental rules”, therefore, the number of these chains is also accidental. *Within the EDWs perspective, thinking of only one chain of EDWs is like thinking the Earth is flat.* Exactly as I indicated that the “world”/“Universe” did not exist, I would like to emphasize that not only one chain of EDWs really are, but many chains of EDWs are. Obviously, I have no idea how many, but not infinite EDWs since “infinity” cannot even exist (see Vacariu and Vacariu 2019).

The main question that automatically will appear is this one: we accepted EDWs, we can accept also the “chains of EDWs”, but why do we need to stop here? Why don’t I introduces “chains of chains” of EDWs. Obviously, we can go further... What can stop us for these further steps? I believe that we cannot go further and further just because our argument would fall into regress *ad infinitum* argument, and in our book 2019, we showed that the “infinity” cannot even exist. If we accepted the existence of “infinity”, for instance the “infinite” spacetime cannot even exist, then nothing can stop of thinking

at the beings of many kinds of such spacetime”, for instance, it would be meaningless to talk about our existence “now and here”. Therefore, because of our living “now and here”, we have to exclude the ontological existence of “infinite” (of spacetime).

In this context, can we talk about chains of chains of chains of EDWs? Yes, we can. The main idea that arises from “chains of chains” of EDWs is that there is no rule to stop somewhere. Everything has happened *accidentally*: the apparition of EDWs, the laws that govern them, and any other characteristic/determination is accidentally, somehow. That means, these laws are not “pre-establish” by “something” or “somebody”. Obviously, there are just correspondences between the appearance of these laws in one particular EW and EDWs (with their ED laws and entities). Anyway, the laws of a particular EW are determined by the entities from that EW. For instance, the “entanglement” between two microparticles (which belong to the micro-EW) corresponds to a particular wave (which belongs to the field-EW). Working on the mind-brain problem, I discovered the first chain of EDWs in 2002, but we can imagine that with the discovery of this first chain of EDWs, we are in the situation of Magellan (discovering America). There are other continents, but all these continents (including the oceans) are the same Earth. Is a lake surrounded by the “continents”? Of course, no. If we judge the oceans as being large lakes, we notice that all the continents are the same continent. The same situation is regarding the chains of EDWs in relationships with the EW0. Putting together all chains of EDWs, I will be able to understand what the EW0 “hyperis”, why the EW0 hyperis, and why “before” the EW0, nothing could exist. The main reason the EW0 hyperis is that, following Aristotle’s “Unmoved Mover”, we have to stop the “motion” (or other characteristics) somewhere, otherwise we, the humans, would not even exist here and now.

We can notice that even if one EW does not exist for any EDW, there are some (indirect) “dependence” (correspondence) between one EW and at least the next one in this chain of EDWs. For instance, the macro-EW *indirectly* “depends” on (corresponds to) the being of micro-EW (even if one EW is not for any EDW). It is clear that, without the appearance of the micro-EW, the macro-EW would not appear. The same assertion is available for the relationship between the field-EW (field-EW) and the micro-EW, for instance. Let us call this dependence the “*chain-dependence*”. We can notice without any problem that there are some dependence (correspondences) in EDWs. I believe we cannot reduce all EDWs only to these particular kinds of dependence, therefore, I believe there are other chains of EDWs. Where? In the “same place” (since “spacetime” does not exist). I mention here that it was very possible some EDWs disappeared in the past; it would not be only a mind-EW (many has disappeared until now), but a “natural” EW (like the micro-EW or the macro-EW).

Within the first chain of EDWs, we cannot explain everything. For instance, eliminating spacetime, God, infinity, and many other pseudo-notions from sciences (mainly physics), people have not been able to explain, *scientifically or at least with certain rigorously arguments*, the “beginning” of the EW0. I repeat, I believe that, since I eliminated the “infinity” (my book 2019), nothing can stop me to introduce more chains of EDWs. In the future, with more chains of EDWs, it will be much easier for us to explain the Beginning. In other chains of EDWs, there are other phenomena that combined with EDWs that we know, will eliminate certain unsolved problems like the “Big Bangs”.

We know that each particle corresponds to a wave. However, we can presuppose a single field which is correlated with the entire matter that we know and unknown (like dark matter or antimatter). As I indicated in my previous works, dark matter belong to the EDWs than those that we have already known. (Anyway, see Vacariu and Vacariu 2020) According to my EDWs perspective, it is already known that all EDWs hypercorrespond to the EW0. What is the EW0? It hyperis Hypernothing, but it is not “nothing” (which does not have any ontological background). Obviously, we can know nothing about the EW0, at least in our days. However, we are sure that Hypernothing “hyperis”, but not “is”. Moreover, Hypernothing cannot have the same mysteries that we have associated with the “Big Bang” or “God”: Hypernothing cannot have any traits that we can find to other entities or the EDWs that produces paradoxes and unsolved problems (Big Bang, infinity, etc.) Therefore, for picturing Hypernothing, we have to eliminate all possible characteristics/features that are common to all ED entities that belong to EDWs. Otherwise, there would be the same problems (Big Bang, infinity, etc.) or others (that we have no idea about) and these new problems will force us to extend the chains of EDWs and to fall into regress *ad infinitum*. The main idea is that there has to be certain traits which avoid the infinity.

“What one man calls God, another calls the laws of physics.” (Nikola Tesla) Translating Tesla’s statement in our language, I can write: “What one man calls God, I call an EW, Hypernothing or EW0.” The main difference between “God” and the EW0 is that the EW0 is just an EW, that is, it is something *natural* and, therefore, it does not have any features related to “God”. Moreover, the main difference between Hypernothing and God is that the EW0 does not even exist for us (it does not exist for any EDW), therefore, we cannot consider the Hypernothing as being a new “God”. Hypernothing is something natural, not something supernatural, even if the EW0 hyperis. I talk here about natural entities, not about “Gods”...

The first chain of EDWs (the only one that we know) is based on matter (field, only from which, by a chain of correspondences, other EDWs spontaneously appeared from “nothing”), but there are other chains of EDWs based on matter that we have not discovered yet (or I will not be able to discover in the future) or something different - I have no idea what, yet, but we are sure it has to be something different than matter-spiritual distinction. It has to be an “ED ontology” than all epistemological-ontologies that we know today. We are sure, in few hundreds year or maybe more, the humans will discover other kinds of substances - different than all ED ontologies that we know today. Moreover, I am pretty sure there has to be other hyperontologies than the chain of ontologies that we already know, let me call it, the “first chain of matter”: wave-particle-macroparticle-mind. Why am I so sure? Because I am neither materialist, nor idealist, not a combination of these matter (these cannot be even combined because such combination send us directly to Cartesian dualism, which is quite a wrong dichotomy, see Vacariu 2008). In fact, there cannot be any dualism or duality ontology distinction within a particular EW. Such ontological duality cannot exist within the same EW, since *there cannot be any possible interaction between these two substance* (we have learned this lesson from Descartes’ mistake, see Vacariu 2008), therefore, those two substances belong to EDWs. My argument is the following: nothing can stop us thinking there are different chains of matter. Within EDWs, it would be quite absurd to think that all that

exist are ED entities which belong to the “first chain of matter”. Since there are EDWs, there are “different chains” of matter.

We know that after the Big Bangs, there was 380,000 years of an huge temperatures. Then, this temperature started to decrease and first waves (and the corresponding microparticles) were able to escape from that “fire”. Even if the main rule is that one EW does not exist for any EDW, there are some dependences (i.e., correspondences) between some or even all EDWs. For instance, in the first chain of EDWs there is the electromagnetic wave that created this dependence. The appearance of the microparticle needed (through correspondence) the existence of the wave (vice-versa is not true), the macroparticle needed (through correspondence) many microparticles and the life needed (through correspondence) the macroparticles. There have been EDWs created based not through correspondences to the “wave”, but on other entity (I have no idea what element is or can be). However, in the future, I will be able to discover not only new EDWs within EDWs (1), but also other chains of EDWs.

Again, how many EDWs are? How many chains of EDWs are? These numbers are totally *aleatory* numbers. Otherwise, if not aleatory, we have to introduce “God” or “infinite”, but as I indicate in my previous works, these concepts are “empty words”. You were born just because of certain aleatory “games” between your relatives (mother-father, grandmother-grandfather, etc.), you were not been planned. We have not to forget that even “spacetime” has no ontological status. What did it produce the click for the appearance of an electromagnetic wave? There is no such “absolute click”, everything was accidentally, even the appearance of this click. In fact, for the EW0, there has been no such click, since within this EW, nothing could have changed. There has been such accidental “clicks” only for the appearance of certain EDWs. Parmenides was quite wrong to consider that everything is “static” and Heraclitus was also wrong believing everything is in “motion”. For characterizing the EW0, we have to go beyond “static-in motion” distinction, beyond “One-Multiple” distinction or “existing-nonexisting” distinction. Motion exists only relative to a particular frame of reference (see the special theory of relativity), but regarding Hypernothing, there is no such frames. The motion of a microparticle does not exist for the electromagnetic wave; it is just a particular activation of electromagnetic wave along its length. We can talk about the “beginning” of certain EDWs, but not of all. However, every EW is only in itself, not for any EDW. The physicists give us the definition of mass but, within my perspective, there is the definition of entity, i.e., its ontological status. Without any kind of interactions, not only an entity has no mass but also it does not exist.

The main ontological principle of the EDWs perspective:

In general, an entity exists (= its properties, like the property of having mass) only because of its interactions with other entities from the same EW. Mind is an entity, but also an EW, therefore, it does not interact with other entities. Mind exists as entity because of its correspondence to the brain/body (an entity in an EDW), but it is also as an EW with no boundaries.

Any fundamental particle interacts with the Higgs bosons to get mass. However, a planet has a mass even if it does not interact with Higgs bosons, since these bosons do not exist for the planet. The Higgs particles exist only for other microparticles and all the microparticles belong to the micro-EW. It has to be very clear that the planets belong to

the macro-EW. In order to avoid any ontological contradictions, we have to reject the idea that the planet and Higgs bosons are within the same EW. We have to apply exactly the same rule for the mass of a planet as we apply for its existence. I can consider that a planet has a mass by means of the correspondences between its mass and the masses of a huge number of microparticle. (Vacariu and Vacariu 2017, p. 75)

Within EDWs, the “breaking symmetry” principle has to be rethought. Maybe, in the micro-EW, the particle received mass just because, indeed something was “broken” in the wave/field-EW, and the electromagnetic wave becomes more concentrated in a point which *corresponded* to the particle in the micro-EW. According to the EDWs perspective, the particle corresponds to a particular peak of the wave and the “empty space” corresponds to the rest of the wave. Without those entities which belong to the EW1, we could not even talk about this “empty space” (which belongs to the EW2): anyway, the Higgs bosons are present everywhere in the micro-EW, but also the Higgs field is everywhere in the field-EW. Any particles and any planets have masses (more exactly, “a particle is the mass”) and each of them corresponds to the “curved” electromagnetic wave (the energy of the entire field/wave) which belongs to an EDW. The curvatures appeared because of the interactions between various electromagnetic waves. The “false” vacuum is nothing more than the field which belongs to the field-EW. Hypernothing (the EW0) corresponded to the EW1 which corresponded to the EW2 and so on, until the pre-Big-Bangs-EW corresponded to the plasma-EW (after the Big Bangs) which corresponded to the field-EW which corresponded to the micro-EW which corresponded to the macro-EW which corresponded to the mind-EW. Anyway, any EW finally hypercorresponds to the Hypernothing.

The “curvature of spacetime” (gravity for Einstein’s general relativity) is a wrong notion, since “spacetime” has no ontology. However, in order Einstein’s general relativity to be correct, I needed to replace “spacetime” with something else: “nothing” which corresponds to something which belongs to an EDW. For instance, a planet curves this “nothing” (no ontology!) which corresponds to the electromagnetic field (the field-EW) which it is really curved. Space (or spacetime) does not exist, therefore, it is the electromagnetic field which is curved by a “planet”. In reality, this “planet” (from them macro-EW) corresponds to a concentrated amalgam of electromagnetic waves (from the field-EW) which curves the electromagnetic field which surrounds this concentrated amalgam of electromagnetic waves. The light of a star which passes near a “planet” is not curved by the curved “space” (which it does not exist) which surrounds the planet. In fact, the light follows the curvature of the electromagnetic field through which it moves. Space does not exist, it cannot have any ontological background (see our work 2016), therefore, it is quite absurd to consider that a light follows a curved “space” which it is “curved by a planet”, according to Einstein’s general relativity. Again, not space (which does not exist), but just the electromagnetic field (which “surrounds” the “planet”) is curved by the concentrated electromagnetic field in the field-EW (which it corresponds to the planet in the macro-EW). It has to be clear that the microparticle does not exist for the electromagnetic field, and vice-versa. It is not “space” which “expands”, since it does not exist, but it is the electromagnetic field which expands and it represents, from my viewpoint, the “dark energy”. Anyway, I explain “gravity” completely different than Newton and Einstein. So, there is an order of the appearances of EDWs, even if one EW does not exist for any EDW, that is, there is no causality between them. Between the

EW0 and the EW1, there is a hypercorrespondence. We return to the relation between Hypernothing and EDWs. There is no passing from Hypernothing to the EW1a or the EW2 (for instance).

Obviously, without the EW0, the EW1a-n would had not appeared, but there was only the correspondence between any two EDWs. All the EDWs are just indirectly “manifestations” of the EW0 (which does not exist for any EDW), that is, the hypercorrespondence between the EW0 and the EW1a-n. Because of such (hyper)correspondences, we do not need an external force to produce the “appearance” of any EW. However, inside the EW0, “nothing happened” in order the EW1 to appear. *The “beginning” of a particular EW is inside of that EW*, there is no the “external” Big Bang to any EW. Between the EW0 and the EW1a-n there was no causality, but only the correspondence, just because there is no “inside” or “outside” the EW0. In the Hypernothing, nothing could happen. There was no broken law of energy conservation. Each EW has its origin inside of itself, but there has been a correspondence to the previous EW, other previous EDWs and finally to the EW0. Essentially, the EW0 is not even for the EW1a-n, but “hyperis”. The EW0 (with its hyperontology) is beyond the distinction “nothing-something”. “Outside”, there is that “thing-in-itself” (Hypernothing) which corresponds to ED entities which belong to EDWs. It has to be very clear that Aristotle’s “Prime motor” cannot even exist. The Hypernothing is not this “Prime Motor”, even if this “motor” was “unmoved”. For me, the Hypernothing is not even “unmoved”, it is something beyond “moved-unmoved” distinction (beyond any distinction available for the entities and the processes which belong to EDWs). Something can happen only within an EDW, but not in the EW0. Each “prime motor” takes place in each EW, not in the EW0. A “Prime motor” cannot exist for the EW0, otherwise, “today” would have already been in the past. Within the “Hypernothing framework”, let us construct the argument for the relationship between “Hyperverse” (all EDWs, except the EW0) and Hypernothing. I introduce three premises and the conclusion:

Hypernothing is the EW0, or better, Hypernothing hyperis, while all EDWs are.
All EDWs hypercorrespond (EW1a-n direct hypercorrespondences) to Hypernothing.
One EW is not for any EDW, so ontological speaking, the Hyperverse is not.
Conclusion: *The Hyperverse hyperis Hypernothing.*

It would be quite wrong to consider all EDWs as a “hologram”, since one EW does not exist for any EDW. One EW is for itself, but not for any EDW. Hypernothing “is” not for itself, but hyperis.¹ It has to be very clear the difference between the “ontology” of any EDW, and the “hyperontology” of Hypernothing. Hypernothing is nothing (it does not exist) in relationship with EDWs, it is nothing in itself, but it is hypernothing (through correspondence, no ontological status) with all EDWs. In this way, we have an “Unmoved motor”, but we avoid any ontological contradiction. It is absolute necessary Hypernothing has no “evolution”, it did not produce anything, otherwise, there would be strong ontological contradictions. We can describe certain phenomena/processes using our abstract notion of “time”, but we cannot

¹ I use “hyperis” in order to avoid other three old alternatives: the regression *ad infinitum*, nothing and God. Parmenides was right: from nothing, nothing could appear. This was the reason, I needed to replace “nothing” with “Hypernothing”. It did not mean the EW1 appeared from the EW0 since there is only correspondence between any two EDWs, and moreover, each EW accidentally appears in itself but in (hyper)correspondence to an EDW; one EW does not exist for any EDW.

use it for describing the EW0. Hypernothing hyperhas certain hyperfeatures which eliminate the regress *ad infinitum*. All its hyperfeatures have to be totally different than any feature of all EDWs, just in order to eliminate the regress *ad infinitum*, nothing, God and the illusory “spacetime”. The EW0 is “nothing”, but a kind of nothing which hypercorresponded to the EW1, for instance.

I need to elaborate a new principle which furnish the relationship between the corresponding ED laws: *the relativization of qualities, phenomena or EDWs through the correspondences between ED entities/laws (of motion, etc.)*:

Even if one EW does not exist for an EDW, the correspondences between ED entities/laws impose certain new “qualities” or “features” to some of ED entities which can be explained only based on these correspondences. In some cases, there are some new ED phenomena or new EDWs.

With this principle of the relativization of EDWs, I strongly relativize the number of EDWs. From those several EDWs (the field-EW, the microparticles-EW, the macro-EW, the self-EW) elaborated until now, the number of EDWs increases quite a lot. For instance, each phenomena belongs to a particular EW, but the motion of the entities from each phenomenon is relativized to the corresponding ED entities. The laws of motion of greater entities are more “powerful” than the laws of motion of smaller entities. The laws of motion of macro-entities are “more powerful” than the laws of motion of microparticles. The motion of a greater entity is “imposed”, *indirectly*, to the motion of smaller ED entities. The motion of microparticles which correspond to a planet is different than the motion of microparticles which do not correspond to a planet. The motion of a planet is “more powerful” than the motion of corresponding microparticles in relationship to the surrounding microparticles. Therefore, in order to explain the motion of microparticles which correspond to a planet in relationship with the surrounding microparticles, I need to relativize the framework of thinking. The planet “imposes” its motion to the corresponding microparticles (even if the planet does not exist for those microparticles). The same principle of relativization is applied to “entanglement” problem. However, in this case it is not the “size” which is involved but the “length” of an electromagnetic wave. If we posted two microparticles close to each other, a corresponding electromagnetic wave is established between “them”. The same principle is applied to the motion of “my” right hand. “I want to move my right hand.” (This sentence is wrong since the I does not exist for the hands, and vice-versa). How do I move “my” right hand? In the mind-EW, the self “commands” to the “image of the right hand” (which is part of the self) to move. At the same time, in the macro-EW, the brain sends order to the physical right hand to move. Who did impose the motion of my right hand, the self or the brain? Meaningless question, since the brain does not exist for the self, therefore, the hand does not exist for the mind. The same principle is applied to ED phenomena or even to EDWs. For instance, between two planets there is “nothing” which correspond, for instance, to the electromagnetic field. The planets correspond to two very large concentrations of electromagnetic waves/fields. The motion of a planet corresponds but also it imposes to the motion of a concentration of waves. Some of these microparticles (which correspond to the planet) are in motion, some are static in relationship among them, but these particles are in motion in relationship with the microparticles outside the conglomerates of microparticles (which corresponds to a planet).

My conclusion is the following: for describing the features of a particular entity, we need to take into account not only its real features (given by the interactions between that entity and other entities form the same EW), but also certain features that can be grasped only in correspondences with ED entities from EDWs. I emphasize that there are some *indirect* interactions between entities which belong to EDWs. For instance, the movement of the Earth around the Sun influences, indirectly, the movements of all microparticles which correspond to the planet Earth. There are many such indirect interactions among the many sets of ED entities. These interactions are indirect interactions just because one set of particles do not exist for any ED set of particles.

Chapter 2

The “Big Bang” (from actual Physics) versus *Hypermetaphysics*: the EDWs perspective regarding the *accidental* appearances of the first EDWs (the EW1a-n) in hypercorrespondences to Hypernothing (the EW0)

In this chapter, I will introduce *Hypermetaphysics*: for the first time, I furnish a complete explanation regarding the *hypercorrespondences* between the EW0 (Hypernothing) and the first EDWs (the EW1a-n, as I called). It is not about certain causal relationships between “nothing” and “somethings” (such causal relations are totally wrong, from my viewpoint within the EDWs perspective), but it is about the “hypercorrespondences” (not even “correspondences”) between the EW0 and some EDWs (the EW1a-n). In this sens, this book is about the “hypermetaphysics” and not even “metaphysics” (an empty notion, anyway). The Hypermetaphysics is about Hypernothing, the EW1a-n and all EDWs, and the chains of EDWs (like field-EW, micro-EW, macro-EW, life/mind-EW).

2.1 The history of “Universe” in Cosmology today

The “origin of the Universe” is one of the most important question in our days in Physics (Cosmology) and Philosophy (Philosophy of science^{1,2} Following several books (Devereux 2021, Singh 2005, etc.) I would like to introduce a very short summary of the “history of the Universe” from “Big Bang” until the formation of galaxies. Everybody agrees that Big Bang happened 13.82 billions years ago. In my previous works, I indicated that there was not a “Big Bang” (it does not matter what it is would be the interpretation of this notion), but there were many Big Bangs that happened 13.82 billions years ago. In this way, I wanted to avoid Guth’s notion of “inflation” which would contradict the limit of the speed of light, c . (See my previous works) Obviously, there have been many “universes” (“multiverse”, as it is know in the Physics), not only our “universe”, but these multiple universes are within the same framework: it is our ‘universe’, there are other universes in other places. This is all, I also agree with this idea: I am convinced there was not only our “universe” which appeared 13.82 bilions years ago. There are other “universes” in other places which appeared earlier or later. We cannot reduce everything to our “universe”. So, there have been not only many “universes”

¹ Feynman: “Physics is to math what sex is to masturbation.” “Philosophy of science is about as useful to scientists as ornithology is to birds.” (Feynman in Singh 2005, p. 398) Better: “System of philosophy” is to “philosophy of language” what sex is to masturbation; “system of philosophy” is to “ethics” what sex is to impotence. In front of great theoretical development in physics, philosophers started to “inquire language” (at toilet) (i.e. “philosophy of language”). Later, because of great debates in quantum mechanics (physics, in general) and the apparition of cognitive (neuro)science, philosophers deal with total abstract notions in “Ethics” since they were being unable even to understand essential notions from particular sciences. Instead of dealing with what it really exist, the philosophers from Ethics have been able to deal only with impotent notions like “good” and “bad”.

² ““Okay, you surely receive this question endlessly, but I shall ask nonetheless: How did something (the universe/big bang) come from nothing?” This is maybe one of the biggest questions of all, because it’s basically asking not only where did everything come from, but how did all of it arise in the first place. Here’s as far as science has gotten us, at least, so far.” (Siegal 2022)

(multiverse¹, i.e., many “Big Bangs”) in different “parts” of “spacetime” (which could not have any ontology - see our previous works), there were many EDWs, not only after the Big Bangs, but also before the Big Bangs (13.82 billions years ago). Essentially, we have to accept there have been different “universes” in different places (classical “multiverse”) in different periods, but also EDWs.

¹ “Whenever and wherever inflation ends, you get a hot Big Bang. If inflation and quantum field theory are both correct, a Multiverse is a must.” (Siegal 2021) No: “inflation” is not correct, and even if quantum field theory is ok, all “interpretations” of quantum mechanics are - according to my EDWs perspective - quite wrong (constructed within the unicorn world)! In this chapter, I furnish an alternative to the multiverse and EDWs. “But what initial conditions did the Big Bang need to have at its beginning to give us the Universe we have? It’s a bit of a surprise, but what we find is that: there had to be a maximum temperature that’s significantly (about a factor of ~ 1000 , at least) lower than the Planck scale, which is where the laws of physics break down, the Universe had to have been born with density fluctuations of approximately the same magnitude of all scales, the expansion rate and the total matter-and-energy density must have balanced almost perfectly: to at least ~ 30 significant digits, it must have been born with the same initial conditions — same temperature, density, and spectrum of fluctuations — at all locations, even causally disconnected ones, and its entropy must have been much, much lower than it is today, by a factor of trillions upon trillions.” (Siegal 2021) We have to pay attention to the fact that “matter-and-energy density must have balanced almost perfectly... it must have been born with the same initial conditions — same temperature, density, and spectrum of fluctuations — at all locations, even causally disconnected ones”: how was this fact possible to happen? The explanation is not through “inflation” (a contradictory notion since it presupposes processes with the speed higher than c the speed of light, c); it is through the many correspondences between the pre-Big-Bang-EW and the plasma-EW, for instance: it happened many Big Bangs, not only one in an infinitesimal “singularity” (a pseudo-notion!). In fact, Siegal correctly writes that “it has to explain what the Big Bang cannot: the initial conditions the Universe started off with. These problems that remain unexplained within the Big Bang alone must be explained by whatever novel idea comes along.” (Siegal 2021), but he adopts Guth’s “inflation”. Indeed, the Big Bang did not explain these essential problems! It was possible to be the “same initial conditions” at “all locations, even causally disconnected just because Big Bangs happened in many places in the same period of time (a very short one!). “During inflation, the Universe gets stretched to enormous sizes.” (Siegal 2021) However, with the EDWs perspective, I rejected Guth’s inflation approach which, as a physical phenomena did surpassed the speed of light, c ... However, such “exceeded” as a physical event is not possible, according to Einstein’s postulate related to his special relativity. “Only, unlike today’s dark energy, which has a very small energy density (the equivalent of about one proton per cubic meter of space), the energy density during inflation was tremendous: some 1025 times greater than dark energy is today!” (Siegal 2021) Such “energy density during inflation” is a SF story, no more! As I indicated in my book 2022, this entire energy was not placed within that “singularity”, but it has been revealed during the expansion of light in all directions after the Big Bangs. “Put simply, if each hot Big Bang occurs in a ‘bubble’ Universe, then the bubbles simply don’t collide. What we wind up with is a larger and larger number of disconnected bubbles as time goes on, all separated by an eternally inflating space. That’s what the multiverse is, and why scientists accept its existence as the default position. We have overwhelming evidence for the hot Big Bang, and also that the Big Bang began with a set of conditions that don’t come with a de facto explanation. If we add in an explanation for it — cosmic inflation — then that inflating spacetime that set up and gave rise to the Big Bang makes its own set of novel predictions. Many of those predictions are borne out by observation, but other predictions also arise as consequences of inflation. One of them is the existence of a myriad of Universes, of disconnected regions each with their own hot Big Bang, that comprise what we know as a multiverse when you take them all together... But if the theory of inflation is a good one, and the data says it is, a multiverse is all but inevitable.” (Siegal 2021) We don’t need “inflation” to predict the existence of the multiverse. With many Big Bangs happening in different places, not only for our “universe”, but for many different universes placed at very great distances, i.e., the multiverses, we reject Guth’s inflation furnishing a much better explanation (this explanation requires or not the existence of the pre-Big-Bangs-EW, i.e., we can admit many Big rejecting the existence of the pre-Big-Bangs-EW...)

In my book 2022, I developed my approach about the first EW, that is about the Hypernothing (or the EW0). In this section, I will not repeat many details about this EW, but I would like to introduce new ideas (some of them contradicting my previous ideas...). The main is that I am convinced there were “many” EDWs before the appearance of our “universe”. The new idea is that, in hypercorrespondences to the EW0 (Hypernothing), many EDWs (the EW1a-n) have appeared in different places/periods. In this way, I reject the idea which claims that from “nothing” appeared “matter” and “antimatter” (or the EW1 and respectively the EW-1, as I wrote in my book 2022). Since in correspondences to the EW0, there appeared many EDWs (the EW1a-n), we do not need to introduce “the EW-1” (or “antimatter”).

We preserve the principle of “conservation of energy” since one EW does not exist for any EDW: the EW1a-n do not exist for the EW0 so, in this way, we do not contradict the principle of conservation energy. Maybe, there are “places” where EDWs have appeared just now in certain hypcorrespondences to the EW0 (not only with correspondences to EDWs than the EW0). obviously, there have been other “universes” that appeared in other places (the “multiverses”).¹ It would be completely *wrong* to consider there was only one “Big Bang” and only one “universe” appeared (13.82 billions years ago). I am convinced (no provement) there were many Big Bangs 13.82 billions years ago (at the same time in order to avoid Guth’s inflation - see mey previous works), but also many Big Bangs happened “earlier” and “later” in EDWs. Therefore, the line of EDWs and different “universes” is somehow like this one:

- EW0 (Hypernothing) HC (hypercorrespond) to EW1a-n.
- These EDWs corresponded to (C) EW2b-m ... (C) pre-Big Bangs-EW (C) many BBs (in the same area to avoid Guth’s inflation, 13.82 billions years ago) (C) plasma-EW² (C) field-EW (C) micro-EW (C) macro-EW (C) life/mind-EW.³
- “Big Bangs” (ED Big Bangs or Big Bangs corresponding to the same EW) happened in different places, in different periods. Different “universes” (like our “universe”) have appeared in different places, in different periods; all these “universes” are in the same

¹ We have to make an analogy between our galaxies and the discovery of thousands of billions of other galaxies: at the beginning of Cosmology, many scientists were convinced that only our galaxy, Milky Way, exists. Many decades later, there have been discovered thousands of billions of other galaxies. Obviously, other many galaxies would be discovered in the future.

² “Although it was now too cool for fusion, the universe still had a temperature of roughly a million degrees, which resulted in all matter existing in a state known as plasma. The first and coolest state of matter is solid, in which the atoms and molecules are tightly locked together, as in ice. The second and warmer state is liquid, in which the atoms or molecules are only loosely linked, allowing them to flow, as in water. The third and even hotter state is gas, in which the atoms or molecules have virtually no bonds between them, allowing them to move independently, as in steam. In the fourth state of matter, plasma, the temperature is so hot that atomic nuclei cannot hold on to their electrons, so that matter is a mixture of unattached nuclei and electrons... So, an hour after its creation the universe was still a plasma soup of simple nuclei and free electrons.” (Singh 2005, p. 270)

³ There has been discovered the existence of dark matter and dark energy. In our book 2016 and article 2020, we developed a new idea about dark matter and dark energy. I will not write too much about dark matter/energy in this work. Anyway, in my book 2022, I introduced a new alternative for dark energy: the electromagnetic waves/fields (the field-EW) have the speed c , therefore, the speeds of the corresponding microparticles (the micro-EW) have been continuously increasing and the speeds of the corresponding planets (the macro-EW) have continously increasing. Obviously, having masses, the microparticles (except the photons) and the planets (all macroscopic entities) could not reach the speed of light.

“spatiotemporal” framework.¹ In this way, the appearance of our “universe” is something accidental² but quite normal. Nothing special with the appearance of our “universe”.³ There have been many “universes” and many EDWs which have appeared after many Big Bangs (within the same “universe”) or after many ED Big Bangs in EDWs. According to the EDWs perspective, we already know that 13.82 billions years ago, many Big Bangs happened in the same area, at that moment and later.⁴ This information (based on empirical results like the CMB radiation) informs us about our “Universe”. The “Standard Model of Cosmology” is the “Lambda Cold Dark Matter” model (Λ CDM), where Λ is for dark energy and CMD is for cold dark matter. It is well recognized that our “universe” has expanded after Big Bangs and the speed of this expansion is accelerating (because of the dark energy). What happened after the Big Bangs? The “universe” started to expand and its huge temperature started to decrease continuously.

The Big Bang was extremely hot, it contained all the energy of the universe. In the first millionth of a second after the Big Bang the basic elements and forces that we now see in the universe were formed, producing the sub-atomic particles of electrons, neutrons and protons, along with the strong and weak nuclear forces, gravity, electromagnetism and light. The universe at this stage was a very hot, dense soup of particles and light. (Devereux 2021, p. 3)⁵

I believe, it would be totally wrong to consider the “entire energy” was contained in the Big Bangs. As I indicated in my work 2022, the “energy” of the “universe” has been *revealed* (not “produced” from an “infinitesimal point”- obviously the most absurd notion in Cosmology) since the Big Bangs until our days. For instance, the entire “energy” of the electromagnetic field was not contained within the Big Bangs⁶: this “energy” has been

¹ This idea is called “multiverse”. These “universes” being within the same “spatiotemporal framework”, one universe can interact with another universe. Our “universe” can interact with other “universe” in the future. Therefore, the “multiverse” is a completely different notion than EDWs (one EW does not exist for any EDW, so it is *meaningless* to consider that “one EW can interact with an EDW”).

² The appearance of our “universe” is like appearance of your self/organism: accidental process among billions of other selves/organisms...

³ Obviously, I excluded “God” from this equation since “God could not even exist”. (See my article about this topic FREE at my webpage)

⁴ In my previous works, in order to avoid Guth’s notion of “inflation”, I introduced many Big Bangs happened in the same area. “These three things together, the Big Bang, dark matter and dark energy, form the ‘Standard Model of Cosmology’. There are three main problems with this model: one, we don’t know what caused the Big Bang; two, we don’t know what dark matter is; and three, we don’t know what dark energy is.” (Devereux 2021, p. 1) Obviously, there were many Big Bangs (13,82 billions years ago). What did produced these Big Bangs? According to my EDWs perspective, there was at least one EW before these Big Bangs. (About dark matter/energy see Vacariu and Vacariu 2016 and 2020).

⁵ “The Λ CDM model starts with a hot Big Bang but we don’t know what the Big Bang could be. This is the Big Bang Problem. In an expanding universe space is getting bigger and that means when we go back in time space was smaller. Going back even further, all of space, time, matter and energy will become just a single point. This point is called a singularity.” (Devereux, p. 100) According to Deveneux, this is the “Singularity Problem”.

⁶ We can relate these Big Bangs with the notion of “multiverse” or Vilekin’s “quantum creation”. (Devereux, pp. 100-1) “According to the extreme version of the anthropic principle, the finetuning of the universe which has allowed life to evolve is indicative of a tuner. In other words, the anthropic principle can be interpreted as evidence for the existence of a God. However, an alternative view is that our universe is part of a multiverse. The dictionary definition of the universe is that it encompasses everything, but cosmologists tend to define the universe as the collection of only those things that we can perceive or that can influence us. By this definition, there could be many other separate and isolated universes, each defined

revealed since the Big Bangs until today. It did not mean that the electromagnetic field existed before the Big Bangs or the entire field existed immediately after the Big Bang in an “infinitesimal point”. In relationship to the pre-Big-Bangs-EW (for instance), the field-EW did not exist. There was only the “potentiality” of the field-EW (no ontological status) which became “actual” field-EW 380,000 years after Big Bangs.

- Between the first 10 seconds and 20 minutes after Big Bangs, the protons and neutrons combined and formed the nuclei of helium.¹

After 380,000 years, the electrons and the nuclei formed the atoms. (Devereux, p. 3)² The matter was cold enough, the first photons and the electromagnetic waves (the

by its own set of six numbers. The multiverse would thus consist of numerous diverse universes, perhaps an infinity of universes.” (Singh 2005, p. 391) God could not even exist (see my article at my webpage FREE), but I sustained in the past that there were many EDWs (not only those produced by Big Bangs 13.82 billions years ago. I agree that there were many multiverse, but I add, there were many EDWs. Probably, even today, there are many EDWs which have appeared in the last 100 years (let suppose 100 years)... “Hence, quantum cosmology offers various hypotheses that allow for the universe to have started from nothing for no reason. For example, a baby universe could have spontaneously emerged from nothing, possibly alongside a multitude of other universes, making it part of a multiverse... Unfortunately, the scientific community has to admit that all these possible answers, from rebounding universes to spontaneous quantum creation, are highly speculative and do not yet properly address the ultimate question of where the universe came from.” (Singh 2005, p. 395)

¹ “The next Cosmological Clue also comes from even smaller variations in the CMB temperature, changes in temperature of ten millionth of a degree, that is 1 part in 100,000. These fluctuations were predicted by theory [29] and finding them was yet more evidence for the Big Bang. The theory is that the fluctuations are the small changes in the density of matter in the very early universe and the denser areas became the seeds for galaxies forming in the future.” (Devereux, p. 57) These small variations are the “primordial fluctuations that seeded the cosmic web”, the “Density Fluctuation Problem”. (Devereux, p. 108): “The seeds of structure must have formed in the very early universe because there is no mechanism within physics that could have caused them after the universe was one second old. The denser regions had to be there before the Λ CDM model starts and they had to be large enough by then to provide enough gravity to pull matter into oscillating clumps. Λ CDM does not explain where they came from; they are assumed to have been there. This is the Cosmic Web Problem. A possibility is that the denser regions could have been created by quantum fluctuations in the hot early universe. This is an attractive idea, and is within the laws of physics, but Λ CDM does not have enough expansion to turn quantum fluctuations into the size of galaxies today nor into the size of the temperature fluctuations of the CMB by the time the universe was 380,000 years old.” (pp. 108-9) “The fourth Cosmological Clue looks at how the chemical elements formed in the universe. The development of the physics that showed that hydrogen, helium and a small amount of lithium and beryllium, the first four elements of the periodic table, must have formed within minutes of the Big Bang explosion is a vital piece of evidence that the Big Bang happened and it comes from a totally different source than looking at galaxies in the sky. It comes from our understanding of nuclear physics; the study of how protons and neutrons bind together to form the nuclei of atoms. The formation of these light chemical elements following the Big Bang is called Big Bang Nucleosynthesis (BBN).” (Devereux, p. 58) “After 1 second the universe had cooled enough that the protons and neutrons started to bind together to form small nuclei.” (Devereux, p. 59)

² “The universe continued to cool but it was another 380,000 years before our next interesting event happened when the universe was at 3,000 degrees. This was when electrons combined with the nuclei of the elements to form atoms, a process called recombination. Atoms have no charge, the negatively charged electrons cancel out the charge of the positively charged protons.” (Devereux, p. 73) “The transition from plasma to atoms happens at roughly 3,000°C for hydrogen and helium, and the duo estimated that it would take 300,000 years or so for the universe to cool to this temperature. This event is generally known as recombination (which is a little confusing because it implies that the electrons and nuclei had previously been combined, which was not the case). After recombination, the universe became full of gaseous neutral particles, because the negatively charged electrons had combined with the positively charged nuclei. This dramatically changed the behaviour of the light that filled the universe. Light interacts easily with charged

CMB radiation¹) to evade from the “quark-gluon plasma”-EW.²

- An important consequence of stars appearing in the universe was that they gave out ultra-violet (UV) light and the massive first stars would have given out a lot of strong UV light. The UV light affected the atoms surrounding the stars by stripping off electrons in what is called ‘ionisation’. The atoms became charged. Now the high energy light was no longer absorbed and all wavelengths of light could travel through space unimpeded. The universe became visible as we see it today. This process is called ‘reionisation’. (Devereux, p. 74)³

particles in a plasma, but not with neutral particles in a gas, as shown in Figure 82. Hence, according to the Big Bang model, the moment of recombination was the first time in the history of the universe that rays of light could start to sail through space unhindered.” (Singh 2005, p. 272)

¹ “The next clue became the piece of evidence that confirmed the Big Bang must have happened and led to its general acceptance – the discovery of the Cosmic Microwave Background (CMB) in 1964 by Penzias and Wilson...” (Devereux, p. 40) “In 1948, George Gamow, Herman Bethe and Ralph Alpherin [25] were studying how the first particles could form just after the Big Bang. The nuclear reactions that had to have taken place required an extremely hot environment and would also have created light at extremely small wavelengths. This light would travel through the universe and eventually be seen by us. The expansion of the universe means that the light would also expand as it travelled, making the wavelength longer (called the cosmological redshift). Gamow had calculated that as this light hits the Earth today it would be the wavelength of microwaves. This is the Cosmic Microwave Background, it is light that was created from nuclear reactions in the hot soup of the early universe, it is a relic of the Big Bang. It is hard to explain the CMB without the Big Bang.” (Devereux, p. 54) “The other place that the pattern is seen is in the light that escaped from the regions. This light continued unimpeded throughout the rest of the life of the universe and we can see it today. This is the light of the Cosmic Microwave Background. The pattern of the oscillating regions is embedded in the CMB light in small fluctuations in the temperature of the CMB called the CMB anisotropies.” (Devereux, p. 77) “Physicists such as Gamow, Alpher and Herman performed detailed calculations, estimated the conditions of the early universe and made predictions about how the early universe would leave its mark on the current universe, namely in terms of the ratio of hydrogen to helium and the CMB radiation. These predictions have turned out to be uncannily accurate” (Singh 2005, p. 382)

² “Today, the accepted theory for how the chemical elements formed in the universe is a mixture of both the Big Bang Nucleosynthesis and stellar synthesis. The Big Bang produced 24.67% helium and 75.32% hydrogen with tiny traces of deuterium, lithium and beryllium. Stellar synthesis produces all the other elements by nuclear fusion in the stars and in supernovae explosions of dying stars. Today, all the elements, other than hydrogen and helium, make up less than 2% of the elements in the universe.” (Devereux, p. 60) “It is at one second old that one of our Cosmological Clues becomes relevant; Big Bang Nucleosynthesis. This is when protons and neutrons started to combine to form the nuclei of simple chemical elements: helium, deuterium, lithium and beryllium. By 3 minutes old, the universe had cooled to 1 billion degrees and had grown to a few hundred light-years across. The positrons had virtually all been annihilated leaving mainly electrons, and the nuclei had finished forming since all the neutrons had combined with the protons. There were more protons than neutrons so the universe was left with 75% protons (which is hydrogen), 25% helium (two protons and two neutrons) and traces of the remaining elements.” (Devereux, p. 73)

³ “Going further back in time we come to the cosmic dawn, this is the name given to when stars first started to form at about 150–400 million years from the Big Bang. When the first stars formed they were massive stars that gave off a lot of strong UV light. This light was absorbed by the neutral hydrogen atoms, releasing electrons and creating ionised hydrogen. A bubble of ionised hydrogen formed around the stars and over a period of about a billion years these bubbles grew and merged until the universe was fully ionised and became transparent to light, which is why we can see the stars and galaxies today. This process is called reionisation and the time it took from the first ionised bubbles to all the universe being ionised is called the ‘Epoch of Reionisation’ (EoR).” (Devereux, p. 142)

- Less than one billion year after the Big Bangs, some galaxies were formed.¹ Researches like Shapley, Leavitt (“Leavitt’s law” on Cepheid variables as “standard candles”), Curtis and Hubble (Hubble’s law² referring to the expansion of the galaxies³) indicated the existence of many galaxies.⁴
- Earth, Sun⁵ and other planets in our solar system have been formed 4,5 billions years ago. However, Milky Way galaxy has been formed around 100 billions years ago.
- Milky Way, Andromeda and other 30 galaxies form the Local Group. This Local Group with other groups of galaxies (around 100 galaxy groups) represent the Virgo Supercluster.⁶

¹ “Further expansion and cooling allowed gravity to pull the atoms together until they were dense enough for nuclear reactions to take place and stars were born giving off heat and light. Over time the stars have been pulled together by gravity to form galaxies (large groupings of stars).” (Devereux, p. 3)

² “In 1931 Hubble published another paper containing a new plot, shown in Figure 62. This time the points stood obediently to attention along Hubble’s line. There was no escaping the implications of the data. The universe really was expanding, and in a systematic way. The proportional relationship between a galaxy’s velocity and distance became known as Hubble’s law. It is not an exact law, like the law of gravity, which gives an exact value for the gravitational force of attraction between two objects; rather it is a broad descriptive rule which generally holds true, but which also tolerates exceptions.” (Singh 2005, p. 211) “Hubble’s observations and his expansion law meant that the whole universe was dynamic and evolving, with distances increasing and the universe’s overall density decreasing with time.” (Singh 2005, p. 214)

³ “The first clue came in 1929 when Edwin Hubble observed that most galaxies were moving away from us (Clue 1). This led to the theory that the universe is expanding. If we extrapolate backwards in time the universe must have started from an extremely small state, called the Big Bang.” (Devereux, p. 39) “Although Hubble is credited with discovering the expansion of the universe, there were two other scientists who published the idea of an expanding universe before Hubble’s publication [10, 11]: George Lemaître in 1927 and Howard Robertson in 1928.” (Devereux, p. 45) “So everything in the universe apparently emerged from a single dense region during a moment of creation. And if the clock is run forward from the zero hour, then the consequence is an evolving and expanding universe. This is exactly what Lemaître and Friedmann had theorised. This was the Big Bang.” (Singh 2005, p. 210) I believe there was not a real “Big Bang”, but many “Big Bangs”, i.e., the revealing of some matter in correspondence to the matter from the pre-Big-Bangs-EW. As I indicated in my work 2022, the entire “energy” of the electromagnetic field was not contained within that an “infinitesimal point” (singularity), but this field has been *revealed* during billions of years of the extension of the “Universe”. (see Vacariu 2022)

⁴ “As the stars were forming, gravity continued to pull them together to form galaxies. The earliest galaxies formed at about a billion years and were irregular shaped and small. As they merged, they grew until they became the smooth, large galaxies of today.” (Devereux, p. 74) More details on this topics and other related topics, see Singh (2005).

