Arguments Supporting Open Individualism

http://www.iacopovettori.it/laterzaipotesi/eng/ArgumentsProOI.aspx
by Iacopo Vettori – January 2012

"But he has nothing on at all!" said a little child at last.
(Hans Christian Andersen, "The Emperor's New Clothes")

This paper is the transcript of four comments I posted in the Facebook group "I am You: Discussions on Open Individualism" in October 2011, where I expounded my latest account of the arguments that led me to subscribe to Open Individualism ("OI"), whilst adopting a specific version that I provocatively called "Reductionist O.I.", which I think might be considered as an evolution of the traditional layman materialist metaphysical view. Actually this proposal has some characteristics that allow it to override the distinction between reductionism and dualism, but as Open Individualism is easily misunderstood as implying a sort of religiously charged "Cosmic Soul", my aim in classifying it as "reductionist" was to demonstrate that this mystical view is unnecessary and misleading. This transcript integrates in the text some paragraphs added to better explain what I found somehow unclear at a second reading and the notes I wrote to reply to the comments made by other members of our group, which I want to thank and mention here: Gordon Cornwall, Denis Antonov, David Nyman, Jeff Henry, Luke Clayborn Hopper, Steven Blair, Andres Gomez Emilsson. I wish thank also Daniel Kolak, Edward Miller and Jonas Muller for previous discussions that helped me to refine my arguments. A special thank to my dear friend Corrado La Torre who helped me to write these pages in a decent english prose.

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0) Preface

An overview of the issues related to personal identity with an introduction to the used terminology.

Since in the following discussion are used terms familiar to members of the Facebook group "I Am You: Discussion on Open Individualism", but this paper intention is to address a wider audience, it seemed appropriate to add this brief preface. One of the most important issues with personal identity is the one about the persistence of the subject. From physiology we know that in our lifetime our body undergoes changes so vast that no physical or psychological element remains unchanged, nevertheless we are sure to be the same person that we were when we were children, how far we can push our memory. This is expressed by saying that even if we dramatically changed both physically and psychologically, we did not change our personal identity. Historically, there are two families of alternative theories: dualist theories and reductionist theories. According with dualist theories, each of us has a soul that is not material and that is able to remain the same through all the physical changes we experience. The modern dualist theories do not use the term "soul" which has religious valences, but they must appeal to something unidentifiable in physical terms, and because the existence of this "something" cannot be proven, they are charged of being not scientific theories. According to reductionist theories there is nothing that is not reducible to the matter, but once it is ascertained that our body is constantly changing in both its structure and the matter composing it, it is difficult to solve the problem of the persistence of our personal identity.

Derek Parfit in his book "Reason and Persons" in 1984, proposes to consider illusory this continuity of personal identity: as the differences between a person at the time of childhood and the same person into adulthood are huge, scientifically there are no good reason to believe that they are really the same person: this illusion would be solely due to the fact that the adult person has inherited from the original person the memory and all the individual characteristics that have been preserved through all the changes occurred in the growth. In practice, Parfit denies that personal identity can persist unchanged for the entire life, but this means that, despite any appearance, the child I was, the adult that I am today and the old man maybe I will be in the future are not really the same person as now I believe: I would have started to live some time ago in a body that was already grown and with all the memories that I feel like mine, and in some time I will fade away again, replaced by another "I" who will inherit the body and the memories that I inherited, with the changes occurred in my presence. There are different opinions about how much could be long the interval of time available to me. In the most radical form of this theory, my life would not be longer than a moment.

Daniel Kolak has developed an alternative theory that solves the problem of the persistence and described it in his book "I Am You." He also proposed a nomenclature that distinguishes the three families of theories in question. The traditional theory, according to which each of us has a precise identity that lasts from birth to death, is called "Closed Individualism" (CI), or "Closed Individual View of Personal Identity", meaning that the personal identity of each individual is separated from the one of others and it is somehow linked to the physical body, even if this requires a solution that has not yet clearly defined for the persistence's problem. Parfit's theory is called "Empty Individualism" (EI), or "Empty Individual View of Personal Identity", meaning that personal identity is reduced to something very ephemeral and, in its most radical form, virtually nothing. The persistence's problem is solved just giving up the persistence. The new theory that Kolak proposes is called "Open Individualism", or "Open Individual View of Personal Identity", meaning that personal identity is not something tied to a single physical body, but it is the same in all the living beings, at least those who have self-awareness. This also solves the problem of persistence because you no longer need to find something that is transmitted unchanged through an entire life: in every moment of awareness of every conscious being, the "I", i.e. the experiencer of that moment of life is always the same, even if it is present simultaneously in all the people living in that same moment.

