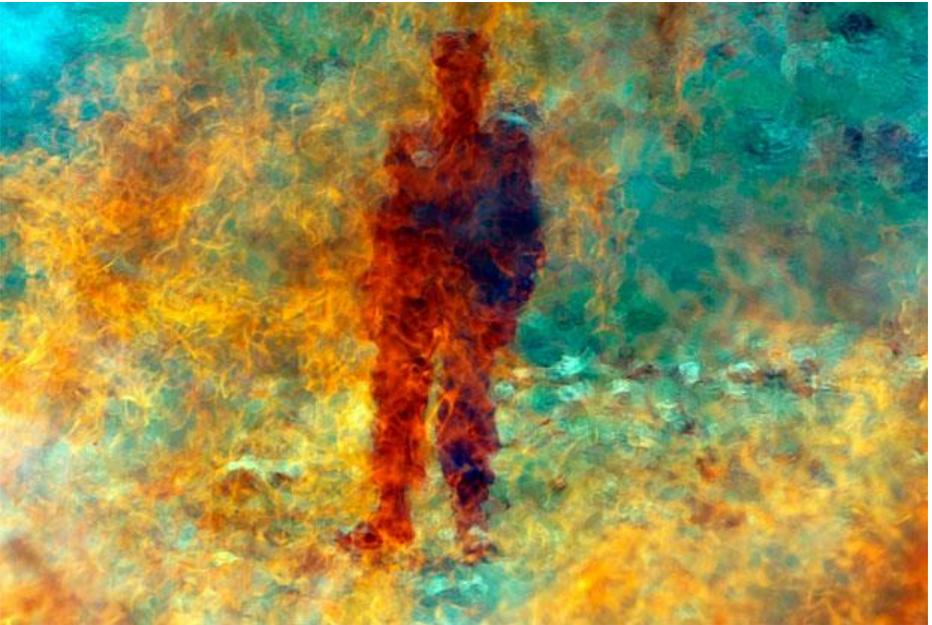


Iacopo Vettori

Reduction to Open Individualism

How to converge to Open Individualism reasoning in a reductionist way



http://docs.google.com/document/d/16ohGsnxDfzKH7bkq1Pme_njn7LUQv2G7uDiDYkwLQgg

<http://www.iacopovettori.it/laterzaipotesi/eng/Default.aspx>

Date of Creation: 2015-01-21

First Publication Date: 2016-09-23

Last Edit: 2017-01-24

Cover photo:

An Afghan policeman stands behind a pile of burning illegal narcotics in Kabul April 26, 2009 (Ahmad Masood/Reuters/Contrasto).

The image suggests how human consciousness comes alive from aggregations of energy and particles randomly springing forth into the universe.

Abstract

This paper presents the Open Individualist View of personal identity, introduced by Daniel Kolak in his book *I Am You*, published in 2004. I read his book in 2010, after I had already come to the same view on my own, in 2006, and adopted his term in my successive writings about it. This same view was called Universalism by Arnold Zuboff in his 1990 article “One Self: The Logic of Experience”, though I was unaware of this until after the present work was completed. And in recent years, I have met others who also discovered it independently. I hope all of this means that our culture is ready to accept it. Basically, Open Individualism / Universalism is a reductionist version of Monopsychism. Here I expose the problems of personal identity according to the existing reductionist views, and try to trace a path to convince the reader that only Open Individualism can satisfactorily answer all these problems. I begin by criticizing the concept of identity when referring to objects, showing that it has no solid foundation, so that it cannot be used as a basis for defining personal identity. On the contrary, we in fact deduce the concept of identity for all objects starting from our own inner concept of personal identity. I then criticize directly our concept of personal identity, using thought experiments that have already been described in the literature. To prove that Open Individualism is a viable alternative, I propose to adopt a new concept of time, using an eternalist framework where external time is illusory and not flowing, and introducing instead “subjective times” that flow subjectively for each living being. To show that this theory is more advanced than the alternatives, I discuss the General Existential Problem and the Individual Existential Problem. The first groups together all the problems related to the existence of the universe and specifically the existence of all the universes that allow the appearance of life. This is a problem that is independent of any personal identity

theory. The second groups the problems related to our personal existence in one of these universes. I want to show that only Open Individualism can answer the questions posed by the Individual Existential Problem, mainly because **it represents the only possible way to reconcile the objectivity of science and rational reasoning with the subjective datum of our personal existence**, which otherwise has to be attributed to blind fate or a mystical concept of predestination, with no hope of any rational explanation. This difference makes Open Individualism the most satisfactory theory of personal identity. Then I list some problems that can be easily answered by the theory, including a new view of the contraposition between determinism and the possibility of free will, and between reductionism and dualism. Then I conclude with some considerations of ethics and practical behavior.

Acknowledgements

I want to thank everyone who discussed these ideas with me, even those who disagreed with me, because they led me to study some problems deeper and to refine my arguments. Many of them are members of the Facebook group “I Am You: Discussions on Open Individualism”. But I want to explicitly thank Joe Kern, who revised this paper with me, suggesting corrections in both the form and the content. Joe is one of the rare people who independently discovered the idea of Open Individualism, and wrote a book about it, following his own path: *Personal Existence and its Absence*. I find his writing very detailed and clear, and I recommend it to every interested reader. You may be surprised to find how similar his arguments are to the ones expressed in this paper. This is a sign that we are on the right path. His work can be found at <https://applebutterdreams.wordpress.com/2016/08/22/the-odds-of-you-existing/>

A roadmap to Open Individualism

The aim of this paper is to summarize the problems of personal identity, examining the current theories and their defects, and comparing their answers with those of a theory whose believers are a minority at this time, although this theory is the only one that can coherently manage all these problems. The theory is called “Open Individualism”, named so by Daniel Kolak in his book *I Am You*, published by Springer, Synthese Library, in 2004, and can be considered a modern version of Monopsychism, which can be traced back to Siger of Brabant, Averroes, and Aristotle.

The modern version does not require an appeal to God as the ancient theory does, nor does it require us to accept anything weirder than what is already required by the concurrent theories to manage personal identity in some exceptional cases, like teletransport or perfect copying or surgical brain splitting, that we will discuss later. Notwithstanding this, this theory is not very popular because it is contrary to common sense, so to evaluate it as viable it is necessary to be ready to overcome some of our biases and consider many factors together, many of them currently in dispute in the philosophical community. Here I will try to present them in a straightforward way, thereby building a Roadmap to Open Individualism which the reader may follow to gain a quick understanding of the reasons to adopt this Theory. Along with many arguments that have already been discussed by philosophers, I occasionally propose my own personal views and observations. I do not expect to be exhaustive or fully convincing. Take them as suggestions about some issues that I think are useful to consider in the wider discussion.

Because the terminology in this discussion is fundamental, let me introduce the terms I will use in this paper. An *individual* is a generic term to indicate a single *human being* but is not limited to human

beings; it may refer to any other material entity that you may accept as having a mind. I can also use the term *people* in the same sense. Every individual has their own first-person point of view on the world. This view is subjective, and this is why I also use the term *subject* as synonymous with individual, but to be more accurate I should specify it as a *physical subject*, because *subject* can be also used with the meaning of *minded subject*, as we will see in a moment. The term *personality* indicates the sum of psychological traits and other characteristics that every individual has and that distinguishes one individual from another. These characteristics make different individuals different *persona*, or different *characters* in a theatrical sense. Individuals differ in many aspects, but all of them have in common the ability to think; this is not a part of personality. The term *person* is used to indicate *the owner of the mind* of an individual, the *subject that is thinking*, the *minded subject*, where the term *subject* here is not intended as a *physical subject*, but as a *mental subject*. It is also called the *conscious subject*, because the experience of *having a mind* is attained by *being conscious*. Kolak calls it the *subject-in-itself*, the subject of the intuition “*I am I*” and identifies it with *consciousness*. Sometimes it is also referred to as the *self*, or the *inner self*, to indicate a level of you deeper than your *ego*, which instead represents the level influenced by your personality. The *person* is generally supposed to have a definite identity, which is called *personal identity*. Open Individualism asserts that despite the fact that there exist many individuals with many different personalities, their personal identity does not change, so all of them are actually *the very same person*. This is why Kolak entitled his book *I Am You*.

To be clear, Open Individualism regards our experience of being conscious and aware as a phenomenon that does not take a different identity every time it exists, despite the fact that it occurs simultaneously in the world in many separate individuals. Me and you and everybody else living in this moment are actually different

conscious living beings, but our personal identities are not more different than your identity of today compared with your identity of yesterday. There exist differences between individuals, but they are all formal differences, not substantial. Every other living being is a different version of you, in the way that you might see yourself as many different people in a hall of mirrors, or in the way that you could meet yourself at a different stage of your life. You should see everybody else as though they are different incarnations of your very same *inner self*.

The best metaphor for this view is to regard the world as a movie where every character is played by the very same actor, each time so deeply involved in playing the character as to forget everything else about any other role. You may figure out how it is possible to do this in a movie, with skillful editing, but it is much more difficult to conceive that this can actually happen to all our lives. There are many reasons indeed for this difficulty, but primarily it is because of our lives taking place in overlapping times. In this metaphor, the terms *individual*, *physical subject* and *ego* refer to a single character; the term *personality* refers to the psychological traits of a single character; the terms *person*, *mental subject*, *subject-in-itself* and *inner self* refer to the actor who plays all the roles.

I want immediately to point out that this view differs substantially from the view of many old-age and new-age religions that preach the reaching of a spiritual unity with some “global soul”, or “the soul of God” or whatever. All these views imply that we are separate pieces of that “big soul”, wishing to re-join with it, but in the meantime, each of them has their separate identity. Open Individualism does not claim that we should dissolve our personal identities into a “big soul”, primarily because it denies the existence of any separate identity. To be one with the “soul of God”, knowing all and feeling heavenly, can be appealing, a beautiful dream, but it is not a promise of Open Individualism. Maybe one day, and maybe a day not too far in the future, we will use our

technology to join together many brains to act as a single brain, melding many minds into a single mind. This will be very revealing and very useful to promote the Open Individualism View, but this does not mean that once they die, everybody will experience a mind state of global awareness and harmony with the universe. Open Individualism is not a spiritual doctrine, it is a philosophical theory that has to be discussed in a rational way. And actually, I think that it is the ultimate conclusion that any reductionist theory must acknowledge.

Here I will try to examine step by step the problems that the theories of personal identity have to face, and give evidence that there exists a reasonable combination of answers that together form a framework based on Open Individualism, able to solve all these problems. Daniel Kolak in his book *I Am You* names the currently widely accepted view “Closed Individualism”, where everybody has their own personal identity, meaning that there are closed borders that definitely separate persons. There exists another view promoted by Derek Parfit and others that we will discuss later, which Kolak named “Empty Individualism”. Together with Open Individualism, these views of personal identity allow us to classify every kind of theory. The existence of a complete and coherent solution based on Open Individualism poses a challenge to every concurrent theory: they have to be able to supply a similar framework, or at least they have to find some fundamental failure in the framework of Open Individualism. Otherwise, we have to acknowledge that Open Individualism is more advanced than the others. The consequences for each individual and for the whole of society will be amazing, irreversible and extremely important.