⁵ “The Sun exists within a group of at least 250 billion other stars making up the Milky Way galaxy. The Milky Way is a small spiral galaxy with four main spiral arms... The Milky Way is rotating about it’s centre and the Solar System with it. It takes the Sun about 230 million years to make one rotation of the Milky Way.” (Devereux, p. 21)

⁶ “There are estimated to be about 10 million superclusters in the universe. At the edge of the Local Group is a vast region of relatively empty space, a void of galaxies where there are less galaxies than the average in the universe, this is called the Local Hole (or Local Void). It was discovered by Brent Tully and Rick Fisher in 1987 [6]. This hole is on a gigantic scale, possibly being as long as 1,000 million light-years and 150 million light-years wide. This may seem surprisingly big, but 90% of the universe consists of voids like this. Although some galaxies do live in voids, 90% of galaxies live in the remaining 10% of the space in the universe in a structure called the cosmic web.” (Devereux, p. 22) Astronomers “discovered that our Milky Way galaxy is part of a massive system that holds thousands of other galaxies together in what is known as a supercluster of Galaxies. Researchers have revealed that the Milky Way is part of a gigantic cosmic structure named Laniakea, which spans 500 million light-years and has 100,000,000,000,000 Stars spread among 100,000 150,000 galaxies.” (<https://blog.yameestudio.com/scientists-mapped-8000-galaxies->

So where do the filaments of the cosmic web come from? This is where dark matter comes in. We find that there is not enough atomic matter for gravity to overcome the expansion of the universe and form stars. Much more matter is needed; 85% more. This is the dark matter. It provides enough gravity for dark matter clumps to form. The atomic matter is attracted to these dark matter clumps, allowing stars and galaxies to form. Where the stars and galaxies form is determined by where the dark matter is; it is the scaffold for the stars to form in. The picture of the cosmic web is the picture of where dark matter is in the universe today and it also shows us how the peaks and troughs of dark matter was distributed in the early universe. (Devereux, p. 63)¹

I notice that these superclusters and large voids have not been predicted by the “standard theory” (Λ CDM).² The universe started as a single point. The cosmologists claim that

the existence of mega-entities which belong to the mega-EW, but anyway, they confirm the correspondence between the galaxies (huge groups of planets) and the field-EW. “‘Magnetic fields pervade the universe — from planets and stars to the largest spaces in-between galaxies,’ lead author Tessa Vernstrom (opens in new tab), an astronomer at the International Centre for Radio Astronomy Research in Crawley, Australia, said in a statement (opens in new tab). ‘However, many aspects of cosmic magnetism are not yet fully understood, especially at the scales seen in the cosmic web.’” (Turner 2023, <https://www.livescience.com/galaxy-size-shock-waves-found-rattling-the-cosmic-web-the-largest-structure-in-the-universe>) It is clear, in Cosmology (in Physics in general, but also in Cognitive Neuroscience and Biology), the only alternative framework acceptable is the EDWs perspective.

¹ “So what was left was a structure of matter that formed from a combination of the denser regions and the rings left over from the oscillations. The structure is mostly dark matter, which is why we say that dark matter is the scaffold of the cosmic web, and over time the atomic matter and dark matter gravitated towards each other to eventually form the universe as we see it today.” (Devereux, p. 77) “One of the outcomes of the Λ CDM model is that the amount of atomic matter, the matter we know and can see, is only 15% of all the matter in the universe. The rest is dark matter. When we add up all the atomic matter in the stars of galaxies it comes to only 10% of the total atomic matter required by Λ CDM. If we add the gas and dust that we can see then that takes it to about 50% of the total. So where is the rest of the atomic matter? This is the Missing Baryon Problem.” (Devereux, p. 110) We explained dark matter and dark energy in our previous works (Vacariu and Vacariu 2016, 2020).

² In our book 2016 and our chapter 2020, we introduced a new perspective for dark matter and dark energy, therefore, in this work, I avoid writing about these topics. I also avoid writing about the notion of “inflation” (Guth) since in our previous works, we rejected it, and replaced it with many Big Bangs that happened in different places at the same moments. “Cosmic inflation was proposed by American physicist, Alan Guth, in 1981 [62], in order to solve the Horizon and Flatness Problems that arise out of Λ CDM. From measurements of the Cosmic Microwave Background we can see that the universe is at the same uniform temperature everywhere. This should not be the case, in the Λ CDM model there are parts of space that have never have been in contact with each other so they should be at different temperatures. This is the Horizon Problem. The Flatness Problem is that our cosmological evidence tells us that the universe is flat rather than any other shape. This is a very specific, unique shape and there is no reason why the universe should be exactly flat.” (Devereux, p. 86) About (super)string theory, see our works 2010, for instance. Within the EDWs perspective, the Flatness Problem is quite easy to be solved: space (or spacetime) could not have any ontological status; there are only correspondences between EDWs. Therefore, the “universe” is “flat”. The same answer is for the Horizon Problem (section 5.7 in Devereux 2021): “The Cosmological Clues tell us that the universe is very uniform and looks the same in all places, we see this in the CMB temperature and when we look at the cosmic web on a large scale. The Λ CDM model does not give us a uniform universe, it gives us a universe that should have differences on a large scale. So there is a problem. This is called the Horizon Problem.” (Devereux, p. 99) “There are two ways the universe must look the same. It must give the same observational evidence at all locations; this is homogeneity. It must also look the same in all directions; this is isotropy. These are not the same.” (Devereux, p. 112) “If we treat the sky as the surface of an imaginary sphere around the Earth and divide it into regions that could not have been in contact at the time of the CMB, then there are over 40,000 regions where their observable horizons were not big enough to meet. Yet, they are all at exactly the same temperature.” (Devereux, p. 115) “Einstein’s

the entire energy that exists in the “universe” today existed in this point. We do not know how this can happen, our laws of physics break down for such a point, but conceptually that is how we think of it. In physics we call such a point a singularity: a point that has an infinite amount of energy and is infinitely small. As scientists we do not like singularities, and normally avoid them, but we do not know how else to describe the start of the universe so we put up with it until we find something better. “About fourteen billion years ago, the singularity changed and created spacetime. The energy released was so massive that it made space and time expand and it continues to expand today.” (Devereux, p. 73)

- The “expansion of Universe”: Friedmann, Lemaître¹... It has been considered that the expansion of “Universe” (all matter/energy) refers to the expansion not only of matter/energy but even at space itself.²

assumption is known as the cosmological principle, which states that the universe is more or less the same everywhere. More specifically, the principle assumes that the universe is isotropic, which means that it looks the same in every direction—which certainly seems to be the case when astronomers stare into deep space. The cosmological principle also assumes that the universe is homogeneous, which means that the universe looks the same wherever you happen to be, which is another way of saying that the Earth does not occupy a special place in the universe.” (Singh 2005, p. 121) The “universe” (EDWs) is quite uniform and “looks the same in all places” just because there are EDWs which just correspond to the pre-Big-Bang-EW, but we have to be aware that this particular EW does not exist for any EDW. Each EW exists only in itself and it has no relationship with EDWs, but just correspondences.

¹ “Lemaître had argued that general relativity (in its purest form) implied that the universe is expanding. If the universe is expanding today, then in the past it must have been more compact. Logically, the universe must have started from a highly compact state, the so-called primeval atom of small but finite size. Lemaître thought that the primeval atom might have existed for eternity before there was some ‘rupture of the equilibrium’, whereupon the atom decayed and ejected all its fragments. He defined the beginning of this decay process as the start of our universe’s history. This was effectively the moment of creation—in Lemaître’s words, ‘a day without a yesterday’. Friedmann’s view of the moment of creation had been slightly different from Lemaître’s. Instead of picturing the universe as emerging from a primeval atom, Friedmann’s Big Bang model had argued that everything emerged from a point. In other words, the entire universe had been squeezed into nothing.” (Singh 2005, p. 221)

² “Earth, just as predicted by the Big Bang model, but Big Bang theorists unanimously believed that the galaxies were not actually moving through space, but were moving along with space. Eddington explained this subtle point by comparing space to the surface of a balloon, simplifying the three spatial dimensions of the universe onto a two-dimensional closed rubber sheet, as shown in Figure 64. The balloon’s surface is covered with dots, which represent the galaxies. If the balloon is inflated to twice its original diameter, then the distance between the dots will double in size, so the dots are effectively moving away from one another. The crucial point is that the dots are not moving across the surface of the balloon—instead, it is the surface itself that is expanding, thereby increasing the distance between the dots. Similarly, the galaxies are not moving through space, rather it is the space between the galaxies that is expanding.” (Singh 2005, p. 221) Nevertheless, the space does not exist (spacetime could not have any ontological status - see Vacariu and Vacariu 2016), therefore, there is indeed the extension of matter, but not of “space”. Within the EDWs perspective, I introduced a new solution in 2021, 2022: the macro-matter (the macro-EW) corresponds to the micro-matter (the micro-EW) which corresponds to the electromagnetic field (the field-EW). This field has the speed c which corresponds to the speed of the microparticles (except the photons, all microparticles have less than c) which corresponds to the speed of planets/galaxies. Because of these correspondences, the speed of galaxies/planets have been continuously increasing. “By retaining the cosmological constant and varying its value, they could tweak their theoretical models of the Big Bang and modify the universe’s expansion. The cosmological constant represented an anti-gravity effect, so it made the universe expand faster.” (Singh 2005, p. 224) In this way, we eliminate the “dark energy” in explaining the expansion of galaxies. In this way, we can eliminate both Einstein’s cosmological constant and dark energy.

Again, my opinion is the idea that the “universe” started as a single point, an “infinitesimal point”, all energy/matter being concentrated in a “singularity” is totally wrong. As I indicated in my work 2022 (and other works), matter (for instance, the electromagnetic field) has not been created from an “infinitesimal point” (a “singularity”¹), but this “field” had been *revealed* 380,000 years after the Big Bangs until today. Moreover, as we indicated in 2016, space and time (spacetime) could not have any ontological status: any kind of ontological status of spacetime would produce strong ontological contradictions.²

In this context, I introduce new EDWs. We can say that these mega-filaments belong to the filament-EW. The mega-filaments are “nothing” in the macro-EW which correspond to the electromagnetic field presents everywhere in the field-EW. Exactly as the macro-entities (the macro-EW) do not exist for the electromagnetic field (the field-EW), in the same way, the mega-filaments exist in the filament-EW but they correspond to the electromagnetic field (field-EW). Also, the mega-entities (or mega-discs from the the mega-EW) correspond to the galaxies/planets (the macro-EW). Exactly as the macro-entities like planets do no exist in the field-EW, the mega-entities (mega-EW) and the mega-filaments (the filament-EW) do not exist for the macro-entities or for the electromagnetic waves. However, without the correspondences between mega-entities/megadiscs (mega-EW) and mega-filaments (the filament-EW) and (a) macro-entities (planets) and (b) electromagnetic field, the mega-entities and mega-filaments would not exist in the mega-EW and filament-EW, respectively. Filaments exist because of their correspondence to the electromagnetic field (field-EW); mega-discs exist because of their correspondence to the galaxies/planets (macro-EW). Mega-filaments (filament-EW) are “nothing” in the macro-EW or field-EW. One mega-disc exists for other mega-discs that exist in the same mega-EW. It seems that the filaments belong to the filament-EW. Between the mega-discs there has to be a kind of “gravity”, but this gravity is neither a “force”, nor a curved spacetime; it is “nothing” which corresponds to interactions between the galaxies/plantes (macro-EW) and the curved electromagnetic field (field-EW). The mega-discs (mega-EW0) interacts through “nothing” which corresponds to the curved electromagnetic field exactly as the the planets interacts

¹ Today, we know that there are two trillion galaxies in the “Universe”. (https://bigthink.com/starts-with-a-bang/how-many-galaxies/?utm_term=Autofeed&utm_medium=Social&utm_source=Facebook&fbclid=IwAR1uAevlupic8IpiujwVMS9VG5sJPZtMzH02lWFPFQ2F1_xCByXxQ6TGcf4#Echobox=1663535566) I do not believe that the matter of these two trillion galaxies and other kinds of matter existed in an infinitesimal point! It mirrors a very strong ontological contradiction...

² “For example, we know that today’s galaxies were seeded by variations in density that existed in the universe roughly 300,000 years after the Big Bang, but what was responsible for these density variations? Also, according to Einstein’s general theory of relativity, space can be either flat, or curved inwards, or curved outwards. In a flat universe a ray of light can keep on travelling in a straight line for ever, just like a ball rolling along a flat, frictionless surface, but in a curved universe the ray could follow a circular path and return to where it started, just like an aeroplane flying around the equator of the curved Earth. Our universe seems to be flat according to astronomical observations, so the question is this: why is our universe flat, when it could have been curved? One possible explanation for both the origin of the variations and the apparent flatness of the universe is provided by the theory of inflation, which was developed towards the end of 1979 by Alan Guth.” (Singh 2005, p. 383) As I indicated in my previous works, space and time (spacetime) could not have any ontological status; moreover, Guth’s inflation (which requires a phenomena to pass the speed of light c !) is not a correct supposition: I replaced it with the appearances of many Big Bangs in many places at the same moments (13.82 billions years ago).

(macro-EW). The planets (macro-EW) and the mega-discs (mega-EW) correspond to these filaments (filament-EW) exactly as the microparticles corresponds to the electromagnetic waves. The mega-discs (mega-EW) correspond to the galaxies/planets and to the electromagnetic field (field-EW), while the filaments (filament-EW) correspond to concentrated electromagnetic field (field-EW), galaxies (macro-EW) and mega-entities (mega-EW). It seems that the mega-discs and the filaments would not belong to the same EW: the mega-discs belong to the mega-EW, while the mega-filaments belong to the filament-EW. The mega-entities (mega-EW) would explain dark matter (see our previous works 2019, 2020); the mega-filaments (filamen-EW) would explain dark energy: this energy is “nothing” which corresponds to the electromangnetic field. The galaxies/planets accelerate because they corresponds to the electromagnetic field which has the speed c in all directions.

We have different “chains of EDWs”; one of these chains is the “standard chain of EDWs”:

EW0 hyperC EW1a C EW2 C EDWs... C pre-Big-Bangs-EW C field-EW C micro-EW C macro-EW C
 (a) life/mind-EW. (C means “corresponded”)
 (b) mega-EW
 (c) filament-EW.

Any body corresponds to an amalgam of microparticles. These microparticles have the same features, they do not differ in these features. A body differs than another body because of the arrangements of those microparticles (that have the some features). (The same thing is available for microparticles-electromagnetic waves). Something macro-material corresponds to an amalgam of microparticles (for instance, protons and neutrons) and their “space” among them (that is, their positions). Therefore, “position” is more important than “content”/matter (since matter has the same properties). If two bodies correspond to two amalgams of microparticles in the same positions, then those bodies should look identical; the corresponding minds would be have the same immaterial contents. When some parameters of microparticles pass an epistemological-ontological thresold, a new EDW appeared. For instance, when a huge amalgam of microparticles become closer and closer, at one moment, when the distances between microparticles passes a thresold (the distances between microparticles have become smaller and smaller), then a macro-entity has appeared (in the macro-EW, an EW which does not have any ontological status, only the macro-entities really exist, not the macro-EW). The life-EW could not exist without the existence of corresponding macro-entities (the macro-EW). Life has to correspond to certain macro-entities (which correspond to an amalgam of microparticles which correspond to an electromagnetic field). The microparticles would not exist without the existence of the electromagnetic field. So, the electromagnetic field is a corresponding condition for the existences of microparticles. (The same statement is also available for the micro-macro relationship).

2.2 Classification of (hyper)correspondences

There are differrent hypercorrespondences and correspondences:

- (1) Hypercorrespondences between the EW0 and the EW1a-n
- (2) Correspondences between all EDWs except the EW0.

The correspondences are

- (a) Direct Correspondences, for instance, between
 - electromagnetic waves and microparticles
 - microparticles and macroparticles
 - macroparticles and life.
- (b) Indirect Correspondences, for instance, between
 - electromagnetic waves and macroparticles
 - microparticles and life.

There are hypercorrespondences between the EW0 and the EW1a-n just because the EW0 is nothing (hyperontology) which hypercorresponds to the ontologies of the EW1a-n. The EW0 *directly* hypercorresponds to the EW1a-n, and *indirectly* corresponds to the EW2 or the macro-EW or the life/mind-EW. We can claim that the field-EW (electromagnetic field always having speed c) is the absolute framework of thinking for microparticles and macroparticles. Again, the electromagnetic field did not appear from an infinitesimal point. That point corresponded to nothing; therefore, the electromagnetic field did not appear (in its EW), but it has been *revealed* from that point (any point today) in all directions. Since the Big Bangs, there have been revealed an electromagnetic field with a diameter of 26,4 billions years. This electromagnetic field has been there in state of potentiality and has become actual since the Big Bangs until now. However, because the this field has the speed c , there is no “time” for it (i.e., there are no processes for it since the electromagnetic waves spread in all directions with speed c). This electromagnetic field is the same as 12.82 billions years ago (it is not “older” not because “time” did not exist for it, but processes did not exist for it due to the speed c). The electromagnetic field has no “istory”, it is the same as 13 billions years ago.¹

Why do I need to use “hypercorrespondences”? Because the EW0 hypercorresponded to the EW1a-n. What does “hypercorresponded” exactly mean? When only the EW hyperexisted, any of the EW among the EW1a-n did exist. The hyperexistence means that the EW0 did not exist, it did not have any ontology but a hyperontology. This “hyperontology” is given by the fact that all EW1a-n “represented” the EW0, i.e., “nothing” since none of these EDWs existed and the EW0 is “nothing”. So, only the EW0 hyper-existed... the EW0 has always hyper-existed, even now this EW hyper-exists but we cannot detect at all the “nothing” since our “universe” is full of electromagnetic field. Can we say that these EDWs were “pre-existing inside” the EW0? Clearly, this statement would be a pseudo-judgment. Why? Before each of these EDWs appeared (these EDWs did not exist), all EW1a-n “represented” (hyper-corresponded to) the EW0.

In this context, we can make an analogy between EW0-EW1a-n and white color-ROYGBIV. Exactly as together, all colors are “white color”, a kind of “no color” (i.e., “nothing”). For these united colors, there were just an epistemological status, without any kind of ontological status: no color existed within this unification. “At the beginning”, when there was only the EW0, each EW did not exist in itself; “together”, all EW1a-n represented nothing which hypercorresponded to (represented) the EW0. Later, each of these EDWs appeared only in itself (probable not all at the same “time”, in the same “place”) in hypercorrespondence to the EW0. So, we could talk about the

¹ “Thus light does not get old; a photon that emerged from the big bang is the same age today as it was then. There is no passage of time at light speed.” (Greene 2008, p. 68) More details about special and general theories of relativity without “spacetime”, see Vacariu and Vacariu 2016.

“hyperontology” because before their appearances, all EW1a-n “hyper-represented” the EW0. It would mean that all these EDWs did not exist; together¹, all these EDWs do not exist even today since together these EDWs represent nothing, i.e., the EW0. When each of these EDWs (the EW1a-n) became, accidentally, only in itself and for itself. Each EW among these EW1a-n appeared in hypercorrespondences to the EW0. These EDWs, like all EDWs, have appeared (and some of them probable disappeared) in the same place and/or different places, in the same “time” and/or different periods of “time”. Any EW (among the EW1a-n) just *revealed* itself (for itself) accidentally but in hypercorrespondence to the EW0.² Any EW (among all EW1a-n) did not exist before being revealed. All these EDWs represented the EW0, but none of these EDWs existed before the EW0 (at the beginning when there was only the EW0 which hyper-was).

An epistemological entity belongs to a particular EW. Each particular EW exists only in itself, it does not exist for any EDW. It does not exist for the EW0 (which does not have any ontology!). An electromagnetic wave (which represents, for exists, the color green) is a part of the electromagnetic field (the field-EW). An EW hypercorresponds (directly or indirectly) to the EW0 and it corresponds directly to an EDW and indirectly to many EDWs. Exactly as the mind-EW appeared “from” nothing (but in correspondence to the macro-EW: any brain/body being an entity within this EW), the EW1a-n appeared in hypercorrespondence to the EW0. The EW1a appeared in hypercorrespondence to the EW0, but the EW1a existed in itself, it did not exist in relationship to the EW0. Therefore, the “principle of conservation” (matter, energy, nothing) is preserved.

Within this new framework, we can indicate how many EDWs has appeared through direct or indirect hypercorrespondences to the EW0 (Hypernothing). In this way, we exclude any other alternative (like “God” (any God) or the “regress *ad infinitum*”). All the EW1a-n appeared *accidentally* through hypercorrespondences to the EW0.³ The question, why the EW1a did not appear “earlier” is a meaningless question, since “spacetime” could not have ontology and, mainly, the EW1a (and each EW among EW1b-n) existed (was) in itself, not in relationship with the EW0. It is like asking why “my self” (self as an EW) did not appear earlier. My self appeared in a certain correspondence (no ontological status for any correspondence) to my body (the macro-EW), but my self does not exist for my brain/body, exactly as the EW1a did not exist for the EW0. My self corresponds to my body, the self of my twin brother corresponds to his body. My self (an EW) does not exist for my body, it does not exist for the self of my twin brother. Why my self corresponds to my body and not to body of my twin brother? Meaningless question, since my self always corresponds to my body and not other body. Other meaningless questions: “Why did you born in that day and not other day?” “Why did you born in that country and not other country?”, etc.

¹ “Together” means none of these EDWs existed in itself: each EW existed only in (hyper)correspondences to all EDWs.

² It is quite clear the macro-EW could not appear after the Big Bangs... The same idea is available for the EW1a-n.

³ Kuhn mentions the problems encountered by Darwin’s evolution theory: there were not only theological opponents (in 19th century, in Great Britain, the priests belonging to “mafia-religion” did not exist for scientists!); there were opponents against the idea that the evolution of species had no *goal*, it happened accidentally! (p. 172) I applied the same principle for the appearances of EDWs 9and multiverse).

Each EW has appeared in hypercorrespondences to the EW0 and correspondences to EDWs. Obviously, there are many other “universes” and many EDWs (from EW1a-n, EW2b-m,... and the only chain of correspondence that we know, field-EW, micro-EW, macro-EW, life/mind-EW). In this context, essentially, it is the notion “accidental”. What does it mean, more exactly, that “an EW appeared accidentally”? For instance, the life-EW appeared *accidentally* in correspondences to certain macro-entities which belonged to the macro-EW. It means that different macro-entities were arranged in different ways, more or less accidentally. There were some macro-laws which determined these arrangements, but we cannot claim there was a plan for the arrangement which corresponded to “life”. Such arrangements happened accidentally 3.5 billions years ago (or so)... In different periods, there happened *accidentally* arrangements of certain macro-entities and “lives” appeared as EDWs but in correspondences to these arrangements of macroentities. There was no plan for the appearances of lives - this has to be the meaning of “accidental”. There were many accidental arrangements, in general many of them being within an organizational framework (without producing life). When these arrangements passed an epistemological-ontological threshold, life (as an EDW) appeared in correspondences to those macro-arrangements (the macro-EW). The passing from an organizational threshold to an epistemological-ontological threshold happens accidentally.¹

Let me now investigate the “hypercorrespondences” between the EW0 and the EW1a-n. We cannot claim a kind of passing a threshold (any threshold) since EW0 is nothing. Nothing happened within the EW0 since it is nothing. I recall that the EW0 hypercorresponded to the EW1a-n, that is, *together* these EDWs represented the EW0. None of these EDWs did exist when only the EW0 “hyperwas”. These EDWs appeared accidentally in different places, in different “periods”. Neither “places”, nor “moments” existed before their appearances². Maybe among these EDWs, some of them were immaterial (no places, no periods - “spacetime” does not exist), we don’t know. All these represented the EW0 exactly as ROYGBIV represents white light (see below). Each EW among these EW1a-n appeared accidentally in itself for itself, each EW did not exist for the EW0. Everything which exist in EDWs does not exist for the EW0. From the viewpoint of the EW0, nothing exists. (From this reason, “infinite” could not even exist.)

Could we talk about the “pre-existences” of EW1a-n? No: before these EDWs appeared, there was nothing (the EW0) and nothing else. There EDWs appeared totally accidentally; we need to believe in this “absolute accidentally”, otherwise we need to introduce, for instance, “God” in equation or the “pre-existence status” of EDWs, but I totally rejected the existence of “God” and of any kind of “pre-existences”. The appearance of any EW happened accidentally, no more. The EW1a-n did not exist, somehow, before the first Big Bangs; they did not have any “pre-existences” status. Always, the EW0 has been nothing and nothing else. Any EW among the EW1a-n appeared totally accidentally and nothing else. Any human mind is an EW, her body is placed within the macro-EW (which corresponds to the field-EW), therefore, she will never been able to observe, directly, “nothing”, i.e., the EW0. Why? From the viewpoint of “nothing” (the EW0), we do not exist at all, the micro-entities and the macro-entities do not exist at all; nothing exists at all, nothing (the EW0) do not have any ontology.

¹ About these thresholds, see my previous works.

² Anyway, “spacetime” could not have any ontological status: see Vacariu and Vacariu 2016.

However, each EW (the field-EW or each mind-EW¹, for instance) exists in itself, but not for “nothing”. Each EW is in itself, nothing exists for “nothing” (the EW0)... In this way, the principle of conservation of “nothing” remained valid: the EW1a-n appeared in hypercorrespondences to the EW0; the “causalities”/laws between the EW0 and any EW among the EW1a-n are totally rejected...

2.3 The rejection of “antimatter”²

Within the EDWs perspective, we have to reject the idea that from “nothing” appeared “matter” and “antimatter”³ (equal “quantities”). In reality, according to my new idea within the EDWs perspective, antimatter did not exist at all exactly because there were many EDWs (the EW1a-n and not one, “our universe”) in hypercorrespondences to the EW0. These EW1a-n did not exist for the EW0, so we did not have any rejection of conservation principle of something (energy/matter) and nothing: nothing (the EW0) remained nothing, the EW1a (for instance) did not exist for the EW0, so there was no ontological contradiction at all. I emphasize that my idea from my previous work (2022) that the EW0 hypercorresponded to the EW1 and the EW-1 is quite wrong: we do not need the EW-1 (antimatter) anymore. So, “antimatter” is quite a wrong notion within the EDWs perspective. It is an acceptable presupposition within the unicorn world, since within this framework, there has to be a conservation principle between “nothing” before the “Big Bang” and the matter/energy that appeared after the Big Bang. Within the EDWs perspective, since one EW does not exist for any EDW, we do not need antimatter.

An important problem for the “Standard Model of Cosmology” is the “anti-matter problem”: the physicists have no idea where is the “antimatter” and what it has to be exactly this “matter”.⁴ Working within the unicorn world, the physicists needed to introduce “antimatter” for preserving the “principle of conservation energy”: it was believed that from “nothing”, matter was separated from antimatter (even if nobody could explained how and why this separation took place!). Through the EDWs perspective, because of the *correspondence* between any two EDWs, I strongly indicate that “antimatter” did not exist. In my previous work (2022), I introduced the correspondences between the EW0 and the EW1 and the EW-1 (the last EW being a kind of “antimatter”).

¹ We already know, the micro-EW and the macro-EW do not exist in themselves. The microparticles and the macro-objects really exist and each set of these ED entities represents the micro-EW and respectively the macro-EW.

² I introduced the rejection of antimatter as a very short subchapter to indicate the importance of this idea. The main ideas of this sub-chapter have been published in my article 2022b (*Timpul journal*). I write nothing about CPT symmetry; I believe, this symmetry (and others) are just human mind creations within an abstract mathematical background. More exactly, the theoretical physicists created such symmetries only because they have been working within the unicorn world.

³ I do not consider positron as being anti-matter of electrons (it is considered by physicists in the last decades). For me, positron is another particle with opposite charge than the electron, no more. When these two particles interact, the particles disappear BUT “pure energy” is released. It means that the positron is not an antimatter of electron; a particle to be the antimatter of another particle would mean when these two particles interact, both disappear but nothing is released. I believe that the antimatter has not been discovered yet just because it does not exist. (see below)

⁴ “The universe is made of matter. This seems an obvious statement but from our known laws of physics there should be no matter. In the early universe matter was created. When matter is created, it is always created in pairs of matter and antimatter and very quickly it is destroyed in pairs of matter and antimatter. So if the same amount of matter and antimatter was produced and then destroyed why is there any matter in the universe? This is the Anti-matter Problem.” (Devereux, p. 119)

Because there was only a hypercorrespondence (no ontology) between the EW0 and the EW1, I did not need to introduce the EW-1 (or the “antimatter”). In this way, I do not need the “existence of antimatter” at all (within the EDWs perspective, I completely reject the existence of the EW-1).¹

If the EW0 hypercorresponded only to “one EDW” (for instance, the EW1), maybe we would need to introduce the EW-1 (as “antimatter” for the EW1). In reality, the EW0 corresponded to *many* EDWs (the EW1a-n). So, in this work (as in my work 2022b), I indicate that we have to reject “antimatter” (or the EW-1 from my perspective published in my work 2022) and, consequently, the “separation of matter from antimatter”. This kind of separation would require an “external click”! Who did produce such “click”, “God” or it did happen accidentally? “God” (any God) could not exist (see my previous work), therefore we could claim it happened accidentally. Why? Having only one such event (the appearance of only one “universe”, “our universe”) which did happen accidentally, this accidental event become quite suspicious. If we extend the number of such accidental events (from “our universe” to the EW1a-n), it seems that these accidental events are not “absolute accidentally”, but become inevitable. Like the appearances of “lives” on Earth: lives appeared in different places, in different periods...

If we accept antimatter, we need to introduce many antimatter-EDWs, and this would be quite absurd. Because there were the EW1a-n and because the EW1a did not exist for any EDW, I do not need to introduce antimatter” (the EW-1, for instance). Let us suppose the first Big Bangs happened 13.82 years ago. Then the plasma-EW appeared and 380,000 years later, the field-EW appeared. However, the “electromagnetic field” was not created by something, it was not “produced” by something: the electromagnetic field has been *revealed*, not produced! It does not mean the electromagnetic field already existed there; it was nothing there, but this nothing hypercorresponds to some EDWs which did not exist yet because, together, all these EDWs represented the EW0 (like ROYGBIV...).

As a conclusion of this section: the antimatter could not even exist just because there have been many EDWs which appeared *accidentally* in hypercorrespondence to the

¹ “But the Universe we had, despite beginning in an incredibly hot and dense state where matter and antimatter could both be created in abundant, copious amounts, must have had some way to create a matter/antimatter asymmetry where none existed initially... The Standard Model has all of these ingredients, but not enough. If you consider a matter/antimatter symmetric Universe as ‘a Universe with nothing,’ then it’s almost guaranteed that the Universe generated something from nothing, even though we aren’t quite certain exactly how it happened.” (Siegal 2022) With my new idea within the EDWs perspective, the “antimatter” is not necessary at all. In fact, because of my new ideas within the EDWs perspective, we are forced to reject the existence of the antimatter and the “symmetry” between matter and antimatter. In this article, Siegal indicates Guth’s inflation as one of the best alternatives, but the author is aware that this answer could not be available for the real question: “How did everything arise from nothing?”: “Without as physical theory to describe what happens outside of the Universe and beyond the realm physical laws, the concept of true nothingness is physically ill-defined. In the context of physics, it’s impossible to make sense of an idea of absolute nothingness. What does it mean to be outside of space and time, and how can space and time sensibly, predictably emerge from a state of non-existence? How can spacetime emerge at a particular location or time, when there’s no definition of location or time without it? Where do the rules governing quanta — the fields and particles both — arise from?” (Siegal 2022) With the EDWs perspective, we furnish a new answer to this question... “No matter how logically sound any other consideration may be, including a notion of absolute nothingness, it’s merely a construct of our minds.” (Siegal 2022) Indeed, within the unicorn world, the notion of “nothingness” is indeed a “construct of our minds”! Within the EDWs perspective, “nothing” is the EW0 or Hypernothing, and nothing else...

EW0 and in correspondence to EDWs. It would be quite impossible many anti-EDWs (with ED antimatter) to appear in relationships to so many EDWs. Antimatter is a meaningless notion in physics.

2.4 More details about electromagnetic field (the field-EW)

All micro-entities and macro-objects correspond to the electromagnetic field (having always speed c). Also, all micro-entities and macro-objects have the speed c , but the speed is shared in space and time: according to Einstein (in Greene 1999), all macro-objects travel with the speed c , but for micro and macroentities these speeds are shared much more in time than in space. According to my EDWs perspective, since space and time (spacetime) could not have any ontology, all micro-entities (except photons, all have the speed less than c) and macro-objects (all have the speed much less than c) correspond to the electromagnetic field (speed c). Gaining masses, the *speed* of microparticles and mainly macro-objects shared more in time than in space, that is, the distances travelled by microparticles and mainly by macro-objects become shorter and shorter in “distances”, but longer in “processes”.

Microparticles (the micro-EW) and macro-objects (the macro-EW) (except photons with speed c , because they do not have mass) correspond to an electromagnetic waves/fields (the field-EW) which always have the speed c . This is the reason, because they correspond to the electromagnetic field, all ED entities travel with speed c in “spacetime” (in fact, longer processes (for “time dilation”) and shorter distances (for “space contraction”). Independent of “spatiotemporal framework”, the speed of light (the speed of the electromagnetic field) is always c . Therefore, all ED entities which correspond to the electromagnetic field have the speeds c (but their speed is shared more in “time”/longer processes than in “space”/shorter distances).

- Electromagnetic field has the speed c .
- Corresponding photons (no masses) have speed c (there is no “time” for photons, i.e., the photon do not interact with the down-mirror if the mirrors have the speed c).
- Microparticles (except photons) have the speed c , but these speed is shared more in “time” and less in “space”. (Mass increases with speed: if an entity having mass reaches the speed c , its mass becomes infinite). If the speed of a microparticle increases, its motion is distributed more in space (the microparticle travels a longer distance) than in time (its internal processes are slower).
- Macroparticles have the speed c , but most of their speed is shared in time, much less in space. The distances travelled by macro-entities are much shorter and their times have much more frequencies (time moves faster).

Indeed, all ED entities moves with speed c in “spacetime” (no ontological status for me) just because all ED entities correspond to the electromagnetic field.¹ This idea is constructed within a new framework of thinking, the EDWs perspective. I recall: the electromagnetic field has the speed c (there is no “time” for it, i.e, there are no “interactions” with other entities - see Greene’s example of clock with photon between two parallel mirrors...) So, when something has the maximum speed, the speed of light, c ,

¹ As I wrote in other works, there is a “chain of correspondences” between the field-EW, the micro-EW, the macro-EW and the life/mind-EW. It means that, without the field-EW, the micro-EW would not have appeared; the macro-EW would not have appeared without correspondence to the micro-EW; the life/mind-EW corresponds directly to the macro-EW and indirectly to the micro-EW or the field-EW.

there are no “interactions”. Without interactions, there are no other entities, neither in the same EW, nor ED entities (belonging to EDWs). However, the Big Bangs did not produce all matter and energy: I recall, since the Big Bangs, the electromagnetic field has been revealed not “produced” in correspondence to the EW0 (see Vacariu 2022). In this way, the matter-antimatter distinction is totally rejected. Obviously, there are other ED entities (which belong to EDWs) which have been revealed in correspondence to the nothing (the EW0). The ED entities like micro- macro and life-entities are in the “chain of correspondence” to the field-EW: without the existence of field-EW, other ED entities would not have appeared through correspondence of this field).¹

We can extrapolate these correspondences: the EW0 corresponds directly to the EW1a-n, and indirectly to the EW2b-m, etc. All ED entities (belonging to many EDWs, but not infinite EDWs - since infinite could not have any ontological status) correspond to Hypernothing: it means, all ED entities do not exist for Hypernothing, they are nothing for Hypernothing. In this way, the property (nothing, with no ontological status) is preserved: exactly as all ED entities moves with the speed of light (shared in different quantities in “space” and “time”), all ED do not exist for the EW0, they are nothing for the EW0. In the same way, it did appear only the EW1a-n and we do not need to introduce “antimatter” (or “the EW-1a-n”). Being more EDWs that appeared in the hypercorrespondences to the EW0, we do not need antimatter...

I introduced the “*revealing*” of electromagnetic field (against the classical view of its appearance from that supposed “infinitesimal point” (after the Big Bangs) just because it is quite impossible an “infinitesimal point” to exist (to have an ontological status) and to contains the “entire” energy/matter of “universe”.² Moreover, physicists presupposes that “matter” was separated from “antimatter”, but nobody has found any “antimatter” yet.³ I believe, antimatter could not even exist; within the latest version of the EDWs perspective, I reject the existence of antimatter (see Vacariu 2022b⁴ and below).

¹ Because of this “chain of correspondence”, we can consider the electromagnetic field (with constant speed independent of the framework of observation/measurement) as being, through correspondences, the “absolute framework” of ED entities like micro-entities and macro-entities; this is the reason, Einstein was right: all entities have the speed of light, c . But, as we know, light (the electromagnetic wave and also the photon, so two EDWs) has no “time”/processes; also, because of “revealing”, light has no “space”, it does not “move in space”, it is just “revealing” itself in correspondence to Hypernothing (but not in “space” because we would have a strong ontological contradiction: there can be either space or electromagnetic field, both entities could not exist in the same “place”, in the same “moment”). (see Vacariu and Vacariu 2016)

² Obviously, after 380,000 years after Big Bangs, macro-entities could not have appeared; the electromagnetic field appeared (it has been revealed) and the macroparticles appeared much later through correspondence to the microparticles and the electromagnetic field.

³ For instance, electron and positron are not “matter” and, respectively, antimatter: if one electron interacts with an positron, the microparticles do not disappear, they are both transformed in energy. So, these microparticles do not represent “matter” and “antimatter”.

⁴ In the article 2022b, I rejected the Big Bang, antimatter: “My new idea is the following: in correspondence to the EW0, there appeared many EDWs (the EW1a-n), therefore, we do not need to introduce any EW-1 (or antimatter); on the contrary, in this article, I reject completely the existence of antimatter (any kind of antimatter)... It would be completely WRONG to consider there was only ‘one Big Bang’ and only ‘one universe which appeared (13.82 billions years ago). I was also convinced (no proof) that there were many Big Bangs at the same time (13.82 billions years ago, for avoiding Guth’s “inflation”), but also many Big Bangs which appeared ‘earlier’ and ‘later’ in EDWs. Therefore, the line of EDWs and different ‘universes’ is somehow like this one:

- EW0 (Hypernothing) HC (hypercorrespond) to the EW1a-n.