Expressing it in this way it seems a crazy idea, but carefully examining all the issues related to personal identity, we can see that this theory is the only one able to offer always rational response. Moreover, considering some very special cases, we can see that all the weirdness that it seems to require are in fact inevitable for every alternative theory. Finally, the more you test this theory, the more it is strengthened, while the differences with the alternatives end up being marginal. I was lucky enough to get independently to this theoretical solution, which I had initially called "the third hypothesis", and I discovered that it had illustrious predecessors in the East, in some currents of Hinduism, and also in the Western philosophical tradition, by Siger of Brabant and Averroes who dates it back to Aristotle. Later, it was declared heretical and then abandoned for many centuries. When I knew the work of Kolak, I was happy to see that the idea had been reintroduced again in a modern form. After studying his book, and become aware of the current debate about personal identity, I tried to refine the presentation of the ideas that led me to embrace this theory, with a point of view sometime very personal, but trying to express it better in terms familiar to specialists of this debate. I hope that my efforts will be useful to suggest arguments and thoughts both to those who already agree with this idea, and to those who believe it is not still convincing.

1) An informatics model of personal identity

An informatics version of the group of dualist theories and the group of reductionist theories, showing how OI can be considered a theory of the reductionist group and allows it to override that distinction.

My mean concern will be to show that OI does not really require any extraordinary assumption over what the alternative views already require. In the last part I will then present the argument that I believe makes the OI the most rational theory, other things being equal. The first part, in this and in the two following chapters, covers the same kind of work that Daniel Kolak did in great detail in his book “I Am You”. The adopted information science methodology used here is, I believe, compatible with what he wrote. Kolak in his book leaves a lot of room to alternative interpretations of OI, as he presents it as a “full-contact philosophy” that may fit to every metaphysics. I will try to go one step beyond, accepting some restrictions in order to avoid any mystical charging, criticizing our common sense identity concept, and underlining some problems that are hidden in traditional reductionist and dualistic metaphysics. I will finally discuss the basic problem which only OI can rationally answer.

One of the most important questions that I want to make clear is why OI can be considered, at least in the version that I subscribe to, a reductionist theory. Here I am using the term "reductionism" in a non strictly traditional way, i.e. meaning that consciousness could be reduced to something of material, but in a weaker sense, i.e. that the emergence of the consciousness requires some physical structure that could be described and could be used to check if a given physical structure represents a conscious living being or not. This conception may concede that the mystery of consciousness might not be completely explained in terms of matter, but still firmly retain that it requires a particular physical structure to emerge and manifest itself. Actually OI results to be fundamentally agnostic regarding the dualism/reductionism contraposition. This happens because the primary problem that causes this contraposition is the question if we have something that may have the role of the soul or not. As OI eliminates the need of using any kind of placeholder of our personal identity, the conflict between reductionism and dualism become less important. It could be summarized by the single question about the full reducibility of all the behaviour of living physical structures to some mandatory physical laws, eliminating the possibility that any form of willingness might express itself independently by them, even if the consciousness' emersion would remain a fact beyond any possible explanation, especially if the behaviour of the matter would not be influenced by it in any way. But once separated from the problem related to our personal identity, the question takes the form of a non-decidable problem, especially considering that our mental behaviour is influenced by quantum phenomena that can be investigated only with statistical methods.

Anyway, my position is that the base element of reality is information. The concept of information links together the concepts of material data and the abstract capacity to interpret them as something meaningful. The same concept of "meaning" implies something that is understood by somebody, i.e. the coexistence of a physical part and a mental part. This can be considered as a form of dialectical monism or maybe better of neutral monism. I will do some more considerations of this type in the final part of this paper, but anyhow this view does not affect the reasoning that I will explain. What I really care about here is to give an interpretation of OI that does not need any mystical concept as a "Cosmic Soul" or something like that, nor that presupposes any hidden link between all of us that may allow us to express a common willingness or to share information between us. Nor do I want to deny this possibility, I just want to show that this hypothesis is not necessary. It is possible, and it is sufficient for the admissibility of OI to think that all that we can experience is just the kind of life with limited conscious faculties like the ones that we are currently living. What I really mean is that this kind of OI does not need anything that could be considered

mystical.

According to the weak concept of “reductionism” that I adopt, and considering the aim of this paper, I classify the theories as "reductionist" or "dualist" not basing this choice on their opinion about the full reducibility of the mystery of consciousness to something of material, but basing it on their requirement to identify univocally any conscious living being. A strong or weak reductionist theory cannot require anything more than what can be deduced in a detailed description of it. A dualist theory requires something more, but incurring in some further problems as we will see later. Actually, for Open Individualism the problem does not exist at all, because there is nothing that makes our person different. Therefore, as it does not need to add anything to the physical description of conscious beings to identify them univocally, it can be considered a reductionist theory, at least in the weaker sense, if we think that anyway the consciousness needs some complex physical structure to have the chance to emerge. In this way the question if a fully reductionist theory is possible or not becomes a separated question that does not affect the plausibility of OI. Let us see this in detail, as it will give us a model to define clearly other problems that we will debate next. We will start considering how we may evaluate the theoretical set of all the conscious living beings according to every non-OI theory, in order to define the key differences between reductionism and dualism.

My considerations are influenced by my experience in computer programming, so I propose an informatics model to determine if a theory is of dualist or reductionist type. Imagine that any possible conscious living being could be described in the degree of detail that you want, until you reach the detail level that you retain to be sufficient to capture not only the fact that the entity described is a conscious living being, but also to univocally define its personal identity. You could reach the sub-atomic level if you want, and you may even imagine to access some hypothetical hidden information inside elementary particles, or to have some future knowledge not available today: the only discrimination here is that the information could be described at last theoretically, no matter if we actually can do it. This must be possible in principle for every non-OI reductionist theory, because they don't need to add any further indescribable element (something that might be considered like a soul) to distinguish univocally the personal identity of each actual conscious living being.