The problem of definition and persistence of personal identity

1. To manage **the problems of definition** (what makes you you) **and persistence** (what makes you remain you through all your physical changes) **of personal identity**, there have historically existed two families of theories: **dualist theories** and **reductionist theories**. There has been less support for dualist theories these days, because they appeal to something that is not detectable in our physical world. This makes them unfalsifiable theories, and for this reason they are not much considered in the current scientific and philosophical debate. However, for the sake of completeness I will not exclude them. I think that every mental phenomenon has a physical counterpart, but as you will see, my critique of personal identity is mainly directed against the identity of all physical entities, so some readers may think that dualism could offer an alternative solution. I think that even a dualist solution cannot work, and that **Open Individualism offers a better solution which overcomes the most important problems that cause the contraposition between the reductionist and the dualist theories**.

2. Briefly, **dualist theories** postulate that our personal identity is determined by a soul or a surrogate of the soul, meaning that there is something that is not detectable by physics that has a defined identity and therefore each of us has their own defined personal identity. This answers the need to define the identity of a person (you are your soul) and explains its persistence (your soul does not change as you grow older). Some theories may claim that the soul has some characteristics that are not reducible to anything physical, others may regard it just as a placeholder of personal identity. In my view, these differences do not matter. Beyond the problem of unfalsifiability, **the crucial defect of dualist theories** is that if we suppose that the personal identity of every

person is defined by their soul, **the reason for the existence of your personal identity is doomed to remain forever without any rational explanation**: you have to acknowledge that you find yourself being a soul with your own personal identity, but nobody will ever be able to explain why your soul and your personal identity had necessarily to exist. **You should take this fact as “given”**, as if you were predestined to live your life, from the beginning of time, and no questions can be asked about it. I will discuss this in more detail later, when speaking about the **Individual Existential Problem**.

3. To avoid dualism, **reductionist theories of personal identity have to appeal to something physical** to which to reduce personal identity, but this ends up creating more questions than answers. These theories have been discussed by many reductionist philosophers and are analyzed by Derek Parfit in his book *Reasons and Persons*, published by Oxford University Press in 1984. The problems these philosophers have discussed cannot have a satisfying answer because **they try to define personal identity by anchoring it to the identity of objects**, supposing that objects could be a solid ground for this purpose, when actually grounding identity in objects has many problems, as we will see. Moreover, the persistence of personal identity becomes so difficult to explain that Parfit and other thinkers give it up altogether, saying that actually we gradually change our personal identity over the years.

4. At the beginning of the part of the book that addresses personal identity, **Parfit makes a distinction between qualitative identity** (such is the identity of two things made in the same way) **and numerical identity** (such as the identity of a thing that actually remains the very same thing in time). Initially, he says that personal identity is about the numerical identity of each person, but **eventually he concludes that in a reductionist view, personal identity has to be reduced to qualitative identity, except when more than one person**

has the very same qualitative identity. This exception raises more questions than it provides answers, so the debate remains open. Anyway, **Parfit's work identifies in Psychological Continuity and Psychological Connectedness the source of the sense of self.** Psychological Connectedness is the holding of some direct psychological connections such as having the same memories, intentions, desires etc. Connectedness can hold to any degree. The connectedness is considered strong if there are enough direct connections between two psychological states. Psychological Continuity is the holding of overlapping chains of strong connectedness. These concepts are very important in considering the Open Individualism framework, because they constitute **our illusion of being different subjects of experience**, of having separate personal identities.

5. On the reductionist view, a person's psychological state can be mapped onto the physical structure made of neurons in our brain. Other philosophers, such as **Thomas Nagel**, think that **personal identity necessarily depends on the fact that our brain is a mass of matter different than that of other brains**, that it is independent in its structure. This means that it is the matter itself which has a specific identity. Both **these theories have trouble with the persistence of personal identity over time**, because both the matter and the structure of our body change gradually in time. **Parfit thinks that our personal identity changes gradually** whenever Psychological Connectedness does not hold any longer between the current and a previous psychological state. Parfit does not define how long Psychological Connectedness must hold sufficiently strongly to avoid the changing of personal identity; it is possible to imagine it not lasting more than a single instant, shrinking the lifetime of a single personal identity towards zero. This is why Daniel Kolak named this view "Empty

Individualism”. In the extreme case, we should imagine being frozen in a single instant of time, subject to the illusion that time flows. I find this view claustrophobic, but to dismiss it definitively, we have to consider the Individual Existential Problem discussed later. Other philosophers are inclined to think that a persistence based on a mixture of material and structural elements may allow personal identity to hold for an entire lifetime or a shorter period of time, but anyway longer than a single instant. Actually, no mixed model can currently properly answer every problem that arises. The important point is, **all the reductionist theories of personal identity regard personal identity as depending directly on the identity of the physical object of your brain or a bigger part of your body.** For this reason, to criticize this concept of personal identity from the ground up, we have **to criticize the identity concept when applied to inanimate objects.**

Criticism of the identity concept applied to objects

6. From a reductionist point of view, the identity of generic objects is reducible to some material or structural characteristics. Therefore, we have to consider two groups of theories: those that eventually **reduce identity to something material**, and those that eventually **reduce identity to something structural**.

7. The theories that **reduce identity to something material** presuppose that material objects have some “intrinsic identity” that is not structural. Because all material objects are composed of parts, we have to face **the paradox of the ship of Theseus**: if we gradually change the components of a complex object, we end up having a brand-new object with none of its original components. The original paradox speaks about the mythological ship of Theseus, the first ship ever built, of which it was said that it was conserved by the Athenians and maintained over time by changing out the parts that had deteriorated until no original parts were still in place. If we think that the identity of objects does not depend on their structure, but on the intrinsic identity of something material, we must conclude that the complex object has lost its original identity. **The identity of complex objects depends on the identity of their component objects**. Reasoning in this way, we quickly find ourselves reduced to considering the intrinsic identity of each subatomic elementary particle.

8. Because we are discussing the identity of objects as the basis of the personal identity concept, we must note that we continuously exchange the matter of our body, literally with every breath we take. A common saying with some scientific grounding is that in seven years we change all the matter that constitutes our body. For this reason,

reductionists that support this theory have to acknowledge that despite what we believe, we do not have the same personal identity that we had seven years ago. This does not mean that our body has grown older in seven years; this means that **we are actually another person, believing that we are the same person only because we have inherited the memories** of the different person who existed seven years ago with a body constituted of completely different matter from the one we have today.

9. Even suspending our judgement about our personal identity, and returning to reasoning about the identity of the objects, we have to face another problem. The question comes from the fact that physics says that **elementary particles have some measurable properties, but have no intrinsic identity**. They are indistinguishable. And if we still imagine that they may have **some hidden univocal property** to which we may anchor their identity, then we are embracing a theory that **cannot contend with dualist theories on the grounds of unfalsifiability, because it is also unfalsifiable**. Some might think that the **identity of a particle can be given by its position in space-time**, which has to be unique. Actually, these are geometric properties that are best suited to the concept of identity based on structure, discussed next. Keep in mind that space-time coordinates are not absolute; they are always relative to some reference system.

10. The fact that elementary particles are indistinguishable is difficult to accept: our common sense suggests that each particle has its own position, and as we can trace its position in space, we can be sure that it has some identity that persists in time. But modern physics says that reality is much more complicated than that. We may have successive detections of particles but nothing guarantees that the particle is the very same as before. The equations to compute the positions of particles regard them as a wave and give as a result the

probability of all the possible new positions. **Regarding the particle detected in a second place as the very same particle that was detected in a first place is an arbitrary generalization of our thinking**, but is not based on any physical truth. Quantum physics regards all the particles as continually appearing and disappearing in a so-called “quantum foam” of virtual particles. **We should think of particles as the localized counterpart of a given energy packet, not as little material marbles.** We can still imagine associating an identity with each energy packet, but the ground becomes slippery here for an identity concept based on matter, because these packets are local thickenings of the total energy of the universe. A good article by Meinard Kuhlmann published by *Scientific American* in August 2013 explains these experimental problems: <http://www.scientificamerican.com/article/physicists-debate-whether-world-made-of-particles-fields-or-something-else/>. Studying the matter at the extremes of our knowledge, we end up with equations and packets of energy that cannot help in supporting the concept of identity based on something material. The world is made of particles no more material than bubbles on the surface of boiling water. This leads us to regard identity as something that derives from structure.

11. According to Derek Parfit, your personal identity remains the same (and therefore you remain you) as long as your psychological traits are sufficiently similar to the ones you had before. In the reductionist view, these psychological traits are mapped physically to a configuration of neurons in your brain. So, in this view, your personal identity depends on the identity of an object that is identified as something structural: **the identity of a brain with the neuronal configuration that implements your psychological traits.**

12. It is possible to say that the identity of a brain is based on its **capacity to generate thoughts.** We can say that a brain itself has no

identity, but **it acquires an identity only when it is functioning**. This can be regarded as a more abstract level of structural identity, but actually is not based on the identity of an object, but on **a property of that object that makes it a subject**. This will be discussed in more detail later, once we have seen that the concept of identity when referring to objects is not a good one to base the concept of personal identity on. Here, we have to notice that the concept of “functioning brain” has meaning only from a perspective of sentience, because **it expresses the capacity of the brain to generate a mind that we know exists only by our direct experience**, but is not deducible by simple physical observation: we are able to observe only the physical counterparts of the brain activity, but **the notion that that activity generates a mind is proven only by our personal direct experience of our own mind**.

13. Because we discuss the identity of objects in order to use it to define personal identity, we have to face the problem that because identity based on structure is not linked to some specific bunch of matter, in principle **we could build many brains having the very same structure** and therefore generate **many numerically different minds with the very same personal identity**. Parfit thinks that if your body is destroyed and then built again in a different place, replicating exactly the same original structure, your personal identity would be preserved. But if your body is replicated without destroying the original body, Parfit thinks that the original personal identity may not be preserved even in the original body. To avoid the possibility of two physically separated bodies having the same personal identity, **Parfit needs to introduce a clause that specifies that personal identity is preserved as long as there exists only a single physical brain at a given time with the required structural characteristics**. This is what Daniel Kolak calls a “**metaphysical epicycle**”, and it raises more

problems than it solves. This clause implies that the existence somewhere in space of a copy of myself influences my personal identity, and therefore that **my personal identity is determined not only by my inner structure, but also by the outer structure of the world** around me.