The light of a lantern, for instance, consists in “producing” of an amalgam of photons which corresponds to some electromagnetic waves (part of the entire electromagnetic field revealed after the Big Bangs). In sending the photons, the electromagnetic field is activated. Otherwise, there would be strong ontological contradictions: the lantern could not emit a new electromagnetic wave since there has already been an electromagnetic field (the “universe” is full of electromagnetic field after the Big Bangs) which can have different frequencies and wavelengths. The photons of that lantern have certain frequency and wavelength. How this light is not an ontological contradiction with the existence of the previous electromagnetic field which appeared after the Big Bangs? The light of that lantern is the emission of certain photons but, in the same time, it is the activation of the pre-existing electromagnetic field (with certain frequency and wavelength). Photons are not in contradiction with electromagnetic field since photons and electromagnetic field belong to EDWs. When someone turns on the lantern, new photons are emitted indirectly by the fire of light of that lantern, but the electromagnetic field is activated since an electromagnetic field has already been there 380,000 years after the Big Bangs. Otherwise, we have to accept the existence of both

- These EDWs corresponded to (C) EW2b-m ... (C) pre-Big Bangs-EW (C) many BBs (in the same area to avoid Guth's inflation, 13.82 billion years ago) (C) plasma-EW (C) field-EW (C) micro-EW (C) macro-EW (C) life/mind-EW.

- 'Big Bangs' (ED Big Bangs or Big Bangs corresponding to the same EW) happened in different places, in different times. Different 'universes' (like our 'universe') have appeared in different places, in different periods; all these 'universes' are in the same 'spatiotemporal framework'... also believe, it would be totally wrong to consider that the entire “energy/matter” was contained in the ‘Big Bang’. As I indicated in my work 2022, the ‘energy’ of the ‘universe’ has been revealed (and not “produced”) since the Big Bangs (13.82 billion years ago) until our days. For instance, the entire ‘energy’ of electromagnetic field was not contained within Big Bangs: this ‘energy’ has been revealed (not produced) 380,000 years after Big Bangs until today... Within this new framework, we can indicate how many EDWs have accidentally appeared through direct or indirect hypercorrespondences to EW0 (the Hypernothing). In this way, we exclude any other alternative (like “God” or the “regress ad infinitum”). Essentially, it is this notion of ‘accidentally’...

In this new context, but also within the EDWs perspective, we have to reject the idea that from “nothing” appeared “matter” and “antimatter” (equal quantities). In reality, the “antimatter” did not exist at all. There were the EW0 and direct hypercorrespondences to the EW1a-n, but these EDWs did not exist for the EW0, so we do not have any rejection of the conservation principle of something (energy/matter) and nothing: nothing (the EW0) remained nothing, the EW1a (for instance) did not exist for the EW0, so there is no ontological contradiction at all. I emphasize that my old idea from my previous work (2022) that ‘the EW0 hypercorresponded to the EW1 and the EW-1’ is totally wrong: in the new context (the hypercorrespondences to many EW1a-n), I do not need to postulate the existence of the ‘EW-1’; in fact, I have to reject completely the existence of any kind of ‘anti-matter’. So, ‘antimatter’ is quite a wrong notion within the EDWs perspective... Conclusion: In this work, I indicate that we have to reject ‘antimatter’ (or the EW-1 from my perspective published in my work 2022) and its ‘separation from matter’. This kind of separation would require an ‘external click’. Who did produce such ‘click’, God or it did accidentally happen? God could not exist (see my work), therefore we could claim it happened accidentally. Why? Having only one such event (the appearance of one ‘universe’) which did happen accidentally, such ‘accidentally event’ become quite suspicious. If we extend to a much larger number these ‘accidental events’ (the appearances of EW1a-n), it results that these accidentally events are not ‘absolute accidentally’ (it would require ‘God’ or a ‘special click’), but become something inevitable. Moreover, if we accept the ‘anti-matter’, we need to introduce many anti-matter-EDWs, and this would be quite absurd. Because there were the EW1a-n and because the EW1a did not exist for any EDW, I do not need to introduce the existence of ‘antimatter’ (the EW-1, for instance). Anyway, within the EDWs perspective, the cosmologists have to change many essential concepts of Cosmology.” (2022b) (This article has been FREE at Timpul journal Internet page since it was published in December 2022).

electromagnetic fields, the one after Big Bangs and the one emitted by our lantern with different features (different frequencies and wavelengths). The question is if there are two electromagnetic fields, how do they exist within the same place, at the same time? Different features of these two fields are enough? It means, one field does not exist for the other field.¹

Let me refer again to the analogy between EW0-EW1a-n and white light-ROYGBIV²: different wavelengths in the same place, at the same time produces “white light”. I turn on the lantern during night and I see its light hitting a wall: the microparticles could not pass through the microparticles that correspond to the wall, but the electromagnetic wave (radiation) passes through the wall.³ With the Big Bangs, the pre-existing electromagnetic field has been activated.

Newton conducted many experiments with light, which are summarized in his 1704 book *Opticks*, and discovered that when clear white light passes through a prism, it refracts into different colors in a particular order, or what we know as a rainbow. This means that white light is not actually white but is composed of a homogenous spectrum of colors! These colors make up the visible (light) spectrum; it's the part of the electromagnetic spectrum that human eyes can see. All colors in the visible light spectrum travel at different wavelengths, with red having the longest wavelength at around 700 nanometers and violet having the shortest at around 380 nanometers. These wavelengths bend at different angles when passing through a prism, and this is what causes the rainbow color order to look the way it does. Newton is the one who decided to interpret the rainbow order in terms of seven unique colors—ROYGBIV—but the truth is that rainbows consist of more than a million colors, many of which are invisible to the human eye!... Newton chose to define the rainbow as consisting of seven colors because he believed the number of colors in a rainbow should be the same as the number of notes in a musical scale. Clearly, this is a pretty arbitrary (and non-scientific way) to look at the different colors in a rainbow. Indeed, many people still struggle to distinguish indigo from violet and blue! (Muniz 2019)

What does it mean “white light” is not “white but it is composed of a homogenous spectrum of colors”?⁴ What does it mean “compose”? It means that light white does not really exist? Does it mean it exists only for human observer? But we do not see white

¹ Are the ED electromagnetic fields (with different frequencies and wavelengths) in the same place, at the same time? The physicists have to answer to this question...

² “ROYGBIV is an acronym for the sequence of hues commonly described as making up a rainbow: red, orange, yellow, green, blue, indigo, and violet. There are several mnemonics that can be used for remembering this color sequence, such as the name ‘Roy G. Biv’ or sentences such as ‘Richard of York Gave Battle in Vain’.” (<https://en.wikipedia.org/wiki/ROYGBIV>)

³ $E = mc^2$ se refera la EDWs since energy belongs to the field-EW and ED matters which belong to EDWs.

⁴ “It is because Aristotle was following the Platonic conception here that he spoke of the ‘reflection of sight’. Carl Boyer suggested, however, in his book on the history of rainbow that if we are only concerned with the physical causes of rainbows it would not make any difference if we spoke of the reflection of the light instead. If we adopt this suggestion, then we may say that Aristotle was looking in the right direction, namely, he was rightly seeking the causes of rainbows in the interactions between the light from the sun and water drops in the air.” (Iida 2013) “In short, a rainbow is a public sight. To repeat, each person sees one and the same rainbow from her own perspective. But, a rainbow is different from other objects and events that can be perceived from different perspectives in that the difference of perspectives does not seem to make a change in the phenomenal content of its perception.” (Iida 2013, p. 16) “In sum, a rainbow is an event, and should not be identified with its visual appearance to us, although it is recognized as such by its characteristic appearance, namely, that multi-colored and arch-like shape. This means that a rainbow itself can exist without appearing to us.” (Iida 2013, p. 17) “... a rainbow is in reality a complicated event consisting of numerous smaller events of refractions and reflections and its participants are the mass of water drops in the air and the light rays from the sun.” (Iida 2013, p. 18)

light... However, we see rainbow, that is we see some color of ROYGBIV (obvisouly, not all). If rainbow consist of more than a million colors, maybe we can say the same thing about the relationship (hypercorrespondences) between the EW0 and EDWs.

According to Röhl, there is a distinction between electromagnetic field and wave. Röhl considers that electromagnetic fields have their proper existences with certain characteristics: they can be superposed, not countable (continuous stuff), determinate, interact, etc. So, an electromagnetic field is a continuous stuff which can “coexist” with ordinary matter. (p. 6) (In reality, there are EDWs...) “At a portion of space occupied by my body there exist also earth, magnetic and gravitational fields without excluding each other.” (In fact, there are EDWs, and space or spacetime could not even exist). An electromagnetic wave has certain features: “(1) time-varying with a specific period pattern, can (2) be charaterised by amplitude, frequency, and wave length (or wave number) and wave velocity (...)”. (p. 7)

If we clearly distinguish between waves and fields, the characteristics (amplitude, direction, frequency, wavelength) of the wave can be seen as very properties of the field that makes this particular state or configuration the field a wave. So these properties would be ascribed to the field as participant, not to the wave as a process. This would also show that for waves with material bearers we would always need the field in addition to the bearer... In the field physics, a wave can be seen as a special field configuration, a solution of a special case of a field equation, so it seems somewhat artificial to describe the field as participant in the wave process as it is this field configuration was something easily distinguishable from the wave. (Röhl, p. 7)

Waves can occur both in entities that admit of non-field descriptions and in fundamental fields, although a field description is also possible for the former case. Therefore it seems plausible to treat waves as dependent on fields. (Röhl, p. 8)

The relationship between white light and ROYGBIV mirrors (just an analogy, nothing more), somehow, the relationship between the Hypernothing (the EW0) and the EW1a-n. The EW0 has no ontology (it is nothing with its hyperontology) that means the EW0 hypercorrespond directly to the EW1a-n and indirectly to all EDWs.¹ I recall the field-EW has just been revealed (not produced by the Big Bangs - more exactly, after the plasma-EW). The electromagnetic field is placed in all extension/“space” of this “Universe” and it has extended since the Big Bangs until today and, probable, it will be extended in the future. However, having speed c , the electromagnetic fields (electromagnetic waves) do not have “time”. Being only revealed, we can consider this field is not even placed in “space” (since even “space” could not exist). We can consider that the macro-EW are placed somewhere (one in relationship to the others), but we cannot find any relationship for this electromagnetic field which covers the entire “space” since the Big Bangs. All micro-entities or all macro-entities correspond to this field (the field-EW), i.e., one such entity exists in relationship to other entities from the same EW. We can attribute a “time” and a “space” to a micro-entity (or macro-entity), but we cannot attribute space or time to the electromagnetic field (the field-EW). So, the same rule that we applied to the relationship between the EW0 and the EW1a-n can be applied to the pre-Big-Bangs-EW and the EDWs that appeared, accidentally, after the Big Bangs. Maybe there were EDWs after the Big Bangs/plasma-EW, not only the field-EW (which

¹ I recall, there is a direct correspondence between the field-EW and the micro-EW, and an indirect correspondence between the field-EW and the macro-EW.

accidentally and immediately corresponded to the micro-EW), we do not know yet, but these EDWs could be in the same “Universe” with EDWs (field-EW, micro-EW, macro-EW) or in other “places”.¹

2.5 More details about special theory of relativity²

Let me investigate, very shortly, some ideas referring to special relativity (from Greene 1999). We already know that, according to special relativity, “simultaneity” does not exist since the speed of light is c , not infinite (and this speed cannot be passed - something to pass c requires infinite mass and infinite energy, quantities that could not even exist!). For Einstein, “time” exists because we can measure it using a “clock”. For instance, in his example, Greene uses a clock made from a photon which travel between two mirrors: “one second” is from the moment the photon travel from the above mirror to the below mirror and return. If the clock is in motion (“sliding clock”), the path travelled by a photon will be longer; therefore, the second will be longer (“time dilation”).³ For me, since space and time could not exist, I rejected the notions of “time dilation” and “space contraction”. There are just “longer processes” (not “time dilation”) and “smaller extensions” (not “space contraction”). Nevertheless, light has the same speed c independent of the framework of measurement.

A big clue for how to do this comes from a central piece of information we have already encountered. When an object moves through space relative to us, its clock runs slow compared to ours. That is, the speed of its motion through time slows down. Here's the leap: Einstein proclaimed that all objects in the universe are always traveling through spacetime at one fixed speed—that of light. This is a strange idea; we are used to the notion that objects travel at speeds considerably less than that of light. We have repeatedly emphasized this as the reason relativistic effects are so unfamiliar in the everyday world. All of this is true. We are presently talking about an object's combined speed through all four dimensions—three space and one time—and it is the object's speed in this generalized sense that is equal to that of light. To understand this more fully and to reveal its importance, we note that like the impractical single-speed car discussed above, this one fixed speed can be shared between the different dimensions—different space and time dimensions, that is. If an object is sitting still (relative to us) and consequently does not move through space at all, then in analogy to the first runs of the car, all of the object's motion is used to travel through one dimension—in this case, the time dimension. Moreover, all objects that are at rest relative to us and to each other move through time—they age—at exactly the same rate or speed. If an object does move through space, however, this means that some of the previous motion through time must be diverted. Like the car traveling at an angle, this sharing of motion implies that the object will travel more slowly through time

¹ Again, I draw the attention on the great difference between EDWs and “multiverse”: EDWs are in the same “place” or in different places, the “universes” of the “multiverse” are always placed in different places.

² The EDWs perspective applied to both special relativities and quantum mechanics, see Vacariu 2006, 2007, 2008, etc.)

³ “The simple but essential point is that the double diagonal path that we see the photon traverse is longer than the straight up-and-down path taken by the photon in the stationary clock; in addition to traversing the up-and-down distance, the photon in the sliding clock must also travel to the right, from our perspective. Moreover, the constancy of the speed of light tells us that the sliding clock's photon travels at exactly the same speed as the stationary clock's photon. But since it must travel farther to achieve one tick it will tick less frequently. This simple argument establishes that the moving light clock, from our perspective, ticks more slowly than the stationary light clock. And since we have agreed that the number of ticks directly reflects how much time has passed, we see that the passage of time has slowed down for the moving clock.” (Greene 1999, pp. 22-3) It is not about “time dilation” (“one second is longer”), but simply the motion of the photon takes place in a longer path (not longer space)! Nothing else... In motion, all processes of any mechanism (it does not matter what kind of the mechanism is involved) take place longer (that is, the elements of that mechanism travel in a longer distances due to the motion of that mechanism).

than its stationary counterparts, since some of its motion is now being used to move through space. That is, its clock will tick more slowly if it moves through space. This is exactly what we found earlier. We now see that time slows down when an object moves relative to us because this diverts some of its motion through time into motion through space. The speed of an object through space is thus merely a reflection of how much of its motion through time is diverted. (Greene 1999, p. 27)

The most important words are the following: “Here's the leap: Einstein proclaimed that all objects in the universe are always traveling through spacetime at one fixed speed—that of light. This is a strange idea...”. Indeed, all objects (microparticles or macroparticles) always travel with the speed of light, but they travel not in “spacetime”, but in “nothing” which always corresponds to the electromagnetic field (with speed c). In this case, the photon does not travel in an electromagnetic field, the photon corresponds to an electromagnetic field (both photon and electromagnetic field have the speed c).

2.6 More details about general theory of relativity

Now, let me write few words about general theory of relativity. The problem of special theory of relativity (which refers to the phenomena having constant speed) was that it could not explain “gravity”. Obviously, with his theory of gravity, Newton realized the great unification between the falling apple and the movement of planets.¹ We knew Newton could not furnish a definition of “gravity”; he introduced only the mathematical formula for the “force of gravitation”, but he did not have a clear of gravity.²

Let me introduce several paragraphs regarding general relativity from Greene's book (1999) which I will comment below:

- “Einstein called the indistinguishability between accelerated motion and gravity the equivalence principle.” (Greene 1999, p. 32) More exactly, gravity “is the warping of space and time”. (Greene 1999, p. 35)
- “The sun, like the bowling ball, warps the fabric of space surrounding it, and the earth's motion, like that of the ball bearing, is determined by the shape of the warp... The difference, now, is that unlike Newton, Einstein has specified the mechanism by which gravity is transmitted: the warping of space.” (Greene 1999, p. 36)
- “Einstein was able to calculate how fast disturbances to the fabric of the universe travel and he found that they travel at precisely the speed of light.” (Greene 1999, p. 38, his italics)

We have to interpret these paragraphs from the EDWs perspective. In our book 2016, we indicated “spacetime” could not have any ontological status. Therefore, in that

¹ Maxwell was the scientist/mathematician who realized the second greatest unification: he unified the magnetic field with the electric field. With my discovery of EDWs, I realized the first “greatest desunification” in the history of human thinking...

² “It is inconceivable, that inanimate brute matter, should, without the mediation of something else, which is not material, operate upon and affect other matter without mutual contact. That Gravity should be innate, inherent and essential to matter so that one body may act upon another at a distance thro' a vacuum without the mediation of anything else, by and through which their action and force may be conveyed, from one to another, is to me so great an absurdity that I believe no Man who has in philosophical matters a competent faculty of thinking can ever fall into it. Gravity must be caused by an agent acting constantly according to certain laws; but whether this agent be material or immaterial, I have left to the consideration of my readers.” (Newton in Greene 1999, p. 30) Greene continues with this sentence: “That is, Newton accepted the existence of gravity and went on to develop equations that accurately describe its effects, but he never offered any insight into how it actually works.” (Greene 1999, p. 30)

book, we re-wrote Einstein's special and general relativities without spacetime. Gravity is not "warping of space and time", gravity is "warping" (indirectly through the correspondences between the electromagnetic field and the macroparticles) the electromagnetic field, nothing more. "Quantum gravity" and "gravitons" do not exist at all. We cannot detect the warping of electromagnetic field at "micro-scales", but at "macro-scales" (abstract notion) is not "spacetime" which is warped, it is "nothing" (no ontological status) which corresponds to the electromagnetic field which is warped not by a planet (the planet does not exist within the field-EW), but by a huge concentrated electromagnetic field from the field-EW (this electromagnetic field corresponds, within the macro-EW, to a planet) which warps the electromagnetic field which surrounds that concentrated electromagnetic field.¹ Gravity travels with the speed of light just because "gravity" (no ontological status at all, not even as being the "warping of spacetime" since spacetime could not have any ontology!) is the deformation of the electromagnetic field which has the speed c .²

Let me introduce now some ideas about a kind of framework for an "absolute spacetime". In this sense, regarding quantum interpretations, Putnam notices that

It is that neither of these theories is Lorentz invariant, and it seems likely to me there is no rigorous proof, but, as Maudlin argues, it is pretty clear that no theory in either of the classes that they represent (the 'no collapse and hidden variables class' and the 'spontaneous collapse' class) can do without an 'absolute time' parameter. An absolute time will come back into the picture if either sort of theory is destined to be the future physics. (Putnam 2005, p. 631)

Can we soften the 'bad news' that we may need to return to a notion of 'absolute time'? My final suggestion is this: when it comes to quantum cosmology—and, as yet, neither GRW nor the Bohm theory has been extended to quantum cosmology—in my view, present-day quantum cosmology does already involve a 'background' time parameter. It is sometimes concealed, as when cosmologists say that they are not really taking an absolute time as the parameter in the Schrödinger equation but are taking something

¹ "This description shows that general relativity finishes a job initiated by special relativity. Through its principle of relativity, the special theory of relativity declares a democracy of observational vantage points: the laws of physics appear identical to all observers undergoing constant-velocity motion. But this is limited democracy indeed, for it excludes an enormous number of other viewpoints—those of individuals who are accelerating. Einstein's 1907 insight now shows us how to embrace all points of view—constant velocity and accelerating—within one egalitarian framework. Since there is no difference between an accelerated vantage point without a gravitational field and a nonaccelerated vantage point with a gravitational field, we can invoke the latter perspective and declare that all observers, regardless of their state of motion, may proclaim that they are stationary and 'the rest of the world is moving by them,' so long as they include a suitable gravitational field in the description of their own surroundings. In this sense, through the inclusion of gravity, general relativity ensures that all possible observational vantage points are on equal footing." (Greene 1999, p. 32) We can generalize the framework of thinking ("all possible observational vantage points are on equal footing") just because all observers (macro-entities or micro-entities) correspond to the electromagnetic field with a constant speed c ...

² Maybe we can talk about "spacetime" within the macro-EW or the micro-EW or even the field-EW, but the "spacetime" could not have any ontological status. The "spacetime" is the electromagnetic field (the field-EW), therefore, there are only correspondences between the electromagnetic field and the "nothings" (spacetimes) between the macro or micro-entities (within the macro-EW or the micro-EW). "This merger was summarized by the poetic words of Minkowski, who during a lecture on special relativity in 1908 said, 'Henceforward space on its own and time on its own will decline into mere shadows, and only a kind of union between the two will preserve its independence.'" (Greene 1999, p. 34) In fact, the "union" between "space" and "time" was possible just because neither space nor time could have any ontological status, so it was an abstract "union", no more.

such as the ‘radius’ of the universe as the time parameter (and hoping that this is a well-behaved quantity). But this parameter plays exactly the role of an absolute time in which the cosmos is supposed to evolve.

The reason for its presence is that, in present-day quantum cosmology, one does not talk about one single space-time. Quantum mechanics depends on the idea that all physical ‘states of the world’ (Live Cat, Dead Cat, Red Light lights, Green Light lights, and so on) are represented by mathematical objects, vectors, which can be multiplied by scalars and can be added, so that one gets such states as $p(\text{Green Light lights}) + q(\text{Red Light lights})$. In quantum cosmology, the state vectors can represent different geometries of space-time. (A classic presentation is Misner et al. [1973].) In effect, one superimposes whole space-times. And this superposition of space-times evolves in the background time.

So, what relieves my initial distress at the idea of an absolute time coming back into the picture is the following thought: it might not be quite as bad a contradiction of Einstein’s vision as it first seems. It might be that, before we ‘superimpose’, each space-time is perfectly Einsteinian—each space-time is a Minkowski space-time which knows nothing about any ‘simultaneity’. And it may be that the time parameter that both GRW and Bohm need is just the absolute time parameter that quantum cosmology seems to need. Of course, this is just a speculation. But it would mean that, although Einstein would have to admit that there is such a thing as simultaneity, it comes from ‘outside’ any one well-defined space-time, it comes from the quantum mechanical ‘interference’ between whole space-times. (Putnam 2005, p. 632)

Let me interpret, from the EDWs perspective, Putnam’s paragraphs. Indeed, we have, somehow, to introduce an “absolute time”, but not as real physical “parameter”, but only as a “tool of describing” the behavior of certain ED physical entities (for instance, micro-entities and macro-entities). The physical “background” of microparticles (the micro-EW) and macroparticles (the macro-EW) is the corresponding electromagnetic field (the field-EW). However, this field has a constant speed, c , for all observers. “Time” does not exist either for the electromagnetic field (the field-EW) or for photons (the micro-EW) because all these ED entities have the speed c (in fact a clock could not measure one second since all its mechanism moves with speed c). In my EDWs framework, we can consider the field-EW as the “primordial EW” in the “chain of correspondences” (field-micro-macro-life). Without the field-EW, we could not speak about the micro-EW or the macro-EW (without the macro-EW, the life-EW could not appear!).¹² But, within the “unicorn view”, the electromagnetic field does not have “time” even if it moves in space. Within the EDWs perspective, I indicated that the “electromagnetic field did not moves in space”, it has been revealed itself (accidentally³) since the Big Bangs until now.⁴

¹ In this way, with the EDWs perspective, we avoid that “infinitesimal point” which contained all energy and matter that has appeared from the “Big Bang” until now...

² “The special theory of relativity owes its origins to Maxwell’s equations of the electromagnetic field.” (Albert Einstein) This statement is quite normal since the field-EW is the primordial EW of the “first chain of correspondences” (field-micro-macro-life) and the speed of electromagnetic field is c , independent of the status of any observer...

³ Obviously, there are other “universes” in different places, in different periods. Electromagnetic field has been *accidentally* revealed, but in other “universes”, there are other kinds of matter that were revealed.

⁴ In our “chain of correspondences”, we have to include the pre-Big-Bangs-EW... But we have to be aware that, in correspondences to the pre-Big-Bangs-EW, maybe other EDWs has appeared... we don’t know, yet... Like in hypercorrespondences with the EW0, not only one EDW appeared, but many EDWs (the EDWs1a-n) appeared and maybe EDWs have still appeared in totally different places than where our “universe” is placed, in the last year... I am convinced that the religious thinking (the existence of “one God”) has influenced, directly and indirectly, the human thinking: philosophers and the scientists have restricted all the existences to “one continent”, “one planet”, “one planetar system”, “one galaxy”, and “one world/Universe”. Only different forms of “reductionism” had been available within the unicorn world until the appearance of my approach (2002-2003 and mainly 2005 since in 2006 there are tens of people

As Putnam writes, “one does not talk about one single space-time” , there are “geometries of space-time”. In reality, there are EDWs, but not “spacetime” (spacetime could not have any ontology, otherwise, any ontology would produce some strong ontological contradictions, see Vacariu and Vacariu 2016). Moreover, the electromagnetic field can be “straight” or “curved” (it depends if there are planets or not) and this electromagnetic field is not placed in “spacetime”, but in “nothing” which maybe corresponds to something which belongs to the pre-Big-Bangs-EW (we have no prove for this idea). The micro-EW or the macro-EW did not have a pre-existence; these EDWs have been formed in (direct or indirect) correspondences to the field-EW immediately after the Big Bangs and later (the macro-EW - its macro-entities - almost one billion years later).

Within the EDWs perspective, we can talk about an “absolute spacetime” (with no ontological status, just as a tool of explanation) only based on the (direct or indirect) correspondences between the “primary EW” (the field-EW) and certain EDWs (the micro-EW, the macro-EW, the life-EW) in our “chain of correspondences” but taking into account that the speed of electromagnetic field (the field-EW) is constant (being independent of the state of any observer) and this speed is the maximum speed an entity can reach. Because of the speed c , the electromagnetic field has no “time” (i.e., a clock would not mark any second); it is “placed” in “nothing” (no ontological background which maybe corresponds to something which belongs to an EDW, we don’t know yet), but we cannot say that it is placed in a particular “space” (since space(time) could not have any ontological status). The EW1a-n appeared exactly as the lives appeared on Earth: the life did not appear from macro-entities, but in certain correspondences to these entities. Life did not appear only in correspondance to one entity (an entity “having life”). Obviously, the environment created the conditions of appearance of lives in many places on Earth. Therefore, the lives appeared in different places, not in the same time but in different periods. Exactly the same thing happened with the appearances of EW1a-n: there was not only one EW1a which appeared in hypercorrespondence to the EW0; there were many EW1a-n which appeared in different “periods”. Why the EW1a-n appear in hypercorrespondences to the EW0? The answer is exactly as the “lives” appeared on the Earth in correspondences to certain macro-entities: accidentally. There was no God, not regress *ad infinitum*, but only “nothing” (the EW0) which was the “hypercorresponding conditions of possibility” for appearances of many EDWs (the EW1a-n) in different “places”, in different “periods”. I emphasize again that the EW0 has been the hypercorresponding “conditions of possibility” for many EDWs (the EW1a-n), not for only one EW.¹ Probably, in this period (how long period? I do not know exactly), an EDW appears in itself (it does not exist for any EDW, including the EW0), but in the hypercorrespondence to the EW0 somewhere... Why these EDWs (the EW1a-n) have

“discovering” “different realities”, i.e., my EDWs). Also, the existence of self in itself (no “access” to other selves) has influenced this way of thinking pro-“only one”.

¹ If there were only one EW hypercorresponding to the EW0, it would be quite difficult to accept that the appearance of this EW was just accidentally. Such “accident” would have just very few chances to take place. This is the main reason, we have to accept the hypercorrespondences between the EW0 and many EDWs (EW1a-n) in different places, in different periods. It would be “ED accidents” (and “different accidents” - for instance, the appearances of different “universes” in different places, in different “times” within the same EW), not only one... Again, life did not appear on Earth just in one place, at one moment but surely in many places on Earth, in different “times”.

appeared in the hypercorrespondence to the EW0? Each EW has its “conditions of possibility” of appearance “in itself” (no ontology) and in hypercorrespondence to the EW0 (and in direct or indirect correspondences to EDWs). Life (an EW) appears in itself, but in correspondence to a macro-entity, the organism (the macro-EW). I recall, again, ROYBGIV for EDWs: all EW1a-n were “nothing”, i.e., they hypercorresponded to the EW0. The EW1a (and, compulsory, all EDW1b-n) accidentally “appeared” in itself and through hypercorrespondence to the EW0. The EW1a did not exist either for “nothing” (the EW0), or for the EW1b (for instance). A life-EW appeared accidentally in itself but always in correspondences to a physical organism created (also accidentally) within the macro-EW from certain macro-entities (these entities being without corresponding to any “life”).

I recall that the field-EW has no “time” (even just as description since “spacetime” cannot have any ontological status, see Vacariu and Vacariu 2016) as we can describe the macro-EW, for instance) just because the speed of electromagnetic field is c . We can consider that the field-EW does not have even “space” (if we believe the field is placed within a “spatial framework”, there would be an ontological contradiction). Officially, an electromagnetic field started 380.000 years after Big Bang when temperature decreased enough first photons and waves to evade. From the EDWs perspective, the electromagnetic field was not produced by the Big Bang; after the Big Bangs, the electromagnetic field has been revealed until our days. We have to pay attention to the features of the electromagnetic field, these features being the closed to “nothing”: it is continuous, it has neither “time”/processes, nor interactions, not even entities (like microparticles). Mostly, this field had electromagnetic waves; because of the interactions between these entities, the corresponding microparticles have been created. However, the micro-EW (or macro-EW) has more different features than “nothing”: there are micro/macro-entities (discontinuities) and their interactions; we can only “attribute” space and time (or spacetime) to micro/macro-entities¹. So, their traits are more different than “nothing”. It is more difficult to associate the micro-EW or the macro-EW to “nothing” than the field-EW. The mind-EW has features totally different than the field-EW. Obviously, the same thing we can sustain about the EW1a-n and the EW2b-p, for instance: the hypercorresponding EDWs (the EW1a-n) are closer to nothing than the corresponding EDWs (the EW2b-p, for instance). Again, the electromagnetic field has been revealed not produced (as I indicated above and in my book 2022). It represents “nothing” (no ontology) for the micro-entities and the macro-entities which we can associate them with a “spatiotemporal explanations” (no ontology for any “spatiotemporal framework”). Within the same “spatial framework”, there are all EW1a-n (even if some of these EDWs could not have “spatial explanation” like the mind-EW).

The “conditions of possibility” (Kant) do not have any ontological status. These conditions represent the “possibilities” of appearances, but these possibilities do not have any ontological status. The EW0 represented the “conditions of possibility” for the EW1a-n. at the beginning, when there was only EW0, these EDWs are in a potential status, all these EDWs representing Hypernothing. Accidentally, from *potential*, each (or maybe not all, but some) of these EDWs became *actual*, but this actuality happened in

¹ We can attribute an abstract “spacetime” just because of the correspondences between electromagnetic field and micro-macroparticles. Without these correspondences, we could not even attribute such abstract “spacetime”.

itself, for itself (since an EW did not exist for any EDW). In this way, we have to define the existence of any EW. Hypernothing remains Hypernothing and nothing else. Any EW among these EDWs appeared only accidentally but in hypercorrespondence to the EW0. Without such hypercorrespondence, any EW among the EW1a-n could not appeared. There were no rule regarding the appearances of EW1a-n. Of course, there are some correspondences between microparticles and macroparticles (a macro-entity is just an amalgam of microparticles), but there are no such relationships between any EW1a-n and the EW0: the appearance of any EW among EW1a-n was completely accidentally since the EW0 was nothing and nothing else.

If we consider a particular case (there was no “universe” before the Big Bangs), than before these Big Bangs (12.82 billions years ago) there was only the EW0 (Hypernothing). After the Big Bangs appeared the plasma-EW and, later (380,000 years later), the field-EW appeared, or better, *revealed* in “correspondence” to “nothing” (as I mentioned in 2022). The electromagnetic field has been *revealed* from those moments (380.000 after Big Bangs) until now: actually, other parts of the electromagnetic field are revealed in (all) directions in which the “Universe” has been extending since “its” appearance. In reality, after the Big Bang (and ignoring the plasma-EW), our “Universe” has been a manifestation (transformation from the “state of potentiality” to the “state of actuality”) of the electromagnetic field. This electromagnetic field has been in a potential state which has become actual state (through its *revealing*) in time. Maybe in other places, in other periods, certain EDWs have been revealed in hypercorrespondence to the EW0 or produced in correspondences to EDWs. *All the EW1-n have been revealed in hypercorrespondences to Hypernothing*, while some EDWs appeared (later) in correspondences to these EW1a-n (like the EW2b-m, etc). However, the field-EW (in this particular case, but all EW1a-n, in the general case) did not exist before the Big Bangs, but it was in a “potential state” with other EDWs. In this work, I officially rejected the existence of the “anti-field-EW” from my book 2022 (and maybe other works). More exactly, I replace the “anti-field-EW” with certain EDWs. In general case, I replaced “the EW1 and the EW-1” with the “EW1a-n”. All these EW1a-n represented “nothing”, i.e., the EW0.

We return again to the analogy to ROYGBIV: together, all colours represent white light. Using a prisma (as Newton did), colors are separated and become visible for human eyes. Before this separation, human eyes do not see even white color. We see the objects which absorb majority of wavelenghts and reflect one electromagnetic wave of the light (the color that we attribute to that object). Within white light, colors do not exist for human eyes. In the same way, we cannot see the EW0 (Hypernothing) since it does not have any ontology. Without any ontological status, there is nothing to observe. A prisma separates the electromagnetic waves attributed to different colors and human eyes are able to perceive these colors. And now the analogy: together, all EW1a-n are in the same status as colors are in ROYGBIV: the EW1a-n represent the EW0, while colors represent white light. In relationship to human eyes, colors do not exist before they are separated using that prisma. When prisma separates colors, each color is separated from other colors and becomes visible. In the same way, each EW among the EW1a-n became active in itself for itself. It is not necessary to consider each EW became separated from other EDWs. So, at this point, we have to stop the analogy. Each EW (among the EW1a-n) became active from its potential state (together, all these EDWs were in the “potential

states” and represented nothing, i.e., the EW0). Together, all EW1a-n did not exist; however, at different moments, these EDWs started to exist, each in itself, for itself. These EDWs did not exist for the EW0; the EW0 has always been nothing, i.e., being “nothing”, it has not been existed.¹ “Nothing” has no ontology, it is not extended (like the field-EW), time could not be attributed because there are no processes, no entities, there is nothing. I recall: this “nothing” hypercorresponded to the EW1a-n (all EW1a-n “represented” the EW0).

¹ Can we consider the electromagnetic field being in a potential state, and the electromagnetic waves and the photons (for instance) became active? I do not know, the physicists have to answer to this question...

Chapter 3

More details about Hypernothing and its hyperontology¹

3.1 Hypernothing (epistemologically different then “something” and “nothing”)

In my previous books (2008, 2010, 2011, 2012, 2014, 2016a, 2016b), using EDWs, I investigated the main streams of human knowledge, mainly in the particular sciences, such as physics, cognitive (neuro)science, biology and philosophy. With the EDWs perspective, I have given answers to the main problems of these domains. In my book (2017), I have investigated other areas (like thermodynamics) and topics of physics. So, I can claim that I have written about almost everything. I indicated that the regress *ad infinitum*, nothing and God are just empty concepts (Vacariu and Vacariu 2019).

Let me insert *more* ideas about “nothing”. “Because it’s not there might be reason enough to write a book about Nothing, especially if the author has already written one about Everything.” (Barrow 2002) What does “nothing” mean, in general? Kuhn (2017/2013) indicates five alternatives: “(1) a blank is absurd; (2) no explanation needed; (3) chance; (4) value/perfection as ultimate; and (5) mind/consciousness as ultimate”. (Kuhn 2017/2013, p. 1) Kuhn indicates nine levels of nothing: it starts with space and time without any objects, visible objects, matter and energy, laws, abstract objects, possibilities and God. However, Hypernothing is something completely different from this “nothing”, since Kuhn’s “nothing” refers to the “nothing” constructed within the unicorn world. On the contrary, Hypernothing has to be beyond “something” or “nothing”: it cannot be “something” (“something” would require a previous cause), it cannot be “nothing” (“nothing” produces nothing). Therefore, Hypernothing hyperis Hypernothing. What does “nothing” mean for physics? According to the Merriam-Webster’s dictionary,

nonexistence is *the negation of being*. There are several ways to refer to this enormous entity: zero, null, empty, vacuum, void. All of these refer to the idea of nonexistence. There is more of this “nothingness” in the universe than there is physical existence. However, none of this is empty. We need to define what “empty” means in order to understand “nothing”. Emptiness can be filled endlessly with more *nothing* without ever becoming full. (Stock 2017)

In the past, my works covered the main topics of various sciences and philosophy. Therefore, just because I have already written about “Everything”, it is my duty to deal with “Nothing”. In my EDWs framework, I will investigate *Hypernothing* (quite a different notion from “nothing”): for me, Hypernothing is the first EW (a kind of Aristotle’s “prime/unmoved mover”; both these expressions are quite wrong, so I replaced them with something completely new: “Hypernothing”).

Let me clarify the difference between “Hypernothing” and “nothing”. When we talk about “nothing”, it is about “nothing” which “refers” to a particular EW. For instance, “on a table, there are two glasses of water and nothing else between them”. The table and those two glasses belong to the macro-EW. Between these two glasses there is “nothing” (we eliminate the air, dust etc.). The “nothing” between these two glasses has no ontological status. However, this “nothing” corresponds to some microparticles that

¹ Large parts of this chapter are from my work 2022.

belong to the micro-EW, for instance. On the contrary, Hypernothing has a kind of hyperontology, that is beyond the ontologies of all EDWs that we know and we can know in the future. *“Hypernothing” has a hyperontology.* We know that an EW does not exist for any EDW, but the ontologies of all EDWs (except the EW0) are “somethings”, while the hyperontology of Hypernothing is hypernothing, nothing more or less. The “hyperontology of Hypernothing” is not only beyond the ontology of any actual or possible EW, but it is the hyperontology of Hypernothing. Why do I need to postulate the existence of such a hyperontology? The answer is in the following statements:

Without the hyperontology of Hypernothing, all EDWs would not be at all (even if one EW does not exist for any EDW), i.e., there would not be any ED ontology, or any ontological entity would not exist.

If Hypernothing were just “nothing”, then all EDWs would not be. The “hyperontology” is something different from “ontology”. The EW0 hypercorresponded to the EW1a-n. Since “nothing” has no ontological status, the old and well-known verdict “Nothing can appear from nothing” is very true within the EDWs perspective.

Even if Hypernothing hyperis an EW, this EW hyperis the “first EW”, the EW0. Any kind of “epistemological ontology” has to be rejected, otherwise, we have to accept the existence of “infinity”, but “infinity” cannot exist (i.e., it cannot have ontological status). If “infinity” existed (for instance, the infinite space and time), I would not be “here” and “now”.

My main thesis that I present in this chapter is the following: *“Hypernothing hyperis and hypercorresponded to EW1a-n”.* As an EW, the Hypernothing cannot *be/exist* since “any EW is”. Only ED entities (objects, for instance) “exist” in EDWs. Moreover, only the “self” (as an entity and an EW) has an ontology and the Hypernothing really have a hyperontology, while some EDWs do not have real ontologies (for instance, the macro-EW or the micro-EW are not). Only ED entities and their interactions really exist.

Many thinkers would wonder: “Where did everything come from?” Following the unicorn world framework and very old religious sources, the answer of the majority of physicists has been: “From nothing”. Isn’t it a wonderful answer? “Why is there something rather than nothing? Well, why not? Why we presuppose ‘nothing’ rather than ‘something’? No experiment could support the hypothesis ‘there is nothing’ because any observation obviously implies the existence of an observer.” (Sorensen 2015, p. 1) Indeed, for everything that really “exists” (not “is”), there has to be an “observer” (in our terms, there have to be certain “interactions”). Since an EW is (does not exist), I introduce a rule:

Hypernothing hyperis an EW, therefore, in principle, it is quite impossible for a human being to be an “observer” of the EW0, (not even indirectly - as the human being can indirectly observe some EDWs).

The human observer is (the body, which exists, belongs to the macro-EW, the mind is an EW), while Hypernothing hyperis. An EW is not for any EDW, but more than this state, the EW0 hyperis, while EDWs are. So, the relationship “hyperis-is” indicates that it is quite impossible for the EW0 to be observed (not even indirectly) by a human being; it is quite impossible for the EW0 to interact with something else (either an EDW or an entity). So, a human body does not belong to the EW0 and cannot interact with this EW. A kind

of hyperinteraction between any human body and Hypernothing would be necessary, but I have no idea what this hyperinteraction would be. Obviously, from my viewpoint, the EW0 does not exist (as any EDW). However, the Hypernothing-EW hyperis hypernothing (a kind of “nothing”). Anyway, Hypernothing has no ED ontology for us, like all EDWs. The EW0 is nothing for us and for all ED entities (EDWs). From this “nothing”, through hypercorrespondence, appeared the EW1a-n, but each of these EDWs appeared in itself, any relationship of these EDWs with the EW0 being ontologically rejected. I emphasize, there was not a separation between these two EDWs. From the viewpoint of EW0 (i.e., a kind of “nothing”), this separation does not exist, so these EDWs are, together, “nothing” and nothing else.