We can imagine a huge database table, with a huge number of columns, each of them corresponding to an information that plays a part in this complete description, and a number of rows, that eventually could be considered infinite, each corresponding to a different conscious living being, with a defined personal identity. This will be the table of “All the Conscious Living Beings” (ACLB table for brevity). This kind of informatics description has the largest degree of freedom: you can imagine that the information stored contains anything you may think necessary to include any form of weird conscious life. Somebody may want to think that each row describes a whole body, somebody else might prefer to think that each row contains the detailed description of the neural network of the brain of each being. We could even imagine that each row contains the detailed story of all the life of a living being: our considerations will be so general that they are valid in every case. We may imagine that not all the attributes contained in a row are fundamental to define the personal identity, but if we adopt a non-OI reductionist theory, we must assume that even personal identity is just a matter of different values contained in some column. These special columns could be thought as forming the “Primary Key” of the ACLB table, i.e. a set of columns containing a univocal combination of values that allows to identify completely each row of the table. As I adhere to OI, I really think that nothing can define the personal identity, so it cannot be reduced to a matter of different column values, but now I want to try to signal the difficulties that arise when we assume that this definition of personal identity could be done.

Using this model, we can define precisely the differences between reductionist and dualistic theories: according to all the reductionist theories, the information stored in each row representing a given conscious living being is enough not only to determine if it is really a conscious being, but it is also enough to determine "who" it is, i.e. what is its personal identity, basing this on the key values stored in the columns that represent the Primary Key. These key values should be something more complex than the simple DNA sequence, as we believe that even if we could produce billions of people cloned with the same DNA, they would have some little but crucial difference in their corresponding rows in the ACLB table, that should make it possible to distinguish their personal identities one by one. But theoretically every non-OI reductionist theory should agree that as nothing else exists except the physical world, if we could produce two perfect copies of living beings having all the key values equal, we should conclude that they were not just two identical persons, but actually the same person. This seems an hazardous claim, and we will see later what strategies may be adopted to avoid the occurrence of such a situation, but we have to acknowledge that in any reductionist theory, each living being is fully describable, and this fact leaves the theoretical possibility of the existence of a perfect copy of each of us, not just simple clones with the same DNA.

Dualistic theories are different because they claim that, despite any possible information, there still will remain something of not explicable that is precisely what contains the secret not only of our consciousness, but also of our personal identity. We can represent this requirement introducing in our ACLB table an special column that will be named "ID", containing a conventional datum that we can imagine as an integer number, that does not have any meaning but must be considered just as an abstract placeholder which will univocally represent each different personal identity. This will represent what naively is called “soul”, even if modern dualist theories prefer adopting other terms that sound less mystical. This kind of ID is often used in database programming, and allows us to distinguish rows that would be otherwise equal. In this way we can imagine for any dualistic theory that two different conscious living beings could be fully equal, but despite this they may have two different personal identities, just because we suppose that they differ in the "inaccessible datum" that contains the mystery of their personal identity. The description of these two living beings would then be contained into two different rows of our imaginary ACLB table, differing only for the content of the ID column.

We may imagine a number of different dualist theories, so we may also imagine that some of them would allow that two different bodies had the same soul, even if completely different in all the other attributes, just like it happens for the traditional theory of reincarnation. We may also imagine that the same soul could live simultaneously in two different bodies, if we concede that souls could go freely back and forth in time. We may imagine also that there exists a single soul that lives simultaneously in all our bodies: this is the dualistic version of Open Individualism that most people may find more easy to imagine. The difference with the reductionist version of Open Individualism is that the dualist version may imagine that this “Cosmic Soul” is something having a separate existence from the matter, something that may or may not inhabit a material structure, whilst in the reductionist view the consciousness is interpreted as a phenomenon that may manifest itself only in the presence of some complex material structure as a brain is, and cannot exist independently from it. If we take the OI point of view this difference between reductionism and dualism might be expressed equivalently by the question if the matter could be influenced by something of non-material. Without the need to trace the individual personal identities, OI can interpret the consciousness not as “something” that has its own independent existence, but as a function, a property, a base ingredient of the existence as well as time and space. Trying to continue to ask “who” this “Cosmic Soul” might be is missing the point that OI is the only way to empty that question of any

meaning. Instead of thinking of me as a physical structure owned by some “instance of consciousness”, I should think of being a physical structure having the property of expressing consciousness. Beware that this distinction has a sense only if we mean that the “subject of experiences”, what Daniel Kolak in his book named the "subject-in-itself", is not just an individual “instance of consciousness” or any instance of something else, but the “consciousness phenomenon” itself.