14. Actually, this problem also applies when we reason about bare objects. In our daily life, we know that two identical objects are not really identical: if we could check them atom-by-atom, we would discover many little differences. Notwithstanding this, we can imagine having **two objects of macroscopic dimensions**, let's say two salt crystals, **that are exactly identical to each other even when compared at the level of atoms**. In this case, we would not say that because they have the same structure, they have the same identity. We would make a distinction, talking about "the one on the left" and "the one on the right". This means that **the outer environment is playing a part in defining the identity of the two objects**. But if we limit the definition to a finite environment, then recreating a copy of the environment would once more introduce an ambiguity in the definition. To avoid definitively any ambiguities in the definition of the identity of an object, **we have to consider an environment so vast that it is not possible to copy it, to make sure that it is unambiguous throughout the whole universe**. This is the same as the case we suggested before, in criticizing the concept of identity based on matter, about the proposal to **link the identity of each elementary particle to its position in space-time**. We end up needing to consider the whole universe in order to define the identity of its elementary particles.

15. In accordance with all these considerations, it turns out that the identity of every object, and therefore, if we are reductionists, the personal identity of each human being, is determined not only by its inner structure, but also by the structure of the surrounding

environment. **The identity of an object is not an intrinsic property that it has *a priori*, but rather it can be defined unambiguously only by considering the environment containing the object, and to avoid any ambiguity this environment has to be expanded to include the whole universe.**

16. **The parts of the universe to which we assign separate identities are arbitrary.** For example, two separate islands can be considered to have two different identities, but if the level of the sea decreases, they can become a single island, with a different identity than the original two, without any change in their inner structure. It is just a matter of practical convention to regard them as two objects instead of a single greater geographical region, or as just parts of the planet Earth. This also applies to objects that seem more definite, such as two crystals or two clocks. We are comfortable with this because **objects appear spatially separated.** Actually, this geometrical condition simplifies our communication conventions, but we could assign them other identities in a different way, without any loss in terms of physical reality. The reason that it appears natural to assign a different identity to different objects like two clocks is that each of these objects may be used to execute the task of keeping time. This task is meaningful for us, because we are sentient observers who know that some objects can be used to achieve a goal, but still the fact that we regard the clock as having an identity is a decision that we make arbitrarily.

17. From a strictly physical point of view, **all physical objects are temporary structures made of energy packets tossed into the quantum foam.** We have to conclude that *the identity of objects is always reducible to a communication convention and that it has no absolute meaning.* Considering all the objects as geometrical parts of the whole universe actually defers the problem of the definition of the identity of objects to the identity of the universe. But **the only way to**

define the identity of the whole universe is to describe its inner structure, and this causes the definition of all the identities to become circular.

18. Once the concept of identity of objects is lost, even the difference between the concepts of “type” and “instances” of objects vanishes. The instance of an object can be regarded as the actualization-with-a-unique-identity of a type definition. Once the unique identity is deferred to the whole universe, which has no further container object, this unique identity become useless, and the definition of an unidentified actualization of the type corresponds with the definition of the type. It is important to remark that in considering the universe as a whole, I mean that it has no exchange of information with anything else. If we ever discover some forces that are inducted by a parallel universe, we should consider both our universe and the parallel universe, or even a bigger *multiverse*, to again be “the whole universe”. As the concept of identity vanishes when applied to the whole universe, so also the difference between the theoretical existence of the universe and the actualization of the universe that we experience vanishes. I mean that we may think of ourselves as experiencing directly the type of the universe, instead of the actualization of one instance of that type. This will be discussed again later when speaking about the General Existential Problem.

Criticism of the identity concept applied to persons

19. Personal identity, or the identity concept applied to persons, is different from the identity of objects, because it comes from our direct personal experience. **The concept of identity applied to my person comes from the realization that I can directly control and feel sensations from a limited part of the outer world that I identify as “my body” or “me”.** It is the existence of a mental world that allows us to assign an identity to our material counterpart, not the other way around. **It is this connection that creates our experience of being discrete physical subjects, which is not reducible to a mere communication convention.** (Note: **Julian Jaynes** in his book *The Origin of Consciousness in the Breakdown of the Bicameral Mind* suggests that anthropologically we gained the matching between the identity of our mind and the identity of our body during centuries of social evolution).

20. **The concept of identity applied to objects derives from an arbitrary extension of the concept of identity that we apply to ourselves** and then to other persons. But this view raises the question about the origin of the identity of our mental world. Have we to accept it as “given”? If personal identity cannot be anchored to the identity of something material or structural, then **the identity concept in itself seems to be intrinsically dualistic.** We will see that only **Open Individualism can solve this question,** avoiding all the problems related to dualistic theories, but for now let us suspend our judgement about the origin of personal identity, acknowledging that **at the moment we have no complete theory of personal identity.** Notwithstanding this, **let us start examining the problems that arise when,** once we accept that the identity concept comes from the direct

experience of our personal identity, **we continue thinking that every person has their own separate personal identity.**

21. All reductionists agree that **every mental phenomenon has a physical counterpart**, but they have to face the fact that our direct experience of **the existence of a mental world** appears to be something like an **unexpected and unnecessary phenomenon** that arises from brain activity, which is expected to respect only physical laws. It is difficult to find a reason to deny that **a fully materialist world could work the same without any mental world emerging from brain activity; we know that a mental world exists just because we have a direct experience of it**, and then we assume that it is true also for other people. In fact, we infer that other people have conscious experiences based only on their behavior and, more recently, on our knowledge of the functioning of the brain. Because we can see that they act in about the same way that we do, we figure that everybody else has their own “experience of thinking” in the same way we have. Making this generalization **we integrate the objective knowledge that we get from observation with the subjective experience of the mental world** that we undergo in the first person. This is the main reason why **Reductionism asserts that it is possible to map any mental state onto a specific physical brain state, but it does not justify the existence of the mental state.** This is why reductionists have to say that mental phenomena “emerge” from the brain (whatever that may mean), and this is why the **hard problem of consciousness** described by **David Chalmers** is so hard to solve.

22. To avoid focusing the discussion on consciousness instead of personal identity, and thereby avoid the questions about various degrees and limits of consciousness, **I will use the term “subjectiveness” instead of “consciousness” to refer to the experience of having a mind, a mental world that “emerges” from the brain of a living**

being. The term “subjectiveness” highlights that having a first-person point of view is what is missing in inanimate objects and what is occurring in living beings, and for that reason they can be properly called “subjects” instead of “objects”. The mind, or the mental world that each of us experiences personally, can according to this terminology be called the “**subjectivity phenomenon**”; this term also refers to the lower levels of perception. The subjectivity phenomenon is originated by brain activity, but it does not exclude the possibility of other sources. This allows us to apply the discussion to a wider range of living beings instead of only to humans.

23. Because in a reductionist world, every mental state corresponds to some brain state, I will call the **process that is able to transform a brain state into a mind state** “**the subjectivity function**”. The applying of the subjectivity function to a series of ordered brain states results in the appearance of a series of mind states that constitutes the mind or the “subjectivity phenomenon” as defined before. Each different brain, through the subjectivity function, originates an (apparently) numerically different instance of mind, which we usually identify as **a subject with its own personal identity**.

24. By referring to a “subjectivity function”, I do not mean that the mind is a passive result of a physical process that may be driven only by chance or necessity, but rather I just point out the **strict correspondence between the brain and the mind** in a reductionist sense. **I do not exclude the possibility that mind may interact actively with physical world**, even if this does not appear to be compatible with reductionism. This problem is related to free will and **can be considered separately from the issues relating to subjectiveness and personal identity**. I will discuss it in more detail at the end of this document, explaining how Open Individualism may help to manage this problem.

25. So far, we have seen how personal identity is not **reducible to a mere communication convention** like the identity of objects was: on the contrary, this is the basis on which we build our concept of identity. **Even if we cannot imagine where to anchor our personal identities, we assume that in some way the identity of my mind is something definitely different from the identity of your mind.** We are here at the same time, me and you and everybody else, so how on earth can we have the same personal identity? To see that even this trivial conviction has serious problems, we have to consider some cases that currently seem to belong only to science fiction, but actually in part are already possible and have already been discussed by many philosophers of the mind, and are summarized by **Derek Parfit** in *Reasons and Persons*. These cases are about the extreme possibilities that result from **personal identity transforming, splitting and melding.**

26. In *Reasons and Persons*, **Derek Parfit** describes a thought experiment called “the combined spectrum”, where the body and the brain and the psychological content of the brain of one person are gradually transformed into the body and the brain of another person. From a reductionist point of view, nothing else determines personal identity but the matter and the structure of the body and the brain (considering the psychological content as an expression of some physical structure in the brain). For this reason, he concludes that **personal identity changes smoothly during the experiment**, so that the person after the experiment has a completely different personal identity from the person before the experiment. He says that after a certain amount of transformation, the personal identity is not the original one, and yet it is not the final one. At some point in the spectrum, the resulting person will believe him or herself to be a different person from the original one. We may think that there is a sharp borderline between the two different personal identities, where

the first one is suddenly replaced by the second one, but Parfit thinks that the change will happen smoothly, so at every intermediate step in the spectrum of the transformation, the resulting person is still the original one to some degree. But because the final person has been set to be a completely different person from the original, he excludes the possibility that anything of the original person may still survive at the far end of the spectrum, when the person has completely become the final person.

27. Parfit acknowledges that this thought experiment raises a problem. **During our life, the matter that constitutes our body continuously changes, as does the structure of our body.** The body and brain structure of a child are very different from the body and brain of the same individual when old, so much so that the differences are comparable to those existing between two different individuals. **Parfit concludes that necessarily the personal identity of each individual changes gradually over the years.** He is forced to this conclusion because he does want to keep reductionism and the personal identity concept together.

28. Here I want you to notice that Open Individualism could have already been deduced from this consideration, if we assume that the starting point and the end point of the imaginary transformation between two persons has no special role, and that therefore, they may well be considered to still be the same person, a possibility that Parfit excludes. He does not define any critical factor that necessarily determines if two people can or cannot be the same person: he just observes that one person could be smoothly transformed into another person, even a person arbitrarily chosen from among the ones already in existence, and from this fact he deduces that the original and the final person *necessarily* have to be two different persons. But such a critical factor may well exist: it could be a percentage of changes in the

individual characteristics, and/or individual faculties, that together cause the lacking of the psychological connectedness needed to consider the personal identity to still be the original one. **Open Individualism may follow even from this view, if we hypothesize that differences in psychological characteristics have no influence, and that the only psychological faculty required to maintain enough psychological connectedness to consider the personal identity to still be the same is the bare faculty of “being a subject”, and therefore “having a brain supporting the subjective phenomenon”.** This would eliminate any chance of finding the personal identity concept in a reductionist way, but there would be no need to appeal to non-reductionist theories: **Open Individualism can be achieved by giving up the personal identity concept, denying that any absolute “identity” may ever be defined,** and therefore believing that all of our apparent personal identities should be considered *undefinable*. We will see later how this can be compatible with the mere fact that there exist many physically separate individuals.

29. The possibility of **mind splitting** by surgical **brain splitting** is described by Parfit and other authors, referring to the surgical separation of the two hemispheres of the brain. In the 1960s **experiments with this procedure were carried out to cure some severe epilepsy cases.** It turned out that **people who underwent this operation behaved like they were two persons** sharing the same body. **Each half of the split brain seems to generate its own mind.**

30. The real cases were irreversible, but it is possible to imagine that the communication between the two hemispheres was only **temporarily inhibited**. Parfit and other authors like **Roger Penrose** tried to imagine how it would be to experience such temporary mind splitting, and wondered whether it would preserve our personal identity. They agree

that it would be preserved, at least when the splitting has a brief duration.