Does Hypernothing have a kind of unity? Firstly, we are tempted to support the idea that Hypernothing has indeed a unity. If Hypernothing were composed of certain entities, then it would not be Hypernothing. I emphasize that it is completely meaningless to believe that Hypernothing is composed of certain elements. However, I strongly claim that Hypernothing is beyond “unity-disunity” distinction just because of its “aspects” (the “possible conditions of existence”). If Hypernothing had a “unity”, no EDW would appear, through correspondence, of course. If Hypernothing had a disunity, I would need to explain this disunity (maybe I would need to introduce a previous EDW), so it is better to reject any disunity. Again, Hypernothing is exactly as nothing is, it has nothing to do with something (ED ontologies) or nothing (no ontology). The “absolute viewpoint” is Hypernothing’s viewpoint (the first viewpoint), which it is “nothing”, the supreme ontological status (“nothing” is missing). In this context, I need to introduce the “negative principle of appearances of EDWs”:

*The appearances of EDWs are aleatory/accidentally processes exactly as there were the appearances of animals species on Earth. The appearances of EDWs are quite spontaneously, **accidentally** ED processes.¹*

In “nothing”, it appears spontaneously, an EW or an EDW, but this new EDW can correspond or not, later, with the appearance of a “chain of EDWs”. Only if we put together all EW1a-n, we get “nothing”. When one of us die, “its” life returns to “nothing”: it means the body is transformed in the ED entities, the self/life (which corresponds to the body) disappears completely (as an EW), and from the viewpoint of the EW0, something “positive” happens. The EW0 was not perturbed when each EW among the EW1a-n appeared. The uniformity of Hypernothing was not perturbed by the appearances of EW1a-n. The spontaneous appearances of EW1a-n were accidentally and these appearances hypercorresponded to the EW0. The “hypercorrespondence” involve that nothing changed in the EW0 with the appearances of EW1a-n (nothing could chance in the EW0). I repeat:

The *uniformity* of the EW0 (i.e., nothing) was not perturbed by the spontaneously appearances of EW1a-n. Nothing has remained nothing (and nothing else), even if the EW1a-n spontaneously appeared just because each EW among all EW1a-n exist in itself, but not in direct relationship with the EW0, only direct hypercorrespondences.

From the viewpoint of EW1a (for instance), Hypernothing is not, and the EW1b-n aren’t. Exaggerating, in analogy to Aristotle’s Prime Motor, I could claim that Hypernothing is

¹ *The notion of “accidentally” rejects the existence of God or regress ad infinitum...*

the “Prime EW”. Without Hypernothing, without the uniformity of Hypernothing, nothing would have existed.

The question “Why is there something rather than nothing?” is inevitably based on Kantian category of “causality”: everything needs to have a cause for its appearance in the “universe”. From my viewpoint, I could speak about “causality” only between the entities which belong to the same EW. Other kinds of “causalities” are meaningless, since one EW is not for any EDW. To stop an “infinite chain of causalities and to follow Aristotle’s rule of “Prime engine”, philosophers and mainly physicists introduced “nothing”: before the Big Bang, was nothing. However, many cosmologists claimed that the Big Bang separated “matter” from “antimatter”¹. Obviously, the main reason for the introduction of “nothing” into this equation was that the question “What produced nothing?” has always been meaningless. It is quite common that, when someone discovers a very difficult question, other people consider that question meaningless. “Nothing can appear from nothing” (Parmenides), even if we have to accept that the “Universe” (i.e., the EW_{1a-n}, but not the micro-EW or the macro-EW) appeared from “nothing” precisely in order to avoid the regress *ad infinitum* argument. The notion of “causality” has been questioned upon mainly after the development of quantum mechanics: this notion, “causality”, has been placed within the realm of great problems, but ever since the birth of quantum mechanics until today, the physicists have not been able to notice that they had been working within the wrong framework, the unicorn world. As I showed in the past, all alternatives to quantum mechanics are wrong, since the framework under which these theories have been constructed has been quite wrong, the unicorn world. Under the EDWs perspective, the “causalities” between the events/processes which belong to EDWs are also excluded, since one EW does not exist for any EDW. In our mind (and only in our mind), there are certain *correspondences*, nothing more. There is a kind of “succession” of the appearances of EDWs, but “time” and “space” could have any ontological status; if these notions had ontological status, there would be strong ontological contradictions. (Again, see our work from 2016) So, the life-EW (or the mind-EW) is placed as an EDW than the macro-EW, where the body/organism is placed. In relationship to the macro-EW, the life-EW is just an EDW, this is the “place” where I situated the life/mind/soul as an EW. The body corresponds mainly to certain great disturbances of small part of the field-EW (in relationship with the entire electromagnetic field), but the organism also corresponds to the life-EW (an entity and an EW). These correspondences are just accidentally, aleatory processes and I am convince there are no rules for transforming these “correspondences” in certain scientific notions. Such correspondences do not have any ontological status, therefore, there are no scientific rules for these correspondences.

The “conditions of possibility” (no ontological status) for appearance of the first macro-entity corresponded to the micro-EW. Without the “perturbations” of the existence of certain micro-entities, a macro-entity could not appear. The same statement is valid for the electromagnetic wave (which belongs to the field-EW) and the microparticle (which belongs to the micro-EW): without the perturbation of a wave, the corresponding microparticle would not exist. From these sentences, I deduce the following essential statement:

Before the EW1a-n appeared, I could think that there were certain “conditions of possibility” for the appearance of these EDWs, but these “conditions of possibility” (no ontology) were not inside Hypernothing, and did not correspond to Hypernothing, but there are just epistemological notions in our head for explaining the appearances of all EW1a-n.

The appearances of all EW1a-n are embodied in their “*self-organization*” (which “belongs” to each EW among these EW1a-n) out of “nothing”, and this “self-organization” just hypercorresponds to Hypernothing. ED entities and nothing appeared spontaneously, but these entities/nonentities had *hypercorrespondences* to Hypernothing. It is as if each EW among the EW1a-n had appeared from itself, even if, before their appearance, these EDWs did not even exist. The EW0 is a kind of “ghost” for the EW1a-n, but this “ghost” has no ontological status. Also, the macro-EW has to be associated (in our mind, only through correspondence) to the micro-EW (not only in hypercorrespondence to Hypernothing): however, even if one EW does not exist for any EDW, without the micro-EW, the appearance of the macro-EW would not be possible. There is a chronological order, but this “order” (i.e. “time”) has no ontological status: again, I have to eliminate any causality between any two EDWs, so it would be meaningless to check for the law between any two EDWs. I introduce here the “*postulate about nothingness*” within the EDWs perspective:

In general, “nothing” of a particular EW had no ontological status, but this nothing corresponded to something. Apparently, some EDWs have “nothing” in their “composition”: for instance, the macro-EW and the micro-EW have this “nothing” in their “compositions” (the so-called “empty space”), but “space” and these EDWs do not really exist (it does not have any ontological status) - only their ED entities and interactions really exist. EDWs that do not “contain” “nothing” (correspondences) have a “unity” (like the self-EW or the field-EW) and such an EW corresponds to something which belongs to (or is) an EDW.

Hypernothing rejects such necessary correspondences, since it is about the EW0. It would be meaningless to believe that Hypernothing “contains nothing”. If Hypernothing contained “nothing”, then this EW would not be Hypernothing. We can think that Hypernothing has a kind of “unity”, but this “unity” would be a very *rough* (even wrong) feature, since “unity” makes us think of “something” (an “entity”) with an “identity”, but all these notions can be applied to characterize ED entities which belong to EDWs, but not to Hypernothing, since the EW0 cannot have any such feature. Also, Hypernothing cannot be characterized as being either “stable” or “unstable”. Again, I have to reject the idea that the EW0 has any kind of entities and/or processes or properties that we know or we can think of or even imagine. The EW0 is “nothing” and nothing else. On the contrary, in the “later” EDWs, there have been some entities and processes that have changed continuously and such changes involved “motion”. Together, the EW1a-n represent “nothing” which *hypercorresponded* to Hypernothing. It is not one EW which corresponded to the EW0, but only from the viewpoint of all EW1a-n, we can talk about the EW0. (The notion of hypercorrespondence is related to this previous statement.) From the viewpoint of an entity which belongs to a particular EW, we cannot talk about “nothing”, i.e., nothing (the EW0) does not exist for that entity. Again, the EW0 cannot have any property; if it has any property, I need to introduce a correspondence between the EW0 and a previous EDW. If the EW0 had these properties (or any other property that we can only think of), then EW0 would not be Hypernothing, but there would be an EDW and not Hypernothing. It has to be clear the following statement:

The EW1a-n did not appear from the “instability” of EW0.

Hypernothing is beyond the stable-unstable dichotomy and any dichotomy that can characterize ED entities and their interactions which belong to EDWs (but not “nothing”). The sudden appearance of EW1a-n depended on the “*conditions of possibility*” of their appearances (abstract notion, anyway), not depending on the EW0 (which did not exist for the appearances and the existences of EW1a-n). The only condition of “dependence” seemed that was: before the appearance of EW1a (for instance), there was nothing. The “conditions of possibility” of their appearance had no ontological status; it is a formal notion, in a strictly Kantian sense. The instability appeared in itself, i.e., in the appearance of a particular EW. *A particular EW, for instance, the EW1a (among the EW1a-n) appeared in itself and for itself in dissociation from all EDWb-n.* All EDWs remained “nothing” until EDW (the EW1b, for instance) appeared in itself, for itself. The EW1a did not exist for the EW1b. So, the periods of appearances of EW1a-n “depended” on the “*possibility of its appearance*” (an abstract notion), not on existence of the EW0 (which it could have any ontology, but a hyperontology). This “possibility” has no ontological status, being exactly a Kantian one (a notion of explanation, not an ontological notion). I will use this notion of “possibility” to move the question of “What did produce the appearance of EW1a-n ?” from the EW0 to the EW1a-n, even if the EW1a-n did not exist at that moment.

3.2 The principles of hyperontology of Hypernothing

I introduce the principles of hyperontology of Hypernothing:

- Hypernothing hyperis (or hyperisn’t).¹
- Hypernothing hyperis an EW. Anyway, Hypernothing isn’t for any EDW, but only *hypercorresponds* (directly) to the EW1a-n (and indirectly to all other EDWs).
- Hypernothing hyperis, any EW is. Therefore, Hypernothing is beyond the dichotomy “is-isn’t” which refers to some of EDWs (like the mind-EW): as we already know, some of EDWs really are, while some of EDWs are just abstract labels which designate a set of the ED entities and their interactions. Hypernothing has its own hyperontology (Hyperbeing, that is, “first nothing” which hypercorresponded to the EW1a-n), while some other EDWs have their ontology (being). All ED entities and their interactions really exist (“belong” to some EDWs like the macro-EW or the micro-EW).
- If Hypernothing had any kind of known or possible ontology, all EDWs would not appear through (hyper)correspondences to Hypernothing just because there would be a regress *ad infinitum* argument.
- Because Hypernothing hyperis, sequences of events/processes of entities inside it are totally meaningless. Therefore, notions like “earlier” and “later” are meaningless for Hypernothing. Also, question like “What was before Hypernothing?” is meaningless. Only introducing Hypernothing, we could stop the regress *ad infinitum* argument regarding the being of EDWs. Also, the thought “Hypernothing has been an eternal EW” is meaningless, since this EW hyperis and, within this hyperontology, it is

¹ I cannot state that Hypernothing is/exist (or isn’t). Otherwise, I would either regress *ad infinitum* argument or all EDWs would not be.

meaningless to talk about “existence” or “being”, “infinite” or “finite” and other features (existence, being, causality, etc.) which belong to ED entities from EDWs.

- Hypernothing replaces Aristotle’s “Prime Motor”. Hypernothing is not just “Unmoved”, but I extend this Aristotelian “missing property” to all the properties that can characterize all ED entities that we know: it means that Hypernothing did not have any property that we know as belonging to an entity from any EW. Hypernothing has no property and *this status is the most positive characterization: the EW0 is nothing and nothing else.*
- I need to explain the relationship (hypercorrespondence) between the Hypernothing and the EW1a-n, even if, in principle, one EW isn’t for any EDW. In this case, however, Hypernothing (which hyperis/hyperisn’t for the EW1a-n which each EW was in itself, not for the EW0): it means the *beings of EW1a-n did not disturb/perturb Hypernothing*).
- We can ask the question: “What did happen in the micro-EW since this corresponding macro-entity appeared?” The answer would be: “The accumulation of an huge amalgam of microparticles *corresponded* to the appearance of a macro-entity (a planet, for instance). That means, something happened in the micro-EW for a corresponding macro-entity to appear in the macro-EW. On the contrary, when we talk about the appearances of EW1a-n, nothing happened in Hypernothing. Since it would be about Hypernothing, nothing happened within this EW in order something which hypercorresponded to it (the EW1a-n) to appear.
- The “chain of the correspondences” that we can talk about regarding certain EDWs (for instance, between the field-EW and the micro-EW or between the micro-EW and the macro-EW) did not exist between the Hypernothing (which hyperis) and the EW1a-n (which are): the Hypernothing hyperisn’t for the EW1a-n; the micro-EW isn’t for the macro-EW. It means all ED entities hypercorrespond (directly like the EW1a-n) or indirectly (like all other EDWs) to Hypernothing.

The macro-EW appeared through the correspondences to the micro-EW and the field-EW. The micro-EW and the field-EW appeared from the “nothing” which corresponded to something (the pre-Big-Bang EW).¹ And so on. I emphasize that the process of moving from one EW to another in the past can be useful for us since it allows us to imagine, somehow, the being of previous EDWs. In this way, I could move closer and closer to Hypernothing. “Nothing” is not equivalent to Hypernothing, since always something existed before “nothing”, but nothing existed before Hypernothing. Therefore, Hypernothing is the “first nothing” and nothing else.

Hypernothing has always hyperbeing (time and space do not have any ontological status) and this EW does not exist for any EDW (the causalities between ED entities which belong to EDWs are meaningless). Hypernothing hyperis; if Hypernothing only “is”, the regression *ad infinitum* argument would appear. It is meaningless to use “causality” related to Hypernothing. Any “causality” cannot even exist within Hypernothing and cannot exist between any two EDWs. The notion of “causality” would require the notions of “process” and entities, but Hypernothing has neither entities nor processes/interaction. It is meaningless to consider that Hypernothing has or does not

¹ Exactly as “entanglement” has no ontology (it is based on the correspondence between wave and particles) and cannot be explained within the unicorn world, the same reason is applied to the “space” (“nothing”) between two objects which belong to the macro-EW, for instance.

have this property of causality. Hypernothing is neither static, nor in motion; it hyperis (or hyperisn't) something beyond these properties. We cannot even say "Hypernothing hyperis or hyperisn't". Anyway, following the main rule of EDWs, as an EW, Hypernothing isn't for any EDW. Again, I am certain that I have to reject, as belonging to Hypernothing, all ED entities/processes/forces/properties that we know belong to real entities/interactions or imaginary entities/interactions which belong to EDWs. Otherwise, that EW would not be Hypernothing. Because, ontologically, each human mind has certain limits in its ability to think, we cannot even think more details about Hypernothing. Again, by rejecting the existence of God (see my paper on my webpage) and other pseudo-notions invented by the human beings (see all our previous books), in this way and only in this way, *Hypernothing is beyond Aristotle's "Prime mover"*. Otherwise, I cannot avoid the regress *ad infinitum* argument, but the notion of "infinity" does not exist (it has no ontological status), so it is excluded from the EDWs perspective. Obviously, Hypernothing is not the "unmoved mover", since such properties (moved or unmoved) do not even exist for this EW (or for something inside the EW just because there is nothing inside the EW). Moreover, it is not only about the property of "movement", but about any property that we can think of as characterizing any entity or any EW. If the EW0 were something that ontologically exist, then the questions "Why this kind of matter?" and "What did produce this matter?" would immediately appear. Therefore, I am forced to change Aristotle's "Prime mover" with Hypernothing, which also rejects the necessity of a previous EDW. With Hypernothing (not the Big Bangs), I finally stop the regress *ad infinitum* argument.

From my EDWs perspective, no entity "is becoming", an entity spontaneously appears "inside" an EW. Obviously, in many cases, there has to be a correspondence between the entity which spontaneously appears and other entities and/or processes which belong to an EDW. Anyway, a class of entities and processes represents, in general, an EW. Again, except for the mind-EW and Hypernothing, from what we know today, no other EW really exists. I can say that all EDWs are, but only ED entities/processes really exist. I introduce an important principle regarding the "*negative epistemology-ontology*" for Hypernothing:

If we were able to "identify" somehow Hypernothing, then the (hyper)correspondences between Hypernothing and all EDWs would be a meaningless notion. That is, that EW would not be Hypernothing, since Hypernothing hyperis, while all EDWs are and between "hyperis" and "is" any correspondence cannot be established.

From the ontological viewpoint of any EW, Hypernothing has no "identity"; more exactly, Hypernothing "hyperis not". Nevertheless, the EW0 hypercorresponded to the EW1a-n. Obviously, an EW is not for any EDW, but theoretically, we can think of two EDWs, even if there is no relationship between them. The problem is that we cannot even think of Hypernothing, not only in the relationship with any EDW, but we cannot think of the EW0 in itself at all. Why? Because Hypernothing hyperis and therefore it has not an "ontological identity", but a "hyperontological identity". This is the main reason, we have to accept that the "Hypernothing hyperis". All above mentioned dualities cannot be applied to Hypernothing. Since the Ancient Greek philosophy, our knowledge has always involved verbs like "to be" and "to exist", but nobody so far has thought of the verb "hyperis". The missing verb is due to the wrong framework of thinking, the unicorn

world. The relationship between Hypernothing and EDWs is given by this simple law (*law of “existing/being-hyperbeing”*), which mirrors *the conditions of possibility* of EDWs:

No Hypernothing, no EDWs:

(1) *An object/entity exists.*

(2) *An EW is. (The mind-EW is, for instance.)*

(3) *Therefore, Hypernothing hyperis/(hyperisn't). “Hyperisn't” means “nothing” which permit the appearance, accidentally (simultaneously or not) of EW1a-n. These two EDWs represent “nothing” from the viewpoint of the EW0. Therefore, nothing changed in the EW0, when the EW1a-n appeared in hypercorrespondences to the EW0.*

(4) *Any EW is, Hypernothing hyperis (or hyperisn't), i.e., this EW is beyond the dichotomy “is-isn't” which refers to all EDWs.*

In order to avoid the regress *ad infinitum* argument, the “being of EDWs” is the main indication of the *hyperbeing* of Hypernothing. Precisely to avoid either a strong ontological contradiction or a regress *ad infinitum* argument, I discover that if EDWs *are*, then it is compulsory that the EW0 (Hypernothing) hyperis which hypercorresponded to all EW1a-n. Apparently, the expression “Hypernothing hyperis” seems to be a contradictory statement: how can we claim that “nothing is”? Obviously, we do not say either “nothing is”, or “Hypernothing is”. Both statements would be just contradictions. To avoid such ontological contradictions, we have to add a new verb (quite related to the verb “to be”) in our vocabulary: “*to hyperbe*”. In this way, I constructed the syllogism written above. This it is not to say either “Hypernothing is not”, or “Hypernothing is”. I can claim is that “Hypernothing hyperis”. Again, by comparing the existence of the various ED things with the being of EDWs, on one side, and with the status of Hypernothing, on the other side, I have *discovered* the hyperbeing of Hyperverse. By investigating this relationship, I became aware that this is the only way in which I could avoid the regress *ad infinitum* argument. So, avoiding this regress *ad infinitum* argument was possible only by discovering the new ontology of Hypernothing: hyperontology. I need to introduce the *notion of “contrariety”* within my EDWs perspective.

Hypernothing (the EW0) is contrary (not a contradiction) to any EW. “Hyperis” is contrary to “is” or “exists”, hyperontology is contrary to “epistemology-ontology”. This contrariety represents the Kantian “conditions of possibility” of all EDWs. Hyperbeing hypercorresponded to all EW1a-n (which are).

This “contrariety” is not a property of Hypernothing; it is the linkage/relationship between it and mainly the EW1a-n. I cannot claim that, for instance, the micro-EW is “contrary” to the macro-EW, or the mind is “contrary” to the brain, since all these EDWs are and Hypernothing hyperis. Nevertheless, Hypernothing is *contrary* to any EDW and this contrariety admits middle term, so between Hypernothing and the field-EW (for instance), there have been many EDWs. Certainly, the EW1a is not the field-EW (we can talk, for instance, about the “plasma-EW”, an EW between the Big Bangs and the field-EW - see my previous works). I can postulate that the field-EW appeared “before” the micro-EW, I would know for sure that the micro-EW appeared “before” the macro-EW, I would know that Hypernothing was there before the EW1, but I would not be able to

indicate the details referring to the relationship (hypercorrespondences) between Hypernothing and any EW among the EW1a-n.¹ When the “I” thinks about Hypernothing, the “framework of thinking” (the self-EW with its ontology) is *contrary* to Hypernothing (with its hyper-ontology). It is the contrariety between the being/existence and the non-being/non-existence. However, can I talk about the non-being/non-existence? No, I cannot, but I can name what it is about: it is about Hypernothing which hypercorresponded to the EW1a-n. With this solution, I reject the regress *ad infinitum* and the existence of God (see my article free at my webpage against the existence of God).

3.3 More details about the *accidental* appearances of the EW1a-n in hypercorrespondences to the EW0²

In my book 2022, I developed my EDWs approach about the first epistemological world (EW), that is about Hypernothing (or the EW0). In this work, I will not repeat many details about this EW, but I would like to introduce new ideas (some of them being in contradiction to my previous ideas from my book published on Amazon in 2022).

Let me start with the main ideas. I am convinced there were many EDWs before the appearance of our “universe”. In correspondence to the EW0 (Hypernothing), many EDWs (the EW1a-n) have appeared in different “ED places/periods”. In this way, I reject the idea that from “nothing” appeared “matter and antimatter” (or the “EW1” and respectively the “EW-1”, as I wrote in my book 2022). My new idea is the following: in correspondence to the EW0, there appeared many EDWs (the EW1a-n), therefore, we do not need to introduce any EW-1 (or antimatter); on the contrary, in my article 2022, I reject completely the existence of antimatter (any kind of antimatter).³ With this rejection, I preserve the principle of “conservation energy” since one EW does not exist for any EDW: any EW among these EW1a-n did not exist for the EW0. Thus, introducing many first EDWs, I do not contradict the “principle of conservation energy”. Maybe, there have been “places” where EDWs have appeared in hypercorrespondences to the EW0 even now. Surely, there were other “universes” that appeared in other places (this being the old

¹ As I emphasized in the past, Bohr’s complementarity (the main principle of I published in 2002-2014) has been changed: EDWs are not even complementary, since one EW is not for any EDW. Or, I can say that I do not have to use the notion of “complementarity” (not even to explain quantum mechanics - against quantum mechanics, see our previous works) for indicating the relationship between certain EDWs. This “complementarity” means a kind of epistemological-ontological complementarity, but it is not about two EDWs: there is no complementarity between Hypernothing and any EW, there is no complementarity between any two EDWs. Again, one EW is not for any EDW, so there is no ontological contradiction here, but the ED ontologies which belong to EDWs. So, I have to eliminate even Bohr’s *complementarity* from our vocabulary for the relationships referring to certain EDWs like the field-EW and the microparticle-EW.

² Large parts of this section have been published in 2002b, *Timpul journal*.

³ In our works 2016/2020, we rejected the ontology of dark matter/energy and spacetime. About the origin of the “universe” in the views of some physicists (explained by Devereux 2021, Singh 2005, for instance), see my future work. Anyway, in 2022, I introduced a new alternative for dark energy: the correspondences between electromagnetic waves, microparticles and macroplanets/galaxies are “dark energy”: since the electromagnetic waves have speed c , through correspondences, all corresponding microparticles (except photons which has already c) increase their speeds and also corresponding planets/galaxies increase their speeds. This is enough to explain completely dark energy within the EDWs perspective. (In this context, I recall Einstein’s idea that all objects have speeds c in their spatiotemporal framework: a part of this speed is in space, a part in time, photons have no “time”, all their speed being in “space”.)

idea of “multiverses”).¹ It would be completely *wrong* to consider there was only “one Big Bang” and only “one universe” which appeared (13.82 billions years ago). I was also convinced (no proof) that there were many Big Bangs at the same time (13.82 billions years ago, for avoiding Guth’s “inflation”), but also many Big Bangs which appeared “earlier” and “later” in EDWs. Therefore, the line of EDWs and different “universes” is somehow like this one:

- EW0 (Hypernothing) HC (hypercorrespond) to EW1a-n.
- These EDWs corresponded to (C) EW2b-m ... (C) pre-Big Bangs-EW (C) many BBs (in the same area to avoid Guth’s inflation, 13.82 billions years ago) (C) plasma-EW (C) field-EW (C) micro-EW (C) macro-EW (C) life/mind-EW.
- “Big Bangs” (ED Big Bangs or Big Bangs corresponding to the same EW) happened in different places, in different times. Different “universes” (like our “universe”) have appeared in different places, in different periods; all these “universes” are in the same “spatiotemporal framework”.²

Because the Big Bangs (that we have already known) existed 13.82 billions years ago, other Big Bangs existed earlier and later than this period... Probable, other Big Bangs appear just now in different places or in EDWs. Because of these many Big Bangs in different places/periods, it is quite normal to believe that “our universe” did appear total accidentally. Therefore, it was nothing special with the appearance of “our universe”. There have been many “universes” and many EDWs which have appeared after many Big Bangs (in “our universe” and other universes) or after many ED Big Bangs (in EDWs). So, according to the EDWs perspective, we already know that 13.82 billions years ago, many Big Bangs happened in the same area, earlier, at that moment or later. I also believe, it would be totally wrong to consider that the entire “energy/matter” was contained in the “Big Bang”. As I indicated in my work 2022, the “energy” of the “universe” has been revealed (and not “produced”) since the Big Bangs (13.82 billion years ago) until our days. For instance, the entire “energy” of electromagnetic field was not contained within Big Bangs: this “energy” has been revealed (not produced) 380,000 years after Big Bangs until today. It did not mean that the “entire” electromagnetic field existed before Big Bangs or the “entire” field existed immediately after Big Bang in an “infinitesimal point”. In relationship to the pre-Big-Bangs-EW (for instance), the field-EW did not exist. Again, my opinion is that this idea (the universe started as a single point, an “infinitesimal point”, all energy/matter being concentrated in a “singularity”) is totally wrong (even absurd). As I indicated in my work 2022 (and other works), the field/matter (for instance, the electromagnetic field) has not been created from an “infinitesimal point” (a “singularity”), but this “field” had been revealed 380,000 years after Big Bangs until today. Moreover, as we indicated in 2016, space and time

¹ We have to make an analogy between our galaxies and the discovery of thousands of billions of other galaxies: at the beginning of Cosmology, many scientists were convinced that only our galaxy, Milky Way, exists. Many decades later, there have been discovered thousands of billions of other galaxies. Obviously, other many galaxies would be discovered in the future.

² “Multiverse”: These “universes” are all within the same “spatiotemporal framework”, one universe can interact with another universe. For instance, our “universe” can interact with another “universe” in the future. Therefore, the “multiverse” is a completely different notion than the “EDWs” since one EW does not exist for any EDW (so it is meaningless (or totally wrong) to consider “one EW can interact with an EDW” or to believe that all EDWs are in the same “spatiotemporal” framework).

³ I emphasize again, the idea of this “infinitesimal point” containing all energy/matter is totally *wrong* idea constructed within the unicorn world...

(spacetime) could not have any ontological status: any kind of ontological status of spacetime would produce strong ontological contradictions. We have different “chains of EDWs”, one of these chains is the “standard chain of EDWs”:

EW0 hyperC EW1a C EW2 C EDWs... C pre-Big-Bangs-EW C field-EW C micro-EW C macro-EW C life/mind-EW. (C means “corresponded”)

There are hypercorrespondences between the EW0 and all EW1a-n just because the EW0 is “nothing” with its hyperontology which hypercorresponds to the ontologies of EW1a-n: the EW0 directly hypercorresponds to the EW1a-n, and indirectly corresponds to the EW2 or the macro-EW or the life/mind-EW. We could claim that the field-EW (electromagnetic field always with speed c) is the “absolute framework” of thinking for microparticles and macroparticles. The electromagnetic field did not appear from an infinitesimal point. That point corresponded to nothing; therefore, electromagnetic field did not appear (in its EW), but it has been revealed from that point (any point today) in all directions. Why do I need to use “hypercorrespondences”? Because the EW0 hypercorresponded to the EW1a-n. What does “hypercorresponded” exactly mean? When only the EW hyperexisted, any of EW among the EDW1a-n did not exist. Hyperexistence means that the EW0 did not exist, it did not have any ontology but a hyperontology. This hyperontology is given by the fact that all EDW1a-n “represented” the EW0, i.e., “nothing” since none of these EDWs existed and the EW0 is “nothing”. So, only the EW0 hyperexisted, i.e., being “nothing”. The EW0 has always hyper-existed, even now this EW hyper-exists, but humans cannot detect “nothing” at all since “our universe” is “full” of electromagnetic field. Can we say that the EW1a-n “pre-existed inside” the EW0? Clearly, this statement would be a pseudo-judgment. Why? Before each of these EDWs appeared, all EDW1a-n “represented” (hyper-corresponded to) the EW0.

Within this new framework, we can indicate how many EDWs has accidentally appeared through direct or indirect hypercorrespondences to the EW0 (the Hypernothing). In this way, we exclude any other alternative (like “God” or the “regress ad infinitum”). Essentially, it is this notion of “accidental”. What does it mean, more exactly, that “an EW accidentally appeared”? For instance, the life-EW appeared accidentally in correspondences to certain macro-entities which belonged to the macro-EW. It means that different macro-entities were arranged in different ways, more or less accidentally: there were some macro-laws which determined these arrangements, but we cannot claim there was a “pre-determined plan/scheme” for these macro-arrangements (which corresponded to “life”). Such arrangements happened accidentally 3.5 billions years ago (or so)... In different periods, there happened accidentally arrangements of certain macro-entities and “lives” appeared as EDWs but in correspondences to these arrangements of macroentities. There was no plan for the appearances of “lives”, this is the meaning of “accidentally”. There were many accidentally arrangements, in general many of them being within an organizational framework (without producing something new like “life”). When these arrangements passed an “epistemological-ontological threshold”¹, “life” (as an EDW) appeared in correspondences to those macro-arrangements (the macro-EW). Passing from an “organizational threshold” to an “epistemological-ontological threshold” happened *accidentally*, no more.

¹ About “epistemological-ontological” threshold and “organizational” threshold, see my previous works.

Could we talk about the “pre-existences” of EW1a-n? No: before these EDWs appeared, there was nothing (the EW0) and nothing else. All EDWs appeared totally accidentally; we need to believe in this “absolute accidentally”, otherwise we need to introduce, for instance, “God” in equation or the “pre-existence status” of EDWs, but I totally rejected the existence of God (see my article at my webpage) and any kind of “pre-existences”. The appearance of any EW happened just accidentally. The EW1a-n did not exist, somehow, before the first Big Bangs; they did not have any “pre-existences” status. Always, the EW0 has been nothing and nothing else. Any EW among the EW1a-n appeared totally accidentally and nothing else.

Within the EDWs perspective, we have to reject the idea that from “nothing” appeared “matter” and “antimatter” (in “equal quantities”). In reality, “antimatter” did not exist at all. There were the EW0 and direct hypercorrespondences to the EW1a-n, but these EDWs did not exist for the EW0, so we do not have any rejection of the conservation principle of something (energy/matter) and nothing: nothing (the EW0) remained nothing, the EW1a (for instance) did not exist for the EW0, so there is no ontological contradiction at all. I emphasize that my old idea from my previous work (2022) that “the EW0 hypercorresponded to the EW1 and the EW-1” is totally wrong: in the new context (the hypercorrespondences to many EW1a-n), I do not need to postulate the existence of the “EW-1”; in fact, I have to reject completely the existence of any kind of “antimatter”. So, “antimatter” is quite a wrong notion within the EDWs perspective. Working within the unicorn world, the physicists needed to introduce the “antimatter” for preserving the “principle of conservation energy”: it was believed that from “nothing”, matter was separated from antimatter (even if nobody could explained how and why this “separation” took place). Through the EDWs perspective, because of the correspondence between any two EDWs, I strongly indicate that “antimatter” did not exist. In my previous work (2022), I introduced the correspondences between the EW0 and the EW1 and the EW-1 (last EW being a kind of “antimatter”). Because there was only a correspondence (no ontology) between the EW0 and the EW1, I was forced to maintain the “antimatter” in my equation. However, now, in this new context, I do not need to introduce EW-1 (or “antimatter”), I do not need the “existence of the antimatter”, so within the EDWs perspective, I reject the existence of EW-1. If the EW0 hypercorresponded only to one EDW (for instance, the EW1), maybe I would have needed to introduce the EW-1 (as “antimatter” for the EW1). In reality, the EW0 hypercorresponded to many EDWs (the EDW1a-n) which accidentally appeared in different “places”/ “periods”.

In our previous works (Vacariu and Vacariu 2016, 2020), I rejected the existence of dark matter/energy in the macro-EW. Dark matter is the results of interactions among ED entities which belong to the mega-EW (a “higher” EW than the macro-EW).¹ In 2022,

¹ Kroupa and Haslbauer (2023) indicates that the “universe” is “more ‘clumpy’” than the standard cosmological model predicts: “The data thus robustly falsify the cosmological principle. While the same laws of physics may apply in every corner of the universe, the universe itself it is not the same everywhere.” The last statement of this article: “... rather than discarding the standard cosmological model, our scientific establishment is digging itself ever deeper into the speculative fantasy realm, losing sight of and also grasp of reality in what appears to be a maelstrom of insanity.” (2023) In fact, as I indicated long time ago, the “universe” does not exist at all, but there are EDWs. It means that, somehow, even the macro-EW “contains”/corresponds to EDWs. More than this, as I emphasized in the past, the macro-EW did not even exist; there are only macro-entities and their interactions. However, there can be, of course, macro-

I introduced a new alternative for dark energy: *the distances between galaxies have extend continuously because of the correspondences between planets, microparticles and electromagnetic waves*: indirectly, through these correspondences, because of the speed c of electromagnetic field, microparticles continuously increase their speed and thus planets/galaxies continuously increases their speed. So, these correspondences produce, indirectly, the expansion of galaxies with an accelerate rate. Obviously, because of their masses, microparticle/macroparticles will never reach the speed c . In our work 2020, we rejected the existence of “spacetime”: because of the correspondence between electromagnetic field (presents everywhere), spacetime could not exist since we cannot place two entities (“electromagnetic field” and “spacetime”) in the same “place”, at the same “time”/period.

In this section, I indicate that we have to reject “antimatter” (or the EW-1 from my perspective published in my work 2022) and its “separation from matter”. This kind of separation would require an “external click”. Who did produce such “click”, God or it did accidentally happen? God could not exist (see my work), therefore we could claim it happened accidentally. Why? Having only one such event (the appearance of one “universe”) which did happen accidentally, such “accidental event” become quite suspicious. If we extend to a much larger number these “accidental events” (the appearances of EW1a-n), it result that these accidental events are not “absolute accidentally” (it would require “God” or a “special click”), but become something inevitable. Moreover, if we accept the “antimatter”, we need to introduce many antimatter-EDWs, and this would be quite absurd. Because there were the EW1a-n and because the EW1a did not exist for any EDW, I do not need to introduce the existence of “antimatter” (the EW-1, for instance). Anyway, within the EDWs perspective, the cosmologists have to change many essential concepts of Cosmology.¹

Discovering the EDWs, I furnish a new view about

- man and “reality”
- the origin of the “univers”/world
- nothing (i.e., Hypernothing)
- the metaphysical framework/background of everything.

For the first time in the history of human thinking I elaborated a new view about the relationship between the origin of the “universe” (i.e., the EDWs) and nothing (i.e., the Hypernothing). In this way, I completely excluded “God” and “infinite” from any equation referring to the “world” and “man”. I clearly argued that we did not need God or infinite in explaining something (anything), in fact, working within the EDWs prespective, anybody has to reject “God” and “infinity”. The “beginning” did not exist; there has always been “nothing” but not in an “infinite past” (“time” or “spacetime” could not even exist; infinite could not even exist - see Aristotle), every EW appeared accidentally in relationship to an EDW or to the EW0. Since when the EW0 is? Meaningless question since time could not exist and, moreover, the Hypernothing did not have any ontology. Therefore, it is meaningless to ask when the Hypernothing appeared;

EDWs, not only one. I recall, there is also the mega-EW, but in the same line with the previous observation, surely, it is not only one mega-EW but mega-EDWs.

¹ I can make an analogy between the appearances of EW1a-n and life (on Earth): these EDWs accidentally appeared in different places/periods in hypercorrespondences to “nothing” exactly as “lives” (EDWs) appeared on Earth in different places/periods in hypercorrespondences to “nothing” but in correspondences to certain macro-arrangements of matter (the macro-EW).

the EW0 is “nothing” and nothing else. And this “nothing” hypercorresponded (not even corresponded) to the EW1a-n. Each of these EDWs (the EW1a-n) appeared in itself; it “existed” in itself, it did not exist for the EW0 or for any EDW. Also, I rejected “the One” (a philosophical name for “God”): from my viewpoint, “the One” would be the Hypernothing/EW0 and nothing else. You, the reader, do not exist for the EW0 (which anyway is “nothing”), therefore, it is meaningless to ask about the “origin” of yourself, about the “fundamental level” of reality. The “nothing” is not the “origin” of everything since the Hypernothing does not exist for any EDW; nothing has just corresponded to the EDWs. There is no “causality” between nothing and the EDWs, there have been only hypercorrespondences (not even correspondences); I reject any kind of “causality”, “emergence” or direct relationship between one EW and an EDW since one EW does not even exist for any EDW. With my perspective, I passed beyond so-classical “dualities” like mind-brain/body, material-immaterial¹, self-world, micro-macro, etc. I introduce here two very important principles regarding my EDWs perspective:

Principles A

Each EW appears in-itself, it does not exist for any EDW. Therefore, it is not necessary an “external click” to produce any EW.

In this way, each EW appears *accidentally* in correspondences to an EDW and in hypercorrespondence to the EW0. Within my EDWs perspective, rejecting the existence of “God” and “infinite”, we conclude (metaphorically, using wrong notions):

Principle B

All EDWs appear accidentally and each EW exists in itself (it does not exist for any EDW). However, each being (=life/mind an EW) is an “universe” and “god” in the same time even if, at its “fundamental level” is (corresponds to) “nothing”/Hypernothing!²

¹ From an ontological view, Descartes’ dualism is closer to my perspective, closer even than Spinoza’s dual aspect theory just because the mind and the brain are not “two different aspects of the same substance”. The mind is immaterial, the brain is material. To this dualism, we have to add Spinoza’s “dualism” but rejecting his “one substance”, i.e., “God”. We know, even Descartes needed to introduce God in his equation (for explaining the interactions between those two substances. Spinoza’s step was quite interesting, but his aspects were “suspended in the air” and this was the reason he also needed to introduce God into his equation, pantheism which was, anyway, totally wrong. Both philosophers were wrong because they worked within the unicorn world.

² The reader has to be aware that these principles (through their meaning) are some of the most important statements in the history of human being (even if some parts of these principles can be found in the previous principles - just because of their importance, I inserted them here). Translated in my terms: “Each human being is an EW having her own rationality, and before all EDWs was “nothing” (the EW0) and nothing else. I furnish, for the first time, the metaphysical framework of “nothing” as being the “origin of the universe”. This statement had been supposed by many physicists (obviously, they have been correctly forced to exclude “god” and “infinity” from their scientific framework of thinking), but they presupposed matter and antimatter, for instance. Anyway, all scientists and philosophers had been working within the unicorn world until I discovered the EDWs. I rejected, for the first time, the antimatter in this work. Each man is an “universe”/“God”, but everything has happened accidentally. Amazing, isn’t it? Each person is totally responsible for its own mind since nothing exists for it (not even your body). I believe, this framework of thinking the most INCREDIBLE one in the history of human thinking. From the old framework of “believing in God”, regarding the “last believer”, we have to recall the Russian director of movies Andrei Tarkovsky. (See my book about him and other artists...) Since God could not even exist, large parts of your

Based on these two principles, we can completely reject God, regression ad infinitum, and any other alternative regarding the beginning of the “universe”. With these principles, we also eliminate completely the anti-matter and we furnish complete argument for “nothing” (no ontological status), i.e., the EW0 (the hyperontology), as being the beginning of “everything”. The EW1a-n appeared *spontaneously* in different places and time and *accidentally* in certain hypercorrespondences to the EW0, no more. With my EDWs perspective, in my previous article (2022 in Timpul) and this work, I furnished, for the first time in the history of human thinking, the argument for “nothing” as being the “origin of everything”. It is the supreme time when human beings have to renounce to “God”, “infinite” and many other pseudo-notions in their human thinking. A new paradigm (a hyper-paradigm, see Chapter 8) is on the market, you cannot avoid it.

With my EDWs perspective, a totally new ERA of human thinking has started for scientists and philosophers, artists and thinkers, in general! I return to the motto of this book: “Every transformation demands as its precondition ‘the ending of a world’ - the collapse of an old philosophy of life.” (Carl Jung) My discovery of the EDWs means the end of the “world/universe”, it means the disappearance of the largest and the most oldest paradigm of human which has involved so many concepts, ideas, approaches, theories and (sub)paradigms. Everything has already been changed in the human thinking since there have been so many people, from so many countries, from different domains (the main particular sciences (like cognitive neuroscience and physics) and philosophy), on so many topics who have plagiarized my ideas (the EDWs paradigm). With my EDWs perspective, a totally new “world of thinking” has already been accepted by many people on this Earth.