Let's see what can we say about the Open Individualism theory when considering this ACLB table. If we ascribe it in the group of dualist theories, we have to consider what number we must write down in the ID column. Because Open Individualism claims that the personal identity is always the same, we have to write the same number (maybe ‘1’, or maybe better ‘0’) in each row of our ACLB table. That information does not seem to be very useful. What is its purpose? It is just to verify that it always contains the same number in all the rows. But the theory itself assumes as hypothesis that it were necessarily always the same. It is easy to see that the ID column can always be empty, and may even be deleted safely from our ACLB table without any information loss. The fact that it should contain always the same data should make us aware that it is not necessary at all and can be removed without losing the possibility of OI. This might represent the tiny conceptual gap between dualist OI (where the ID column always contains the same value) and the reductionist OI (where the ID column is always empty or doesn’t exist at all). Anyhow, as the eventual value contained in that ID column results to be completely useless, every conscious living being can be fully described in a database table without the ID column, as it is for every reductionist theory. This demonstrates that OI does not have to be considered a dualist theory. This now may seem a simple data manipulation trick, but it really reveals that the idea that OI requires some dualist concept is just a bias due to our existing concept of personal identity, that’s precisely what we want to now criticize in its fundamentals.

Let us focus again on non-OI reductionist theories, and how they should consider the ACLB table. We said that some theories could consider just a subset of all its data, contained in the column set which we named the Primary Key, as strictly necessary to define the personal identity of the actual living being described by the row’s data. A mereological essentialist, who thinks that the identity of something changes as soon as a little part of it changes, may claim that all the data in the row are required to form the Primary Key, but someone else may think that not all the data are really necessary to individuate the identity of a person, assuming that there are some changes that we could make in the row without losing the identity. Moreover there are certainly some data that two rows could have in common even if they are supposed to describe beings with different identities. The property of having a consciousness is something that all the beings described in the ACLB table have in common by definition and it should be described somewhere in every row, even if this information is scattered in more than one column. As we are restricting our focus on the reductionist theories, we are assuming that the property of being conscious is something that depends on some physical structure, so we can obtain this information without the need of some abstract ID column nor the need of a dedicated “is_conscious” column, but in a more reductionist way, just by evaluating the values of the existing columns, by imagining to pass the entire row to a very powerful function “is_conscious()” that returns ‘TRUE’ or ‘FALSE’. As we are examining the rows of All the Conscious Living Being Table, such a function would always return the value 'TRUE' if called passing as argument a whatever row from the ACLB table.

According to the OI view, I really imagine that there is nothing that could influence the choice of the personal identity, but for the sake of our discussion, I may equivalently affirm that the personal identity is influenced only by the presence of the consciousness itself, that is the only property that all the conscious beings must have in common. Actually, the ability to be conscious might be determined by the combined

action of the same values contained in the same columns required to determine if a living being is conscious or not. The single values may slightly vary between all the living beings, and their variations may allow to define different personal identities. In an analogous way, our daily survival does not depend on some specific food, the only thing that matters is that we may eat enough of a variety of edible foods. On the other way, presuming that to define the personal identity were required some additional properties other that those already required to define the presence of consciousness, will leave the theoretical possibility to get an "incomplete being" having all the properties required to be defined "conscious", but not sufficient to define its personal identity. Anyhow, we can always imagine that personal identity doesn't depend on any variation, not even on a fixed set of properties, but only on the return value of the function "is_conscious()", that is always 'TRUE' or 'FALSE': in this way, each conscious being will result to have the same personal identity, even if the corresponding descriptions were differing in all the values stored in the columns of ACLB table. All the other individual characteristics that may vary freely, in the same way they may vary in my person at age 5 from my person at age 50, without affecting the personal identity. Here I am not claiming that this position is necessarily the best one: I want just point out that it has no conceptual obstacles that alternatives don't have. For each non-OI theory, each of us owns a numerically different personal identity, but if we imagine that the identity of each "instance of consciousness" is influenced only by the same phenomenon that allows the consciousness to emerge, and not influenced by the little quantity variations of the required ingredients, nothing is left to represent the identity of a person. The question then is no more "what consciousness" each conscious living being had, but is if the living being "has the consciousness" or not.

I will return to this issue with a more materialist approach, considering the set of all the possible conscious brains and the consciousness that emerges from each of them, but for now this should have explained that the clues that seem necessarily to retain OI as a dualist theory are preconceptions linked to our difficulties to free ourselves from a closed individualist view, according to each of us has their own isolated personal identity that doesn't change in their entire life. The problem that required to review it was that in a full reductionist theory we could lose the tracking of a personal identity unless we can somehow mark it. According to OI, there's nothing we can lose, as doesn't exist the possibility of "another" personal identity numerically different from the same that each of us believes it were just their own one, but is the only one possible, so there's no need of any tracking and any abstract ID. The mystery of the subject that emerges from mental activities is still there in all the reductionist theories. OI just reduces the problem of the personal identity of the emerged subject to the one about the emergence of consciousness, simply assuming that there's no need to imagine that the personal identity depends on anything else than the same mysterious process that makes the "subject" appear, independently from any differences in specific attribute values, so implying that it must be always the same. I know that at this moment this may appear as a simple opinion, but I want you to realize that this opinion does not need anything of more mysterious or mystical than the alternatives. One could think that the mere fact of being generated by numerically different occurrences of the same mysterious process could be sufficient to give an intrinsically different identity to each conscious living being, but as we will see after, this idea is untenable by any reductionist theory.