31. But reasoning about a temporary splitting of our brain into two independent hemispheres requires us to imagine that **our mind becomes *both* the mind generated by the left hemisphere *and* the mind generated by the right hemisphere.** This seems to require the simultaneous existence of two different personal identities, so my original personal identity seems to not be sufficient to explain the case. For this reason, some thinkers prefer to argue that actually we *always* live with two different personal identities, one for each hemisphere, even if we are not aware of it.

32. We also have to know that **there exist some injured people who live with only half of their brain functioning.** If we imagine that we could experience a temporary switching off of half of our brain, quickly followed by a switching on, nobody would question that the experiment would preserve our personal identity.

33. Moreover, we may also imagine that the two halves of **the split brain may be transplanted into two different bodies.** The resulting two people may live and act independently. In this scenario, it seems absolutely beyond dispute that this would imply **the simultaneous existence of two different personal identities.** But it is difficult to imagine **what would happen to my original personal identity,** considering that most of us probably think that it is possible to survive if I had half of my brain switched off, and then the functioning half transplanted into another body. **It is the simultaneous existence of two legitimate candidates to being my future self that undermines my confidence in the survival of my personal identity.**

34. We may imagine that the resulting two people are left to live their lives entirely without ever being re-joined in the original body, but we may also imagine **again transplanting the two hemispheres back into the original body**, and reconnecting them to **again form the original whole brain**. In this case, we may think that the original personal identity will reappear. This is called “mind melding”, and can be generalized using entire brains.

35. Mind melding represents the complementary hypothesis to mind splitting: it results from imagining that **two or more brains** could be **connected together to form a bigger brain, with a unified brain activity**, so that it will generate a single mind. There already exist some devices that allow us to detect brain activity, and there also exist some rudimentary devices that can interfere with our brain activity, so that we can perceive a signal sent directly to our brain. And actually, some experiments with mice have demonstrated that it is possible to join the brains of two or more mice so that they form a *brainet* behaving as though it generated a single shared mind (see the article by Dr. Karen S. Rommelfanger, Emory University, at <http://www.nature.com/articles/srep11869>).

36. Imagine connecting your brain to a device that allows many people to directly share all the signals of their brains, so that they act like a single bigger brain. How do you think this would feel? **Once our brain is connected with many others**, so that the bigger-brain activity becomes a single, synchronized activity, we have to conclude that all participants will have a single shared mind, so that **all the participants will have the very same personal identity**. This experience would not be like to meeting some friends at a party: we have to think that **the resulting mind** would be unable to discern what brain it comes from. Because it would result from a single activity of all the connected brains, it **would be equally generated by all of them**. In the same way,

after a temporary splitting of your brain hemispheres, you would not find yourself thinking “I was the left-hemisphere-generated-mind that now has been reconnected with the right-hemisphere-generated-mind to re-form my entire mind”. You would simply think, with some relief, that finally your mind is once again being generated by both the hemispheres of your brain. And similarly, once the melded mind decides to dissociate the brain that you previously considered to be “your brain”, you will find yourself again alone with your body, brain and mind, but certainly shocked by the experience you underwent, and perhaps **doubting whether your personal identity is really the very same** one you had before.

37. The disconcert regarding these imaginary experiences comes from **our need to think that both mind splitting and mind melding have to instantly create and destroy one or more personal identities**. But our need to imagine that many personal identities are involved in these processes is dictated by **our inability to accept that two or more coexisting minds may have the same personal identity**. And actually, if we *were* to accept this hypothesis, we would not need to postulate any personal identity at all: it would become a concept that refers only to something illusory. But **we have to figure out what it might mean that two or more minds may have the same personal identity**, especially when they exist simultaneously.

External time and Subjective times

38. **Open Individualism** as defined by Daniel Kolak in *I Am You* **claims that personal identity is always the same for every conscious being.** The conclusion is the same when **we consider that personal identity is illusory and the subjectivity phenomenon is an uncountable phenomenon,** even if this phenomenon is happening contemporaneously in many separate individuals. From the critiques of the concept of identity it follows **that each occurrence should not be considered to have a different identity,** because each occurrence has no well-defined identity. Consider also that **different time slices in the life of an individual can be equally regarded as different occurrences of the subjectivity phenomenon.** This may help us to realize that it is not necessary to introduce differences in identity between many occurrences of this phenomenon.

39. The main obstacle to embracing Open Individualism is that **this view requires a new conception of time.** In the last century, physics has already revised the concept of time, and so too in philosophy we have to get rid of the concept of absolute time, providing a reasonable proposal that can explain all the phenomena we consider.

40. Open Individualism **requires the conception of a subjective time** bounded to each occurrence of the subjectivity phenomenon, **and an external space-time** that must be thought of as the container of all the stories that ever occur in the world.

41. Note: Even though this is far from my area of competence, I just want to remark that the existence of a subjective time bounded to each active brain has some scientific grounding. In regard to the brain, many authors advocate **a quantum physics role in the brain/consciousness relation.** For example, **David Pearce** suggests that it may be based on

entanglement phenomenon (read about non-materialist physicalism at <http://www.physicalism.com/>). In regard to time, some experiments show how **time can result from becoming entangled with an existing entangled system** (see the article at <https://medium.com/the-physics-arxiv-blog/quantum-experiment-shows-how-time-emerges-from-entanglement-d5d3dc850933>, where a link to the original paper is provided).

42. A good model for this external space-time is the eternalist framework proposed by **Julian Barbour** in his book *The End of Time*, published by Oxford University Press in 1999. Briefly, his model considers the whole set of all the actual and possible world configurations that exist statically; time is not something that flows. **External time must be regarded as the property that allows to sort chronologically two states of the world**, when comparing the one with the other.

43. The mind, or the subjectivity phenomenon, appears where some special parts of the world (specifically, the time slices of a brain) can form a sequence of states that the subjectivity function transforms into a succession of mind states, originating **the corresponding mind (or the occurrence of a subjectivity phenomenon) together with the subjective time that the mind perceives as flowing**. The fact that each occurrence of this phenomenon involves its own subjective time frees the model from the need to assign a different identity to each occurrence.

44. We may imagine two successions of brain states in two nearby space-time regions. These successions are both transformed by the subjectivity function into two successions of mind states, each of them originating the corresponding subjective times of the subjectivity phenomenon. In the eternalist framework, it does not matter if these two

events are experienced as simultaneous by some observer or not. **There is no meaning in saying that one subjective time is created before or after the other, nor that they do or do not flow at the same time. We cannot sort the subjective times into an external time that flows over the eternalist framework.** External time may be helpful to assign the date of birth of two individuals, but it is useless if we want to know if the subjective function has been applied to one succession of brain states before or after the other. Indeed, each of these applications generate their own subjective times, which cannot be sorted along a longer subjective time. This is what we need to regard the Open Individualism View as viable, because it frees the model from the need to assign a separate identity to each subjectivity phenomenon, and the need to find something that allows us to distinguish each of its occurrences interacting in near space-time regions. **Because we do not need to assign any identity to the subjectivity phenomenon, the identity concept can be dismissed as illusory even when it is applied to persons.**

45. When a functioning brain splits into two (or more) functioning brains, **the subjective time related to the subjectivity phenomenon splits into multiple branches, allowing the subjectivity phenomenon to indifferently follow all the paths.** The same occurs when two (or more) functioning brains are melded into one bigger functioning brain. In this case, **multiple subjective times converge to a single subjective time** for awhile, and then the single subjective time splits again into multiple paths. We do not have to question “who” follows one path or the other: **the subject that follows all the paths is always the same subjectivity phenomenon.** We do not have to question whether this phenomenon occurs in one path “before” or “after” the other; in the eternalist framework you may figure them to be coexisting paths.

46. Eternalism may appear to be a theory that requires determinism, because it makes the universe appear to be static. But it **is possible to complicate the model by considering all the possible theoretical states of the universe, and all the possible ways to sort them** according to physical laws. The model proposed by Julian Barbour does this. This corresponds to considering all the possible universes of the Everett interpretation of quantum physics, where the collapse of the wave function is actually a selection of one of the simultaneously existing branches of a greater multiverse. We may also suppose that **the subjectivity phenomenon can split into all of the branches,** generating a respective number of subjective times.

47. Moreover, **it is possible that states of the world that are different at one point in time may converge to being in the same state at a later point in time.** This is what happens in phenomena such as the quantum eraser experiment. It is also possible that **some of the future states of the world may coincide with some of the past states,** so that **the sorting of two physical states is not absolutely univocal,** despite the fact that the arrow of time results almost certainly from probabilistic considerations. Notwithstanding this, **what we perceive subjectively is always a single subjective time,** even if it coexists together with a bunch of alternative subjective times joining and splitting at every moment.

48. This view transforms the linear world of a deterministic universe into a labyrinth where the paths of all the possible multiverses continuously intersect with each other, **making our current life just a variation of all the possible alternate lives that we could experience** if we had behaved differently some time in the past. This view **leaves an open door to the possibility of free will,** as we will see in more details in one of the conclusory notes.

49. At first sight, **Open Individualism may seem to intrinsically deny the possibility of free will**, because if I accept that in some way I will find myself living in the first person the life of any individual who is interacting with me in this moment, I am inclined to believe that then **I will be constrained to act exactly as I currently see the other is acting now**. If we are in dialogue right now, we are deciding freely the future of our dialogue, but if I imagine finding myself replicating this same dialogue as you, I necessarily will be forced to speak the same words that you are currently saying. **This error derives from ignoring the fact that external time is not flowing**. Only our subjective times are flowing through the common eternalist framework. So, when I find myself experiencing our same dialogue as you, it will be not “another time”, it will always be the very same time that I will influence with the same freshness and feeling of flexibility I am currently experiencing. You may grasp what is occurring according to Open Individualism, thinking in terms of the temporary split-brain experiment. In that case, it is easier to imagine that each half-mind can express a genuine free will, though they are separated experiences of the subjectivity phenomenon. The two subjective times of the two half-minds are both part of your subjective time that flows before the splitting and again after the rejoining, but you cannot say whether you experienced the left half-mind *before* or *after* the right half-mind. **Events can be ordered in the external time that does not flow, but subjective times and the subjective experiences of two separate lives cannot be ordered** in the same way using external time.

50. For the same reason, **it is impossible to say whether I will find myself living your life before or after my current life**. Despite our need to sort every event in time, the question “what will my next life be?” has no answer. A life can be seen as a complete sequence of brain states that is suitable for being processed by the subjectivity function,

ordered from the first to the last according to the external time of the eternalist framework. If this sequence has no other singular points (splitting or joining points), the subjectivity phenomenon and the subjective time may flow straight until the last of the sequence. But **after death there are no subjective times that may bring the subjectivity phenomenon to another starting point.** We always find ourselves only at some point of some subjective time.