At the end of this chapter, I introduce a new very important principle related to two important notions: “accidentally” and “probability”:

Principle P

To increase the probability of appearance of the macro-EW (the appearance of any EW) that we know, there had been necessary the accidentally appearances of many macro-EDWs (the appearances of many EDWs) that we do not know yet.

With Principe P, we can explain why the EDWs that we know really are: these EDWs are just because there have been many EDWs, not only the ones that we know there are (the plasma-EW, the field-EW, the micro-EW, the macro-EW, the mind-EW). We can apply Principle P to the being of your mind-EW: you have appeared just because there have appeared “billions of billions” of beings on this Earth in the last four billions years. You are who you are just because there have been incredible many billions of human persons on this Earth until now. It means, the *probability* you (your mind-EW and your macro-body) to appear on this Earth has been considerably quite high until now; however, the appearance of your mind-EW has been purely *accidentally*, no more, while the appearance of your macro-body is related to the union between the macro-bodies of your parents. In

destiny is “in your hands”... amazing, isn't it? I believe “religion” has been the worst thing for human beings in all times; it produced the most crimes in the history of human thinking, it has been the wrong umbrella (a refugee) for many great thinkers (philosophers, artists, scientists), for the majority of many human beings. If Nietzsche knew “God was death”, I indicated God could not even exist.

principle¹, there have been no differences among the ontological status of the mind-EDWs, while, obviously, there have been differences among the macro-bodies of human persons.

¹ I use this expression “in principle” just because there are certain differences regarding the minds of human beings. For instance, the abilities for playing musics or being a painter or doing mathematics have certain native aspects. However, the ability of *creativity* of new ideas, musics, paintings, etc. is not a native aspect. For instance, it would be quite absurd to consider I have been born for discovering the EDWs...

Chapter 4

Friedman's "relativized a priori" and "change of paradigms in science" versus EDWs

In this chapter, I will present the very interesting article written by Michael Friedman (2009) on "relativized" a priori knowledge for certain scientific theories and another Friedman's article (2012) on "the change of paradigms" in scientific theories in particular science, physics.¹ Then, I will interpret my EDWs within Friedman's framework.

4.1 Geometry and Physics: relativized *a priori* for Newton/Kant, Helmholtz, Poincare and Einstein

In the first article (2009), Friedman illustrates, as usually very amazing, the relationships between Kant, Helmholtz, Poincare and Einstein (special and general relativities) regarding their *a priori* knowledge versus empirical knowledge in their theories.² Obviously, the starting point for principles of *a priori* knowledge is, for Friedman, Kant's transcendentalism: "sensibility" (pure intuitions in "Transcendental Estetic") which presupposes the Euclidian space and "understanding" (categories in "Transcedental Analytic") which requires Newton's laws of motions. Both pure intuitions and pure understanding represent the "transcendental apperception". This transcendentalism is "absolute", i.e., these pure intuitions and pure understanding are necessary for the entire human knowledge (not only for Euclidian geometry and Newton's physics).

On the contrary, due to the knowledge of 19th Century (non-Euclidian geometries, polyadic logic and anti-psychological movement), Kant's "absolute" a priorism became "relative": a particular scientific theory contains certain a priori elements, but this apriorism is relative to a certain historical context. Friedman have succesfully indicated certain a priori elements in these theories. I will introduse a table about all these elements (a priori and empirical for the authors mentioned at the beginning) as a summary of Friedman's chapter and I also inserted some of his ideas.

Authors	A priori/postulates	Geometry	Kinematics motion entities
Newton		Euclid	laws of motion + gravity
Kant	pure intuitions	Euclid	Newton's gravitation
vs.	(infinitely iterate geometric construction)		
Hume	+ perception of spatial objects)		
Locke	laws of motion		
Helmholtz	space free mobility	Euclid	spatial measurements → Euclid

¹ About previous Friedman's works, see Vacariu 2008 (6.8) or Vacariu 2016.

² Michael Friedman (2009): "Einstein, Kant and relativized a priori" (from M. Bitbol et al. eds., Constituting Objectivity). The article written by Michael Friedman has been one of the best articles I have ever read in my career.

Poincare hierarchy disciplines
 free mobility + iteration
 ↑
 relativity of space
 (space: homogenous, isotropic)

Euclid + nonEuclid = conventions
 →
 physical law of relativity

Einstein
SR relativity
 rectilinear motion
 ↑
 inertial trajectories/
 laws electromagnetic, c
 mechanical phenomena

Euclid → dynamic of Minkovski space-time
 electrodynamics moving objects

→ new simultaneity

GR equivalence non-Euclid (empirical) free falling trajectories
 gravitation = acceleration in gravitational field
 $mg = mi$

The main topic: “relativization of a priori principles” in human knowledge in the framework given by the rational-empirical debates.

- Newton: Euclid geometry + 3 laws of motion. It results motions of inertial objects and gravity.
- Kant: pure intuitions (sensibility, Euclidian space) and categories (understanding with Newton’s laws of motions and Aristotle’s logic) are a priori. Such a priori knowledge (pure mathematics and universal natural sciences) was against Hume’s skepticism and Locke’s empiricism. Geometry (space) and physics (motion) are strongly related under his “transcendental apperception”.
- Helmholtz: “space” and “free mobility” as a priori, but “Euclidian geometry” is given by “spatial measurements”.
- Poincare: “hierarchy of domains (arithmetics, analytics, geometry, mechanics (physics); free mobility and iteration as a priori, but geometries (Euclidian and non-Euclidian) are just “conventions”. From “relativity of space” (homogenous and isotropic) results “physical law of relativity”.

For both Helmholtz and Poincare, Geometry (space) is not directly related to physics (motion).

- Einstein:
Special Relativity: principle of relativity (Galilei) + constant speed of light c are a priori principles (geometry Euclidian); motion of objects in inertial trajectories/frames following Minkowski’s kinematics of space, time and motion (electrodynamics of moving objects). It results a new “simultaneity” (space contracts and time dilates in relation to speed of objects).

General Relativity: principle of equivalence ($mg = mi$ or gravitation = acceleration) is a priori; geometry non-Euclidian (established empirically); gravitation is curved spacetime¹.

¹ Newton did not have a definition for “gravitational force” (even if he introduced its mathematical formula). Moreover, the transmission of gravitational force was instantaneous (action-at-distance). Contrary to this idea it was Maxwell’s principle regarding the limited speed of light, c , being the greatest speed that

The result is “free falling trajectories in gravitational field”.

Einstein rejects

- “Helmholtz’s empiricism” because of relativity of motion
- “Poincare’s conventionalism” because of non-Euclidean geometry of spacetime (determined empirically) in general relativity.

Like Kant, Einstein strongly relates geometry (space/sensibility) and physics (understanding). In fact, in his entire article, Friedman indicates the relationship between geometry (space) and physics (kinematics, space-time-motion) for Newton-Kant, Helmholtz, Poincare and Einstein. Kant’s *a priori* “absolute” principles (sensibility and understanding) became “relative” *a priori* principles in different scientific theories/knowledges.

EDWs perspective: I discovered the existence of EDWs working on the mind-brain problem (somehow, an “empirical” problem). I have always been working on various “entities” and their processes/relationships, but I totally avoided working on “spacetime” in the earlier period. However, few years later, I asked myself if it was the same “space” in some EDWs or each EW had its “own space”? The only answer was that space(time) could not even exist. Even at the beginning I realized that mind had no “space”; later I understood that space itself could not have any ontological status (its existence being in contradiction to the existence of electromagnetic field). So, in our book 2014, we indicated “spacetime” could not have any ontological status (i.e., its ontological status would produce strong ontological contradictions - for instance with the existence of the electromagnetic field). In our book 2016, we re-wrote Einstein special and general relativity without “spacetime” (using only “motions of entities”). Therefore, our movement was not to relate “geometry” to “physics”, but to exclude completely geometry (space) from discussion regarding physics (motion of objects/entities). We believed that space and time (or spacetime, as you wish) were just human mind creations. Essential point: working on special relativity and noticing how Einstein “relativized” “spacetime” (depending on the movement of framework), I realized that, if “spacetime” could be relativized in this way, then “spacetime” lost any ontological background.¹ Moreover, working on the correspondences between the macro-EW and the field-EW (for instance), I realized that space(time) and electromagnetic field would be situated in the same “place”/“period” and this empirical fact represented, for me, a strong ontological contradiction since two entities like “space” and “electromagnetic field” could not occupy the same “place”/“time”. It did not mean one of these entities do not have any ontological status (this would be the “strong reductionism” approach in physics which

can be reached by something. Therefore, Einstein need to replace Newton’s gravitational force with curved spacetime (transmission of curvature in spacetime having the speed of light, no more). In my previous works, I indicated that spacetime could not have any ontological status and I replaced curved spacetime with “nothing” among macro-objects (the macro-EW) which corresponded to “curved electromagnetic field” (the field-EW). So, gravitational force for macro-objects is given by the curvature of the corresponding electromagnetic field.

¹ I am not the first thinker who deny the existence of spacetime (see for instance Leibniz). However, my argument in rejecting any ontology for spacetime is totally new (the EDWs perspective). I furnished arguments which indicated that spacetime could not have any ontology.

reduced everything to the electromagnetic field); on the contrary, with the help of the EDWs perspective, the macro-entities acquired a clear ontological status.¹

Following Friedman (2009), I could sustain that my empirical discovery of EDWs became an *a priori* (relative) principle regarding many problems (for instance, the “ontology of spacetime”): the existence of EDWs rejected the existence of space(time). Helmholtz and Poincare separated the Kantian strong link between space and motion (geometry and physics). With my EDWs, I completely rejected the existence/ontology of “spacetime”, so geometry is not a “science” but a discipline which its “objects of studying” do not refer to “real entities” but to certain abstract notions created by human mind. Among macroentities (the macro-EW) and microentities (the micro-EW), there would be “nothing” which has no ontological status, but in these two cases the “nothing” corresponds to electromagnetic field (the field-EW). Therefore, a planet does not curve “space” but “nothing” (no ontology) in the macro-EW which corresponds to electromagnetic field (the field-EW). (See Vacariu and Vacariu 2016) Spacetime could not have any ontological status. Then what is it curved if it is nothing between these two planets. Between two planets (the Sun and the Earth, for instance) there is “nothing” (no ontological status) which corresponds to the electromagnetic field. Therefore, the electromagnetic field is curved, but not by planets since the planets do not exist in the field-EW. This electromagnetic field is curved by the concentrations of the electromagnetic field which correspond to those two planets. The “infinitesimal” space is straight (not curved); an apple falls on Earth following the shortest distance which is “straight” in infinitesimal distance, but curved in the field-EW. I can raise my hand if I want, so, my hand does not follow the “law” of gravitation; I can touch my nose with my hand following a “straight” line. In the field-EW this line is curved. On short distances, we have the illusion the distance is straight; in reality, any distance is curved because it corresponds to the curved electromagnetic field. Eddington’s experiment confirmed Einstein’s theory of general relativity, even if the photons (light) do not have masses, just because the light follows the shortest distance which is, in the field-EW, curved. Why then an apple falls down on Earth? Because the apple and the Earth have masses which correspond to two concentrations of the electromagnetic field. It is not these concentrations which attract each other (since these concentrations do not have masses), but there are those two planets which attract each other because of their masses and the corresponding entities/interactions belonging to the field-EW.

4.2 The change of paradigm in scientific knowledge: Cassirer, Carnap versus Meyerson and Kuhn²

The main idea of Friedman’s second article (2012) refers to the dispute between “development-of-accumulation model” (early logical positivism) versus “discontinuity or incommensurability” (Kuhn) regarding the development/progress of or change in

¹ I have to recall that the strong debates on Quantum Mechanics have been, until I discovered EDWs, on the existences of microparticle and electromagnetic wave. As I indicated in my early works (2003, 2005, 2006, 2007, etc.), all great problems of QM have been solved by introducing EDWs: waves and particles belong to EDWs, no more. (I recall, many “physicists”, “cognitive scientists” and “philosophers” have *plagiarized* my ideas since I have solved all great problems of physics, CNS and philosophy.)

² This section is about Michael Friedman (2012), “Kuhn and Philosophy” (*Modern Intellectual History*, Cambridge University Press)

scientific theories or to change of a paradigm in science. I also introduce a table and some ideas as a summary of Friedman’s work (2012):

Authors	Philosophical position	Revolution/change in science
Cassirer (neo-Kant Platon)	<i>function</i> relative a priori	<i>rational</i> progression/continuity of abstract relations (maths) universal laws structures = maths Rs continuity theories (Cohen, Marburg school)
		↓
Carnap (logic + neoKant + empirism with Einstein R) vs.	<i>formal</i> /linguistic frameworks relative	plurality languages internal questions (logic) external q-s (convention/empiricism)
Meyerson Koyre (Plato/Hegel)	<i>substance</i> (vs. function/structure)	<i>irrational</i> /dialectical (limits of maths)
Kuhn	<i>substance</i> (ontology vs. mathematics)	philosophy language change: <i>cognitively</i> important discontinuity/ incommensurability (rejects continuity)

- Carnap (following Cassirer + Whitehead/Russell) influenced by the Neo-Kantians: logical *formal* structures (mathematics) results “constitutively systems of reality” (*Aufbau*). He relativizes Kant’s “synthetic a priori principles”: objects are defined/constituted by “stipulation” and investigated by “experience”. Our knowledge of scientific theories is not “necessary” (fixed through the *a priori* principles) but “relative” to a specific “scientific context”.
 - Cassirer: Platonic idea for mathematization of nature (Marburg neo-Kantianism)= mathematical-relational concept of “*function*” (universal laws of mathematical physics) versus Aristotelian concept of “*substance*”. “Kant-mathematics”: rational purification of our view of nature, progress from substantialistic conceptions (substances, causes) toward purely functional conceptions (mathematical representations of phenomena in universal laws)¹ (fixed for Kant, but relativized for Cassirer and others)
- vs.
- Meyerson: underlying “substance” conserved (absolutely unchanging and self-identical in all sensible alterations of nature) → mechanistic atomism (particles) + Lavoisier principle of conservation energy/matter + second law of thermodynamics

¹ The maxim exaggeration of mathematization of physical entities/processes (i.e, a total accent on function and totally ignoring substance) has been the (super)string theory in physics. Against this theory, see my last chapter 2010. In fact, in 2016, we indicated that even spacetime itself could not have any ontological status, therefore, the (super)string theory became totally meaningless.

(temporally irreversible process of dissipation of energy) → dialectical opposition between *substantialy* (absolute identity) versus *function*.

So, for Meyerson/Koyre (Plato/Descartes/Hegel):

- substance (ontology of substantiality things) versus “mathematical laws”
- Hegel’s dialectic, irrational progress (temporal successions) versus Cassirer’s anti-substantialistic conceptions of science/mathematical physics.
- Kuhn: related to Meyerson (ontology, not mathematics/function)
- rejecting any “continuation of theories in explaining nature”
- “sudden” changes/revolutions from one scientific theory to another from the same particular science.

EDWs perspective: Working on the mind-brain problem, I have always dealt only with “substance” (I have never dealt with “function”/mathematics¹). In this way, I discovered the existences of ED entities (“substance”) which belong to EDWs. But even when I was working on EDWs (others than the mind-EW), I indicated they involved ED entities. For instance, later, I applied the EDWs perspective to quantum mechanics and I indicated that waves (field-EW) and microparticles (micro-EW) belonged to EDWs. More later, I applied the EDWs perspective to Einstein’s special and general relativity without “spacetime”: there are macro-entities (planets, for instance) and their motions (no spacetime) which belong to the macro-EW².

Authors	Philosophical position	Revolution/change in science
String theory (Veneziano, Schwartz Green, Witten)	function/formalism (absolut) Mathematics = Physics	mathematics = reality abstract math equations = reality (super)strings 10-11-26 dimensions

For the superstring theory, each particle is a “vibration of a string” in 10/11/26 dimensions; the mass of a particle is determined by the energy of string vibration. (Greene 1999) Different types of vibration determine particles with different masses. The researchers of superstring theory believe that they (Schwarz and Sherck) can explain not only strong forces but also the gravitation/“graviton” (as I indicated in my previous works, graviton could not even exist!). Based on the “uncertainty principle”, every string is in continuously “vibration” in 10/11/26 dimensions. Thus, reality is geometry, more exactly, reality is given by a mathematical abstract formula in multidimensional space of 10/11/26 dimensions, nothing else. Everything is abstract mathematics, not even “geometry” since the space of string theory is 10/11/26 dimensions.

As I indicated in 2010, the (super)string theory has been the worst “mathematization” of physics (explaining reality only in mathematical formula, not even Geometry) in the history of human thinking. In our chapter (2010), we indicated that

¹ I have always considered “mathematics just tools of helping scientists to construct predictions for their theories, but no more. Nature (i.e., EDWs) does not “know” mathematics.

² As I emphasized in the past, the micro-EW and the macro-EW do not have any ontological status; there are just labels. Micro-entities and macro-entities really exist but in EDWs.

(super)string theory was totally wrong since its mathematics had nothing to do with “reality”; the (super)string theory is SF and nothing else... Later, in our book 2016, we indicated space (spacetime) could not have any ontological status, therefore, string theory is just the wrong imagination of mathematicians working in physics. The researchers have gotten certain mathematical formulas trying to relate quantum mechanics to general relativity. As I indicated in my works, quantum mechanics refers to at least two EDWs (the particle-EW and the field-EW¹), while general relativity refers to the macro-EW, and, since one EW does not exist for any EDW, it is meaningless to relate these two theories. So, the entire (super)string theory is totally wrong. Obviously, the EDWs perspective has been a sudden/“incommensurable” change/revolution in the development of human thinking (not only for a particular science like CNS or physics!).² With the EDWs perspective, I introduced a totally new “paradigm of thinking” against the oldest paradigm of thinking, the “Universe/world”. This change was a totally “radical/incommensurable change” since it presupposed not a development/improvement of a scientific theory, but a radical change of the oldest and largest paradigm of thinking of human thinking (not only for scientists/philosophers) with a totally new one, the EDWs perspective. Without any doubt, my discovery of EDWs and their applications to many topics of main sciences (CNS, physics, biology) has been the *greatest* “revolution” for human thinking (in particular for sciences and philosophy, but also in general) until now since I have completely changed its framework.

¹ I repeat: as I indicated in my previous works (2003, 2005, 2006, 2007, etc.), all interpretations of quantum mechanics have been totally wrong since all have been constructed within the wrong framework, the unicorn world.

² However, I consider the difference between “development-by-accumulation” and “discontinuity/incommensurability” as being too artificial distinction. Any “incommensurability change” presupposes “accumulation” and/or “rejection” of certain previous knowledge. I realized the “revolutionary change” by discovering EDWs and denying the identity theory (which produced many “anomalies”). It was not a “continuity” in my discovery, but without *rejecting* the identity theory and Cartesian dualism, it would have been difficult for me to discover EDWs.

II. “Antireductionism” under the Umbrella of Epistemology/Language within the Unicorn World

Chapter 5

Few words about Gell-Mann's "antireductionism"

In this chapter, I will investigate some chapters from Gell-Mann Murray (1994), *The Quark and the Jaguar: Adventures in the Simple and the Complex* (Eighth Printing 2002).¹ Even at the beginning, I would emphasize something already classical in my works: as everybody, but mainly because he was physicist, Gell-Mann worked within the unicorn world framework: "Quantum mechanics is not a theory; rather, it is the framework into which all contemporary physical theory must fit." (p. 6) This sentence is enough to understand that Gell-Mann works within the unicorn world. He emphasizes that "determinism" must be abandoned and the scientists have to work on probabilities. (p. 6) All these ideas are, of course, quantum mechanics framework. Obviously, he had no idea about the EDWs, even if, as we will see in this investigation, he is totally against reductionism. However, even at this page, he underlies that in spite of quantum mechanics successes, nobody understands completely this theory, especially its application to the "universe as a whole". (p. 6) Again, this sentence indicates directly that Gell-Mann works within the unicorn world. For this scientist, the quarks are "elementary particles" (wrong notion within the EDWs perspective), while the jaguar is a "complex entity" which mirrors the "complexity of the world". (p. 11) Again, only somebody working within the unicorn world could write these statements.

Together, Arthur's images of the quark and the jaguar seem to me to convey perfectly two aspects of nature that I called the simple and the complex: one the one hand, the underlying physical laws of matter and the universe and, on the other hand, the rich fabric of the world we perceive directly and of which we are part. (p. 11)

It is almost Spinoza's dual aspect theory applied to the world (not to the mind-brain relationship). We have to be aware that the "rich fabric of the world" is given by what "we perceive directly", therefore, we have to include a Kantian view, here. It is exactly as we see in the Spinoza-Velmans's dual aspect theory (see a later chapter), but applied to the "world".² Writing about Einstein's gravity and planets, Gell-Mann believes that planets involves the "emergence of complex adaptive systems". (p. 16)³ Again, only

¹ "Murray Gell-Mann died on the 24th of May, 2019. In 1964 Gell-Mann postulated the existence of quarks. (The name was coined by Gell-Mann himself and it's a reference to the novel *Finnegans Wake*, by James Joyce.) Quarks, antiquarks and gluons were seen to be the underlying elementary elements of neutrons and protons (as well as other hadrons). Gell-Mann was then awarded a Nobel Prize in Physics in 1969 for his contributions and discoveries in the classification of elementary particles at the nuclear level." (Murphy, p. 1)

² It has to be very clear that many researchers have adopted Spinoza's dual aspect theory (including Bohr! and later Thomas Nagel with his subjectivity), but until me, all have been working within the unicorn world. Gell-Mann's complex-simple dual mirrors exactly the same paradigm of thinking within the unicorn world.

³ "And since we're on the subject of condensed matter physics, we must also raise the controversial issue of emergence. In the case of condensed matter physics again, it can be said that 'complex assemblies of particles behave in ways dramatically different from their individual constituents'. One specific example of this is that a range of phenomena related to high-temperature superconductivity are poorly understood; yet the physics of electrons, etc. is understood very well. Gell-Mann then seems to strike a middle-way between strong and weak emergence in the following quote. Here's the hint at strong emergence: '[I]t's essential to study biology at its own level, and likewise psychology, the social sciences, history, and so

somebody working within the unicorn world could write such statements. In my previous works, I rejected all kinds of “emergence”. Obviously, even his main notion, “complex adaptive systems” is constructed within the unicorn world. In his framework, complex systems are, ontologically or “fundamentally” speaking, just “aspects” of the fundamental quarks. In Gell-Mann scheme (p. 20), we see the causal relationships between simple systems (“pre-biotic chemical systems”) and complex systems (individuals and societies). However, within my EDWs perspective, we have to replace such causalities with correspondences. It seems to be a little difference, but it involves a totally different paradigm of thinking: it is the difference between the paradigm of thinking given by the unicorn world and my new paradigm of thinking, the EDWs perspective.

In Chapter 3, Gell-Mann introduces a very dubious notion (for me): “information”. At p. 24, he writes that everything (including complex adaptive system) follow the “laws of nature” which “rest on the fundamental laws of matter and the universe.” Again, it is very clear the Gell-Mann’s general framework: the unicorn world; only somebody working within such framework could write this important statement. And few lines he writes about “information”, but I avoid to talk about this dubious notion. In the next section Gell-Mann writes again that, in the universe, because of quantum laws, determinism had been replaced with “indeterminacy”. (p. 24) About this notion I wrote in my previous works: I indicated that determinism indicates the laws of EDWs, and indeterminacy or “Heisenberg’s uncertainty” was given by the wrong mixture of two EDWs: the field-EW and the micro-EW.

Gell-Mann uses “levels” for defining “complexity” (p. 29), a common notion within the unicorn world. He discusses about “enlargement” gives as example the very good artistic Antonioni’s movie *Blow-up*. However, from my viewpoint, as I explained very well in my previous works, such enlargements would involve different “thresholds”. You can pass a threshold in the same EW: for instance, a car and its macroscopic parts are all within the macro-EW. However, the microparticles (which correspond to both the car and its macroscopic parts) are in the micro-EW. Obviously, because of these thresholds, the EDWs were not so easy to be discovered by a researcher during more than 2,500 years. So, Gell-Mann uses, as usually within the unicorn world, “levels of descriptions”, “context dependence” and “information”. All Gell-Mann’s notions are linguistic games within the unicorn world, no more.¹

In next sections, Gell-Mann investigates different unifying theories like Maxwell’s equations or Newton-Einstein’s theories about gravitation. Even if Newton unifies the phenomena of Earth with the celestial phenomena, there would be EDWs in

forth, because at each level you identify appropriate laws that apply at that level.’ And then Gell-Mann also hints at weak emergence: ‘Even though in principle those laws can be derived from the level below plus a lot of additional information, the reasonable strategy is to build staircases between levels both from the bottom up (with explanation in terms of mechanisms) and from the top down (with the discovery of important empirical laws). All of these ideas belong to what I call the doctrine of ‘emergence’.’ As I indicated in my previous works, all kinds of “emergence” are wrong notions constructed within the unicorn world.

¹ Murphy writes: “For a start, has any reductionist ever actually claimed that literally everything can be said and explained at the reduced level? No; usually reductionists have simply said that most things can be reduced to another level. And that’s not the same thing.” (p. 2) Nevertheless, Gell-Mann writes about “explanation”, not about what it exists at “fundamental level”. If it, “It’s almost as if the word ‘fundamental’ is normative, rather than descriptive.” (Murphy, p. 3), nevertheless, “normative” has nothing to do with EDWs...

both cases. The existences of EDWs do not depend on sizes of entities involves¹; the main notion for the ED ontologies of the ED entities is the ED interactions.²

In Chapter 9, the authors asks “What is fundamental?”, and writes about the elementary particle physics and cosmology as being the “most basic disciplines” and about the “hierarchy of the sciences”. (p. 107) Again, even this question and notions send directly to the unicorn world. The subtitle: “Chemistry at its own level” sends almost to the EDWs; however, Gell-Mann had no ideas about the EDWs. There is a fundamental level and other levels, but working within the unicorn world, he needs to use “fundamental level”: for him, the relationship between QED theory and part of chemistry that “deals with electrons” is a “special case of the relationship between elementary particle physics... at more fundamental level and chemistry... at the less fundamental one”. (p. 112) Again, these notions could be used only within the unicorn world. He writes that: “I know of no serious scientist who believes that there are special chemical forces that do not arise from underlying physical forces... the upshot is that chemistry is in principle derivable from elementary particle physics. In that sense, we are all reductionists, at least as far as chemistry and physics are concerned.”³ However, he claims that, taking into account “information”, even in this case, the “reductionism is incomplete”. (p. 112) Again, information sends directly to “language”, so we can identify exactly Carnap’s “linguistic frameworks”, no more. At the same page, there is a sentence that sends directly to the unicorn world: “One lesson to be learned from all this is that, while various sciences do occupy different levels, they form part of a single connected structure. The unity of that structure is cemented by the relations among the parts.” (p. 112) Obviously, this sentence is realized under the unicorn world. Different sciences manage different “levels” and different “information”. Again, there is just linguistic framework.

Regarding the relationship between biology and physics, Gell-Mann introduces the same linguistic frameworks. Rejecting “vital forces”, he considers “life” is a notion that is different than the notions from elementary particle physics, but it is no more than a notion. We can talk about different properties of living beings, but there is only one real ontology: the fundamental ontology furnished by the elementary particle physics. “The laws of biology do depend on the laws of physics, or chemistry, but they also depend on a vast amount of information about how those accidents turned out.” (p. 115)

¹ There is section in Gell-Mann’s book: “Scale independence”. Anyway, he investigates this notion within the unicorn world. He relates this notion to the “emergence structure” (another notion constructed within the unicorn world).

² Gell-Mann recalls that Newton’s gravitational force had an instantaneous propagation, while Einstein’s gravitational act is the curvature of spacetime which moves with the speed of light. I investigated these theories/notions in other chapters and other works.

³ Quoting this statement, Murphy comments: “Indeed it would be hard to see how things would work in science (or at least in physics) if reductions weren’t employed. Speaking platonically, reduction seems to be the very essence of physics (if not also of many other sciences). Elsewhere Gell-Mann again admits to being a reductionist. (In this case, in relation to the status of the “mental”.) He writes: ‘Here again, it must be a rare contemporary scientist who believes that there exist special ‘mental forces’ that are not biological, and ultimately physicochemical, in nature. Again, virtually all of us are, in this sense, reductionists.’” (Murphy, p. 6) We have to be aware, again, that Gell-Mann is antireductionism only from an epistemological viewpoint, that is, some phenomena cannot be explained using notions from physics. SO, it is only about “explanation” not about “ontology” or “fundamental level”.

“Information” is used for explaining complex system, but Gell-Mann had no idea about the EDWs.

Regarding the relationship between psychology and neurobiology, Gell-Mann furnishes a similar linguistic view: “Here again, it must be a rare contemporary scientist who believes that there are special ‘mental forces’ that are not biological, and ultimately physicochemical, in nature.” Again, this sentence mirrors directly the unicorn world framework of thinking for Gell-Mann. He talks about the its own “level” of psychology, but there is an epistemological/linguistic level, neither ontological (like for dualists), nor EDWs (like for me). For Gell-Mann, the mind is the “phenomenological manifestations of what the brain and related organs are doing”. (p. 117) This sentence sends to Spinoza-Velmans dual aspect theory. (see Chapter...), but still Gell-Mann works with the linguistic frameworks (different kinds of “information”) under the umbrella of “fundamental level”.¹

In Chapter 10, Gell-Mann introduces the quantum mechanics: the “fundamental laws are subject to the principles of quantum mechanics, and at every stage of our thinking we will have to refer to the quantum approach”. Again, this sentence could be created only working within the unicorn world. It has to be very clear, Gell-Mann has no idea about the field-EW, the micro-EW and the macro-EW: the “universe consists of matter, and matter is composed of many different kinds of elementary particles, such as electrons and protons.” (p.123) Later, however, there are some sentences that almost send to Bohr’s “complementarity”: “In fact, any fundamental force must be associated with an elementary particle that is the quantum of the corresponding field. Sometimes, the quantum is said to ‘carry’ the corresponding force.” (p. 124) This sentence sends to Bohr’s complementarity, but in my previous works, I indicated this notion is constructed under Spinoza and Kant’s influences but within the unicorn world. It has to be very clear that “complementarity” (or Spinoza’s dual aspect theory) could not have any correct ontological background within the unicorn world. (See the chapter about Spinoza-Vermans approach) Even at the same page, there are other sentences that send to Bohr’s “complementarity” or de Broglie’s “association” of particle with an electromagnetic wave. But these notions were constructed within the unicorn world. “Fundamentally” speaking, using Gell-Mann’s notion, there is only one “fundamental level”, no more:

when matter is described as being composed of elementary particles—that is, of fermions and bosons—it should be emphasized that under certain conditions some of the bosons may behave more like a field than

¹ “Gell-Mann explicitly puts the *bad reductionist* position of his own faculty (i.e., California Institute of Technology). He writes: ‘If a subject is considered too descriptive and phenomenological, not yet having reached the stage where mechanisms can be studied, our faculty regards it as insufficiently ‘scientific.’ Gell-Mann’s way of distinguishing the non-scientific is very interesting and very (as it were) particular. Firstly, he sees Real Science as being primarily about ‘mechanisms’. (That isn’t giving us much to go on.) As for non-science, it is ‘phenomenological’. Now that can be a reference to the “what it is like” aspects of the mind or brain (e.g., consciousness or subjectivity) or it could refer to the phenomenological accounts of literally any scientific study... And elsewhere, Gell-Mann writes: ‘In that sense, the founding of the Santa Fe Institute is part of a rebellion against the excesses of reductionism’.” (Murphy, p. 7) Obviously, all researchers from Santa Fe had been working, until my first articles/books published, under the unicorn world. Nobody before me published something about the existence of the EDWs.

like particles (for example, in the electric field surrounding a charge). Fermions too can be described in terms of field;... (p. 124)¹

Writing about the “grand unified theories”, Gell-Mann knows that gravity could not be incorporated within the micro-forces. In fact, the physics had been checking almost one century for “gravitons” until I discovered the EDWs; since those years, many physicists gave up searching for these “elementary particles”. Gell-Mann mentions Einstein’s failure to unify his general relativity and Maxwell’s theory of electromagnetism. (p. 126) Gell-Mann indicates the reason of this failure: the existence of other fields than the gravitational and electromagnetic ones; the necessity to include fermions into this unification; the necessity to work within the quantum framework, framework rejected by Einstein. (p. 127) Obviously, only within the unicorn world, can somebody think to such unification.² Gell-Mann shortly investigates Everett’s “many worlds” (also alternatives histories and fine-grained histories of the universe and “decoherence”), but I rejected this alternative and “decoherence” in my previous works.³

Interestingly, there is a section called “individual objects” in which Gell-Mann inquires about the existence of “planets”. (p. 160) “... the properties of individual things represent a great deal of effective complexity of the universe”. (p. 161) Again, this sentence, as all Gell-Mann’s ideas, are constructed within the unicorn world: he refugees, again, under the umbrella of “information”. His “fine-grained histories of the universe” (and “quasiclassical domains”) are not fundamental reality: “... when complex adaptive systems evolve, they do so in connection with a particular maximal quasiclassical domain...” (p. 164) It is not surprising Gell-Mann quoted Bohr’s famous verdict about quantum mechanics.⁴ There is a section called “Aggregation resulting in higher levels of organization”, but this title does not send to the EDWs since “higher levels of organization” are just “labels” which do not involve the “fundamental level”.

My conclusion is (as everybody knows already): Gell-Mann had been working under the unicorn world; he believes that the fundamental level is furnished by quantum mechanics (maybe he thought that the fundamental level was the electromagnetic field). His complex adaptive systems are constructed under the “linguistic umbrella”

¹ “As for Gell-Mann, he tells us that condensed matter physics ‘is concerned with systems such as crystals, glasses, and liquids, or superconductors and semiconductors’. More relevantly, condensed matter physics is a ‘very special subject, applicable only under the conditions (such as low enough temperature) that permit the existence of the structures that it studies’. In addition: ‘Only when those conditions are specified is condensed matter physics derivable, even in principle, from elementary particle physics.’ Thus, if I’m reading Gell-Mann correctly, condensed matter physics is simply not reducible to ‘elementary particle physics’.” (Murphy, p. 9) Again, it is about explanation, not about ontology; so, Gell-Mann’s antireductionism is an epistemological one, no more.

² Gell-Mann analyses also the string theory, but I do not talk about it here. See my work 2010.

³ Gell-Mann also writes about Schrodinger’s cat and measurements in quantum mechanics, but about these notions, see my previous works. In this chapter, my intention is not to investigate Gell-Mann’s ideas, but to emphasize that his anti-reductionism is realized under the “linguistic refuge”...

⁴ “If someone says that he can think about quantum mechanics without becoming dizzy, that shows only that he has not understood anything whatever about it.” (p. 165) As I writes in my previous works, Bohr’s statement is not amazing since he was working under the unicorn world.. Gell-Mann writes about Einstein-Bohr/quantum mechanics dispute (pp. 169-170), about hidden variables, Bohm’s alternative and string theory (Chapter 14), but I do not investigate these ideas here. See my previous works. Chapter 15 is about “Times’ arrows”, but we indicated (our work 2016) that “spacetime” could not have any ontology. Moreover, I am not interested at all in writing something about the last chapters of his book...

since everything is under the “fundamental level”, that is, ontologically speaking, there is only one fundamental level, that finished by quantum mechanics. Gell-Mann’s anti-reductionism is a linguistic one. It has to be very clear, he was working within the unicorn world and he had no ideas about the EDWs.

Chapter 6

Dual aspect theory (Spinoza-Velmans) versus the EDWs perspective

On January 2023, I received an email from Academy.edu regarding Velmans's article 2008. After I took a look at the paper, I started to read his book 2000. Therefore, in this section, I will investigate Velmans' works from 2000 and 2008.

6.1 Velmans' *Understanding consciousness* (2000)

I emphasize that Velmans does not reject the "Universe"/"world" at all; therefore, he is still working under the unicorn world! Nowhere in his works (before 2005) he rejected the existence of the world/universe. In fact, in this work, this notion is quite important one.

As he recognizes, in this work, Velmans is very close to Spinoza's dual aspect theory. From my viewpoint, the main problem of this work is that the author works on "consciousness" and not on "mind". Moreover, we can find a quite wrong idea even in preface: "Part 3 of this book provides a synthesis. In it I suggest what consciousness is and does. I also develop a form of 'reflexive monism' which treats human consciousness as just one, natural manifestation of a wider self-conscious universe." (x) This idea sends directly to Spinoza's pantheism...¹ Anyway, for me the main problem has been the mind-brain/body problem and not consciousness (a relative small problem) under the umbrella of the mind-body problem.

It is very clear, Velmans works under strong influence of Thomas Nagel's famous article "What is it like to be a bat?" We have to be aware that Velmans makes a clear distinction between consciousness and mind; he underlines the mental non-conscious states. (p. 16, for instance) Velmans clearly works under Spinoza's dual aspect theory: "There is nothing hypothetical about our own conscious experiences. To each and every one of us, our conscious experiences are observable phenomena (psychological data) which we can describe with varying degrees of accuracy in ordinary language." (p. 35) The problem is that Velmans works under classical distinction between the "first-person perspective and "third person perspective".

From a third-person (external observer's) perspective one has no direct access to a subject's conscious experience. Consequently, one has no third-person data (about the experience itself) which can be compared to or contrasted with the subject's first-person data. Neurophysiological investigations are limited, in principle, to isolating the neural correlates or antecedent causes of given experiences. (p. 35)

Obviously, many researchers (including Spinoza) had pleaded for this view in the past. This view is quite close to the EDWs perspective. In the past, somebody even asked me about the difference between Spinoza's dual aspect theory and my EDWs perspective. My answer was: Spinoza constructed his dual aspect theory within the unicorn world. Even if Velmans wants to push further Spinoza's view, he still works under the unicorn view, that

¹ Velmans writes: "For Spinoza, however, the differences between mind and body are so great that their causal interaction is inconceivable. Rather, mind and body are different aspects of one underlying reality (which he variously refers to as 'Nature' or 'God'), and it is for this reason that they appear intimately Conjoined... In its original form, this theory threatens to solve a mystery by introducing a greater one (the unfathomable nature of 'Nature', or 'God')." (pp. 23-4)

is he does not reject the “universe/world” at all! However, he clearly rejects reductionism and dualism.

Conscious experiences are first-person phenomena. To those who have them, they provide the very fabric of subjective reality. One does not have to wait for the advance of neuroscience to know that one has been stung by a bee! If conscious experiences were merely hypothetical, the mind—body problems, and in particular the problems posed by the phenomenal properties of ‘qualia’, would not exist. (p. 37)

Indeed, this sentence is quite close to the EDWs perspective. However, it is formulated under Spinoza’s dual aspect theory, even if is somewho a tendency of ontologizing it. He clearly states that “No, we can’t get rid of qualia!” (section starting at page 84). And qualia is a state which belongs to the first-person view. The problem is that this ontologization is realized under the unicorn world. Velmans has no idea about the rejection of the “world” and the existence of the macro-EW, the micro-EW or the wave-EW.

Another problem for Velmans is that he emphasizes the great differences between conscious and unconscious states. Regarding the “pain” in a finger (and his “conscious phenomenology”, p. 108): I reall do not understand Velmans’ view.

In terms of its phenomenology, the pain really is in the finger and nowhere else. This simple example demonstrates a general principle which leads one away from the dualist model in Figure 6.1 and the reductionist model in Figure 6.2 towards a ‘reflexive’ model of how conscious phenomenology relates to the brain and the physical world in Figure 6.3 (cf. Velmans, 1990a). The damage produced by a pin in the finger, once it is processed by the brain, winds up as a phenomenal pain in the finger, located more or less where the pin went in. That is why the entire process is called ‘reflexive’. Figure 6.3 illustrates a similar process with a phenomenal cat. As before, some entity or event innervates sense organs and initiates perceptual processing, although in this case the initiating entity is located beyond the body surface in the external world. As before, afferent neurons and cortical projection areas are activated, along with association areas, long-term memory traces and so on, and neural representations of the initiating event are eventually formed within the brain—in this case, neural representations of a cat. But the entire causal sequence does not end there. S also has a visual experience of a cat and, as before, we can ask what this experience is like. (109)

This paragraph clearly indicates that Velmans works within the unicorn world, even if he is under Spinoza’s umbrella of dual aspect theory. He did not clearly assume Kant’s view, that everything (including our body and the external world) are represented in the mind-EW. The pain is not in the finger but in the mind-EW since all our mental perceptions (mental vision, auditory, smell, pains, etc.) are the mind-EW. Even the image of the body is part of the mind-EW. Therefore, the pain is not in the finger; in the finger, there are only physical reactions and interactions, no more!

According to the reflexive model, while S is gazing at the cat, her only visual experience of the cat is the cat she sees out in the world. If she is asked to point to this phenomenal cat (her ‘cat experience’), she should point not to her brain but to the cat as perceived, out in space beyond the body surface. In this, S is no different from E. The cat as perceived by S is the same cat as perceived by E (albeit viewed from S’s perspective rather than from E’s perspective). That is, an entity in the world is reflexively experienced to be an entity in the world. (p. 109)

It seems Velmans did not clearly assume Kant’s transcendent view. From my viewpoint, there is a huge difference between S and E: he makes a clear distinction between “internal

states” and “external states”. However, from my viewpoint, this distinction is **TOTALLY** wrong! Again, he is working within the unicorn world. He did not clearly explain the self/mind in relationship to the “external world”, but he assumes both exist within the same framework of explanation. Like Spinoza, Velmans works within the unicorn world.