It is also useful to consider that if our lives were in a succession where each life begins after the end of the preceding life (like the mythical Phoenix), it would be easier to accept that we may have always the same personal identity, i.e. we are all the same person. The real problem is to accept the possibility of being here simultaneously despite the fact that we are all the same person. What is difficult to accept is that our common subject-in-itself could be in more than one place at a given time - i.e. it can experience

non-locality, that seems something mystical or magical. Moreover, the same conception of reincarnation seems to be unavoidably mystical. But we will see next that the need to allow some form of non-locality is required in exceptional circumstances by each reductionist theory, not only by OI. Once we are forced to accept that there are circumstances in which it could happen, why not think that they could be the normal circumstances?

2) The weakness of the "instance identity" concept

Why the subject-in-itself that emerges from the mental activity of physical brains can be considered always the very same "consciousness-in-itself", instead of a single "instance of consciousness".

The proposed informatics example of the table listing All the Conscious Living Beings (the ACLB table) can be translated in a more materialistic view that could be easier to realize. We might consider the "set of all the possible brains apt to let a consciousness emerge". In this case the individual consciousness, according to the traditional materialistic view, may be interpreted as some "deluded subject" of experiences ("deluded" in the sense that it may think to have an existence independent from the activity of the physical brain that generates it), that arises in some mysterious way by the sequence of mental states that occur in the brain, and correspond to what Kolak in his book “I Am You” named the “subject-in-itself”, i.e. that particular “instance of consciousness” that should have to be used as a personal identity placeholder even when the subject experiences any kind of extreme mutation. Pure reductionists may claim that even my believing to be a person is just an illusion, but I am at least something that undergoes that illusion, so we can always refer the definition of “subject-in-itself” to that “something” that believes to be “someone”, if you prefer.

In each reductionist theory we need to imagine that the identity of a person depends on something in the body or the brain, maybe in the whole structure, maybe in a part of it, maybe lasting for a lifetime, maybe lasting for an instant. Douglas Hofstadter in his book "I am a strange loop", identifies the individual consciousness in a logic structure of the brain’s neural network, capable to evaluate itself in a recursive way, creating a logic loop that he named "the strange loop". He thinks that because each of us has his or her own individual instance of strange loop, we correspondingly must have our own individual personal identity. Each instance of brain has its instance of strange loop that in turn generates a different instance of consciousness, a different subject-in-itself, who for these reasons could not be thought of as a shared instance between all the different brains of the set of "all the possible brains apt to let a consciousness emerge".

But what is the actual meaning of "each instance of brain" and the set of "all the possible brains"? Is it really something we can safely speak of in a reductionist and rational way? How can we safely define the differences between two distinct brains and the same brain in two different states? If brains are objects that change in time, we can easily imagine that two different brains in different states could evolve in a perfectly equal state, stay synchronized as long as you want, and then diverge again in different states. What about the personal identity of the two subjects that they generate? Empty Individualism, at least in its most radical version, tries to resolve this problem assuming that each single brain state generates its own subject-in-itself, in order to avoid the need of an abstract and dualistic "personal identity placeholder" that could maintain the same subject-in-itself between two different brain states, and could allow also to distinguish between the identities of two very similar brains that might eventually evolve in the same state. According to EI, even though you maintain the memory of your past, you are not the same person that you

were yesterday, or a year ago, or twenty years ago, or a minute ago (different versions of EI could propose different durations for the persistence of the same personal identity). Other proposals appeal to something like the continuity of the stream of consciousness, practically bonding the identity of the subject-in-itself to the story of the past states of the brain. But both these solutions cannot avoid definitively the real problem that until now seemed to afflict only the Open Individualism proposal: the need to accept the non-locality of the subject-in-itself.

To see this, let us consider two physical copies of the same identical brain structure that evolves in the same way (or frozen in the same single instant for the radical version of Empty Individualism theory). We can easily imagine two identical brains isolated in their own world, but physically placed side-by-side (you may think about two brains in two vats like the ones proposed in the book “The mind’s I” by Daniel Dennett and Douglas Hofstadter). Might they be said to be generating the same subject-in-itself, or should they be considered as generating two distinct subjects, even if they are perfectly identical in all their attributes? If we want to consider them as generating the same subject-in-itself, we are accepting non-locality, one of the most controversial features of Open Individualism. If we want to consider them as generating two numerically different subject-in-itself, based on the consideration that these brains are two numerically distinct instances of the same brain model, constituted by different atoms and/or occupying different locations in the space, we have to face some problems that are impossible to solve without accepting some kind of dualist theory, as we can see in examining in detail what we mean for “instance”.

The concept of "instance" itself is weak. There is a discussion about the identity of things, including the unanimated ones, summarized in Theseus' Ship Paradox (http://en.wikipedia.org/wiki/Ship_of_Theseus). The conclusion is that the meaning of "identity" for unanimated objects is related to the use that we want to make of the object in question. The origin of the problem is that everything material is an aggregate of molecules, these being structures of atoms, made of elementary particles like quarks and electrons. So, at the very end, the "very identity" of an object is delegated to the "very identity" of the elementary particles that constitute it. The problem is that no "identity" for elementary particles exists (http://en.wikipedia.org/wiki/Identical_particles), so we cannot imagine that these might have a kind of "instance identity" that may allow us to think that a macroscopic object could have an identity inherited by the atoms that compose it. The only way to assign an intrinsic "instance identity" to an object is to assume that the particles had some hidden property that might function as the ID column in the ACLB database table. But this could be considered as “dualism for particles” theory.