51. Derek Parfit calls questions that cannot be answered, even if we have all the physical information related to them, “**empty questions**”. **This can be applied to the problem of the sequence of the lives** experienced by the subjectivity phenomenon. The problem with the sequence of lives may mislead us into thinking that the subjectivity phenomenon is like a phantom that goes back and forth in time between one life and the next. Actually, you may grasp a less-naive representation, thinking again about the problem of the temporary split-brain experiment. **The same empty question concept can also be applied in this case:** once the two hemispheres are joined together, the questions “Was I the left-hemisphere originated mind? Was I the right hemisphere originated mind? Was I both? Did I experience being the left part *before* or *after* having experienced being the right part?” are empty. You may see that **the question about how we should sort these subjective times has no answer**, that there does not exist any physical information that may ever answer it: it is an empty question. So, we have to conclude that **it is impossible to determine the sequence in which two paths are traversed by the subjectivity phenomenon:** to sort events in time is a need we have in our daily life, but **there is no physical information available to sort the experiencing of two subjective times.**

52. It is important to show that **the Open Individualist Theory of personal identity proposes a model that corresponds with the**

practical experience that we actually have in our daily life anyway, and moreover, that **it can solve many questions that appear difficult to explain** or have no viable explication. It is easy to misunderstand Open Individualism, classifying it as a theory that implies some mystical connection between all living beings. Actually, the only connection proposed is that **the subjectivity phenomenon, the experiencing of the world from a subjective first-person-point-of-view, is always the same one that each of us experiences in the first person**, despite us wrongly believing that everybody else has their own personal occurrence of the same phenomenon. **Getting rid of the identity concept** means that each occurrence cannot have its own identity, so **the subject that experiences all these first-person point-of-view flows of mind states has to be regarded as the very same subjectivity phenomenon** in every instance, despite the fact that it occurs in many bodies/brains at the same external time.

53. Speaking of the subjectivity phenomenon in these terms may cause some to think that I will assign it a special or divine role to it, but I strongly deny that: **I simply take my own *experience of being an experiencer-in-the-first-person of the world*, which I call *the subjectivity phenomenon*, and then I generalize it by taking away the contingency of my particular experience.** I do not add any special power or any special knowledge or any mystical feeling.

54. All this provides **a complete model that** even without a definitive argument **is coherent and offers easy answers to many problems** about the mind, as described later in this document. This would be sufficient for it to be considered worthy of being evaluated by all thinkers who study personal identity and related problems.

The General and the Individual Existential Problems

55. **A definitive argument may be given: Open Individualism ends up being the only possible answer to what I called “the Individual Existential Problem”, which only by adopting Open Individualism can be reduced to what I called “the General Existential Problem”, which is a problem common to every theory of ontology, even if such theory does not imply any theory about personal identity. Unfortunately, it is not easy to understand the cogency of this argument, so it may appear irrelevant to those who do not grasp it. But I think that once understood, it is so strong that all the other arguments may be regarded as accessory consequences of this main argument.**

56. It is useful to begin by speaking about the **General Existential Problem**. This is the name that I use for the old question: **“Why does the world exist?”**. Here the question does not seek to suggest that there is some immanent purpose to the existence of the world, **it just expresses our wonder at the occurrence of all the events that make possible the existence of the world and life**. It is useful to consider two aspects of this problem: the Theoretical Aspect and the Practical Aspect.

57. **The Theoretical Aspect is related to the architecture of the world**, and more specifically, to the architecture of a world containing life. We know that in nature there is a set of absolute numbers (for example, the ratio between the four fundamental forces) that have to be carefully calibrated to make possible the existence of atoms and molecules as we know them. If you were God (by “God” I mean a cosmic architect, not a magician), you would have to find this calibration to create the world, and you would possibly not even know

whether a working calibration could ever exist. So you would perform a lot of theoretical work, calculating formulas and checking results, and then finally you might find the right formula. If you did, you would have solved the theoretical problem. Now you could become the “cosmic bricklayer” and build an actual world with that exact calibration of the fundamental forces. If you could also build it materially, then you would also have solved the practical problem.

58. The Theoretical Aspect of the General Existential Problem should make us wonder, because **it could not have been guessed that at least one theoretical solution was possible**. It could have been that the appearance of life would require some impossible conditions, such as requiring that the solution of $a^3 + b^3 = c^3$ be integers for a , b and c . *A priori*, **nothing can guarantee that there would have existed at least one mathematical model of the universe that left room for the appearance of the mind**. It could be the case that the appearance of the mind required contradictory conditions. In fact, we know that at least one solution is possible only because we are here.

59. **The Practical Aspect** of the General Existential Problem is the same idea that **Stephen Hawking** wrote about in his book *A Brief History of Time*: “**What is it that breathes fire into the equations and makes a universe for them to describe?**”. That is, if you were God, **once you resolve the Theoretical Aspect of the problem, you still have to practically build an instance of the theoretical model**. To have the complete documentation needed to build a plane does not mean that you may fly: you still have to build the plane.

60. Actually, the reasoning regarding **the vanishing of differences between the “type” and the “instance” concept**, introduced when we criticized the identity concept applied to objects, and in particular, applied to the universe as a whole, led me to think that **the Practical**

Aspect of the General Existential Problem is not as urgent as the Theoretical Aspect is. The “type” of our actual universe corresponds to its mathematical model. **The “instance” of an object is something that derives from the combination of the chosen type and one identity.** We already discussed how identity for objects is always reducible to a convention, based on the internal structure of the object and its geometrical relations with other objects (the latter being not applicable to the model of a complete universe). **The only concept of identity that is not reducible to a convention is the identity of the minds that experience life** in that universe. According this view, **the identity of the universe becomes a projection of the mind** of the living beings experiencing it. **Open Individualism allows us to regard those minds as different forms of the subjectivity phenomenon**, so that eventually, **the identity of the mind and the identity of the universe become useless.** According to this view, **the Practical Aspect is reduced to the direct experiencing of the model by the subjectivity phenomenon**, without the need to create an instance of the model.

61. Now we are ready to face what I call the **Critical Point of the General Existential Problem.** Our bare existence in the universe demonstrates that the existence of the mind is something that is allowed by a special set of very complex mathematical and physical rules. We may wish to overlook the problem of finding a design for a universe that can host life somehow. We may think that, considering all the possible theoretical models of the universe, it is normal that some of them, and at least for sure our universe model, will allow the appearance of life. But I think that overlooking this problem is wrong. This is the **Critical Point of the General Existential Problem**, concerning both the Theoretical Aspect and the Practical Aspect: **even if we find a complete and mathematically coherent world model**

that theoretically leaves room for the presence of the mind, strictly reasoning in mathematical or physical terms, **nothing can ensure that the actualization of such a world model should imply the actualization of the mind** that the model allows. The actualization of the model, despite the room it leaves for the mind, might result in a zombie-world. **This is due to the objectivity that characterizes all the mathematical and physical conditions, and the fact that the experience of the mind is something that we have only subjectively, by our direct experience.** We of course are convinced that other people also have a real mind, but we can be absolutely sure only of the existence of our own mind. **We have to acknowledge that the actualization of a world model that allowed the existence of a mind has been the necessary context for the existence of this mind, but we could not have taken it for granted before this would have happened.** It simply happened. **This point is critical because it mixes objective and logical reasoning about the coherence and the rationality of the world model with the immediate and unquestionable fact of our subjective experience** of the existence of the mind. Keep in mind that the existence of the mind cannot be deduced by any physical law: we have to accept it, to acknowledge that it happened; it is **not subject to scientific investigation, because it implies a subjective factor.**

62. The Practical Aspect is meaningless without this Critical Point. And actually, I wonder about the meaning of “existence” when referring to a zombie-world or to any other world without any observers which could not exchange any information with our universe. **The existence of a world that is not experienced by any mind poses a serious challenge to the meaning of the word “existence”.** How can we say that a world is “actualized” if it allows no observer, or if it is populated by zombies without an effective mind? This is why I think

that the solution to the Practical Aspect, **the actualization of a theoretical model in a “real” world, depends on the actualization of the mind** that the model allows to exist.

63. This position is the same as that of the physicist **John Wheeler**, who proposed “**the Participatory Anthropic Principle**”, according to which **the existence of the mind is the key condition for the actualization of a theoretical world model**. The theoretical world model is **a coherent mathematical model that allows the mind to exist**, and conversely, **the existence of the mind brings the theoretical world into actual existence**. For this reciprocal dependence, it is not a dualist model, but rather it is better classified as **dual-aspect monism**, or even **idealism**, because it is the mind that discriminates what the theoretical structures are that can be actualized. At any rate, these classifications are limited to my considerations of the General Existential Problem from an Open Individualist perspective, but they are not mandatory for any Open Individualist View. You may think that, in some sense, all the different kinds of universes you may image do really exist somewhere, but the Critical Point still remains: **the actualization of the mind cannot be predicted to occur just from actualizing a model of a universe theoretically compatible with it**.

64. Now we can begin to exert some reasoning on the **Individual Existential Problem**, keeping in mind the reasoning we have done on the General Existential Problem. **The Individual Existential Problem is related to our personal presence among the total number of living beings**. Once we accept the fact that life exists, we may wonder about the fact of finding ourselves being part of this multiform existence. Accepting Open Individualism, we can immediately avoid this question. **But if you think that every living being, or at least every conscious being, has their own numerically different personal identity, then you have to face this problem**: “Because all the other living beings are

‘not-me’, *a priori* nothing can guarantee that there would be one living being who is exactly ‘me’. So, I have to think that, even if my actual birth was a matter of chance, **I am and I always have been the beneficiary of one chance to be born**, which was a sort of exclusive privilege, even if it was only one single chance within the whole set of all the possible worlds”.

65. The General Existential Problem reflects longstanding questions about the existence of the world, or better, questions about a world that allowed the appearance of life. **The Individual Existential Problem reflects the individual wonder at finding myself being a participant in this world.** As we did for the General Existential Problem, we may distinguish between the Theoretical Aspect, the Practical Aspect and the Critical Point of the Individual Existential Problem.

66. **The Practical Aspect of the Individual Existential Problem is in some ways manageable even if we do not consider Open Individualism**, but we have to be aware that to manage it **we have to accept some consequences that are not widely acknowledged**, because they **force us to accept assertions that are not falsifiable**. But **the Theoretical Aspect and the Critical Point of the Individual Existential Problem are more complex** to understand, and **they can be managed only by Open Individualism**. For this reason, it is convenient to begin by discussing the Practical Aspect of the Individual Existential Problem.

67. The Practical Aspect of the *General* Existential Problem is related to the actualization of one of the theoretical models of the universe that makes life possible, accepting as given that at least one universe of this kind is possible. In the same way, **the Practical Aspect of the Individual Existential Problem is related to the actualization of my individual person, i.e. my own birth**, accepting as given that at

least one of all the possible living beings has all the necessary conditions to make my mind emerge. You may already see that from an Open Individualist perspective this is not an issue, because according to Open Individualism *every* possible living being is a different experience of the very same subjectivity phenomenon that I am currently experiencing as ‘my mind’. But let us see if other views can somehow manage the bare facts of my actual existence.