But the reflexive model suggests that in terms of phenomenology there is no actual separation between the perceived body and experiences of the body or between the perceived external world and experiences of that world. It goes without saying that when one has a conscious thought, there isn't some additional experience of a thought 'in the mind'. But neither is there a phenomenal pain 'in the mind' (without location and extension) in addition to the pain one experiences in the finger if one stabs it with a pin. And there isn't a phenomenal cat 'in the mind' in addition to the cat one sees out in the world. Applying Occam's razor, the reflexive model gets rid of them.

But the reflexive model does not get rid of conscious phenomenology. Thoughts, pains and phenomenal cats are experienced to have very different 'qualia' (along with different locations and extensions), but they are nevertheless aspects of what we experience. Together, such inner experiences, bodily sensations and external experienced entities and events comprise the contents of our consciousness—which are none other than our everyday phenomenal world. (p. 111)

This statement is quite close to the EDWs; the problem is that it is under Spinoza's dual aspect theory, i.e. under the unicorn world.

The reflexive model shown in Figure 6.3 suggests that all experiences result from a reflexive interaction of an observer with an observed. For the purposes of illustrating how this interaction works to produce different kinds of experience, these can be subdivided into three categories:

- 1 experiences of the external world (which seem to have location and extension);
- 2 experiences of the body (which seem to have location and extension); and
- 3 'inner' experiences (thoughts, images, feelings of knowing and so on) which have no clear location and extension in phenomenal space, although they can be loosely said to be 'in the head or brain'. (p. 113)

Also, this statement is quite close to the EDWs perspective, but still is constructed within the unicorn world: Velmans has no idea that the world does not exist; he is totally wrong using notions like “external world” or “experiences of the body” or “loosely said to be ‘in the head or brain’”. It is clear he works within the unicorn world.

Figure 6.3 illustrates one example of a reflexive interaction resulting in an experience (a visual percept) of a phenomenal cat. In this case, the initiating stimulus (the observed) is an entity located in space beyond the body surface that interacts with the visual system of the observer to produce an experienced entity out in space beyond the body surface. As noted above, a similar reflexive interaction takes place when the initiating stimulus is on the surface of (or within) the body, or within the brain itself to produce experienced entities and events on the surface of (or within) the body or 'in the head or brain' itself.

What is going on? Following current conventions in the psychology of perception, I assume that the brain constructs a 'representation' or 'mental model' of what is happening, based on the input from the initiating stimulus, expectations, traces of prior, related stimuli stored in long-term memory, and so on (cf. Rock, 1997). Such mental models encode information about the entities and events that they represent in formats determined by the sensory modality that they employ. Visual representations of a cat, for example, include encodings for shape, location and extension, movement, surface texture, colour, and so on. In addition, I suggest that the way information (in a given mental model) appears to be formatted depends on the observational arrangements. The information appears in different forms to the subject (S) and the external rver (E), for the reason that the means available to S and E for accessing the information in that mental model differ (see Velmans, 1991b). (pp. 113-4)

It seems that Velmans is quite close to Searle (even if he rejects Searle in this work): if he assumes that the “brain constructs a ‘representation’ or ‘mental model’ of what is happening, based on the input from the initiating stimulus, expectations, traces of prior”, I don’t see great difference between this view and Searle’s view (even if he works under Spinoza’s dual aspect theory and not Searle’s view...) Anyway, this sentence is written under the unicorn world! It is totally wrong to think this sentence within the EDWs perspective. So, nobody could think that my EDWs approach is quite close to Spinoza-Velmans dual aspect theory: the dual aspect theory (and Velmans’s approach) is constructed within the unicorn world! He has no idea about rejecting the world! Just few passage later, he writes that

However, the observational arrangement by which the subject accesses the information in her own mental model is entirely different. As with E, the information in her own mental model is translated into something that she can observe or experience—but all she experiences is a phenomenal cat out in the world. While she focuses her attention on the cat she does not become conscious of having a ‘mental model of a cat’ in the form of neural states. Nor does she have an experience of a cat ‘in her head or brain’. Rather, she becomes conscious of what the neural states represent—an entity out in the external world. In short, the information encoded in S’s mental model (about the entity in the world) is identical whether viewed by S or by E, but the way the information appears to be formatted depends on the perspective from which it is viewed.⁷ (p. 114)

This paragraph is written under Spinoza’s dual aspect theory, indeed, but no more. It has nothing to do with EDWs. Moreover, we can ask Velmans what is the difference between his approach and Kant’s transcendental approach? Anyway, Kant did not touch the mind-brain problem, but Velmans’ work on the mind is quite close to Kant (even if, I suppose, he did not read Friedman’s work (1992) on Kant and exact sciences). Moreover, Velmans’ approach is based on the first-person and third person perspectives constructed within the unicorn world (no more), but we have not to confuse this approach with my EDWs.

Unconscious mind/brain processes construct experienced realities in which our phenomenal heads appear to be enclosed within three-dimensional, phenomenal worlds, not the other way around. But the mental models that encode information about these 3-D experienced realities are ‘in the head or brain’. Given this, how do phenomenal cats and other phenomenal objects that are perceived to be located and extended in space get to be out there? It is clear that nothing physical is projected by the brain.... Rather, ‘perceptual projection’ is a psychological effect produced by unconscious perceptual processing. (p. 115)

It is the mind, of course, but it is Spinoza’s dual aspect theory... As Spinoza, Velmans did work within the unicorn world. His view about the relationship between unconscious and conscious processing (he talks about Libet’s experiment¹, a very important element regarding this relationship) is quite correct, but he has no idea about the EDWs and the rejection of the “Universe/world”. The problem with Velmans is that he assume to much importance for “consciousness” under Spinoza’s dual aspect theory. For me, consciousness

¹ The same thing we can say about Velmans’ example of “phantom limb”. (p. 116-8) “In short, whether we choose to regard what we hear as being ‘mental’ or ‘physical’ depends largely on our direction of interest. If we are interested in the event in the world (the acoustic energy) that the perceived sound represents,¹⁵ and in how that event relates to other events in the external world, then we tend to think of it as ‘physical’. If we are more interested in the phenomenology as such, for example in how acoustic energy produces certain perceived effects in ourselves, then we tend to regard the sound as a ‘conscious experience’.” (p. 120) This view is Spinoza’s dual aspect theory constructed within the unicorn world and nothing else.

is just a minor effect of the mind and nothing else. We can talk about “free will” only from the mind-EW, but as Libet’s experiment indicates, from the third-person viewpoint, there is no such free will.

But the fact that seen objects are experienced as being different from visual images does not alter the fact that both objects and images are experienced—and that their phenomenology results from mental modelling in the mind/brain.

The dependence of visual images on mental modelling is easy to accept. Subjectively, their generation seems to require mental effort and, phenomenally, they seem to be (roughly) located ‘in the mind or brain’. By contrast, the phenomenology of the objects we see appears to require no generative, mental effort on our part. The perceived objects seem to exist in their own right, and they seem to be out in the world, quite separate from the mind/ brain. Nevertheless, the evidence for mental modelling in the construction of objects as seen, including their seen location in 3-D space, is compelling. (p. 121)

I do not understand these words: “their phenomenology results from mental modelling in the mind/brain”. Why Velmans writes “mind/brain”? Even if the “perceived objects seem to exist in their own right, and they seem to be out in the world, quite separate from the mind/ brain” seems to be about the EDWs, it is not: it is about Spinoza’s dual aspect theory.

Virtual realities provide an added ‘existence proof for the operation of perceptual projection. In virtual reality (VR) one appears to interact with a virtual world outside one’s body although there is no actual (corresponding) world there... These virtual appearances do not fit easily into either a dualist or a reductionist understanding of consciousness—as, in spite of being nothing more than seemings, they do not seem to be ‘in the head or brain’. But in the reflexive model they are easy to explain. In the manner shown in Figure 6.6, when visual input from screens in VR headsets are appropriately co-ordinated with head and body movements, they provide information which resembles that arriving from actual objects in the world. The mind/brain models this information in the normal way, and constructs what it normally constructs given such input: a perceived, phenomenal world located and extended in three-dimensional space. (p. 125)

Again, this paragraph is written under Spinoza’s dual aspect approach but within the unicorn world. Moreover, from my viewpoint, there is no such thing as space (no spacetime). (see my work 2016)

Within the reflexive model the physical world as perceived is part of the contents of consciousness. The contents of consciousness are not in some separate place or space ‘in the mind or brain’. That is, in terms of phenomenology no clear separation exists between what we normally think of as the ‘physical world’, the ‘phenomenal world’ and the ‘world as perceived’. The everyday physical world as perceived does have to be distinguished from the more abstract world described by physics (and other sciences). That is, the physical world as perceived is just one (biologically useful) representation of the world that science describes. But, with our eyes open, what we normally call the ‘physical world’ just is what we experience. There is no additional experience of the world ‘in the mind or brain’. This, I suggest, is simple common sense. (pp. 125-6)

From my viewpoint, Velmans’ “phenomenal world” fits exactly with Spinoza’s dual aspect theory, but both constructed their view under the unicorn world. He indeed works with this “phenomenal world” (“Not just ephemeral thoughts, so-called percepts ‘in the mind’ and the like must be reduced to states or functions of the brain, but the entire phenomenal world.”) (pp. 126-7), but it is nothing new comparing to Spinoza’s dual aspect theory.

In sum, science has found no evidence of tactile sensations in the brain. Direct microelectrode stimulation of somatosensory cortex causes tactile sensations that are subjectively located in different regions of the body. That is exactly what the reflexive model describes. But if tactile sensations cannot be found in the brain, viewed either from the experimenter's third-person perspective or from the subject's first-person perspective, how can one justify the claim that these are nothing more than brain states? (pp. 129-30)

Again, we have a clear distinction between the first-person and third person perspectives but there are still Spinoza's dual aspect theory within the unicorn world.

McGinn concludes from this that 'consciousness does not slot smoothly into the ordinary spatial world' (p. 153) and that Descartes was right to think of mental phenomena as essentially nonspatial in character (in which case we are left with the problem of how something non-spatial can emerge from something spatial like the brain).²⁰ In contrast, I argued in Chapter 3 that we should not confuse antecedent causes with resulting phenomenology. While the neural causes (and correlates) of pains and other tactile experiences are in the brain, these need to be distinguished from their effects (the experiences themselves). At the same time, it is a brute fact about consciousness that examination of the brain from the outside can only reveal its physical causes and correlates. It can never reveal the experiences themselves. One would never guess, from inspection of the brain alone, that its 'owner' has an inner conscious life, within an experienced body embedded in a surrounding phenomenal world. But from the subject's perspective the existence of this rich phenomenology is undeniable and much of its appearance can be readily described. Given that very few of these appearances resemble brain states, it is difficult to imagine what science could discover to demonstrate that such phenomenal worlds are ontologically identical to states of the brain. (p. 130)

Totally wrong, from my viewpoint, is this expression "we should not confuse antecedent causes with resulting phenomenology". In my view, there is no "resulting phenomenology". Velmans did not assume "Kant's transcendentalism" completely! Velmans (as Kant) works within the unicorn world. For me, there is no such "resulting phenomenology: from a Kantian viewpoint, the "external world" is a wrong expression: in his transcendentalism, there is no such thing like "external world", there is only noumena, and phenomena is the mind. Nevertheless, even Kant works within the unicorn world. As we have seen above, for Velmans, there is an "external world" if he assumes that the mind "represents" in itself the external world. Velmans still works within the unicorn world (under Spinoza's dual aspect theory) and he did not reach the EDWs (that is, he did not reject the "world"). He rejects the identity theory, reductionism and dualism, but he embraces dual aspect theory and nothing else. Excluding God from equation, I do not see any difference between Velmans's "reflexive monism" and Spinoza's dual aspect theory except that he ontologizes more these "aspects" but within the unicorn world.¹

¹ "It should be obvious from these counter-examples. that the seemingly odd, intransitive nature of pain location has nothing to do with any misconceived attempt to locate pain experiences in the body. Rather, it is a consequence of the mundane fact that a cut is a property of the (affected) body surface or part that the resulting pain represents." (p. 131) From my viewpoint, there is no such "resulting pain represents": this expression is totally wrong (even Kant would reject this expression...) also this paragraph has wrong idea: "We agree that, from a subjective, first-person perspective, the phenomenal pain is in the finger, and that the phenomenology (usually) represents something actually going on in the finger. We also agree that it is useful to distinguish the phenomenal contents of consciousness from their causes both in the world and in the mind/brain—and that these causes are, in a sense, the vehicle or 'carrier' of conscious experiences." (p. 132) It is clear that Velmans works under Spinoza's dual aspect approach but within the unicorn world. Even if Velmans rejects that the mind has no relationship with the brain (Given that one does not require this theoretical fiction to make sense of the way consciousness relates to the brain and physical world, the reflexive model gets rid of it—along with the fiction that the entire subjective, phenomenal world is 'really' in the brain" (p. 133), he still works under Spinoza's dual aspect within the unicorn world. It seems that this

Velmans partially assumes Kant's view regarding the distinction between "observer", "observation" and "observed object itself". (p. 134) But this view is again just Spinoza's dual aspect constructed within the unicorn world. His following paragraph mirrors exactly this fact:

For example, in cases of exteroception of the kind shown in Figure 6.3, the object itself is the source of the stimuli that initiate visual processing. These stimuli interact with the perceptual and cognitive systems of the observer to produce the observation, an object as seen. Barring hallucinations, this perceived object (a phenomenal cat in 3-D space) represents something that actually exists beyond the body surface. But it does not represent it fully, as it is in itself....

Consequently, the reflexive model does not confuse experiences with what they are experiences of. In supporting the common-sense notion that the phenomenal world just is what we experience, it eliminates added experiences of objects in the mind or brain (on the grounds that these are theoretical fictions). But it retains the view that experienced objects and events are just representations of objects and events in themselves. (p. 134)

Velmans clearly works within the unicorn world since he writes that "these stimuli interact with the perceptual and cognitive systems of the observer to produce the observation, an object as seen". Even Kant would not accept this view: there is no interactions between "external stimuli" and "perceptual and cognitive systems of the observer to produce the observation". Velmans did not assume entirely and completely Kant's transcendentalism: for Kant the "external world" is the mind, but he introduces noumena, so for Kant (and Velmans) there is still a relationship between the subject and the external world. Obviously, Velmans' "reflexive model" admits that "the phenomenal world is what we experience" and these experiences are "representations of objects and events in themselves", but again, this is exactly Spinoza dual aspect approach mixed, somehow, with Kant's transcendentalism. My EDWs approach would not to be confused with Spinoza's dual aspect theory, Kant's transcendentalism or Velmans's reflexive monism since all these approaches have been constructed within the unicorn world. In reality, until me, all scientific and philosophical approaches/theories have been constructed within the unicorn world.¹ The huge difference between the EDWs perspective and the reflexive monism is that the my perspective rejects the unicorn world, while reflexive monism (obviously, also Spinoza and Kant) is constructed within the unicorn world. Even "reflexive monism" is totally wrong: it sends toward a reflexive act, but what kind of such act is this one? Where did it take place? Within the mind. But it seems quite absurd to consider such reflexve acts. Also, "monism" is totally wrong

is my main critics against Velmans. Somebody can sustain that my EDWs is nothing more than Spinoza's dual aspect approach. Nevertheless, Spinoza did not rejected the "world"; working within the unicorn world, he was forced to introduce "God" into his equation resulting his pantheism. Obviously, Velmans did not introduce "God", but he uses Spinoza's "monism" which means exactly Spinoza's panteism without "God" but a "thing-in-itself"! My EDWs perspective is totally against any kind of "monism", including Velmans's reflexive monism".

¹ "There may be neural causes and correlates of conscious experience in the brain, but on the basis of all available first- and third-person evidence, no additional phenomenal experiences of objects 'in the mind' exist! This undermines the very basis of the dualist versus reductionist debate." (p. 135) Indeed, here we have Spinoza's dual aspect, but it is still within the unicorn world. Or, we can consider a kantian transcendentalism but included in Spinoza's dual aspect theory. As Spinoza, Velmans constructs his approach within the framework of monism. Or, the monism (or thing-in-itself for Kant) is the unicorn world; the background of Velmans is the unicorn world...

notion... therefore, it is quite clear that the reflexive monism is constructed within the unicorn world.¹ Velmans' approach misses the rejection of the world²...

- In terms of their *phenomenology* the perceived 'physical world' and percepts of the physical world are one and the same (there is no *additional* experience of the world 'in the mind or brain').
- The perceived 'physical world' is just a representation (produced by perceptual and cognitive processing) of some more fundamental reality which natural science might describe in very different ways.
- The perceived 'physical world' that we take for granted is a peculiarly human world. Given their different sensory and perceptual systems, other animals are likely to experience different 'worlds'. To some extent this applies also to humans with major sensory impairments.

... In this sense, the reflexive model commits one to *idealism*—to the belief that the existence of the world *as perceived by us* depends on the existence of and operation of our own perceptual processing... As noted above, the world as perceived may be thought of as a representation of a more fundamental reality which physics, for example, would describe in a very different way. We (p. 154)

Indeed, this paragraph sends directly to Spinoza's dual aspect and Kant's transcendentalism, but it has to be very clear that all these views are constructed within the unicorn world. The more fundamental reality (or Velmans' monism) is the unicorn world. His "phenomenological world" is exactly Spinoza's one aspect (the mind) or even Kant's transcendentalism (this is the reason, Velmans assumes, in a limited sense, a kind of Berkeley's idealism).³

There are many differences between the phenomenal world (the world as perceived) and the world described by natural science. So, unless one is prepared to reject natural science, one must reject the view that the world simply is as it appears to be.²² Observed phenomena cannot fully or exclusively represent, or be, 'what is real'. Rather, sensory and perceptual systems translate the energies and events they detect into neural representations of those energies in different ways in different animal species, producing 'mental models' of the world appropriate to each form of life. Human 'mental models' form one small subset among many... Observed phenomena are partial, approximate, species-specific but useful representations of the 'thing itself'.²³ (p. 162)

¹ Take this example, the title of a sub-section: "How sensory systems translate energies into experiences" (p. 143) This expression (like Spinoza and even Kant's approaches) is obviously constructed within the unicorn world. It has nothing to do with my EDWs. For me, the mind/self does not exist for the brain and the external environment of the body.

² "Given this evidence, it would seem that *what we take to be 'normal perceived reality' has more to do with what enables successful interaction with the world than with any immutable, one-to-one mapping of the events described by physics into events as perceived.*" (p. 14, his italics) We can understand for Velmans, everything is located within the unicorn world... The same observation is available for this statement: "How does the phenomenal, 'physical' world relate to the world described by physics? The data from physics, sensory physiology, perception and psychophysics makes it clear that the perceived world 'models' only a selection of the events and energies described by physics." (p. 152)

³ "According to the model I have developed above, colour appears only once light waves (in the visible waveband) have been translated by the visual system into colour experiences. That is, objects are only red if (a) they reflect light with the appropriate wavelengths (around 700 nm) and (b) the visual system translates that electromagnetic energy into a red colour experience. Of these two conditions, (b) is the more important. That is, the visual system can produce a colour experience without being innervated by light in the 700 nm region (for example in dreams, vivid imagery and hallucinations)." (p. 155) Again, "have been translated" in the first sentence sends us directly to the unicorn world! Velmans' framework (as for Spinoza and even Kant) is, without any doubts, the unicorn world. Many of his statements indicates the framework of the unicorn world. He is clearly against reductionism and dualism, but he embraces Spinoza's dual aspect theory within the unicorn world. In fact, Velmans did not come with something new in his approach at all; there are just more details constructed within Spinoza's dual aspect theory (and partially Kant's transcendentalism; we have not to forget, Kant did not deal with the mind-brain problem at all...)

The last sentence indicates Velmans' framework: the unicorn world. He did not assume Kant's transcendentalism completely, but he accepts Kantian noumen-phenomena distinction. Such distinction is available only within the unicorn world: "The critical realism I adopt assumes instead that there really is something there to experience or to think about, whether we perceive it, have thoughts about it, or not." (p. 164) Nothing more than Kant. It has to be very clear the enormous difference between my EDWs perspective and Verman's dual aspect approach (and Kant's approach¹). The framework of my EDWs is totally different than Velmans' framework (the unicorn world). My approach rejects:

- thing-in-itself or the world
- Kantian noumen-phenomena distinction
- Spinoza's dual aspect theory
- any kind of monism.²

Again, Velmans accepts Spinoza's dual aspect, but he reject somehow Kant's idealism: "However, according to the reflexive model there is no phenomenal difference between physical phenomena and our experiences of them." (p. 176) With my EDWs perspective, I also accepted that there is the macro-EW and the mind-EW and the human being has a approximative perception of reality.³

¹ "I do not wish to skate over the fundamental problems raised by Kant's analysis of how the mind's own nature constrains what it can know. Kant is surely right to point out that we cannot have knowledge of 'reality' in a way that is free of the limitations of our own perceptual and cognitive systems.²⁸ We cannot make observations that are 'objective' in the sense of being observer free, or have knowledge that is unconstrained by the way in which our cognitive processes operate. Our knowledge is filtered through and conditioned by the sensory, perceptual and cognitive systems we use to acquire that knowledge. Given this, we cannot assume that our representations provide observer-free knowledge of the world as it is in itself." (p. 164) I rejected Kant's approach, but also Spinoza's approach since both have been constructed within the unicorn world. Velmans has no idea about the rejection of the world/universe.

² "The reflexive model makes the conventional assumption that causal sequences in normal perception are initiated by real things in the external world, body or brain.³¹ Barring illusions and hallucinations, our consequent experiences represent those things. Our concepts and theories provide alternative representations of those things. However, neither our experiences nor our concepts and theories are the things themselves. In the reflexive model, things themselves are the true objects of knowledge." (p. 166) Velmans' view is Spinoza's dual aspect partially combined with Kant's view within the unicorn world.

³ "For example, I cannot experience your phenomenal mountain or your phenomenal tree. I only have access to my own phenomenal mountain and tree. Similarly, I only have access to my own phenomenal light stimulus and my own observations of its physical properties (in terms of meter readings of its intensity, frequency, and so on). That is, we each live in our own private, phenomenal world. (p. 176) Bovioulsy, this paragraph sends directly to Spinoza and Kant approaches but also to Nagel's bat and first-third perspectives, but not to the EDWs: "• There is only private access to individual observed or experienced phenomena.

• There can be public access to the entities and events which serve as the stimuli for such phenomena (the entities and events which the phenomena represent). This applies, for example, to the entities and events studied by physics.

• If the perceptual, cognitive and other observing apparatus of different observers is similar, we assume that their experiences (of a given stimulus) are similar. In this special sense, experienced phenomena may be public in so far as they are similar or shared private experiences." (p. 177) Nothing new in these paragraphs... The reader has to go to Thomas Nagel's bat or Spinoza or Kant, but not to the EDWs. "However, the physical and psychological descriptions result from two different observation procedures." (p. 180) Clearly, this statement is constructed within the unicorn world. The same observation s available for this statement: "The reflexive model agrees with other models that physical stimuli can cause our perceptions of them, and that the resulting experiences can represent their causal antecedents." (p 186)

According to the reflexive model, there is no actual conscious content physical phenomena separation. For everyday purposes it is useful to think of the phenomena we observe as the ‘physical causes’ of what other people experience. However, once we have observed such physical phenomena, they are already aspects of what we ourselves experience. That is, physical phenomena are part of what we experience rather than apart from it. There is a sense therefore in which physical phenomena are private and subjective in the ways conventionally attributed to ‘mental’ events. (p. 189)

This statement sends directly to Kant’s transcendentalism (and Nagel’s bat) approach but not to the EDWs. Discussing about Libet’s experiment, Velmans writes about “perceptual projection” (p. 197), but this notion indicates that his construction is within the unicorn world and has nothing to do with the EDWs, but mostly with Spinoza’s dual aspect and Kant’s transcendentalism. Analysing Baars’ “global workspace”, Velmans writes that “information that enters consciousness has already been integrated and appears to be generally available to the system as a whole.” Working within Spinoza’s dual aspect, Velmans did not have the same explanation as I furnished in the past: the self/mind corresponds to the brain, body and interactions with environment (the macro-EW). He is quite close to this view, but he is still working within the unicorn world and Spinoza’s dual aspect. However, his explanation about conscious-unconscious states is quite close to Baars’s global workspace; also, my explanation is quite close to Baars’s view but it is constructed within the EDWs perspective and not within the unicorn world.

In a section “Perception viewed as a reflexive process”, Velmans states that “An initiating stimulus located in the space beyond the body surface interacts with the exteroceptive systems of the observer to produce an experienced entity or event out in space beyond the body surface (such as a seen object, or heard sound).” (p. 230) Sombody could construct such statement only working within the unicorn world! Not even Kant would accept this statement.

We experience the phenomenal world as being outside our heads. We have representations of the world inside our brains, but we do not *experience* this world as being inside our brains. Having a model that reflects what we actually experience encourages exploration of *how* it comes to be that way. For example, it encourages the study of perceived spatial localisation and extension, the experience of depth and the mechanisms underlying *perceptual projection*. (pp. 230-231, his italics)

Again, this paragraph is clearly written under the unicorn world. From the EDWs perspective, there is no such “perceptual projection”. someone can talk about such projection only working within the unicorn world... It is totally wrong to assume that “we have representations of the world inside our brains” even if “we do not experience this world as being inside our brains”. “Reflection” and “monism” are both wrong notions within the framework of EDWs; however, these concepts are very important for Velmans’ reflexive monism. Even if the binding problem (mentined at the same page, 231) has, for Velmans, a solution quite close to my solution, his framework remains the same, the unicorn world. Moreover, Velmans’ relationship between the “phenomenal world” and the “external world” is nothing more than Spinoza’s dual aspect combined with Baars’s “global workspace” within the unicorn world. Velmans is missing the EDWs view.

Virtual reality systems in which one appears to interact with a (virtual) threedimensional world in the absence of an actual (corresponding) world provide one of the best demonstrations of perceptual projection in action—and the investigation of virtual realities will no doubt provide useful information about what the necessary and sufficient conditions for perceptual projection might be. Virtual reality also provides a useful

metaphor for understanding how the contents of consciousness relate to the entities, events and processes that they reflexively 'model'. (p. 231)

Indeed, this statement is very close to the EDWs, but it is constructed within Spinoza's dual aspect theory and the unicorn world since he uses again "perceptual projection in action"; from my viewpoint, this essential notion for Velmans, "perceptual projection" is totally wrong!

Human minds, bodies and brains are embedded in a far greater universe. Individual conscious representations are perspectival... Taken together, the contents of consciousness provide a view of the wider universe, giving it the appearance of a 3-D phenomenal world. This results from a reflexive interaction of entities, events and processes with our perceptual and cognitive systems that, in turn, represent those entities, events and processes. However, conscious representations are not the thing itself.⁹ In this vision, there is one universe (the thing itself) with relatively differentiated parts in the form of conscious beings like ourselves, each with a unique, conscious view of the larger universe of which it is a part. In so far as we are parts of the universe that, in turn, experience the larger universe, we participate in a reflexive process whereby the universe experiences itself. (p. 233)

This paragraph indicates, again as all Velmans' ideas, that he works within the unicorn world. "Individual conscious representations are perspectival" indeed (nothing else than Spinoza), but he writes about a "wider universe" (which sends directly to Spinoza's panteism, even if Velmans replaces "God" with an unknown universe). Velmans clearly works within the unicorn world: "there is one universe (the thing itself) with relatively differentiated parts in the form of conscious beings like ourselves". I think it is very clear Velmans' framework: Spinoza's dual aspect approach within the unicorn world. Obviously, Spinoza's dual aspect theory is the closest approach to the EDWs, BUT this approach (as Velmans' approach) is constructed within the unicorn world: "there is one universe (the thing itself) with relatively differentiated parts..." From my perspective, writing such statement clearly indicates Velmans (and Spinoza and Kant) works within the unicorn world.

Given such fundamental problems with both dualism and reductionism, *nonreductionist* monism deserves serious consideration. An early version of this is Spinoza's dual-aspect theory, which neither splits the universe into two incommensurable substances nor requires consciousness to be anything other than it seems. Rather, mind and body are thought to be two aspects of one fundamental 'stuff' (which Spinoza variously refers to as 'Nature' or 'God'). To be scientifically useful, this approach needs to be naturalised. (p. 239)

This paragraph indicates exactly Velmans's approach: Spinoza's dual aspect theory (mind and body are "two aspects fo one fundamental 'stuff'") constructed within the unicorn world ("nature of God" for Spinoza). Velmans tries to naturalize Spinoza's pantheism, but he clearly works under the unicorn world; even the title of his approach, "reflexive monism" indicates the unicorn world. From my viewpoint, this framework is TOTALLY wrong; therefore, Verlmans' approach¹ is totally different than my EDWs perspective.

¹ "Third-person evidence about the workings of the brain retains its full privileged status (about the workings of the brain), and firstperson evidence about what it is like to have a given experience retains its full privileged status (about the nature of experience)." (p. 245) Again, here is just first-person and third person perspectives within the unicorn world, but not the EDWs.

Important is that Verlmans assumes Bohr's complementarity¹: "Such first- and third-person information is *complementary*". (p. 247, his italics) Moreover, his "*ontological monism*" is "combined with *epistemological dualism*". (p. 247, his italics) The reader can almost think that this is a kind of EDWs. Nevertheless, his view is under the unicorn world. In my works, even if at the beginning, I used Bohr's complementarity, in my phd thesis (2007), I rejected Bohr's notion. In fact, as I clearly indicates in my article 2005, Bohr (like Velmans in his book) uses Kantian dichotomy noumen-phenomena distinction. Influenced by Kant (see my article 2005), Bohr's complementarity sends directly to Spinoza's dual aspect theory. However, all people (including Spinoza, Kant, Bohr and Velmans) have been working within the unicorn world until I rejected the world/universe.²

If first- and third-person perspectives on the mind are complementary and mutually irreducible, then the nature of the mind is revealed as much by how it appears from one perspective as from the other. If so, the nature of mind is not either physical or conscious experience, it is at once physical and conscious experience. For lack of a better term we may describe this nature as Psychophysical... The struggle to find a model or even a form of words that somehow captures the dual-aspect nature of mind is reminiscent, for example, of waveparticle complementarity in quantum mechanics—although this analogy is far from exact... If first and third-person accounts of consciousness and its physical correlates are complementary and mutually irreducible, an analogous 'psychological complementarity principle' might be required for us to understand the nature of mind.¹⁹

At the macrocosmic level the relation of electricity to magnetism also provides a clear parallel to the form of dual-aspect theory I have in mind. If one moves a wire through a magnetic field, this produces an electrical current in the wire. Conversely, if one passes an electrical current through a wire, this produces a surrounding magnetic field. But it does not make sense to suggest that the current in the wire is nothing more than the surrounding magnetic field, or vice versa (reductionism). Nor is it accurate to suggest that

¹ I believe, all philosophers of the 20th century have been totally influenced by scientific theories and concepts (mainly from physics, but not only)... It has to be very clear that no philosopher (working in the last century) had any role in physics (in sciences, in general) in 20th century! Discovering the EDWs, I completely rejected all great scientific theories/approaches elaborated in physics, cognitive science and philosophy. Available to my EDWs, it remains Darwin's species evolution, but I introduced a new view referring to the "life-organism" relationship and a new definition for "life".

² "Physical → physical causal sequences describe events from an entirely third-person perspective (they are 'pure third-person' accounts). Mental → mental causal sequences describe events entirely from a first-person perspective (they are 'pure first-person' accounts). Physical → mental and mental → physical causal sequences are mixed-perspective accounts employing perspectival switching. Physical → mental causal sequences start with events viewed from a thirdperson perspective and switch to how things appear from a first-person perspective. For example, a causal account of visual perception starts with a third-person description of the physical stimulus and the visual system but then switches to a first-person account of what the subject experiences. Mental → physical causal sequences switch the other way. From a subject's point of view, for example, an experienced pain in a tooth might cause a visit to the dentist. It might be possible to give an entirely third-person account of this sequence of events (in terms of dental caries producing pain circuitry activation, efferent signals to the skeleto-muscular system, etc). But the mixed-perspective account gives a more useful description of what is going on in terms of the knowledge available to the subject. In principle, complementary first- and third-person sources of information can be found whenever body or mind/brain states are represented in some way in subjective experience." (p. 248) The same observation as above is available for this paragraph since one page later, Velmans claims that "What dwells within the 'explanatory gap'? Ontological monism combined with epistemological dualism assumes that there must be some thing, event or process that one can know in two complementary ways". (p. 249) These "complementary ways" sends directly to Spinoza's dual aspect even if Velmans tries to ontologize this complementarity. The problem is that he indeed ontologizes it, but within the unicorn world. This is the greatest difference between Spinoza-Velmans's dual aspect approach and my EDWs.

electricity and magnetism are energies of entirely different kinds that happen to interact (dualist interactionism). Rather these are two manifestations (or ‘dual aspects’) of electromagnetism, a more fundamental energy that grounds and unifies both, described with elegance by Maxwell’s laws. (p. 250)

It is indeed missing a “better term” describing “nature” as Psychophysical! Only working within the unicorn world, somebody could state such judgment... I repeat: with my EDWs perspective, I totally rejected Bohr’s complementarity. The main reason being that one EW does not exist for any EDW; it does not mean the EDWs are complementary. This notion, “complementarity”, has been constructed Spinoza, Bohr, Velmans and others within the unicorn world.¹

In the section “What consciousness adds to the world” (even the title indicates the unicorn world framework), Velmans writes that

This analysis also explains why the contents of consciousness seem to enter into many different causal interactions with each other. They do so because the entities, events and processes represented in our experience *really do* enter into many different causal interactions (in the external world, body and mind/brain itself). But this still does not explain what consciousness itself *does*. It remains the case that the physical world is causally closed. It remains the case that the neural correlates of consciousness (and the information they encode) would fill any ‘gaps’ in the working of mind/brain that consciousness might fill. (p. 258, hist italics)

He writes about the “physical world is causally closed” (notion examined by other researches mentioned by Velmans; also see Kim in my works). Indeed, for Velmans, there are complementary aspects having complementary ontologies, but all these “complementary ontologies” are complementary aspects of the “universe/world”. So, Velmans works within the unicorn world even if he tries to furnish complementary ontologies to Spinoza dual aspect.² Velmans’ observation indicates the same point of “complementarity”: “Rather, consciousness might be a ‘natural’ accompaniment of neural

¹ The same observation for this paragraph: “If first- and third-person accounts are complementary, some aspects of this paradox are easily resolved. Physical science is, by convention, a ‘third-person’ science—and if one views the material world solely from the perspective of an external observer, it appears to be causally closed. Events viewed from a thirdperson perspective can be entirely explained in terms of data, theories and laws obtainable from that perspective. This applies equally to the workings of the brain. The conscious experiences of others cannot be observed, so it is not surprising that, viewed from this perspective alone, the operations of their minds appear to be nothing more than the operation of their brains.” (p. 253) “One cannot reduce first-person experiences to third-person observations for the simple reason that without first-person experiences one cannot have third-person observations!” (p. 254) It is Nage’s bat subjectivity, the first person view, correlated with the third person view under Spinoza’s dual aspect ontologized within the unicorn world framework.

² “It is not the case that a lower-level (microscopic) representation is always better than a macroscopic one; the example of billiard balls is a case in point. Nor are third-person accounts always better than first-person ones; descriptions of our thoughts and emotions are a good example. The value of a given representation, description or explanation can be assessed only in the light of the purposes for which it is to be used.” (p. 257) This statement seems to indicate the EDWs, but it indicates only “complementary ontologies” within the unicorn world. I repeat: as I wrote in my works, “complementarity” is constructed within the unicorn world. The same observation for this: “It is only when we *experience* entities, events and processes for ourselves that they become *subjectively real*. It is through consciousness that we *real-ise* the world. That, and that alone, is its function.” (p. 260, his italics) It is Spinoza’s dual aspects within the unicorn world. The same observation is available for this statement: “For example, in the precise ways suggested in Chapter 11, first- and third-person accounts of consciousness and its neural correlates may describe the operations of mind, developing over time, viewed in two, complementary ways.” (p. 267)

representation.” (p. 267)¹ Another statement that indicates Velmans’ unicorn world framework:

In the ways noted in Chapter 7, the phenomenal world that humans experience is determined by the structure of human sense organs and by the nature of human perceptual and cognitive processing. It is a *representation* of entities, events and processes but it is not the *thing itself*. In so far as this mix of sensory, perceptual and cognitive processing is unique to humans, this phenomenal reality is species-specific.” (p. 278)

Velmans’ last sentence indicates his framework, Spinoza’s dual aspect approach within the unicorn world: “Consciousness and matter are intertwined in mind. Through the evolution of matter, consciousness is given *form*. And through consciousness, the material universe is *real-ised*.” (p. 281, his italics) Someone working within the EDWs perspective could not write these sentences...

Conclusion: Velmans tries to furnish “ontologies” to Spinoza’s dual aspect theory, but he still works within the unicorn world (embracing Thomas Nagel’s subjectivity, and the first-person and third-person perspectives). Velmans is missing the EDWs perspective and the rejection of “universe”/“world”. On the contrary, as I indicated above, even if he furnishes these ontologies, it is very clear, Velmans works within the “universe”/“world” framework.²

6.2 Velmans’ article 2008 (*Journal of Consciousness Studies*, 15 (2), pp. 5-50)

I start this section with a paragraph from this article:

Reflexive Monism is a dual-aspect theory (in the tradition of Spinoza) which argues that the one basic stuff of which the universe is composed has the potential to manifest both physically and as conscious experience... While remaining embedded within and dependent on the surrounding universe and composed of the same fundamental stuff, each human, equipped with perceptual and cognitive systems has an individual perspective on, or view of, both the rest of the universe and him or her self. In this sense, each human participates in a process whereby the universe differentiates into parts and becomes conscious in manifold ways of itself, making the entire process reflexive. (p. 2)

This paragraph mirrors exactly the same idea from 2008. Velmans’ framework is Spinoza’s dual aspect theory within the unicorn world. Obviously, Velmans’ framework has nothing to do with the EDW framework which completely reject the notion of Universe/world. Within the EDWs perspective, it is meaningless to talk about “universe” and different “aspects”. Within the EDWs perspective it is quite wrong to write: “While remaining embedded within and dependent on the surrounding universe and composed of

¹ Recall de Broglie’s *association* between a particle and a wave within Bohr’s complementarity! Velmans’ approach is nothing new...

² In this context, I recall our paper from 2001 (Synthese): influenced by E. T. Rolls (Oxford University), we understood that we have to accept the existence of mental representations. However, working within the unicorn world, we just postulated their existences without offering a background for them. I believe, Velmans is in the same situation: he accepts the existence of the subjectivity (first person view) and the third persons (different “complementary” ontologies, let say) but he still works within the unicorn world. Therefore, his approach is nothing new... since he did not come with a new explanation of complementarity. In fact, for me, it was necessary a rejection of Bohr’s “complementarity” and Spinoza’s dual aspect theory (both being constructed within the unicorn world). (see my second work, my article 2005, my PhD thesis 2007...) For me, the existence of the mental representations was the beginning of discovering the existence of the EDWs. However, Velmans remains within the unicorn world...

the same fundamental stuff...”, even if you adopt Spinoza’s dual aspect approach. Velmans works within Thomas Nagel’s viewpoint (first and third perspectives) but within the unicorn world.

In short, both BN and RM adopt a form of *appearance-reality* distinction which accepts that the appearances of the world only indirectly represent (and sometimes misrepresent) the nature of the world itself. For the purposes of the following discussion I will call this the old appearance-reality distinction. (p. 16)

From my viewpoint, the appearance-reality distinction (a kantian point) is quite wrong; this distinction is constructed within the unicorn world. Spinoza, Kant, Bohr (with his complementarity) Velmans and everybody until me had been working within the unicorn world. In this article, Velmans has a section “What is perceptual projection?”: as I mentioned in my observation about his work 2000, even this notion is constructed within the unicorn world. In my approach, “perceptual projection” is quite a meaningless notion: “reflexive model posits a form of perceptual projection that completes the reflexive process”. (p. 18) Again, even the notion of reflexive is quite wrong: in the mind, nothing is “reflexive”; only working within the unicorn world, someone could construct this notion.

We know that preconscious processes within the brain, interacting with events in the external world, produce consciously experienced events, which may be subjectively located and extended in the phenomenal space beyond the brain, but we really don’t know how this is done. We also know that this effect is subjective, psychological, and viewable only from a first-person perspective. Nothing physical is projected from the brain.(p. 18)

Only somebody working within Spinoza’s dual aspect theory (and Nagel’s subjectivity) but *within the unicorn world framework* could write this statement. Therefore, Velmans brings nothing new... Obviously, Spinoza and Kant (more than Spinoza) influenced my work, but the difference between Spinoza/Kant/Velmans/etc. and me is *unmeasurable*: there are different paradigms of thinking, no less: the unicorn world versus the EDWs. Spinoza’s dual aspect theory is a small part of my solution to the mind0brain problem, but my solution is within a new paradigm of thinking, the EDWs perspective, which NOBODY has thought until me since everybody (including Spinoza, Velmans, etc.) had been working within the unicorn world. Many “professors” have plagiarized my ideas not Spinoza’s ideas... Spinoza’s pantheism (or Velmans’ fundamental world) is meaningless within my paradigm of thinking: more exactly, I replaced God or fundamental “level”/world with “hypernothing” (the EW0). This point is another completely new ideas within my framework because in my article 2022, I indicated exactly the relationship between the EW0 and the EDWs.