The habit to assign an identity to objects, especially to our own personal objects having an affective meaning for us, ultimately descends from our original preconception about our personal identities. As we are limited in space by our body, a fact that Daniel Kolak in his book calls “FEC”, the Fact of Exclusive Conjoinment, we suppose to be different persons, and this drives us to project some “intrinsic identity” to material objects, in the same way we think to have separate “intrinsic personal identities”. So the strategy of the reductionist theorist to avoid the OI imagining that personal identity could descend by some bundle of attributes, which can only represent restrictions of a definition, result to be based on a supposition (attributes may define identity) that is deduced by a fact assumed as true (we have different identities). Any pure reductionist theory should reject as dualistic any concept of “intrinsic identity”. Maybe he could still trust in a more practical concept of identity, but even then there are subtle difficulties that avoid getting a rigorous identity definition.

When in our every day life we say that two objects are different instances of the same base type (e.g. two

coins), we delegate their identification to their positions and to some small differences or little imperfections. But as we make a sharper definition of the type, even these imperfections may become a part of this definition, shared by every object of the same type. When the type definition becomes so sharp that it doesn't allow any little imperfection, reaching the atom level (e.g. in the case of microscopic crystals), we still can distinguish two objects only because they exist together, side by side, and we can count them, like the two brains in the same state that I mentioned earlier. At this point, we can concede that the identity of the person emerging from these two brains could be the same, acknowledging that in this very special case, the non-locality can be given even in every non-OI reductionist theory. Otherwise, we could argue that the difference of position of the two otherwise identical brains could be sufficient to grant a different personal identity to the subjects that emerged from them. But if two objects can be distinguished only by their relative positions, this means that their instance identities are not derived only from something inside them, but from their relations with other objects.

This means that the descriptions listed in the ACLB table should enclose, in each row, the description of what, in the surrounding environment, we imagine could influence the personal identity, maybe the immediate spatial configuration or the gravitational forces acting in the moment of the birth or whatever, but in general it will be something different by some mere spatial coordinates that anyway need some absolute reference point to be meaningful. Although, as long as this description remains a finite one, nothing prevents the possibility that the same conditions might exist somewhere else in a far region of our universe, leaving open the possibility of the non-locality of the person generated from that specific finite description. Recurring to an infinite-length description raises other problems that I will discuss later, together with the dualist theories. What we should have seen until now is that every finite object description cannot give an absolute way to distinguish between two different instances of objects of the same type. Every finite description is necessarily relative and this impedes that by itself it could grant the physical uniqueness of the conscious living being that it describes. But only the guarantee of this uniqueness could allow a reductionist theory to avoid the non-locality of the subject-in-itself corresponding to the described living being. Otherwise, nothing would stop us imagining some exceptional circumstances where two living beings identical in every detail of their description exist simultaneously, forcing us to consider identical also their personal identity, admitting the non-locality of their common subject-in-itself. To avoid this situation, we had to recur to a description of infinite length, or admit some kind of dualism. Both these alternatives have problems we'll see next, but anyhow I imagine that for the majority of reductionist philosophers, the admittance of non-locality of the subject-in-itself might appear as the less unscientific option.

What I want to show is that if we agree with Douglas Hofstadter on the concept of "strange loop" that allows the emergence of the consciousness (as I do), we cannot appeal to the different physical instance of such a strange loop to support the claim that our subject-in-itself has to be considered each time as a different instance of consciousness. The fact of being conscious may well depend on the realization of a physical structure that allows the formation of a strange loop, but it cannot cause, by itself, the creation of an instance of consciousness with its own intrinsic identity. In the reductionist view of Open Individualism the personal identity of the subject-in-itself depends directly from being generated by a logical structure of the "strange loop" type. Other reductionist alternatives must assume that something more is required than that basic logic structure, maybe a number of little admissible variations, maybe some other logic structure that defines essential characteristics required to define our personal identity, or maybe the whole brain in a given instant, as it is according to the most radical version of EI theory. But even with these differences, these alternatives cannot avoid to admit the occurrence of non-locality in some exceptional circumstances,

so they cannot pretend to have any theoretical advantages over OI.

Once expressed in this way, it's easy to see that there's no technical difference between the three theories that presuppose that the personal identity depends on the minimal "strange loop" logical structure, or on a subset of the logical structure of the brain greater than it, or on the logical structure of the whole brain neural network. Adopting this point of view, some questions that seem to afflict only OI appear to be exactly the same for the alternative theories, e.g. "How and when did the 'universal subject-in-itself' come to exist?". To assume that the subject-in-itself is a different one for each of us cannot give any help to answer the same question. If we think that a specific subject-in-itself can merge in any brain that has a "strange loop" structure and some additional characteristics, we have no reason to require additional explications for assuming that the same subject-in-itself can merge in every brain that has a "strange loop" structure, no matter what other additional characteristics the brain may have.