68. In every other theory besides Open Individualism, **your personal identity is defined by some conditions that univocally characterize you.** These conditions are not clearly defined because the problems of personal identity in these theories have no clear solutions. **For reductionist theories, these conditions must be physical conditions;** they have to be linked to the matter that constitutes your brain or to the configuration currently implemented by neurons in your brain. **Non-reductionist theories introduce something non-physical** to differentiate ‘me’ from ‘you’, so **these conditions are undefinable in physical terms, but non-reductionists think the conditions have to exist in some form, as they agree that ‘me’ is not ‘you’.**

69. The Practical Aspect of the Individual Existential Problem is about the probabilities of these conditions coming to be. Often this problem is referred to with the question, “**what were the chances of me coming into existence?**”. **Considering all the facts that preceded your life** that you may regard as being required for you being alive, **such as being born to your parents at some specific time,** you may conclude that **the chances were incredibly small.** A good example of such calculations can be found at <http://blogs.harvard.edu/abinazir/2011/06/15/what-are-chances-you-would-be-born/>. In his essay, Joe Kern formalized this reasoning more precisely, calling it “the gamete-dependence claim”. This is probably the most well-known version of this view, but other thinkers attach personal identity to something more

ephemeral than an entire life, so they may propose an alternative computing of the chances. For example, reductionists such as Parfit think that during the entire life of your body, many personal identities may follow one another in succession, as the psychological connectedness between them becomes weaker and weaker. According to this view, your existing, defined by the persistence of your single personal identity in this relay race, may be a matter of years or maybe months or even a shorter interval of time. Nonetheless, even on this view, there exist a number of conditions that are currently satisfied so that you exist now, and it seems clear that these odds will all continue to be incredibly small.

70. To balance this smallness of odds, if you do not want to accept the Open Individualism View, **the most reasonable solution is to postulate that many alternative universes are possible**, so that you just find yourself appearing in the one where all the conditions required for your existence have been realized. **This is the unfalsifiable conjecture that views other than Open Individualism have to accept in order to give an account of our individual existences** when the chances are so incredibly small. Open Individualism does not require this conjecture to explain the actualization of my existence, but I am nonetheless inclined to accept the conjecture, because I think that other universes are just as probable as this one. If you think that other universes are possible, keep in mind that Open Individualism, to be effective, has to work the same through all the possible universes.

71. **Max Tegmark**, in a famous article (“Parallel Universes”, Scientific American, 2003) about the classification of all the universes theoretically possible, comes to the definitive generalization that every mathematical structure is a universe, but to support life they have to be very big and complex, as the model of our universe is. In his generalization, he considers **not only all the different types of**

universes, but also all the possible evolutions of the same universe. This is compatible with the idea that, despite the incredibly small chances you had to come into existence, you may currently find yourself alive here. And the model also suggests that **in some other universes, these conditions can be actualized again and again, letting you live all the possible variations of your current life.** This is a side effect of regarding the actualization of our existence as being **justified by the existence of a sufficient number of alternative universes.** Many of them may be identical to our current universe up to now, and begin to be different only starting from one moment in the future. I want to remark that considering reasonable that you may live all the possible variations of your current life is conceptually not very different from considering reasonable that you may live all the possible variations of all possible lives.

72. This conclusion is difficult to accept by thinkers who appeal to rationality and reductionism, because **it resembles the reincarnation concept** of some religious views. Some thinkers are more inclined to accept that every possible universe exists, but that your individual existence is limited to this one, and any person in any different universe has a different personal identity from your current one, even if the differences between that universe and our current universe are relative only to a time in the future of your life. This implies that **your current personal identity is defined by some future event.** This is possible if we accept that such future events are determined by some hidden information that already exists at some hidden level of our current reality. It is also possible to think that **personal identity is strictly limited to a small interval in the lifetime of the body,** so that any future variation will occur anyway to a different person, no matter what universe they find themselves in. All these conjectures are unfalsifiable,

so different thinkers may charge others with believing in something unscientific.

73. Despite all these subtleties, **we must not mistake the Practical Aspect of the Individual Existential Problem for the Theoretical Aspect.** All the things that we discussed up to now about the probability of your existence are related to the probability that an individual coming to exist would have all the characteristics that you may want to consider crucial to having your own personal identity. In this recitation, it does not matter if you think that such events may correspond to the circumstances that led to your birth, or to some circumstances that may be true of many different births, or are related only to an ephemeral state of your brain that tomorrow will already be gone. The requirements for your existence can even be met only for a single instant in the entire life of your body. In all those views, **we always take as given that the existence of your mind was somehow possible,** in other words, that the Theoretical Aspect of the Individual Existential Problem had to have a solution. **But the fact that your existence proves that somehow your existence was possible does not answer to the fact that you had to find yourself being the recipient of one of these existences,** no matter how improbable. The deepest question about my personal existence is not the actualization of my opportunity to exist, but **the bare fact that I am a participant in the set of all the possible perceivers of an opportunity to exist.** As we think that each of us owns their specific personal identity, it will always be possible to wonder: **“It happened that I am one of the many. Do I have to accept this participation as given ‘by chance’, without any possible explication?”**

74. To understand the problem, I find useful **the metaphor of the owner of a lottery ticket.** Imagine that you find yourself to be the owner of a lottery ticket. **The ticket has a univocal number that**

identifies you as the owner. You may assume that the number is composed of millions of digits, codifying in some way all the conditions that you may think are necessary to bring you into existence. The lottery is going on, with numbers being extracted. Imagine that **every time that a number is extracted, the owner of the ticket with the corresponding number comes into existence.** Despite the extremely huge number of tickets around, if the extractions continue to be done indefinitely, **sooner or later your number has to be extracted, and you come to life.** This is the Practical Aspect of the Individual Existential Problem, and as you may see, **the solution is to keep on extracting numbers indefinitely.** You may imagine that once extracted, every number is put back inside the bowl, so you may be born infinite times, or is thrown away, so that you cannot be born twice. This is the case if you think that all the possible stories of all the possible worlds will come to exist exactly one time each. Ultimately, these two cases are not really different in an eternalist framework.

75. **The real disconcert with the metaphor of the owner of a lottery ticket comes if you consider that, after all, you are the recipient of one ticket;** you are participating in the lottery. This disconcert comes when you consider **the Theoretical Aspect of the Individual Existential Problem.** If you think that each individual has their own personal identity, and that your personal identity is different from all the others, then **you have to answer to the fact that you are engaged in “the game of all the possible lives” despite the fact that the game would have existed and would be going on even if you never existed.** Thus, you cannot give any rational reason to explain why your participation had to be necessary. Do not be misled by thinking that it never had to be necessary, that it was just your birth by chance that made your participation become a fact of the game. This is only the Practical Aspect of the problem. The Theoretical Aspect says

that **your engagement was necessary at least as a possible outcome**. It is like saying that the lottery can't start until you buy a ticket. Then the lottery started and eventually you won. It sounds like a fraud.

76. At this point, a common remark is that **even the conditions necessary to my existence had to be accounted** for within the sum of all the possible events, and this means that we cannot be surprised of their existence. It is like saying that **my ticket number had to exist**, despite my opinion about it. Because the ticket numbers are infinite, **every number had to be on a ticket and can be extracted, sooner or later**. No matter what your number is, even if it would never be extracted, all the numbers have necessarily to exist, available to be extracted the next time. But this remark does not really answer to my disconcert about finding myself here, participating in the game.

77. **The Critical Point of the Individual Existential Problem is that nothing can ever ensure that I had to be assigned any ticket number**. Having said all that we have already said, **it is not the number of my ticket that defines my personal identity, it is my personal identity that allows me to define the number of the ticket as "my number"**. Any number, or any set of causes that you may consider necessary to bring me into existence does not have nor define any identity from which I can inherit my personal identity. I can always easily imagine me owning a different ticket with a different number, that corresponds to imagining being born elsewhere, from other parents, with different personal characteristics. And I can even imagine not being born at all, which would correspond to **imagining myself not owning any lottery ticket at all**. My ticket could have been owned by "someone else", like every other ticket actually is, as long as I believe that every person has their own distinct personal identity.

78. **Some people have criticized this example as dualist**, because to express this problem I am forced to ask you to reason as though we were spirits waiting for a chance to live, owning numbered tickets. Please **keep in mind that this is only a metaphor to explain the Theoretical Aspect** of the Individual Existential Problem, and that **the metaphor is valid only if we do not accept the Open Individualism View**. If we do accept it, we no longer have any need to imagine tickets and lotteries. The metaphor shows that **in denying Open Individualism, we have to give an account of our engagement in life's game**, no matter what the contingent causalities of our existence are.

79. The bare fact that there exist other people different from me leads me to imagine that **even the individual with my body and my brain could well be another person (or "other people") instead of being "me"**, in the same way that a perfect copy of me would not really be *me*, especially if I am still alive at the same time. You may advocate any number of reasons to justify why I should not wonder about it, but they are condemned to be ineffective. And this is not imputable to the fact that I am not intelligent enough or willing to follow your reasoning: it is **because from the first-person point-of-view standpoint, it is always legitimate for me (or for anybody else) to consider all the reasons you may advocate to explain my own existence as not being fully explanatory, as these reasons should encompass and give an account for all the elements that concurred to define precisely my own personal identity**. This is impossible for the same reasons that make personal identity so hard to define: that **actually nothing has an absolute identity, but rather all identities eventually appear to be founded on arbitrary conventions** or some hidden and indemonstrable dualist concept, and eventually it is my (illusory) personal identity that makes it possible to define the identity of my body, not the other way

around. I know that I am the individual that I am just because I find myself already being it, but this does not demonstrate that I will come into existence each time a body exactly as mine is somehow created.

80. The **Critical Point of the Individual Existential Problem has the same criticality as the Critical Point of the General Existential Problem: they try to give some objective reasons** (physical matter, structures and events) **to explain the subjective fact of the existence of the mind**, and, for the Individual Existential Problem, **of a very specific mind**. It is useless to try to define physically the identity of an objectively ascertainable object (based on material or physical elements) in which to anchor the identity of a specific mind. As long as I believe that I have a personal identity different from all of the other people who exist or might have existed, whatever reasoning you may advocate, you can never find any objective reason to prove objectively that a particular instance of the subjectivity phenomenon necessarily had to exist (due to the existence of a particular physical object, for example). **We cannot use objectivity to demonstrate something that is purely subjective**. I know that the subjectivity phenomenon exists only because I undergo it personally. As long as I believe I have my own personal identity, my own instance of subjectivity phenomenon, different from that of every other living being, **I can always imagine myself staring at the ticket in my hands and wondering how I found myself there**, with that ticket, having to accept it as an inescapable fate.