There is convincing evidence that the experience of depth is, in part, a construction of the mind/brain, for example in cases of depth perception arising from cues arranged on two-dimensional surfaces in stereoscopic pictures, 3D cinemas, holograms, and virtual realities—and I have reviewed scientific evidence for perceptual projection in various other sense modalities in Velmans (1990, 2000 chapter 6). (p. 20)

Again, this statement could be written only working within the unicorn world: “ a construction of the mind/brain”, “perceptual projection in various other sense modalities” are notions constructed within the unicorn world. Notions like “virtual realities” or

“projection holograms”¹ (p. 21) send directly to Spinoza’s dual aspect theory (within the unicorn world), but not to the EDWs. Obviously, Spinoza’s dual aspect theory is the closest approach to my EDWs, BUT it was constructed within the unicorn world. Spinoza, Kant, Velmans and everybody had no ideas about EDWs, about ED interactions, and about ED entities...

In Velmans article there is a section having this title: “Is the phenomenal world inside the brain?” Even this question is wrong within my EDWs perspective.

Here RM tells a conventional story. It assumes that each phenomenal feature of the cat has a distinct neural correlate that encodes the same information (about the cat). From the perspective of an external observer, this correlate will appear as a form of neural encoding (in neural state space), while from the subject’s perspective the same information (about the cat) appears in the form of the phenomenal cat (in phenomenal space). Consequently, representations in the mind/brain have two (mental and physical) aspects, whose apparent form is dependent on the perspective from which they are viewed. (p. 30)

Again, this view is nothing more than Spinoza’s dual aspect theory or the first-person and the third person perspectives within the unicorn world.² His last paragraphs are written under the unicorn world, too:

Reflexive monism suggests a way of understanding these relationships that neither splits the universe into two incommensurable mental and physical substances nor requires consciousness to be anything other than it seems. It neither splits consciousness from matter nor reduces it to a state of the brain. Instead, it suggests a seamless, psychophysical universe, of which we are an integral part, which can be known in two fundamentally different ways. Whether one adopts the perspective of the “external observer” or a “subject”, the embedding surround, interacting with brain-based perceptual and cognitive systems provides the

¹ A note from Velmans: “Holography was first proposed as a model of neural organisation and space perception by Pribram (1971, 1974, 1979) and has been developed further by Pribram (2004). Virtual reality as an explanatory model for the spatial nature of visual experience has been extensively developed by Revonsuo (1995, 2006)—see also Velmans (1993b, 1998b, 2000 chapter 6).” (p. 21) Indeed, holography is very close to my mind-EW, BUT holography (as dual aspect theory) had been constructed within the unicorn world. How many people have plagiarized Spinoza or Velmans since their framework was the unicorn world? Velmans (1993b, 1998b, 2000 chapter 6)”. (p. 21)

² The same observation about this paragraph: “From your viewpoint, the only information you have (about the entity in the world) is the phenomenal cat you experience. From my point of view, the only information you have (about the entity in the world) is the information I can see encoded in your brain. The way your information (about the entity in the world) is displayed appears to be very different to you and me for the reason that the ‘observational arrangements’ by which we access that information are entirely different. From my external, third-person perspective I can only access the information encoded in your neural correlates by means of my visual or other exteroceptive systems, aided by appropriate equipment. Because you embody the information encoded in your neural correlates and it is already at the interface of your consciousness and brain, it displays ‘naturally’ in the form of the cat that you experience.” (p. 31) “Such first- and third person accounts of mind are complementary and mutually irreducible. We need your first-person story and my third-person story for a complete account of what is going on.” (p. 32) “While the parallels are not exact (see Velmans, 2008) wave-particle complementarity in quantum mechanics provides a rough analogy. One can relate wave and particle properties of electrons to each other with great precision, but within physics, neither is regarded as more basic than, reducible to, or supervenient on the other. As in RM, such properties are regarded as complementary and mutually irreducible—and physics has to grapple with the very same issue of how to specify what it is that these properties *are properties of*. Just as RM opts to describe the fundamental nature of mind as ‘psychophysical’, physics typically opts for descriptions that somehow combine wave and particle-like aspects, for example, describing electrons as ‘wave packets’ or ‘electron clouds’.” (p. 32) About “complementarity and mutually irreducible” and quantum mechanics, see my observation above (Vermans’ work 2000).

supporting *vehicle* for one conscious view, and what we normally think of as the phenomenal “physical world” *constitutes* that view. Nor does reflexive monism ultimately separate the observer from the observed. In a reflexive universe, humans are differentiated parts of an embedding wholeness (the universe itself) that, reflexively, have a conscious view of both that embedding surround and the differentiated parts they think of as themselves. (p. 33)

As we already know, these sentences are written under Spinoza’s dual aspect theory but within the unicorn world. No more. It has to be clear that Spinoza, Velmans and everybody until me had been working within the unicorn world. The most significant change that I have realized with my EDWs was not to come with a new solution to the mind-body problem (my solution is quite close to Spinoza, but Spinoza Kant, Velmans, etc. have been working within the unicorn world). My main change refers to the rejection of the world/Universe (the unicorn world); I replaced the Universe/world with the EDWs; nobody had done this before me, nobody wrote something about the EDWs, the ED entities, the ED interactions. NOBODY.

6.3 My view about consciousness in few words¹

As I wrote in my previous works, consciousness is indeed the result of subconscious processes. My view is very similar to Velmans, but I believe we were both influenced by Libet’s experiment. The problem is that, from my viewpoint, we cannot make a very clear distinction between conscious, subconscious states (not unconscious states like in coma or sleeping), attention, memory and self/mind. I see a table in the middle of a room just in front of me; I am aware/conscious of seeing that table. I perceive also two chairs in two corners of that room but I am not aware/conscious about them. If somebody will ask me what I perceived in that room in a few seconds, I would reply: “a table”. However, I perceived both chairs without being aware/conscious about (without paying attention to) them. The difference between conscious states and subconscious states is one of degree (not of nature). Let us say, the corresponding neuronal states for conscious states are “more activated” than the corresponding neuronal states for subconscious states. This is all that we can say about the difference between conscious and unconscious states. However, from my perspective, all conscious and unconscious states are the self/mind. My main observation is that the self has no “free will” to become aware of the table and not of the chairs. This selection is the result of subconscious processes. Indeed, properly speaking, we do not have “free will” since everything is processed at subconscious level. For instance, when someone speaks continuously, the sentences pronounced are constructed at subconscious level. Even the topic of discussion is constructed at the subconscious level but it creates the illusion of “free will”. The conscious states become conscious just because they are predetermined to become conscious states by the unconscious states. In relationship to the self, the unconscious states are much more numerous than the conscious states. Exaggerating, we can say that the self thinks what its subconscious states dictate. The words pronounced by somebody in a discussion come all from unconscious states. The subject does perceive, internally let say, the sentences that she pronounces during, for instance, one continuously 60 seconds. The subject becomes conscious of those words in the same time with the person who listens her speech. The words that I write here are just partially controlled by my conscious; in fact, the control comes from subconscious states. The conscious states are serial just because they are a

¹ For more details, see my previous works.

serial proces from many parallel subconscious states. Conscious states are the top of the aisberg of unconscious states. This is all. We just have the illusion of free will, but we cannot talk about it since the process of “free will” are the top of the aisberg of subconscious states. This is all about consciousness.

To declare “consciousness” as the main topic for philosophers and even for scientists is, in reality, to avoid dealing with the great problems of particular sciences. It is a kind of refugee under the umbrella of only one problem (a typically alternative for many philosophers who did not have any idea about the great problems of particular sciences)... In fact, solving the problem of consciounsess did not need a change of framework of thinking at all. In contrast, topics like the mind-brain problem (philosophy of mind and cognitive neuroscience) or entanglement/nonlocality (physics) required a new framework of thinking and therefore these problems have been much more important than “consciousness”. In particular sciences and philosophy have been much more important problems (since to solve them required a new framework of thinking) than “consciousness”. Such problems needed a Copernican revolution; with my discovery of EDWs, I realized the greatest revolution in particular sciences and philosophy, in the history of human thinking, in general.

The mission of a philosopher is to solve the great problems of particular sciences. Consciousness is an important topic in Cognitive Neuroscience, but it is one among many other more important topics from this particular science. Moreover, there is Physics with a lot of many other essential topics. With my EDWs perspective, I have solved all great problems of the main particular sciences (like physics, cognitive neuroscience and biology) and philosophy.

Chapter 7

Heil's "Real tables" or "linguistic disease" in the philosophy/sciences of the 20th century

In this short chapter, I will investigate, very shortly, the dramatic change realized by philosophy of language (Wittgenstein) and analytic philosophy in the history of philosophy. This chapter, in fact, mirror my view about the philosophy of language, analytical philosophy, and more generally, almost the entire philosophy of the 20th century.

When I was student at Philosophy, I took a look at so-called famous Wittgenstein's *Tractatus*. I had the impression of reading a philosopher who was in a frustrating situation against the world of sciences. More exactly, it was a philosopher who did understand nothing from the new discoveries in physics (for instance). In such a frustrating situation, Wittgenstein found a refugee in "philosophy of language". It was like great scientists did not pay attention to language at all! Obviously, philosophy of language was a refugee for frustrated philosophers. The problem was the almost all philosophers of 20th century were in this situation: being unable to understand the state of affair in physics (mainly in quantum mechanics and its relationship to the general relativity), the philosophers of 20th century found refugee in philosophy of language and analytic philosophy. Even worst, later in the second part of this century, philosophers have started to work on something much worse: "Ethics". In fact, from my viewpoint, "ethics" has nothing to do with real philosophy; "ethics" is a job for sociologists and politics but not for philosophers. A real philosopher has to deal with what real exists and to create a philosophical "framework of the world" (including human being), not with abstract notions (like good and bad) created by the human beings.

Obviously, the situation was in a bad situation for physicists working on quantum mechanics. Nobody elaborated a solution for entanglement and nonlocality (and other problems) to be accepted by the majority of scientists. There have been different alternatives for these problems, but none of them was accepted by the majority. (see Putnam's article 2005) Then, in physics, the majority of physicists believed that general relativity will be replaced with quantum gravity; many experimentalists had checked for "gravitons" tens of years (until I published my article in 2005 and my PhD thesis in 2007). Many physicists believed that general relativity is just an approximation of reality since the planets did not really exist, but only the microparticles and electromagnetic fields really exist (even if, this relationship was the main unsolved problem in quantum mechanics). It has to be very clear that the state of affair in Physics (mainly quantum mechanics and its relationship to general relativity) had been quite fuzzy during the entire 20th century. However, many physicists had been reductionists: they believed everything has to be reduced to the microparticles and the electromagnetic fields, that is, the macro-entities do not really have an ontological status. Working within the unicorn world, it was something absolutely acceptable that any thinker could not accept the existence of the macro-entities and the micro-entities in the same place at the same time.

In this scientific fuzzy state of affair, the philosophers refugee in the "philosophy of language". My question is: what did Wittgenstein believe?

(1) Did Wittgenstein believe Newton did not pay attention to his main notions? Newton knew and reconized that in his theory, there was no definition of gravity/gravitational force. As everybody knows, he indicated that, in the future, based on his formula, somebody will define “gravitational force”.

(2) Did Wittgeinstein believe Einstein did not pay attention to the main concepts of his special and general relativities? Few words about Einstein’s general relativity: in 19th century, Faraday and Maxwell (and others) working on light (electromagnetism) discovered that the maximum speed of any phenomena in this world is the speed of light. However, it was supposed that Newton’s gravitational force has an instant transmission; this aspect contradicted the limited speed of light, c . Einstein solved this problem replacing Newton’s “gravitational force” with the “curved spacetime”. However, even these “gravitational waves” are transmitted with the speed c , no more. The main dispute between Einstein’s general relativity and quantum mechanics was this one: from the viewpoint of physicists working in quantum mechanics, the planets did not exist. Working within the unicorn world, these physicists could not accept the existences of both microparticles and macroparticles. There would be a strong ontological contradiction even for physicists.

(3) Did Wittgeinstein believe physicists working in quantum mechanics did not pay attention to the main concepts of their approaches? Did they not pay attention to “entanglement” and “nonlocality”? Obviously, any great physicist pay a lot of attention to the main concepts of quantum mechanics. There were elaborated quite *many* alternatives for explaining these concepts; “many” just because none of these approaches had been accepted by the majority of scientists. Each approach had essential problems. Howeber, the physicists did not need Wittgenstein’s “philosophy of language”. Being unable even to understand the state of affair in quantum mechanics (and other theories of physics), the philosophers of 20th century needed a justification for their jobs...

In this context, let me investigate Heil’s article: “Real tables” (2005). The first sentence of this article is: “Table exist.” Even the title is under the same umbrella: the macroscopic objects exist. The main problem for Heil is that he was working (as everybody until me) within the unicorn world. “The philosophical question, if there is one, is not whether tables exist but what makes it the case that tables exist.” (p. 493) I don’t believe everybody accepted the table exist in that period. Many people would accept that table exist only from a pragmatic or linguistic framework, having no ontological background. Within the unicorn world, there would be impossible to have an ontological background for tables, planets and all macroscopic objects.

Heil continues his article introducing different answers to this statement, including the rejection of the existence of tables or the linguistic framework. Moreover, he introduced he debates between the macroscopic objects and the microparticles.

When we look closely at tables, we discover that they comprise swarms of micro-particles. Particles in these swarms come and go. There is no prospect of *identifying* tables with collections of their micro-constituents. This table could have existed, even if *these* particles had not existed. And the particles can exist without the table’s existing: if you set the table on fire, you destroy the table, but not the particles. Perhaps the table is an *arrangement* of particles. But in that case, the table is not a continuant, not a substance, but a mode or an instance of a universal. (p. 494)

Heil investigates Locke distinction between “substance”/“universal” and “modes”; Locke concludes that tables do not exist. Heil writes about other alternatives like eliminativists

and supervenience. In the next part, Heil moves to language investigating the concept of table, the “truth-conditions” of “table predicat”(p. 495). However, in the next page, Heil inquires about the ontology of the word “table”: even if we identify a table with a “swarm of particles”, Heil specifies that “table” and a “swarm of particles” “have different identity conditions”. (p. 496)

These properties, “historical properties” and “modal properties,” oblige us to distinguish the table and the swarm and encourage us to regard the table and the swarm as occupying, at least for a time, the same spatial region... Locke argues, and many philosophers agree, that objects of the *same kind* could not be co-located. This leaves open the possibility of objects of *different* kinds being co-locatable. Two tables cannot occupy the same region of space at the same time, but a table and a swarm could. It will follow that every complex object is co-located with an aggregate consisting of its parts. The object and the aggregate must be counted different objects because they differ in their modal properties, and, typically anyway, in their historical properties as well. (p. 496)

However, Heil is aware that

When we looked closely at the table, we observed a swarm. The swarm has impressive credentials: it is recognized in physics. Our best science tells us that the swarm exists, behaves in particular ways, and falls under strict laws of nature. The table's standing is less impressive. Physics includes no mention of tables. (p. 497)

In this scientific context, Heil considers that the “table is starting to look iffy”. (idem) Quoting from Eddington (1928), Heil writes that

Science speaks: embracing physics means accepting that tables are illusions. Nothing in the material world answers to our table concept, insofar as that concept is of objects possessing a substantial constitution. All that exists—all that really exists—are swarms of electrons and other particles or whatever it is that physicists tell us constitutes the fine grain of reality. (p. 498)

Obviously, the scientists of 20th century were much more important than philosophers. In fact, the world had been explained by scientists (they who did not believe in any philosopher of that century¹!). In 20th century, no philosopher furnished new perspective about the “Universe”/world.² The view about the Universe/world had been completely dominated by scientists:

- physicists regarding the material world
- cognitive scientists regarding the mind-brain relationship
- biologists regarding the life-organism relationship.

In this context, there were no place for philosophers, mainly because they assumed Wittgenstein’s umbrella. Or, philosophy of language has been a “tautological movement” for any scientist. They did not need Wittgenstein and philosophy of language to know that they have to explain their main notions. *I consider that Wittgenstein’s movement (philosophy of language, analytical philosophy) was the worst movement in the history of philosophy.* It was a movement of somebody (followed by majority of philosophers of 20th century) who did not understand anything from the

¹ Wittgenstein was the leader of philosophers of 20th century for philosophers but nobody from physics (or even cognitive science) mentioned him. The scientists did not need “philosophy of language” since every scientist knew she/he had to explain completely the main concepts of her/his approach.

² Recall Carnap’s “linguistic frameworks”...

sciences of his time.¹ Or, on the contrary, the starting point of any philosophical system has to be particular sciences. If there are no scientific problems, than philosophy loses its meaning and justification as discipline since it loses its main (and the only one) job: to furnish a new “image of the universe/world” (accepting and/or *rejecting* the main scientific accomplishments).

Heil investigates Fodor’s “special sciences”, but within the unicorn world, there are great problems accepting the existences of the “higher-level entities”. He is aware that we cannot accept the existences of both one particular “Volvo” (a macro-entity) and a “swarm of particles”. Again, there would be an ontological contradiction, anyway. Even if Heil considers that we can assume that Volvo interacts with other macro-entities, however, working within the unicorn world, he could not avoid the ontological contradiction than moving to language since the interactions between macro-entities and microentities seems quite dubious. The other alternative would be “philosophy of language”: “This is the assumption that ontology can be ‘read off’ our language. If you want to know what tables are, you dissect the table concept. This will reveal the nature of tables.” (p. 501) Heil introduces the hypothesis of the “One”: motion, for instance, would be an illusion in this context. He is aware about the dominant role of language in explaining the world:

Our interaction with objects in the world is only derivatively linguistic. We handle, manipulate, lift, collide with, are struck by, ingest, move, reorganize, purchase, embrace, and observe objects. We also discuss them. The idea that our only route to objects is a linguistic route is an artifact of a chronic philosophical obsession with language. The thought is that either you can specify necessary and sufficient conditions for what it would be to be a table (in particle terms, in terms of thickenings in the one, or what have you) or the relation between talk of tables and the world is hopelessly indeterminate and mysterious. But this misrepresents the connections of our words to the world. We use words as signs for objects to which we bear intimate non-linguistic relations. (p. 502)

The next section “Truthmakers for Modal Predicates” is about language (and “truth” of sentences), so I avoid to comment it. However, the first statement of the next section is quite interesting: “My suggestion is that philosophers’ talk of modal properties is best construed as a potentially misleading way of invoking constraints on the application of substantival concepts.” (p. 505) Nevertheless, Heil works within the unicorn world, even if he tries to move against dictatorial power of language over ontology. “Although our table concept and swarm concept differ in their application and identity conditions, the very same swarm of particles could, on occasion, satisfy both concepts.” (p. 507) I do not offer more important details from Heil’s article, but I emphasize that, working within the unicorn world, Heil could not dissolve the tyranny of language over ontology. His final sentence reflects his image: “This is the linguistic tail wagging the ontological dog.” (p. 508)

¹ It is about Adler’s “complexity of inferiority/superiority” interpreted in my way: the complexity of inferiority (at the sub-conscious level) is transformed in the “complexity of superiority” at conscious level, at the level of writing and speaking. Ther result of specie evolution: in this world, all times, everybody on thinks that he is “God” on Earth, he is the smartest living person in general (not in a particular domain). When someone has no idea about the great debates in particular sciences, that person deals either wih (1) “investigation of language” or (2) “ethics”. In these cases, the philosopher deals either with “masturbation” (first case) or “impotence” (second case) in thinking. (Recall Feynman’s idea about the relationship between physics and mathematics...)

The only alternative to reject completely the tyranny of language/philosophy of language/analytical philosophy/identity theory/Universe/world has been my discovery of the existence of EDWs. I emphasize that until my discovery of the EDWs and my first publications between 2002-2005 (2005, the article from Synthese), all (without any exception) philosophical and scientific approaches and theories have been constructed within the unicorn world. Many (tens revealed by my self in my manuscript with UNBELIEVABLE similarities) “professors” discovered the EDWs (other labels) in 2006; an impossible coincidence!¹ With my EDWs perspective, I rejected the framework of the unicorn world and in this way all theories and approaches constructed until me.

¹ The strategy of certain groups from American and Germany (and other groups from other countries, not “nations”) has been the following: since tens of “professors” plagiarized my ideas in 2006 (thousands in the next 10 years), the important journals and publishing companies have published thousands of other people having the same ideas. (This fact was IMPOSSIBLE to happen in USA or Germany or GB before 2005!!!) In this way, the greatest discovery in human thinking (my EDWs) has become something banal, trivial... everybody could think this idea. This movement has been to cover the great THEFT/robbery realized by so many “academic professors”... I have been alone fighting against those who have PLAGIARIZED my ideas... Almost NOBODY has sustained my efforts... almost nobody. https://www.youtube.com/watch?v=ijj_hheGEi0 “face it alone” in front of this world full of THIEVES and ENVY and PROUDNESS... however, HISTORY does not forgive: none of those who have plagiarized my ideas will remain in the history of human thinking. Because of their proudness, everybody from my generation (and closed generations) have been totally “unlucky” to live in the same period with me who I realized the greatest discovery until now in the history of human thinking....

III. Paradigms and Revolutions

Chapter 8

Kuhn's "paradigms" and the EDWs hyper-paradigm¹

Obviously, the EDWs perspective has been the greatest change in the history of human thinking: this change has influenced all mainly particular sciences like physics, cognitive neuroscience and biology, and the entire philosophy (ontology/metaphysics, epistemology, philosophy of science, etc.). There have been small changes through "development-by-accumulation" (Kuhn 1970, p. 2), there have been great changes through "revolutions", that is, the change of a large paradigm of thinking. But what does it mean small or great change of paradigm? What is the difference between small and great changes? This topic I want to talk about in this section.

We could assume that all "changes" have been "revolutions", but obviously, this idea would be totally wrong. In the history of human thinking, there are small and great changes. I consider we have to differentiate between small or great changes/revolutions. For me, it means, "revolution" would require a change of paradigm of thinking. Again, we can believe there are different kinds of revolutions, but I consider only the change of a paradigm of thinking is a revolution. What, then, does it mean a change of a paradigm of thinking? "Copernicus's revolution" has been considered as a paradigmatic case of "revolution", indeed. From my viewpoint, Copernicus' change was indeed a revolution, but we have to pay attention that he changed the paradigm of thinking for explaining certain macro-phenomena belonging to the same EW, the macro-EW. Therefore, Copernicus did not even deal with phenomena belonging to at least two EDWs, like Descartes' dualism (mind-brain duality) or Bohr's complementarity (wave-particle duality). Could we think the "identity theory" was a revolution?

It was a great change in human thinking (involving philosophy and even people working in neuroscience and psychology, and later in cognitive science). However, I believe, we cannot consider the identity theory as being a "revolution". As I have indicated from 2002 until today, it was even a wrong movement, while Copernicus' movement was not wrong, he was quite right. So, what does it mean a "paradigm of thinking"? We can furnish many meanings for this expression; there are different kinds of paradigms of thinking, greater or smaller. There is a paradigm for one subdomain or a domain, there are larger paradigms, but nobody until me had identified the larger paradigm of thinking, the unicorn world (universe/world). I do not want to deal here with this idea. We return to Kuhn:

Normal science, the activity in which most scientists inevitably spend all their time, is predicted on the assumption that the scientific community knows how the world is. Most clearly than most other episodes in the history of at least the physical sciences, these display what all scientific revolutions are about. Each of them necessitated the community's rejection of one time-honored scientific theory in favour of another incompatible with it... And each transformed the scientific imagination in ways that we shall ultimately need to describe as a transformation of the world within which scientific work was done. Such changes,

¹ I mention here that in this chapter, I will investigate certain only some ideas from Kuhn's work (1970) who seem to be important for me. There are many more ideas that I should investigate, but I am not interested in such work.

together with controversies that almost always accompany them, are defining characteristics of scientific revolutions. (Kuhn, p. 5)¹

We have to make a clear distinction between “scientific revolutions” and “revolutions of paradigm of thinking”: in the first case, there has to be a “change” (smaller or greater) within a particular science or (sub)domain. We can consider, for instance, the identity theory a “philosophical revolution” within the “philosophy of mind”. Since ‘50s years (with Place and Smart’s articles) of the last century until I published my first articles, the great majority of philosophers and scientists had accepted the identity theory. The problem was that many researchers knew that something was quite unclear (or even fuzzy) with this approach, but they did not know exactly what had been wrong with this approach. The majority of people had accepted the identity theory just because it was the best approach until I published my work in 2005 at *Synthese* (USA, one of the best journal of philosophy of science in that period). We have to recall that, in 1992, Searle came with a new alternative on the market (the mind is produced by the brain, both being something physically) but his approach was immediately rejected, almost nobody accepted his view. So, we cannot consider Searle’s view a change of paradigm. This is an example of not being a change of paradigm in a particular domain, philosophy of mind/cognitive science.

Kuhn writes about one “anomaly” which appears within a paradigm of thinking or scientific approach, and later, more and more anomalies are discovered, and these anomalies inevitable produce the crisis. I repeat: many people had known something is not good with the identity theory, but because there were no other viable alternatives, many people had been working within this framework, the identity theory. So, when I discovered the EDWs (in the winter of 2001-2002), the identity theory was the “paradigm of thinking” which had dominated the researchers working on the mind-brain topic and its related topics. I believe there are no standard routes for creating a new paradigm of thinking. Obviously, there are some necessary conditions: the author has to work on an important problem and its related problems, and she has to know the main alternatives to that problem. Also, at least from my viewpoint, it would be much better if the author knows other important problems from different but essential domains. I knew the mind-brain problem and its related topics, I knew all alternatives for this problem, but also I knew (not as good as regarding the mind-brain problem) the main problems of quantum mechanics, for instance.

Regarding my approach, the EDWs perspective, I can mention that nobody rejected it! (Maybe some totally ignorant people, but I do not talk about them...) Kuhn clearly indicates that a “new theory, however special its range of application, is seldom or never just an increment to what is already known”. (p. 7) Amazing, since 2005 until now, I have not read something against my EDWs perspective (or against those thousands of people who have plagiarized my ideas!). In the first year after 2005, i.e., 2006, tens of people had already plagiarized my ideas. It means that my new paradigm of thinking, the EDWs perspective had been immediately accepted by many people and nobody has

¹ “... ‘normal science’ means research firmly based upon one or most past scientific achievements, achievements that some particular scientific community acknowledge for a time as supplying the foundation for its further practice.” (p. 10)

rejected until now... I can call my EDWs perspective a kind of “hyper-paradigm”, i.e., a paradigm beyond all the previous paradigms and approaches.

Let me see exactly the meaning of “paradigm” for Kuhn in the second edition of his book (1970):

A paradigm is what the members of a scientific community share, *and*, conversely a scientific community consists of men who share a paradigm. (p. 176)

A scientific community consists, on this view, of the practitioners of a scientific speciality... they have undergone similar educations and professional initiations; in the process, they have absorbed the same technical literature and drawn many of the same lessons from it. Usually the boundaries of that standard literature mark the limits of a scientific subject matter, and each community ordinarily has a subject of its own. There are schools in the sciences, communities, that is, which approach the same subject from incompatible viewpoints. (p. 177)

The paradigm of the “universe/world” had been accepted by everybody until I discovered the existence of EDWs. There had been no scientist or philosopher who had rejected this notion.¹ Obviously, for the mind-brain problem and for entanglement/nonlocality had been different “incompatible viewpoints” (from my viewpoint, it is about certain “subparadigms” mostly, but not “paradigms” - see below), but all these approaches had been constructed within the unicorn world.

The members of all scientific communities, including the schools of the “pre-paradigmatic” period, share the same shorts of elements which I have collectively labelled ‘a paradigm’. What changes with the transition to maturity is not the presence of a paradigm but rather its nature. (p. 179)

Here, we have a better pre-definition of “paradigm”. The nature of the unicorn world paradigm, the “universe/world”, had been the strongest until I discovered it was quite wrong. Until me, nobody had even questioned about this paradigm of thinking, the unicorn world; everybody had been worked within this paradigm consciously or even sub-consciously without even wandering or asking about the arguments which would support it.

Kuhn indicates the heroes of scientific revolutions, among them being Copernicus, Newton, Lavoisier, and Einstein. (p. 6) Obviously, there are others scientists in this list; but if we refer to the history of human thinking (not only to some “scientific revolutions”), maybe we need to introduce some philosophers in this list or even artists, don’t we? It would be about the human thinking, in general. It is, of course, much more difficult to identify “revolutions” regarding the human thinking in general, but I start writing this chapter having the idea that the discovery of the EDWs represents the greatest challenge in the history of human thinking; therefore, the EDWs perspective is not a scientific or philosophical revolution, but the greatest revolution in human thinking and this is the reason I call it, the “hyper-paradigm”.²

How do we differentiate between a “scientific revolution” and a “revolution in human thinking”? First of all, the Copernican revolution was, indeed, a scientific revolution that it was not a change of “paradigm of thinking” since Copernicus did not

¹ As I wrote many times in this work and in my previous works, Spinoza’s dual aspect theory and Everett’s many worlds were constructed within the same wrong paradigm/framework, the unicorn world.

² Obviously, this is the reason so many academic “professors” have plagiarized my ideas.

change an EW with EDWs: the entities and their relationships (the Earth and the planets of our solar system) were belonging all to the same EW, the macro-EW. I believe Descartes' mind-brain problem was a much serious one since it were dealing with at least two EDWs two centuries later. Copernicus' new paradigm (scientific one, anyway) indicated only that the Sun is in the center of our solar sytem and not the Earth, but the entire solar system was placed within the same "universe/world". Discovering the EDWs, I indicated the "universe/world" does not exist. It was, indeed, the greatest challenge in the history of human thinking since exactly because I replaced the "universe/world" with the EDWs and, in this way, I have solved the greatest problems of different particular sciences and philosophy.

Kuhn mentions some "paradigms" (related to normal science) like "Ptolemaic astronomy' (or 'Copernican'), 'Aristotelian dynamics' (or Newtonina'), corpuscular optics (or 'wave optics'), and so on". (p. 10) Except "Aristotelian dynamics", all other paradigms are "scientific paradigms" referring to certain phenomena from one another science (physics, in general). The EDWs has been a new paradigm of human thinking available for all main particular sciences (like physics, cognitive neuroscience and biology), but also for philosophy. So, my perspective is not just a new "scientific paradigm" or "philosophical paradigm", but a hyper-paradigm for the human thinking in general. I do not know such a change in the history of human thinking (including all great changes in particular sciences and philosophy) which has represented such great challenge of paradigm. In principle, the changes of paradigms have been in a particular science or even in philosophy, but not in all sciences and philosophy! I emphasize again, my theory does not indicate the "Truth"; it indicates certain real truths (which refer to phenomena belonging to EDWs), but also indicates that all approaches, theories and paradigms of special sciences and philosophy have been wrong. My EDWs perspective is indeed a new hyper-paradigm of thinking for all scientists and philosophers¹, but it is not an "absolute true perspective". It has indicated that the greatest paradigm of thinking until now (the universe/world) has been wrong, but also certain truths (referring to ED phenomena belonging to EDWs). Quite interestingly, Kuhn indicates the problems for scientists working in "normal science":

whether historically or in the contemporary laboratory, that enterprise seems an attempt to force nature into the preformed and relative inflexible box that the paradigm supplies. No part of the aim of normal sciences is to call forth new sorts of phenomena; indeed those who will not fit the box are often not seen at all. (p. 24)

Kuhn is quite right referring to the "normal scientists" (scientists who do not even try to discover or the explain something in their science, i.e., 99% of them... they work under "normal or paradigm-based research", p. 25). Nevertheless, there are some "great scientists" who try to explain certain phenomena under a new approach/perspective or even paradigm. For instance, there have been more than ten "interpretations" of phenomena furnished by empirical data of quantum mechanics (inded, "ten" is very small compared to the number of physicists) of last century. There have been very few "shifting paradigms" for the mind-brain problem during centuries even if many

¹ It was not suprinsingly for me, many physicists who have plagiarized my ideas, dealt in their works on certain problems of physics, but for the first time, they furnished a new alternative to the mind-brain problem even if they have never published something on this topic. Who would be so stupid to believe them?

researchers/philosophers like Spinoza-Velmans (against Descartes' dualism) or Searle (against the identity theory), but their approaches had not been accepted: Descartes died without being able to solve the interactions between the mind and the brain, while Searle's approach had been immediately rejected by many scientists philosophers).

Kuhn writes about three kinds of facts that "determine" a paradigm.

- (1) nature of things
- (2) predictions of theory
- (3) the empirical work which supports the paradigm. (pp. 25-7)

The first point (mixed with third one) was very important for me to discover the EDWs: I had to confirm Descartes' main idea (coming from Plato and, even older, from religion) that there are somehow two ontological different substances. However, I knew that something has to be wrong with Descartes' approach, identity theory or Spinoza's dual aspect theory, all approaches being constructed within the unicorn world. When I discovered the mind being an EW, while the brain/body being an entity in an EDW, the macro-EW, I also realized that this new paradigm of thinking could be apply to the main problems of quantum mechanics or to dispute between Einstein's general relativity and quantum mechanics. I have realized the change of paradigm not in a particular science (moreover, I rejected the fundamental role of mathematics in physics, recall Einstein's words about mathematics), neither in cognitive science, nor philosophy. My EDWs perspective (a hyper-paradigm) refers to the human thinking in the most general view. To realize such jump, it was necessary for me to know the main *problems* and the approaches from philosophy, cognitive science and physics. There have always been scientific anomalies within one science or another (recall Ptolemaic epicycles or the fact that Newton did not have a definition for "gravitational force"!). I do not know any scientific theory or paradigm of thinking in which a person (or more) could explained "everything". Until I discovered the beginning of the EDWs (last year), there had always been some problems/anomalies in a particular science or in philosophy. When I have found the answer to the last problem (the beginning of the "universe") last year, I could claim that I have solved all great problems of the main particular sciences and philosophy. Obviously, in the future (probable in 100 years), new phenomena will appear as "anomalies" in relationship with my perspective and the scientists/philosophers will start to check for a new paradigm of thinking. Probable, in 200 years, a new paradigm of thinking will appear, even if, I am sure, the change will not be as great as I have realized discovering the EDWs (so, I believe, that new paradigm will not be called a new hyper-paradigm...)

Kuhn discusses about the "rules" and a "paradigm". Scientists can

agree in their identification of a paradigm without agreeing on, or even attempting to produce, a full interpretation or rationalization of it... Normal science can be determined in part by the direction inspection of paradigms, a process that is often aided by but does not depend upon the formulation of rules and assumptions. Indeed, the existence of a paradigm need not even imply that any full set of rules exists. (p. 44)

For elaborating the "hyper-paradigm of EDWs", I needed to know the main approaches of particular sciences (physics, cognitive science, philosophy) and their "sub-paradigms" (rules, etc.) in order to identify the greatest paradigm of thinking, the "universe/world" and to conclude that there had been the greatest mistake, a paradigm of thinking nobody had identified it as being wrong; people did not identify it as paradigm of thinking,

everybody worked as believing the universe/world really exist (more exactly, nobody even asked if it existed...)¹ During three-four years, I had been working mainly on the mind-brain problem in cognitive science (and philosophy of mind), but before this period but also during his period, I had been working on certain problems from physics and philosophy. I knew the main approaches regarding the mind-brain problem and the entanglement/nonlocality in quantum mechanics. I also knew the great debates between Einstein's general relativity and quantum mechanics. I emphasize that I did not focusing only on one main problem, the mind-brain problem, (even if most time had been dedicated to this problem). I totally agree with Kuhn:

Paradigms may be prior to, more binding, and more complete than any set of rules for research that could be unequivocally abstracted from them. So far, this point has been entirely theoretical: paradigms *could* determine normal science without the intervention of discoverable rules. (p. 46, his italics)

Obviously, the most general paradigm of thinking, the “universe/world”, had dominated completely (more powerful than any other paradigm) all the scientists and the philosophers, it dominated human thinking, in general. Very important, until me, nobody even had thought about the universe/world as being a “paradigm of thinking”!²

The transition from Newtonian to quantum mechanics evoked many debates about both the nature and the standard of physics, some of which still continue... When scientists disagree about whether the fundamental problems of their field have been solved, the search for rules gains a function that it does not ordinarily possess. While paradigms remain secure, however, they can function without agreement over rationalization or without any attempted rationalization at all. (pp. 48-9)

My EDWs perspective has been a new paradigm of thinking (a hyper-paradigm) without “rules”; I have developed certain different rules for each particular sciences, but the paradigm, the EDWs, remains the same. With my accomplishments in 20 years (from 2002 to 2023), I have “rationalized” completely my paradigm exactly because I have answered all the great problems of particular sciences and philosophy. Again, until I discovered and developed my EDWs, there had been quite many unsolved problems in the main particular sciences and philosophy. I recall the title of Putnam's article 2005 about quantum mechanics: “A philosopher look at quantum mechanics (again)” (some authors have used the slogan “the mysteries of quantum mechanics”). Putnam investigates four main interpretations of quantum mechanics from that time, he rejects

¹ My position is very different than Karl Popper's “falsification” (Kuhn, p. 146) or Nietzsches' nihilism. Discovering the EDWs has not been only the falsification of all previous scientific theories or philosophical approaches/paradigms. The EDWs perspective has been a new paradigm of thinking, not just “falsification” of the previous approaches. I suppose my theory will be rejected in 200 years, but it is a new paradigm of thinking which, I suppose, will dominate human thinking for the next centuries. And even if, in the future, it will be replaced with a new paradigm of thinking, it does not mean my movement has been only “falsification” of something. Kuhn's words mirror exactly my view: “But falsification, though it surely occurs, does not happen with, or simply because of, the emergence of an anomaly or falsifying instance. Instead, it is a subsequent process and separate process that might equally well be called verification since it consists in the triumph of a new paradigm over the old one.” (p. 147) “Within the new paradigm, old terms, concepts and experiments fall into new relationships one with the other.” (p. 149)

² The reader has not to confuse my EDWs perspective with Everett's many worlds or Spinoza-Velmans dual aspect approach: both these approaches (and all rules, approaches, theories and paradigms) had been elaborated within the unicorn world.

two of them (including Everett's many worlds!), but he is aware none of alternatives could be accepted without any doubt. In our days, many physicists have plagiarized my ideas, none of them (no philosopher) have criticized my EDWs perspective since I published my article in 2005 at one of the best journal of philosophy in US and the world. It means, in our days, my approach (my hyper-paradigm) is the actual framework for the entire humanity (except ignorants who have not heard about my EDWs yet).

The introduction to this essay suggested that there can be small revolutions as well as large ones, that some revolutions affect only the members of a professional subspeciality, and that for such groups even the discovery of a new and unexpected phenomenon may be revolutionary. (p. 49)

Obviously, there are small and great revolutions in particular sciences and philosophy. I believe, it is quite wrong to use the same notion, "revolution" for "small revolutions"; such revolutions are not real revolutions, but mostly some important changes. As I noticed above, even the identity theory was not a "great" revolution in philosophy of mind/cognitive science. Of course, it was an important change in these domains, but we cannot call it as "revolution". Not even Descartes' dualism or Spinoza's dualism could be called "revolution" since the framework of these approaches had been the same, the unicorn world.

If normal science is so rigid and if scientific communities are so close-knit as the preceding discussion has implied, how can a change of paradigm ever affect only a small subgroup? ... normal science is a single monolithic and unified enterprise that must stand or fall with any one of its paradigms as well as with all of them together. But science is obviously seldom or never like that. Often, viewing all fields together, it seems instead a rather ramshackle structure with little coherence among its various parts... substituting paradigms for rules should make the diversity of scientific fields and specialities easier to understand. Explicit rules, when they exist, are usually common to a broad scientific group, but paradigms need not be... And even men who, being in the same or closely related fields, begin by studying many of the same books and achievements may acquire rather different paradigms in the course of professional specialization. (p. 49)

Again, the problem had been that, during more than 2,500-3,000 years, nobody had identified the "universe/world" as being a particular "paradigm of thinking". There had been "rules" in each particular science and in philosophy for different topics, but everybody had been working within the *same* wrong paradigm without being aware about this fact. Being the same paradigm for everybody can indicate how large the unicorn world had been in sciences and philosophy. In general, researchers (usually old researchers) cannot accept a new approach mainly because it could reject their entire works. Recall Planck's words about a new approach (one of the mottos of my Springer's book) of the document signed by 100 scientists who rejected Einstein's relativity or the dispute between Einstein and the physicists working on quantum mechanics. As I remarked in my previous works, Einstein lost this battle; he died being aware he lost the greatest battle of his life. The problem was that, working within the unicorn world, Einstein and all the physicists have been, at least, partially wrong.¹ If a particular

¹ I used "partially" taking into account Schrodinger's wave equation and Einstein general relativity. However, even if their equations were correct, both scientists worked within the unicorn world (spacetime could not have any ontological status...)

approach of a particular science is much easier to be rejected¹, based on strong scientific/philosophical arguments, when a new paradigm appears, it can be much more difficult to be rejected. On the contrary, instead of rejecting it (because they would not find any error), in our days with Internet, many scientists and philosophers would plagiarize it.