No conceptual difficulties arise when we reduce the "first cause" of personal identity to that minimum subset (that is logical, not physical, so it would work in the same way even in the weirdest form of conscious life that we could ever imagine). This consideration has the same role of the hard work that Kolak did in his book, arguing against all the apparent excluders of OI. Once we agree that assuming OI instead of another reductionist theory doesn't imply any new problems that alternatives must not face, we will be ready to accept it as a viable solution. As we saw, all the differences between OI and the reductionist alternative theories cannot prevent them to allow in some special cases the possibility of non-locality. There is still the possibility to adopt some kind of dualist theories that seem to survive to all the problems discussed now, together with the hypothesis of the need of an infinite length description to define the personal identity. Now we must see what their biggest problem is, which makes them definitively weaker than reductionist alternative theories. Furthermore, we must get rid of another big bias of the traditional reductionist view. According to OI, what matters in personal identity is the bare fact of being conscious, so "I am You" really, even if each of us has their own subjective "now": this is a consequence of non-locality. All the other conscious beings are just different experiences of the same person who in my subjective "now" is me, exactly as I will be myself tomorrow or in a week or in all my future life, so all the pain is my pain, as also all the good is my good. This may seem mystic, but actually it doesn't need any "Cosmic Soul" or "Cosmic Unity", it just requires non-locality. Can the alternative theories really give a consistent model able to avoid any feeling of mysticism like this one seems to give? This is what we will examine next.

3) The fall of a granted assumption about life

Why "probable enough for one life, not probable enough for more than one" is just a bias without a true foundation, in both reductionist and dualistic theories.

A very controversial issue with OI is that it seems to be necessarily mystical, because the shared subject-in-itself is commonly imagined as a big spirit that manifests itself in each of our lives, and it is commonly presumed that its existence should be independent from the existence of something material, otherwise it is supposed that its identity could be lost forever. I don't think that OI needs such a spirit, and this is why I called "reductionist " the version of OI that I subscribe, meaning that I believe that the existence of consciousness requires the existence of some structured matter, in a quite similar way that space and time themselves cannot be thought without the presence of something material that changes. The idea of a big spirit that reincarnates itself is just a representation of what we are inclined to imagine

because of our difficulties to figure how non-locality may be subjectively experienced.

We are naturally forced to imagine a sequence of lives, but if I think that my own person is going to live the life A and the life B in the same world W, it is impossible to give an absolute temporal order, because time is something inherited by the world W, without an external absolute reality. The question if the order is (A, B) or (B, A) is something needed by our way of thinking, but really it cannot even be posed. It may be of some help figuring to experience a temporary split brain like the one described by Derek Parfit in “Reasons and Persons” (chap. 12), or by Roger Penrose in “Emperor’s New Mind” (chap.9). Imagine that you could use a device that may temporarily separate the two halves of your brain, splitting your flow of consciousness in two, allowing each half-self to attend a different job independently by the other half. When the two halves of your brain are merged again together, you could remember that each half-self believed to be the only half followed by your original stream of consciousness, and wondered how strange it was to feel the other half as if it was controlled by someone else. But after the final reunion, you would not be able to sort the two half-experiences in a chronological order. It would be as if the time itself were split in two, instead of your stream of consciousness. I actually believe that this would be the correct way to interpret this situation. We may imagine that in the future we could experience a multiple brain connection. I think that the resulting person would be aware of all the component people, but it would be impossible to distinguish the original body from which each participant began the connection, and once split again in multiple disconnected bodies, nobody would be sure to be the same person who he was before… I believe that this remains true even if we cannot experiment any collective brain union in our normal lives.

Nevertheless, this “transmigration effect” still seems to be mystical when compared with the atheist traditional position according to which we are born by chance and at the end of our lives we'll be dead forever. It seems to be the more rational thing to think, and any alternative appears to be more fanciful and mystical, suggested just to overcome our natural fear of death, and to second our desire of immortality. But my critics here are based on logical considerations that are independent of the OI proposal, and concern both reductionist and dualistic theories. The traditional materialist view has the problem to justify our personal birth as a strange case that could happen. The common proposed explanation could be summarized in this way: “You must not wonder that you are born, because if you were not born, you would not be here wondering about that. But then, once you will be dead, you will return back in the nothing from where you came, forever”. May I have another chance? “No”, is the common answer: “The probability of your birth was so small, that once given, is impossible that you come back again”. The point is that even for a theory of Closed or Empty Individualism class, this assumption cannot be justified by a logical point of view. I like to provoke my friends asking them: "So, the ‘nothing’ where you was before your birth, is different by the ‘nothing’ where you will go after your death", because the first one had the potentiality to generate your life, the second one does not. This seems quite counterintuitive.