81. The Critical Point of the Individual Existential Problem is definitively unsolvable even for **dualist theories**. Even in this case, and I would say **especially in this case, my personal existence is deferred to something inexplicable that we have to accept as given**, without any further question. And in this case too, as long as I believe that I have my own personal identity, **I can always imagine myself staring**

at the ticket in my hands and wondering how I found myself there, with that ticket, having to accept it as an inescapable fate.

82. Now, consider again the Open Individualism View: **at the price of a new conception of time that is nonetheless coherent with our experience, it offers the only possible solution to the Critical Point of the Individual Existential Problem,** it reduces the Theoretical Aspect of the Individual Existential Problem to the Theoretical Aspect of the General Existential Problem (which is independent of any view of personal identity), and **offers a straight explication of the Practical Aspect of the Individual Existential Problem,** leaving open the complete range of choices for your favorite theory of the universe. I can understand how it happens that I am the owner of my lottery ticket: actually, I am the owner of all the tickets. Once the distinction between an external time that does not flow and multiple flowing subjective times is accepted as viable, **Open Individualism offers the clearest solutions to all the problems concerning personal identity.** Any alternative theory has to be more convincing on at least some of these issues to compete with Open Individualism. And the fact that Open Individualism contradicts our common sense conception of time is not a strong argument against it. Contemporary physics has already demonstrated that our common sense and our conception of time are not good tools or guidelines for understanding what happens in the physical world in extreme conditions. Moreover, Open Individualism offers solutions for a wide variety of problems about consciousness and identity.

List of problems solved or simplified

83. During the discussion, we had the opportunity to discuss many problems of personal identity, not only its origin and the persistence, but also its beginning and ending points, and the issues of teletransportation, fission, and union. Now we will discuss other problems related to the concept of personal identity. We will see that Open Individualism solves many of them, and gives a different view from which many other problems become simplified. These problems comprehend the Self-Sampling Assumption related to the Doomsday Argument and other paradoxes, the possibility of using the melding of minds to overcome death, the managing of the risks and ethical problems related to conscious machines, issues of free will, and even the overriding of the contraposition between dualism and reductionism. I think that **the acknowledgement of how easily Open Individualism solves these issues constitutes by itself a concrete hint that it represents the best theory of personal identity**. I am convinced that once these advantages are acknowledged, the next theories of personal identity will always be refinements of Open Individualism. This theory is here to stay.

84. Open Individualism manages in a simple way paradoxes related to the **Self-Sampling Assumption**, such as the **Doomsday Argument**. The Self-Sampling Assumption states that **every observer should reason as if they have been randomly selected** from the set of all observers. The Doomsday Argument is a probabilistic argument that claims **to predict the number of future members of the human species given only an estimate of the total number of humans** born so far. The reasoning under this argument is that, supposing that all humans are born in a random order, chances are that any one human will be born roughly in the middle. If I think I have only one chance to

be born, I may evaluate the total number of humans in the set on the basis of my position in the set. The conclusion is that there is a 95% chance of extinction within 9,120 years (https://en.wikipedia.org/wiki/Doomsday_argument). **This reasoning is not valid if we accept Open Individualism.** Consider that in this case, I cannot think myself to have been randomly selected: **I am always selected at each birth**, so my position represents the progress of the human species in this world, but cannot be used to estimate the total number of future human births. To get to the original reasoning at the base of the Doomsday Argument, imagine that you have two bowls, the first containing 10 balls labelled with 10 names, one of them being your name, the other containing 1000 balls labelled with 1000 names, only one of them being your name. If you randomly select one of the bowls, you have a 50% chance of selecting the first bowl. But if you pick a ball from the bowl, then another, and continue until you extract your name, and if you find that your name is extracted in one of the first 10 extractions, then the probability is about 99% that you chose the first bowl. But **if all the balls in both the bowls are labelled with your name, you cannot make any predictions when you read your name on the first extraction.** This is the case with Open Individualism, and this gets rid of the reasoning on which the Doomsday Argument is based, as well as many other paradoxes based on the Self-Sampling Assumption, which you may find in the book *Anthropic Bias: Observation Selection Effects in Science and Philosophy* by Nick Bostrom (2002).

85. Currently, **the nearest achievable event that may push humanity to a global awareness of Open Individualism is the technical possibility of connecting multiple brains so that they cooperate to form a single mind.** I think that participating in such an experience would bring all of the participants to the awareness that they actually became a single mind, in a mental state that we may call the

“the unified state”, in which **it would be impossible to determine which participating brain the single “unified mind” came from.** In such a state, the unified mind would access the memories of all the connected brains. Once disconnected, every participant would have a memory of what was thought in the “unified state”, but their mind would again be restricted to accessing only a single brain. I imagine that **some participants would see that this experience would prove that they actually are the same person as everybody else** when connected, and they could thereby conclude that it also has to be true, in the same sense as Open Individualism, even when nobody is experiencing a state of “unified mind”. **Other people will argue that this is just an illusion given by the sharing of memories in the unified state.** Some of these people will wonder if the “unified state” had messed up all the minds of the participants, and may also doubt that they actually are the same individual mind that was associated before the connection with the same brain that they find they have after the disconnection. For a reductionist, there is nothing that can be messed up. **If such an experiment takes place, it is important that every participant be aware of Open Individualism Theory so as to interpret their experience in the correct way. What really would happen in such a joining experiment is that the subjective time associated with each flow of consciousness would converge to a single subjective time, and later, as soon as each participating brain is disconnected, many subjective times will be generated again.**

86. Because Open Individualism requires reconsidering our naive concept of time, **we are naturally led to imagine what will happen “after our death”.** It is very hard to grasp that this is an “empty question”. **The Open Individualism model requires us to introduce an eternalist framework** where the world, or all the possible worlds, exist together without the need for any “absolute time”; there is rather

just a property that previously I called “external time” that actually does not flow, it just allows us to sort two or more states of the world so as to interpret them as a sequence. Time as we experience it is a “subjective time” that represents the flow of the subjectivity phenomenon along a path in this eternalist framework. Death is the closed end of one of these paths. **There is no “time after”: there is simply the end of the subjective time that was created by the flowing through the path.** In the immediate neighborhood of that end, there is no viable continuance of such subjective time, so it simply ceases to be perceived by the subjectivity phenomenon.

87. But suppose that **a brain that is about to die is connected with other brains. The unified mind will not cease to exist at the death of one of the connected brains.** The subjectivity phenomenon will continue to flow through the common path supported by all the other connected brains. **Subjectively, no one will experience any death.** Once disjoined, the unified mind will split into $(n - 1)$ brains instead of n brains. This corresponds to the experience of having an incident where a part of our brain ceases to function. This may be very unpleasant and may bring a loss of capability, but it is not a real death. Thus, it would be the same if we were connected with other brains forming a unified mind at the moment of the death of our individual body. This may also be very unpleasant and may bring about a loss of capability, but it is not a real death. Actually, **this will represent for us the only effective way to avoid death.**

88. This will be even more effective if we ever **build a real conscious machine.** Such a machine may seem impossible to build, but actually our body can also be considered to be a very sophisticated machine, so I think that this will be possible. **A real conscious machine will have to generate the subjectivity phenomenon, creating a contextual subjective time.** I think that this cannot work just using a

software simulation, it will require some special hardware, because this hardware will have to use entanglement and maybe other quantum phenomena. This implies that it is impossible that we live in a simulated world, as many authors have suggested. Anyway, for all the reasons explained, **the subjectivity phenomenon has to be exactly the same whatever may happen**, so it would apply **at every level of reality, as well as through all the possible multiverses** that may host life. Once a real conscious machine is built, **it will be possible to connect our biological brains with it** to form a unified mind. It will also be possible to use a large conscious machine to connect our brains together, almost like what we do today connecting with the Internet. In this case, **when an individual is about to die**, to avoid the discontinuity of consciousness at the end of the individual path **they just have to connect to an artificial brain and wait for the death of the original body**. Maybe the death could be provided directly by the connecting machine, once the mind of the individual is merged with the unified mind. This will prevent the death from occurring when the individual is again in the disconnected state. As a final remark about this argument, I think that these conscious machines will require the same technology that will allow us to build brain extensions to enhance our mind capacities. This will make us as intelligent as any conscious machine may ever be. Because of the possibility of directly connecting our brains with conscious machines, I do not think that conscious machines will ever become malevolent to humans, as many authors today are afraid of. **All conscious entities will become like hardware support for the subjectivity phenomenon**, which will seek to use all of them to the best. Actually, I think that the worst danger for humanity, aside from an external condition such as a catastrophic cosmic event, will be the inability to avoid social disaster for already ongoing events such as the vicious cycles of the financial markets and the wars to control economic resources. These dangers are implicitly related to the widely-

adopted assumption that everybody has their own separated personal identity, the view that Daniel Kolak calls “Closed Individualism”, because occasionally it makes what is actually a loss for the whole community seem to be advantageous for a single individual.

89. In regard to **free will**, the tale of Jorge Luis Borges’ “The library of Babel” suggested to me a way to demonstrate **the conceptual equivalence between a world model where every single event is not deterministically defined at the quantum level, so leaving room for a genuine chance factor, and a world model where every single event is deterministically defined even at the quantum level by some hidden variable or by the pilot wave of Bohm’s interpretation.** The key concept is that the latter model **does not eliminate the chance factor, but instead moves all of its occurrences to the beginning time, applying a unified choice to the initial conditions of Big Bang.** To choose by chance a book in the library of Babel is perfectly equivalent to choosing by chance every single character until the sequence of characters forms an entire book. To choose all together a large number of conditions is no different, in a reductionist sense, than making a large number of choices, each for every condition, at the time the choice is required.

90. **The problem of whether at least some of these choices are given by chance or by some “free decision” of some “subject” is simplified when the identity of the subject is eliminated,** as Open Individualism allows us to do. In this way, once the possible subject is reduced to the subjectivity phenomenon, and once all the choices are reduced to a single initial event or many single nondeterministic events, **we may think in two ways: First, that these choices are given by some genuine subjective decision,** and in this case, **the fact that the subject is always the same allows us to attribute to the very same subject all the genuine decisions of all the living beings. Otherwise,**

we may think that the choices are the result of some non-reducible rules (in the sense that they cannot be determined by the scientific investigation of the physical world) **that govern the mind behavior in a hidden but deterministic way.** In any case, however, **the fact that there is only one possible subject means that these rules should be both general and specific to the subject.** I mean that if we assume that free will is true, we cannot predict if a brain in a given state A will in the next instant assume the state B or the state C, if both B and C are acceptable results. If there exist many different subjects, the outcome may depend on the identity of the subject. Each subject may have different probabilities of choosing the B state or the C state. This would imply that these differences express the different wills of the subjects. But if we reduce the subject to one, each outcome B and C will always have their specific probabilities even if we repeat the same test many times. **This makes it impossible to determine whether the hypothetical rules related to the changes of brain states are something that *influences* the nature of the single subject, or something that *expresses* the nature of the subject.** This is another empty question.