Kuhn (p. 50) mentions that the physicists working on quantum mechanics works on different paradigms, and a change of a paradigm could affect only a small group of physicists accepting that paradigm, but that change would not affect other physicists, (much less the scientists working on other topics/domains). “A revolution produced within one of these traditions will not necessary extend to the others as well.” (p. 50) Such “revolutions” were different “interpretations” of quantum mechanics or the mind-brain problem, but from my viewpoint, we should not call such changes as “revolutions”, not even “small revolutions”. Maybe we can call Copernicus’ change a “revolution” (even if it did imply only the macro-EW), but we cannot call “revolution” any interpretation of quantum mechanics (including Bohr’s “complementarity”, Copenhagen interpretation and Everett’s many worlds) just because all of them had been wrong (constructed within the unicorn world) and referring to two EDWs.²

What quantum mechanics means to each of them depends upon what courses he has had, what texts he has read, and which journals he has studied. It follows that, through a change in quantum-mechanical law will be revolutionary for all of these groups, a change that reflects upon only one or another paradigm applications of quantum mechanics need to be revolutionary only for the members of a particular professional subspecialty. For the rest of the profession and for those who practice other physical sciences, that change need not be revolutionary at all. (p. 50)

Kuhn is quite right if we think of all changes (great or small) which had happened until I discovered the EDWs. Nobody has realized such change as I did realize discovering the EDWs. Because there had been different interpretations of quantum mechanics, there have been different (sub)paradigms of working for different researchers. It was not the same situation for scientists and philosophers working on cognitive science and philosophy of mind: almost all had been working under the “umbrella” of the identity theory (even if, many of them knew there were problems with this “umbrella”). Obviously, the beginning of creating a new paradigm is given by some anomalies which indicate that

nature has somehow violated the paradigm-induced expectations that govern normal science. It then continues with a more or less extended explanation of the area of anomaly. And it closes only when the paradigm theory has been adjusted so that the anomaly has become the expected. (p. 52)

For me, the mind-brain problem did not have a clear solution; as many other researchers, I knew the identity theory is not completely acceptable. Also, I knew that quantum

¹ Recall Seale’s approach was rejected by scientists and philosophers (like eliminativists) immediately after being published in 1992.

² Maybe Kuhn is aware that a particular science (for instance, physics) does not exist in itself; there are physicists, different people, each having her mind working under different paradigms, subparadigms, and rules. We have to remark that if Copernicus’ revolution referred to the macro-EW, all interpretations of quantum mechanics referred to two EDWs, the micro-EW and the field-EW. Therefore, the fact that a “change” involves at least two EDWs, it does not mean that this change is indeed a revolution...

mechanics did not have an acceptable alternative. I discovered the existence of the EDWs working on the mind-brain problem, even if I knew the main problems of quantum mechanics (like “entanglement” and “nonlocality”) or the great dispute between Einstein’s general relativity and physicists working on quantum mechanics. In general, any great theory was not easily accepted by the others (especially by old people working in the same domain). However, my EDWs perspective had been plagiarized by tens (probable hundreds) of people in 2006 (one year after I published my article at Synthese) and thousands in the next ten years! Amazing, isn’t it? This fact indicates exactly the magnitude of my hyper-paradigm.

Kuhn mentions new “discoveries” as being the starting point for creating a new paradigm of thinking. However, for discovering the EDWs, I did not need any new “discovery”. “Anomaly appears only against the background provided by the paradigm.” (p. 65) Kuhn mentions, explicitly, that new discoveries are not the “only sources of these destructive-constructive paradigm changes.” (p. 66) The mind-brain problem or entanglement and nonlocality had already been, somehow, “anomalies” in different domains, even if there had been approaches/paradigms pretending of solving these problems. There is, as Kuhn emphasizes, an overlap between scientific fact and theory, discovery and invention. (p. 66) Moreover, in general, there have been different competitors for explaining the same or different phenomena.

Kuhn furnishes different cases, one being the competition between Ptolemaic astronomy and Newton’s alternative.

Philosophers of science have repeatedly demonstrated that more than one theoretical construction can always be placed upon a given collection of data. History of science indicates that, particularly in the early developmental stages of a new paradigm, it is not very difficult to invent such alternatives.” (p. 76)

Discovering the existence of the EDWs, in our days, I do not have any other alternatives. From the beginning, my EDWs hyper-paradigm has not been in “competition” with any other alternative (paradigm/theory/approach); many people have accepted it, many have plagiarized it, only few persons have quoted my name... This is the actual state of men (scientists, philosophers, politicians, soldiers, policeman, wtc.): they are full of envy, proudness, hate, ignorance, many of them are just THIEVES and potential criminals, etc. etc. Moreover, since I have solved all the great problems of main particular sciences and philosophy, there would be quite impossible to appear a new alternative in this period...

Just in the next page, Kuhn indicates that “crisis are a necessary precondition for the emergence of novel theories and ask how scientists respond to their existence.” (p. 77) “Though they may began to lose faith and then to consider alternatives, they do not renounce the paradigm that has led them into crisis.” (p. 77) The problem is that none of interpretations of empirical data from quantum mechanics had been accepted by a majority. Even if the identity theory had been accepted by the large majority of scientists working in cognitive science, some of them were aware about the problems of this approach... I repeat, having no other viable alternatives, the scientists and philosopher had been forced, somehow, to accept the identity theory.

Essentially is the following Kuhn’s statement: “But science students accept theories on the authority of teacher and text, not because of evidence.”¹ (p. 80) I believe

¹ “No wonder that textbooks and the historical tradition they [scientists] imply have to be rewritten after each scientific revolution.” (p. 138) “Whitehead caught the unhistorical spirit of the scientific community

this sentence mirrors exactly the state of affair in any particular science and philosophy.¹ For instance, the (super)string theory dominated more than three decades the academic environment mainly in US, the leader of international academic environment in the last 80 years (or so), but also the academic environment of other countries. However, with my publication from 2005, some researchers suddently gave up to their paradigm of thinking and published UNBELIEVABLE similar ideas to my ideas even in 2006 and 2007... Because of the Internet, the change of a (sub)paradigm of thinking for scientists and

whne he wrote, 'A science that hesitates to forget its founders is lost.'... Fortunately, instead of forgetting these heroes, scientists have been able to forget or revise their works." (pp. 138-9) Except Darwin's evolution thory, I had to reject all the "great" scientific theories and philosophical appoches elaborated until me...Rrejecting, the "accumulation-by-data" alternative, Kuhn believes that "... science has reached its present state by a series of individual discoveries and inventions that, when gathered together, constitute the modern body of technical knowledge." Obviously, he is totally right: "Earlier generations pursued their own problems with their own instruments and their own canons of solution. Nor is it just the problems that have changed. Rather the whole network of fact and theory that the textbooks paradigm fits to nature has shifted." (p. 141) With my EDWs perspective, I have indeed changed COMPLETELY the "whole network of fact and theory" and this is the reason I call my perspective as being a hyper-paradigm... "A new interpretation of nature, whether a discovery or a theory, emerges first in the mind of one or a few individuals." (p. 144) But how about the fact that I discovered tens of people publishing UNBELIEVABLE similar ideas to my EDWs perspective in the same year 2006 and many more in 2007????? *Obviously, it would be quite impossible the greatest change in the history of human thinking to appear in the minds of tens or even hundreds of people in two years, and in the next 10-5 years, to appear thousands of people (working in different sciences and philosophy) with the same ideas. Only somebody incredible IGNORANT would believe these facts...* "Few philosophers of science still seek absolute criteria for the verification of scientific thories." (p. 145) Indeed, as I mentioned above, the physicists of 20th century did not pay attention to any philosopher (I repeat: all the philosophers of 20th century followed the worse movement in the history of philosophy (Wittgenstein's linguistic framework) just because they had been unable to understand and to surpass the problems of quantum mechanics (and other problems from particular sciences). However, many physicists from USA, Germany, Australia, etc. have plagiarized my ideas referring to the great "mysteries" of quantum mechanics immediately after I published my article in 2005. I was lucky the article at that important American journal (*Synthese*) has been published in November 2005; if my paper were published in March 2005, I would be sure, many physicists, cognitive scientists and philosophers would had been published the same ideas in the same year 2005. Nevertheless, I have published two articles (in Romanian journals) with my EDWs perspective in 2002 and 2003. So, those who have plagiarized my ideas have no chances...

¹ "Both normal science and revolutions are, however, community-based activities. To discover and analyze them, one must first unravel the changing community structure of the sciences over time. A paradigm governs, in the first instance, not a subject matter but rather a group of practitioners. Any study of paradigm-directed or of paradigm-shattering research must begin by locating the responsible group or groups." (pp. 179-80) This paragraphs mirror exactly the relationship bewteen the appearance of my EDWs perspective and the reactions of different groups from different sciences/countries: many of them have plagiarized my ideas, but nobody has contradicted my approach until now. This fact indicates that my EDWs perspective is the *largest paradigm* (a hyper-paradigm) elaborated by somebody in the history of human thinking (including the main particular sciences and philosophy). In fact, Kuhn deals mainly with subparadigms or even theories and approaches or even with small paradigms, but not with what I do understand through "paradigm" (see Kuhn notions of "paradigm", "theory", "disciplinary matrix", "symbolic generalization", "shared examples", "tacit knowledge and intuition" at pp. 181-97). I believe, we cannot identify all these details in grasping the change of an old paradigm with a new one... From my viewpoint, a change of a paradigm is phenomena that takes place quite accidentally, but we know sure, only one person is involved in changing a great paradigm; only small changes, we can attribute to two (but not three!) persons... Anyway, many points Kuhn emphasizes in these sections have to be reconsidered taking into account the Internet.

philosophers has become much more easier than in the last centuries. Therefore, we have to update Kuhn's perspective regarding the change of a paradigm.

... even a discrepancy unaccountably larger than that experienced in other applications of the theory need not draw any very profound response. There are always some discrepancies. Even the most stubborn ones usually respond at last to normal practice." (p. 81)

Kuhn investigates the anomaly of Mercury's motion for Newton's theory of gravitation: nobody "seriously questioned Newtonian theory because of the long-recognizes discrepancies between predictions from that theory and both the speed of sound and motion of Mercury." (p. 81) "It follows that if an anomaly is to evoke crisis, it must be more than just an anomaly. There are always difficulties somewhere in the paradigm-nature fit; most of them are set sooner or later, often by processes that could not have been foreseen." (p. 82) It means, we talk about humans, normal humans, and no human is "God" (Newton was declared "God on Earth"!). I believe that, without any "anomaly", a paradigm produces no doubts at all. "All crisis begin with the blurring of a paradigm and the consequent loosening of the rules for normal research." (p. 84) I repeat: in general, all approaches, scientific theories and philosophical frameworks had had problems; none of them explained everything regarding human knowledge. On the contrary, last year I found and published the answer regarding the beginning of all "universes" and EDWs. In this way, during 20 years, I have solved all the great problems of main particular sciences and philosophy. Actually, there remains no great problem in any main sciences and philosophy. For changing my paradigm of thinking, it will be necessary certain "anomalies" (scientific facts) to appear in the future. Actually, there is not any such scientific fact as being an anomaly for my EDWs hyper-paradigm.¹

Kuhn emphasizes that changing one paradigm with another is not given by the accumulation of empirical and theoretical knowledge, but

it is a reconstruction of the field from new fundamentals, a reconstruction that changes some of the field's most elementary theoretical generalizations as well as many of its paradigm methods and applications... When the transition is complete, the profession will have changed its view of the field, its methods and goals. (p. 85)

Indeed, the change of paradigm of thinking I have realized with discovering the EDWs have already produced "new fundamentals", new methods and goals in particular sciences and philosophy. Everything has been changed in human thinking since I have discovered the EDWs.² I did not realized this change through accumulation-of-data, of

¹ To indicate his position against the cumulative process, Kuhn mentions that new "sorts of phenomena would simply disclose order in an aspect of nature where none had been seen before. In the evolution of science new knowledge would replace ignorance rather than replace knowledge of another and incompatible sort." (p. 95) For discovering the EDWs, I did not need new phenomena: these phenomena (like the mind-brain problem or entanglement or nonlocality) appeared long before my discovery. So, Kuhn was right: the discovery of my EDWs was not the result of cumulative facts.

² The confirmation of this fact is given by my dark list. There are many people on this Earth who have known nothing about my EDWs perspective. They are the ignorants; smarter people have plagiarized my ideas, only few have quoted my name... I repeat, because of the Internet, the change of an old paradigm with a new one is much faster than in the last four centuries. At page 88, Kuhn emphasizes the role of philosophers in preceding the apparition of a new paradigm; he mentions the periods before the appearances of Newton, Einstein and quantum mechanics. Nevertheless, in the last 100 years, no scientist

course; it was just a discovery realized by myself. “Einstein wrote that before he had any substitute for classical mechanics, he could see the interrelation between the known anomalies of black-body radiation, the photoelectric effect, and specific heats.” (p. 89) As I mentioned above, the my framework of discovering the existence of EDWs had been given by different problems (for instance, the mind-brain problem, entanglement and nonlocality, the notion of existence, the paradigm of thinking for scientists and philosophers) from different domains (cognitive science, physics, and philosophy).

... the new paradigm... emerges all at once, sometimes in the middle of the night, in the mind of a man deeply immersed in crisis. What the nature of that final stage is-how an individual invents (or finds he has invented) a new way of giving order to data now all assembled-must here remains inscrutable and may be permanently so... Almost always the men who achieve these fundamental inventions of a new paradigm have been either very young or very new to the field whose paradigm they changed. And perhaps that point need not have been made explicit, for obviously these are the men who, being little committed by prior practice of the traditional rules of normal science, are particularly likely to see those rules no longer define a playable game and to conceive another set that can replace them. (pp. 89-90)

Kuhn is perfectly right: there is no key for changing an old “paradigm of thinking” with a new one. And, I was not very young, but indeed I was quite new in the fields of cognitive science/philosophy of mind and physics but my discovering of the EDWs solved, instantaneously all the great problems of these domains. I was aware of all these great problems and I agree completely with Kuhn, a very important aspect was that I had been working alone on the mind-brain problem. The scientific revolutions (i.e., the change of an old paradigm with a new “incompatible” one) are, indeed, “non-cumulative developmental episodes”. (p. 92) Kuhn insists on the necessity of a preceding crisis for a new paradigm to appear. (p. 92) When I discovered the EDWs (in the winter of 2001-2002), there was no “crisis” in either cognitive science/philosophy of mind (scientists and philosopher accepting the identity theory, even if many people knew there were some great problems with this approach) or in physics (since second decade of 20th century, there were different “interpretations” of quantum phenomena, none of them being accepted by the majority). Or, we can say these domains have always been in crisis since nobody came with a new paradigm of thinking accepted by the majority of people from a particular science or philosophy. Kuhn is, again, correct in writing that astronomers “for example, could accept X-rays as a mere addition to knowledge, for their paradigms were unaffected by the existence of a new radiation.” (p. 93) “.. a new theory might be simply a higher level theory than those known before, one that linked together a whole group of lower level theories without substantially changing any.” (p. 95) My EDWs perspective is, obviously, a higher level theory than all the previous paradigms/theories/approaches from particular sciences and philosophy; it is in fact a hyper-paradigm. “The normal-scientific tradition that emerge form a scientific revolution is not only incompatible but often actually incommensurable with that which has gone before.” (p. 103) Indeed, we cannot even “measure” any difference between my EDWs hyper-paradigm and any paradigm/theory/approach elaborated within the unicorn world since my EDWs perspective has changed completely the most general framework of human thinking until

working on quantum mechanics has paid any attention to any philosopher. However, after 2005, not only philosophers but also many scientists (including physicists and cognitive neuroscientists) have plagiarized my ideas.

me: "... through the world does not change with a change of paradigm, the scientist afterward works in a different world." (p. 121)¹ With my EDWs hyper-paradigm, I have indeed worked in "a different world", but I have also changed the "world/universe" itself, for the first time in the history of human thinking. Kuhn inquires if the sensory experience is "fixed and neutral", and his answer is obviously negative. (p. 126) Nevertheless, with my EDWs hyper-paradigm, I have changed completely the relationship between the observer and the observed (or better, empirical) data. For me, the measurement apparatus lost its great importance given by some physicists (Bohr, for instance) working in quantum mechanics. "Observation" became similar to "interaction", therefore, I rejected Bohr's idea (influenced by Kant's view - see my article 2005 and my PhD thesis 2007) referring to the role of measurement apparatus in the physical status of observed phenomena. Our different observations just *reveal* certain ED entities and their ED interactions and nothing else.² Even Kuhn (p. 126) is somehow on Bohr's side regarding this aspect, even if he claims that the scientist have employed different measurement apparatus, she looks at the same "world". (This idea sends directly to Kantian phenomena-noumena distinction...) However, his attack against philosophy of language is quite acceptable: "Philosophical investigation has not yet provided even a hint of what a language able to do that would like to be." As I indicated in my previous works and this work, philosophy of language (initiated by Wittgenstein and followed by Carnap and all the majority of philosophers of last century) has been the greatest disease in the history of philosophy.

Kuhn is again right writing that "The claim to solve the crisis-provoking problems is, however, rarely sufficient by itself. Nor it can always be legitimately be made." (p. 154) I claimed, even in my first publication (2002) that my EDWs perspective is a solution to the greatest problems of particular sciences and philosophy. Usually, every researcher thinks he is "God" on Earth, especially when he discovers something

¹ "Practising in different worlds, the two groups of scientists see different things when they look from the same point in the same direction. Again, it is not to say that they can see anything they please. Both are looking at the world, and what they look at has not changed. But in some areas, they see different things, and they see them in different relations one to another... Equally it is why, before they can hope to communicate fully, one group or another must experience conversation that we have been calling the paradigm shift. Just because it is a transition between incommensurables, the transition between competing paradigms cannot be made a step at a time, forced by logic and neutral experience. Like the gestalt switch, it must occur all at once (though not necessarily in an instant) or not at all." (p. 150) These paragraphs fit perfectly the appearance of my EDWs hyper-paradigm of thinking for all human beings... "All at once" for tens of people in 2006 or for thousands in ten years? How stupid could be some researchers... Few paragraphs later, Kuhn quoted famous Planck's slogan that I wrote as motto to my book published at Springer (Germany). I repeat: because of the Internet, I did not need to wait old professors to retire or to die. On the contrary, many "academic professors" have plagiarized my ideas just in two years! INCREDIBLE, isn't it? Such a confirmation of a theory/approach could not be identified in the history of human thinking at all since nobody has realized as great change of a paradigm as I accomplished discovering the EDWs. I repeat: I were American or German, I would have already received Nobel without any doubt... but maybe I had been lucky I was not American or German since, because of my "dark list", I have continued to develop and to apply my EDWs perspective to all the great problems of human thinking. "Individual scientists embrace a new paradigm for all sorts of reasons... Even the nationality or the prior reputation of the innovator and his teachers can sometimes play a significant role." (pp. 152-3) So, do I need to thanks those who have plagiarized my ideas or to some of my chief-colleagues who did try to take my job many years of my career?

² Therefore, we do not need to include our measurement apparatus in the definitions of ED entities... The ED entities really exist without our measurement apparatus.

important in his domain, but, normally, except one person per century (at least), all the others reserachers are quite wrong in their “new” approaches/theories. I have received a great confirmation of my EDWs hyper-paradigm discovering so many “academic professors” who have plagiarized my ideas.

Kuhn is right in writing that at the beginning, a paradigm solves few problems with solutions far from being perfect (p. 56). Firstly, I solved the mind-brain problem but I wrote also about the great problems from quantum mechanics. Later (during 20 years), I developed the metaphysical framework of my perspective, I introduced principles and rules, I applied my hyper-paradigm to many problems of different domains. With the appearance of my perspective something happened which it have never happened in the history of human thinking: nobody have criticized it during 20 years, but many have plagiarized it! This fact indicates the greateness of my discovery (it is a “discovery”, not a theory). Again, the Internet has had a huge role in transmitting information in our days. Therefore, many ideas elaborated by Kuhn have to be rewritten... “At the start a new candidate for paradigm may have few supporters, and on occasions the supporter’s motives may be suspect.” (p. 159) Without Internet, in my “village”¹ (university, city, not even country), nobody would accept my theory. However, because of the Internet, my ideas had already been plagiarized by tens of people (from different domains/countries) even in 2006! Why this amazing process has happened? Because my EDWs perspectives has changed EVERYTHING in human knowledge and such extraordinary scientific and philosophical revolution (I can call my EDWs perspective as being the first “hyper-paradigm”) has never happened in the history of human thinking.

Regarding the “progress in science”, Kuhn writes that there are two conditions for a new paradigm to be accepted by more and more researchers from a particular domain:

- the new paradigm has to solve a great problem of one important science
- the new paradigm “must promise to preserve a relatively large part of concrete problem-solving ability that has accrued to science through its predecessors.” (p. 169)

Obviously, even at the beginning, my EDWs perspective solved great problems of particular sciences (cognitive science and physics) and philosophy preserving concrete problem-solving ability of these sciences. However, as I mentioned above, for me, “progress” is a fuzzy concept when it refers to science; exactly the same thing we can say about philosophy: nobody claims there is progress in philosophy. Nevertheless, there are changes of (sub)paradigms in both areas. So, if we cannot talk about “progress” in science and philosophy, we can talk about the *rejection* of wrong (sub)paradigms and theories. Does this kind of rejection push the researchers closer to “truth”, so could we talk about “progress”? I consider we cannot claim that a new accepted paradigm is closer to “truth”. Since “spacetime” does not have any ontological status, and “infinity” could not even exist, I am sure some “truths” surely exist, but because of our status of existence and because of the existence of many EDWs (we do not know how many, but not infinite number), we cannot have access to the “last/first truth”. Maybe in tens of thousands of years (or more) the human beings will reach this “first truth”, I have no idea... So, according to Kuhn, the “progress” of science have occurred “without the benefit of a goal”. (p. 173) I agree again with Kuhn: religion had been excluded from science in 18th century; in the next century, Darwin introduced the notion of “accident” in the evolution of species. Last year, in my article from *Timpul*, I introduced the same principle,

¹ Jewish proverb: “You cannot be a prophet in your village.”

accidents, in the appearances of the EDWs. My opinion is that, excluding “God” and “goal” from equation, we cannot talk about “real progress” in science. In the future, there will be discovered quite many “scientific anomalies” against my EDWs perspective, and step by step, probably in 200 years, a scientist or a philosopher will introduce a new paradigm of thinking (it is quite improbable to be a new hyper-paradigm) which will replace, somehow, my hyper-paradigm.¹ I mention again that the new paradigm will be possible only because of the existence of my EDWs perspective.² I end this chapter with Kuhn’s last paragraph:

Scientific community, like language, is intrinsically the common property of a community or else nothing at all. To understand it we shall need to know the special characteristics of the groups that created and used it. (p. 210)

My main ideas of my EDWs perspective have been plagiarized my thousands of people (that I have discovered, but I am sure there are much many...). The special characteristic of all groups (all human beings on this Earth) is that each individual considers he/she is the smartest living person on Earth. (Every person living recognizes that the death scientists/philosophers/composers/artists are greater in their creativity, but not in intelligences.) Therefore, many arrogant (quite smart) people have plagiarized my ideas (many “limited” people did not even hear about my EDWs perspective, even I have published that article at *Synthese* - one of the best journal of philosophy in USA and entire world in 2005 and a books at Springer, Germany in 2015!). those who have plagiarized my ideas and those who have ignored my ideas (quite many) could not accept somebody from “Africa” (myself) has realized the greatest change in the history of human thinking.

As I emphasized in my manuscript regarding the “UNBELIEVABLE similarities” (and in this work), in the last years, I have discovered, in 2006 (!) tens of “professors” from USA and other countries publishing the same ideas that I published in my article 2005! This process was possible because of the Internet.

In this quite absurd situation (tens of people to publish a new paradigm of thinking (the greatest) in the same year (!!!); therefore, the strategy of certain groups from American and Germany (and other groups from other countries, not “nations” since, because of the Internet, we cannot talk about “nations” when we refer to “knowledge”)

¹ “Art would be useless if the world were perfect...” (Andrei Tarkovsky) Philosophy is meaningless if there are no anomalies in the main particular sciences. With discovering the EDWs, I have solved ALL great problems of sciences and philosophy and I have furnished a new “vision of the world”. In order to think about a new paradigm of thinking, the future philosophers have to await until new anomalies will appear in the main particular sciences... If there are no anomalies, a new “philosophical system” is meaningless. It is for the first time in the history of human thinking when a person has understood *everything (the beginning and all the phenomena)* in this “universe”/world excluding “God” and “infinite” from equation.

I have always looked in the future, I was not afraid to forget the past. Anyway, the longer we go into the past of humanity, the worse scenes we can see. Forget about the “eternal return”/“eternal recurrence”, just a religious emblem used by priests and politicians for manipulating people...

² Even I have rejected all the scientific theories/approaches (except Darwin’s species evolution) and the philosophical “paradigms”/approaches, it has to be clear that without Descartes’ dualism, Spinoza’s dual aspect or Kant’s transcendentalism (and many others approaches and ideas elaborated by scientists and philosophers), I would not been able to elaborate my EDWs hyper-paradigm.

has been the following: since tens of “professors” plagiarized my ideas in 2006 (thousands in the next 10 years), the important journals and publishing companies have published articles and books written by thousands of other people having the same ideas in the next 10-15 years. (This fact was IMPOSSIBLE to happen in USA or Germany or GB before 2005!!!) In this way, the greatest discovery in the human thinking (my EDWs) has become something banal, trivial... everybody could think and publish these ideas. It has to be very clear: this movement has been made in order to cover the great THEFT/robbery realized by so many “academic professors” (different domains, many countries)!

In this context, I have always been fighting alone against those who have PLAGIARIZED my ideas... Except the editor of Synthese who published my article (2005) and my editor who helped me published my book at Springer (2015), NOBODY else has sustained my efforts... nobody. Therefore, I have to “face it alone” https://www.youtube.com/watch?v=ijj_hheGEi0 in front of this world dominated by ENVY and PROUDNESS but full of THIEVES ... However, HISTORY does not forgive: none of those who have plagiarized my ideas will remain in the history of human thinking. Because of their “proudness” and their ENVY (the “imperials” like Americans and Germans could not accept a “nobody from Africa” has changed completely the entire framework of human thinking), everybody from my generation (and closed generations) has been totally “unlucky” to live with me in the same period since I have realized the greatest discovery in the history of human thinking until now. In fact, being Romanian (and being attacked by my some of colleagues (in general, those having positions of “chiefs”), instead of helping me - envy is one of Romanians’ main features), it was quite impossible for imperials like Americans and Germans to recognize I have changed EVERYTHING in human thinking; they were to envy regarding my discovery and its apcations to all the great problems of particular sciences and philosophy...

One of my very good ex-students told me once time: “On this Earth, everybody is envy, in general, for a great realization; the problem is when envy is transformed in HATE!” He has been perfectly right.¹ Some of my colleagues and the majority from my “dark list” really hate me for discovering the EDWs and for publishing, on different Internet sites, my manuscript regarding the UNBELIEVABLE similarities between my ideas and the ideas published by those from that list (and many others I have not discovered yet their publications)...

¹ I emphasize again, this message is not against any nation. In actual globalization (Internet), when it is about knowledge, “nations” do not exist. There are only “groups of interests” in different places on this Earth dominated, as usually, by “money” and “fame”.

Conclusion

The EDWs perspective and some truths

I have applied the EDWs perspective to the main topics of different particular sciences and philosophy:

- cognitive neuroscience (and philosophy of mind): mind-brain problem, emergence, supervenience, mental representation, cognition, mind-reading (fMRI, EEG, etc).
- physics: quantum mechanics (entanglement, nonlocality, etc.), Einstein's both relativities; cosmology (dark matter/energy), spacetime, Big Bangs, origin of "universe", etc.
- biology: new definition of life and its relationship with organism
- philosophy (ontology, philosophy of science, etc.): existence, entities and processes, etc.¹

In this work, I furnish more details about the hyperontology of Hypernothing (the EW0) and hypercorrespondences between the EW0 and the EW1a-n. It is for the first time, I have completely explained the appearances of "somethings" (the EW1a-n) in hypercorrespondences to "nothing" (the EW0). Using the EDWs perspective, I rejected the existence of "antimatter", I rejected the existence of EW-1 and the anti-field-EW from my previous works. In this new updated framework of EDWs, I do not need any kind of "antimatter". The first EW is the EW0, the Hypernothing which has no ontology, but mostly a kind of hyperontology: together, all EW1a-n represent/are "nothing". So, before the EW1a-n, it was nothing. With the existences of EDWs, I rejected the existence of any kind of "God" (see my article free at my webpage) and also the regress *ad infinitum*. All the ED entities and/or EDWs really exist/are, but before their existences it was nothing (i.e., the EW0). In hypercorrespondences to Hypernothing (the EW0), the EW1a-n accidentally appeared in different/same "places", in different "periods". Other EDWs appeared later, EW2a-1, EW3, EW4, etc. until the appearances of the pre-Big-Bangs-EW (there were many Big Bangs, not only one, in order to avoid Guth's inflation). In correspondences to the pre-Big-Bangs-EW, the field-EW, followed by the micro-EW, the macro-EW and finally many life/mind-EW. This is the "chain of EDWs" that we really have knowledge. I believe there are many other "chains of EDWs", but we do not have any knowledge in our days. I am convinced, in the future, many information will appear about EDWs that we have no idea about in our days.

Why there have been these EDWs and not others? Meaningless question: it is like asking why you are you and not Leonardo da Vinci. All EDWs appeared accidentally, no more. Some EDWs (the EW1a-n) appeared in hypercorrespondences to the EW0;

¹ James T. Farrell: "Our century is the century of ideas. But there are ideas and ideas..." Indeed, 20th century was the century of ideas in main sciences (and art). However, there were many contradictory scientific theories (in main sciences). However, the only philosopher who will remain only in the "history of philosophy" will be Wittgenstein who drawed the line of all philosophers of 20th Century: in front of difficult theories of physics (and later biology and CNS), the philosophers have been refugees within the "philosophy of language" and "analytical philosophy". Only with the EDWs perspective, I have changed not only the entire philosophy but also the entire framework of thinking for particular sciences. All scientific theories of physics and CNS have been destroyed by the EDWs since my approach has changed everything (except Darwin's evolution species). The EDWs perspective has been the greatest change in the history of human thinking.

other EDWs appeared in correspondences to EDWs. In this explanation, the EW0 is included: since the EW0 is nothing (no ontology), I do not need to explain its appearance since nothing does not exist (has no ontology), therefore, it has no “appearance”. In this sense, I do not need “God” or regression *ad infinitum* in explaining the appearances of all EDWs. Again, the EW1a-n accidentally appeared in hypercorrespondences to Hypernothing, all EDWs appeared in correspondences to the EW1a-n and correspondences between them. Nevertheless, after the Big Bangs, the macro-EW could appeared. However (excepting the plasma-EW), the field-EW (the first EW) have appeared after the Big Bangs because of the properties of electromagnetic field: continuity, speed of light, and not “strong force”. So, the greatest possibility for an EW to appear after the Big Bangs was for the field-EW since the electromagnetic field has the closest features to “nothing”. We have to take into account the “possibilities of appearances” for certain EDWs immediately after Big Bangs. The same is true for the macro-EW which had the greatest possibility to appear in correspondence to the micro-EW. But in this case, the appearance of the macro-EW was pure accidentally, exactly as the life-EW appeared on Earth. Also, the apparitions of EW1a-n were just accidentally: in hypercorrespondences to the EW0 did not appear just one EW (it would be need to introduce “God” in this equation), but there were many EDWs (the EW1a-n) that appeared accidentally in “epistemologically” different places/periods. Each of some of these EDWs had to be included in a “chain of correspondences”. Surely, not each of these EDWs (EW1a-n) was in “correspondences” to an EDW. However, in correspondences to one of these EDWs, appeared the EW2 and in the correspondence to this EDW appeared an EDW and so on until the Big Bangs happened in correspondence to the pre-Big-Bang-EW. 380.000 years after the Big Bangs, the field-EW appeared and very soon the micro-EW also appeared in “our universe”. Later (after less than one billion years) the macro-EW appeared. Much later, the life/mind-EW appeared on Earth. Obviously, there have been EDWs in different places/times, but we have no ideas (yet) about them. I am convinced, in the future, the scientists will discover new EDWs that appeared long time ago or very recently...

I need the hypothesis there were many EDWs after the EW0 just to increase the possibility of appearance of our “universe” (i.e., the Big Bangs, the field-EW, the micro-EW, the macro-EW and the mind-EW). Without this hypothesis, the probability our “universe” to appear would be extremely low.

There have been many EDWs and not only those which we have already known that appeared after the “Big Bangs”: the plasma-EW, the field-EW, the micro-EW, the macro-EW and the life/mind-EW. But we have to admit that all EDWs appeared in hypercorrespondences to the EW0, Hypernothing. So, “everything” appeared in (directly or indirectly) hypercorrespondences to the “nothing”... It was “nothing” (not God, nor regress *ad infinitum*) as the (direct/indirect) “origin of everything” (“everything” being all ED entities/processes which have belonged to all EDWs that have appeared or will appear anywhere, in any “time”).¹ With my EDWs, I indicate certain truths that will remain “truths” forever like

¹ The reader, when you will die (inevitable), your life will “return to nothing”, i.e., it will become “nothing” and nothing else.

- The existence of a pain in a self (the mind-EW) which corresponds to the human body or the “image of a green tree” which really exists in the mind-EW as a mental representation (it belongs to the mind-EW/self-EW).
- Gravitation among planets (the macro-EW) or the existence of brain/body as macro-entity.
- Microentities and their interactions.

Anyway, these and many other truths elaborated within my EDWs perspective will remain truths forever. With my discovery (EDWs), I indicate that the main paradigm of thinking (the world/Universe) has been completely wrong during the last 2500 years. This paradigm of thinking has dominated the human thinking (in sciences like physics and cognitive neuroscience, and philosophy) until my discovery.¹ I am convinced that:

- in 30-50 years, certain great “anomalies” will appear regarding the existences of well-known EDWs.
- in the next decades, there will appear quite small “scientific theories” referring to the ED phenomena which belong to EDWs.
- after 150-200 years, the hyper-paradigm of EDW will be replaced with a new paradigm of thinking (*not as large as my EDWs perspective*).

My main contribution regarding the “paradigm of human thinking” has been that, with my discovery, I have indicated that almost everything in human knowledge has been totally wrong (usually constructed within the unicorn-world framework). Also, discovering EDWs, I have indicated certain truths that will remain truths forever for the entire human knowledge. Discovering the each human mind is an “universe”/world means that “God” is eliminated from this equation and each human mind is also its own “God”. Therefore, through my EDWs, I reach Nietzsche’s goal: each man is a “Superman”. Each mind is not “alone” (wrong expression), it is a world-in-itself and its own God. With my EDWs, each man is a Superman! And the most exciting detail is that each Superman (a world-in-itself) hypercorresponds to nothing, i.e., the Hypernothing. In reality, the Hypernothing is the “Absolute Truth”, and you, the reader, are an Universe/world who hypercorresponds to this absolute truth. This hypercorrespondence represent Nietzsche’s “Superman”.

¹ “We are trying to prove ourselves wrong as quickly as possible, because only in that way can we find progress.” (Richard Feynman) We cannot talk about real “progress”: according to Popper’s fallibilism, a new theory indicates mainly that the previous theory in explaining certain phenomena was wrong... For instance, we can not consider that the appearance of QM and its “interpretations” being a real progress. On the contrary, the negation of the existence of macro-entities (planets, etc.) was not a progress at all (according to my EDWs perspective). Moreover, quantum mechanics had its own problems like entanglement and nonlocality (with my EDWs perspective, in 2002, 2003, 2005, and 2006, I solved these problems). As I indicated in this work, it would not be about the “progress in science” but just about the rejection of previous “scientific” theories. However, my EDWs perspective is not just a denying of all previous theories; it is a new paradigm of thinking, not just a rejection of a previous paradigm. For instance, with the EDWs perspective, I rejected all the interpretations of quantum mechanics and I re-wrote Einstein’s general relativity without spacetime. Could we consider this change a kind of “progress”? It depends on what do we understand by “progress”. The motto of this work is: “Every transformation demands as its precondition ‘the ending of a world’ - the collapse of an old philosophy of life.” (Carl Jung) Discovering the EDWs, I have realized the greatest “transformation” in the history of human thinking; this transformation represents, indeed, the “ending of a world” (the “universe”/world) and the “collapse of an old philosophy” not only “of life”, but “of everything”...

On his deathbed, Tycho Brahe said (several times): “May I not have lived in vain.” Discovering the EDWs, I am sure “I have not lived in vain”; in reality, I have realized the greatest discovery and “philosophical approach” until now in the history of human thinking since, with my EDWs perspective, I have solved all the greatest problems in physics, cognitive neuroscience, biology (the relationship between “life” and “organism”) and philosophy.¹ Evidently, nobody has solved so many and so important problems from these main sciences and philosophy since Ancient times until now.² With my article December 20220, I have solved the last and most difficult problem: the apparitions of “something” (the EW1a-n) from “nothing” (the EW0 or Hypernothing).³

Obviously, since I have realized the greatest change in the history of human thinking, in the main domains of sciences and philosophy, on so many topics, it would certainly mean I have not lived in vain... I repeat for everybody: discovering the EDWs, I have realized the greatest discovery in the human thinking. Many researchers (philosophers, physics, cognitive neuroscientists) were aware about the essential problems of their main topics within each domain, but they had been working within the unicorn world. Nobody become aware that in fact the alrgest framework of their thinking, the “universe/world”, had been wrong. Except me, NOBODY discovered the EDWs, all the others (who published the same ideas since 2006) have just plagiarized my ideas, nothing else.⁴ It is quite impossible two persons to discovery the greatest challenge in the

¹ This is the reason so many “professors” (from so many countries/domains, on so many topics) have plagiarized my ideas... “No battle is ever won. The field only reveals to man his own folly and despair, and victory is an illusion of philosophers and fools.” (William Faulkner) Indeed, discovering the EDWs, I did not discovered the “absolute truth”. However, within the actual state of knowledge, with my EDWs perspective, I have reached the greatest hill toward that “absolute truth”.

² Nelson Mandela: “After climbing a great hill, one finds that there are many more hills to climb.” To me, it happened this fact in the past. After I have climbed the last and greatest hill (“origin of Universe”), I have reached the sky...

³ Obviously, until now, nobody has furnished a similar solution to this problem. Since so many “professors” have plagiarized my ideas, I am convinced, there will be people who will publish “unbelievable similar ideas to my ideas” from this work... Anyway, in history will be written not the names of those who have plagiarized my ideas (they have been just thieves, nothing else!), only the fact that so many “professors” from so many universities have plagiarized my ideas just because I have changed everything in the human knowledge. All these people (who have plagiarized my ideas) “have lived in vain”: they have been “academic” thieves and nothing else.

⁴ As I emphasized in my manuscript regarding the “UNBELIEVABLE similarities”, in the last years, I have discovered tens of “professors” from USA and other countries publishing the same ideas in 2006! The strategy of certain groups from American and Germany (and other groups from other countries, not “nations”) has been the following: since tens of “professors” plagiarized my ideas in 2006 (thousands in the next 10 years), the important journals and publishing companies have published thousands of other people having the same ideas. (This fact was IMPOSSIBLE to happen in USA or Germany or GB before 2005!!!) In this way, the greatest discovery in human thinking (my EDWs) has become something banal, trivial... everybody could think this idea. This movement has been to cover the great THEFT/robbery realized by so many “academic professors”... I have been alone fighting against those who have PLAGIARIZED my ideas... Almost NOBODY has sustained my efforts... almost nobody. https://www.youtube.com/watch?v=ijj_hheGEi0 “face it alone” in front of this world full of THIEVES and ENVY and PROUDNESS... however, HISTORY does not forgive: none of those who have plagiarized my ideas will remain in the history of human thinking. Because of their proudness (the imperials like Americans and Germans could not accept a “nobody from Africa” has changed completely the entire framework of human thinking), everybody from my generation (and closed generations) has been totally “unlucky” to live in the same period with me who I realized the greatest discovery until now in the history of human thinking.... In fact, being Romanian (and being attacked by my some of colleagues (in general

history of human thinking in the same century (what about “in the same 10-15 years”??).¹

I end this book repeating Heil’s verdict (2005) which would perfectly *mirrors* the “language disease/tyranny” (the worst “disease” in philosophy of all times), in fact, the general framework of human thinking (including the philosophy of 20th century + philosophy + physics + cognitive neuroscience) since everybody had been working within the unicorn world (until I discovered the existences of EDWs):

This is the linguistic tail wagging the ontological dog.

John Heil

In reality, Einstein was more correctly (even if he also worked within the unicorn world...):

All the fifty years of conscious brooding have brought me no closer to answer the question, “What are light quanta?” Of course today every rascal thinks he knows the answer, but he is deluding himself. Every Tom, Dick and Hary thinks he knows it. But he is mistaken.

Albert Einstein

those from positions of “chiefs”), instead of helping me - envy is one of Romanians’ main features), it was quite impossible for imperials like Americans and Germans to recognized I have changed everything in human thinking; they were also to envy on my discoveries... One of my very good ex-students told me once time: “On this Earth, everybody is envy, in general, for a great realization; the problem is when envy is transformed in HATE!” He has been perfectly right. (My message is not against any nation! In actual globalization (Internet), “nations” ceased to exist... there are only groups of interests in different places on this Earth dominated, as usually, by “money”.)

¹ What about tens of persons in the same year 2006, and thousands in 10-15 years? It is like a composer of this century composes a symphony having an UNBELIEVABLE similarity to Beethoven’s Fifth Symphony and insisting in telling us that he has never listened this symphony... Only a stupid person would accept this argument. The reader has to think that NOBODY discovered the existence of EDWs during 3,000 years and, in 2006, tens of “professors” published the same idea and later (during the last 20 years) thousands of other professors from different “universities”/countries...

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