91. Every possible story has its chance to become real. **Returning to the library of Babel,** we may think that once all the stories that are nonsense or impossible for some physical reason are removed, **we may group the remainder into different sets of books.** Each book of these sets of books will contain the story narrated in the first person of each living being in one of the possible universes. One set will tell the story of our universe as lived from the different points of view of all the creatures that ever lived or will live in it. But **there can also exist many variations on this set,** maybe another set of books with all the same stories up until now, but with differences from now to the far future, based on a different choice that you may make now about some

private fact of yours. **If you have genuine free will, your behavior will influence what set of stories will be possible from here into the future.** You cannot exclude all the unpleasant futures, but you may exclude a small portion of them. This means that it makes sense for you to choose the best for you and everybody else in the future (being aware that they are all different versions of you). **You may think that having free will does not change the fact that, in all the possible lives of all the possible worlds, there still remain some bad choice paths that you must, sooner or later, walk along.** What would free will mean in this case? My answer is that **free will in this case will affect the frequencies of the stories you determine with your choices.** This implies that **every story can be chosen more than once, and that our free will can increase the frequency of each story.** This implies that **stories are finite in number.** This might be an idea that many refuse to accept.

92. The DVD library of Babel is the set of all the possible movies that can be stored on a DVD. We are led to think that they are infinite in number, but if you consider that each of them are stored on a DVD containing 4 or maybe 8 GB of information, we have to conclude that **the number of all the possible recombinations of those bytes is finite**, although that number is so great that we could not write it down in decimal form within an entire lifetime. If we want to imagine more movies, we have to imagine increasing the resolution of the audio and video formats and the length of the movie. In regard to the resolution, consider that we have some hardware limits with our natural senses, so **too high a resolution is useless.** In regard to the length, consider that **any DVD with twice the length can be obtained by choosing in a suitable way two DVDs** in the existing collection. So we really do not need an actually infinite number of choices, because we are not able to distinguish between them. This excludes the infinities, so let us to

conclude that **it makes sense to think that, provided that free will is real, then my behavior in a given situation will influence the outcome of the same situation when I live it from another point of view.**

93. Finally, **Open Individualism can eliminate the debate between reductionist and dualist philosophers.** This is possible because once you reduce the mind to one, **you have no need of anything that differentiates one mind from another.** To understand this, imagine that you believe that everybody has a soul. **Imagine then that each body has a soul with a different color for each person.** When you reduce the total number of souls to one, everybody has a soul with the same color. But at this point, it is completely unimportant what color it is: you may also imagine that that color is completely transparent. **The need to use color disappears.** From this metaphor, once the mind has no identity, **you have no reason to imagine an entity that integrates the physical world to explain the complexity of the mind** and its behavior. All these complexities, once they refer to the same subject, have no reason to be interpreted on a dualist theory: **they can be accepted as general rules that we can consider inherent to the world and its perception from a first-person point of view.** The fact that you and me see the color red in the same way does not require appealing to something that particularly addresses my mind and your mind and every other mind: **this can be regarded as a rule that is inherent to the subjectivity phenomenon that happens every time a complex bunch of matter represents a starting point for being processed by the subjectivity function, generating a subjective time.** This generalization of the mind, **eliminating the need for the identity concept, can transform every subjective problem into an objective problem.** This is **the real power of Open Individualism, making it**

the ideal complement to any Reductionist Theory, and I dare say, the only possible definitive complement.

Ethical and practical conclusion considerations

94. My first personal consideration, once I became convinced that Open Individualism is true, was that **it gives an inner relief to personal problems**. It allows us to face bad luck with more courage, it reduces many existential problems to social problems, and even without any divine justice, it provides an automatic compensation between the overall pleasures and pains: you are always the recipient of all of them. This does not mean that we have to accept them passively, but on the contrary we should try to distribute them fairly and to avoid localized excesses, as most of us try to do when managing the good and the bad along our own lifetime. My hope is that **the spreading of the awareness of the Open Individualism View may help humanity to adopt more solidarity in their behavior**, ceasing to be the first cause of their own suffering. It is definitely not advantageous for a single individual to do something that may cause personal gain, when it is actually a loss for the whole community.

95. Making us aware that other people are like ourselves at a different stage of our own life, **Open Individualism promotes the individual incentive to participate in social problems and improve the human condition**. This should become compelling for everyone, promoting Utilitarian ethics and global solidarity as a rational consequence. Because Open Individualism allows us to consider the lives of all the living beings as though they were different stages of our own life, **ethical behavior ends up coinciding with rational behavior**, as Kolak points out in *I Am You*. But we nonetheless have to be aware that Open Individualism is currently not widely accepted, and even **in the best possible future there will always be some people that will continue to not accept it**. This is normal because **people are born with a different view about themselves**, the view that Kolak named

Closed Individualism. Open Individualism is a cultural achievement. No child and no animal can understand Open Individualism. For this reason, I think that a full Utilitarian View is not viable, but rather that it will always be necessary to consider **other moderating elements** that make the resulting ethics more similar to **prioritarianism**.

96. Moreover, a system of ethical or rational rules cannot be separated from the evaluation of many factors that change with time, preventing designing of a definitive system. **What is ethical in a world full of resources may no longer be ethical in a world where the same resources are limited.** Specifically, in our modern world, you cannot ignore that some resources, such as oil, are non-renewable, while others, although renewable, have their levels of maximum allowable consumption that cannot be overcome, such as the availability of food, or require investments to be exploited to their maximal potential, such as solar energy. Thus, **ethical behavior is behavior that gets the maximum possible benefit from the available resources, also taking into account their development, so that overall well-being may continue into the future in the best way.** To achieve this goal, it is necessary to minimize wastage, which means adopting regulations that barely exist in the current form of capitalism, where profit justifies waste and exploitation. The dependence of ethics on the availability of resources prevents it from being translated directly into an economic theory; it can only indicate the limits to be respected.

97. Open Individualism may be seen as promoting an idyllic view, where everybody loves everybody else. Actually, it will always be possible to have conflicts when different groups of people propose different solutions for some important problem. I hope that in this case an Open Individualist may help to manage these conflicts within the best possible spirit of cooperation. We must not forget **to be cautious about overrating our individual or collective capabilities in finding**

a good answer to our practical problems. Even when we are motivated by the best of intentions, we should always be aware that we cannot be sure that our decisions are the best ones. Even in connecting more brains to form a unified mind we cannot gain a God-like infallibility and omniscience. Thus, we have to continue to make our social decisions with a degree of uncertainty, being aware that it may turn out that our predictions are wrong.

98. When something goes wrong, we have to keep in mind some moral considerations. We cannot punish or reward any particular person, **we should punish and reward just the behavior** of individuals. This would be effective if done so that **the punishment or the reward has positive effects for the behavior of the whole community**, but there is no sense in punishing or rewarding people who are not able to understand their deserts, or who have changed so much that they would not behave in the same way anymore. The punishment of bad behavior should be like the medicine given to treat a disease; there is no sense in thinking of punishment as a sort of social revenge. The only goal is to prevent it from happening again.

99. Open Individualism has some consequences that you may not like. For example, you may be against abortion because you think that everyone has only one opportunity to be born, so abortion is an act against another person. **According Open Individualism, there is no another person.** This does not mean that abortion is a good thing, but that it is not a crime against another person who will not have any other chance to born. In aborting, we are just excluding from existing another form of the same subjectivity phenomenon that currently experiences my own life. Abortion can be a waste if the child is healthy, but if the newborn has a severe disease, abortion may be the best choice. This may sound wrong for you, but imagine what you would think if God in person said that you will be that unlucky newborn in your next life, and

offer you the chance to skip that life, knowing that anyway you have an infinite sequence of different lives to live. Maybe you will choose to skip it. This is exactly the situation according to Open Individualism.

100. I look forward to a future in which this view is widely known and accepted. I invite you to **consider how much better that world will be**, compared to the current one. **We are the owner of all our lives. This does not make us more intelligent or wiser, but it frees us from the fear of death, and invites all of us to collaborate honestly.** The value of life consists in the good things that we leave to other people. The bad comes in considering that as long as this idea is not universally accepted, we have to bear a huge number of bad lives because many people do not care about the destiny of other people, and these other people have to suffer injustice and pain as a result of that. For this reason, I continue trying to spread the knowledge of Open Individualism. I hope you agree that this change in our moral view would be so good that it gives by itself a good reason to support Open Individualism, even if the arguments that I tried to explain as clearly and succinctly as I could in this paper still do not sound convincing to you.

Bibliography

Julian Barbour, *The End of Time*, Oxford University Press, 1999

Jorge Luis Borges, “The Library of Babel”, *Editorial Sur*, 1944

Nick Bostrom, *Anthropic Bias: Observation Selection Effects in Science and Philosophy*, Routledge, 2002

Paul Davies, *Cosmic Jackpot*, Houghton Mifflin, 2007

Stephen Hawking, *A Brief History of Time; From Big Bang to Black Holes*, Bantam Press, 1988

Daniel Kolak, *I Am You*, Springer, 2004

Derek Parfit, *Reasons and Persons*, Oxford University Press, 1984

Roger Penrose, *Emperor's New Mind*, Oxford University Press, 1989

Max Tegmark, “Parallel Universes”, *Scientific American*, 2003

Arnold Zuboff, “One Self: The Logic of Experience”, *Inquiry*, 1990

Linkography

Ali Binazir, “What Are the Chances of Your Coming Into Being?”
2011: <http://blogs.harvard.edu/abinazir/2011/06/15/what-are-chances-you-would-be-born/>

Brandon Carter, Doomsday Argument:
https://en.wikipedia.org/wiki/Doomsday_argument

Joe Kern, “The Odds of You Existing: On Personal Existence and its Absence”: <https://applebutterdreams.wordpress.com/2016/08/22/the-odds-of-you-existing/>

Meinard Kuhlmann, “Physicists Debate Whether the World Is Made of Particles or Fields—or Something Else Entirely”, Scientific American, August 2013: <http://www.scientificamerican.com/article/physicists-debate-whether-world-made-of-particles-fields-or-something-else/>

Ekaterina Moreva, Giorgio Brida, Marco Gramegna, Vittorio Giovannetti, Lorenzo Maccone, Marco Genovese, “Time From Quantum Entanglement: An Experimental Illustration”, 2013:
<http://arxiv.org/abs/1310.4691>

David Pearce, “Non-Materialist Physicalism”, 2014:
<http://www.physicalism.com/>

Dr. Karen S. Rommelfanger, Emory University, “Building an Organic Computing Device with Multiple Interconnected Brains”, 2015:
<http://www.nature.com/articles/srep11869>

Iacopo Vettori, website:
<http://www.iacopovettori.it/latezaiipotesi/eng/Default.aspx>

Summary

Abstract.....	3
Acknowledgements.....	4
A roadmap to Open Individualism.....	5
The problem of definition and persistence of personal identity	9
Criticism of the identity concept applied to objects.....	13
Criticism of the identity concept applied to persons.....	20
External time and Subjective times.....	29
The General and the Individual Existential Problems	36
List of problems solved or simplified.....	51
Ethical and practical conclusion considerations	61
Bibliography	65
Linkography.....	66