As we saw discussing the informatics model with the ACLB table, every non-OI reductionist theory should be able to define my person as a conscious being with a huge bundle of attributes, maybe infinite in number, maybe some of them not essential for my survival, but a group of them could completely capture what is required to precisely define my personal identity, i.e. the identity of my subject-in-itself. Let us leave for a while the case of infinite attributes, assuming that they are finite in number. When we say that, given that my person is one of the possible outcomes, then the world, sooner or later, could exactly generate me, we are implicitly assuming that even if I lose for a bit an occasion to be born, if I await long enough I could have another chance. Otherwise, nothing in the world could justify the "cosmic jackpot" I made striking my unique chance in the whole eternity. If you want, you can think so: but you have to be

aware that in this way, you are introducing a mystical assumption like "the world (casually or not) was designed to generate me at some point of its history, making me catch my unique chance at the right moment, and excluding forever all other theoretically possible but unrealized outcomes". So I should consider myself as a “gifted outcome”, or at least an extremely lucky one. Just think of the case that my parents had never met. If I do not presume that a very huge number of stories of this world can happen, including all the variations of those that we know have actually happened, I cannot assume that “sooner or later” I had to be born. I should have to consider myself as “blessed by grace” or something like that, because by chance I seized the only opportunity I could have ever had.

If we want to avoid this mystical assumption, we have to think that we have more than one occasion to be born, e.g. we may think that many worlds exist, so that in one of them it can actually happen that all the conditions required to generate me are reunited, i.e. to generate a living being having exactly all the attributes that we assumed were required to define my personal identity. We can imagine that our world is infinite beyond the limit of our cosmic horizon, or that there exist many worlds in a multiverse, or there is an infinite cycle of Big Bangs and Big Crunches, or maybe just one world subject to Poincaré’s Recurrence Theorem. But at this point, nothing prevents us from thinking that there may exist more than one world where my person can be generated, and also some worlds where my person can be generated more than once, even in the same time interval, maybe at an intergalactic distances. According to Max Tegmark’s article “Parallel Universes” in Scientific American of May 2003, if our universe is infinite beyond our cosmic horizon, you could expect to find a particle-per-particle perfect copy of you at an average distance of 10 to the power of 10 to the power of 28 meters away. A complete copy of the sphere with our same cosmic horizon could be found at about 10 to the power of 10 to the power of 118 meters away. And if you think that one day we will be able to produce artificially conscious living beings defined in all their details, you may imagine that we could generate whole armies of replicas of the same person, not just clones with the same DNA, but exact copies, each with the very same brain configuration. So, for each reductionist theory, we must conclude that if your life is something “possible enough” to be generated once, then it is “possible enough” to be generated infinite times. So don't worry: anyhow, you are going to be born again after your death, even if no afterlife world exists. This might seem mystic, but it really is less mystic than presuming that there are some restrictive conditions that avoid the generation of duplicates between all the possible worlds. One could think of the world as a complete collection of all the possible outcomes, and that you represent just one of them. This is an interesting static model, but it requires that we reconsider our time concept, and even the locution “only one time” loses its meaning in this case. Anyway, as this cosmological model can be prolifically used together with OI, we will discuss it again in the last part of this paper.

Note that these conclusions apply for all the reductionist theories, no matter if they are non-OI theories. We can think that the personal identity changes as soon as a single bit of information changes in the description of a conscious living being, or that something exists in the description that can hold our identity for a whole life, or that we are all the same person: anyway, these technical problems are present in every reductionist theory. OI uses the non-locality as a general rule, where non-OI theories must admit it just for particular cases, as well as the idea of multiple births, that non-OI reductionist theories cannot avoid without admitting a compensating concept hidden at a deeper level that results to be more mystic, as it must assume that events have exceptionally favoured our individual existence.

Let's examine the dualist theories. For the sake of this demonstration, these can be grouped with the reductionist theory that we left alone, where it is assumed that the definition of our personal identity requires an infinite number of attributes. For dualist theories, there may be or may not be a bundle of

attributes required to generate my person, anyway these are not sufficient because we still need an extra element that is not definable (if it were, we could add it in our description, and the theory could be managed as if it were a reductionist theory). This means that even if the combination of attributes that partially defines me were realized another time in another world, it would generate a conscious being like me, but possibly with a different personal identity. In the case of the reductionist theory with infinite attributes, we may think that once my combination was given, it is statistically impossible that it would be generated one more time, because it would require an infinite amount of fine tuned attributes, so the probability to select a specific combination could be computed as a series' limit that tends toward zero.

The problem in this case is that your birth would be statistically impossible even the first time. It's impossible to appeal to an infinite amount of time and an infinite number of worlds. The reason is that any world and any event of birth is something that can be counted, even if there were an infinite series of them. But the total number of entities that cannot be described, or the total number of entities that need a description of infinite length cannot be counted (they do not have the same cardinality of integer numbers). The reason is that it is impossible to imagine a procedure that could return one after the other all the elements of the set. That procedure may seem unnecessary, and we could presume that it would be sufficient to wait enough time for our occasion to live, but it’s not so. Only the existence of such a procedure could guarantee that given an element of the set, sooner or later this must be returned, if we repeat the procedure for a sufficient number of times. This is still true even if we don’t use such a procedure and select the element in any other way, including choosing by chance.

In the case of the reductionist theory with infinite number of attributes, the reason is a mathematical one, as Georg Cantor demonstrated with his “diagonal argument” applied to real numbers, that have infinite decimal digits and so they can represent entities that require a description of infinite length. It is instructive to notice that we cannot use all the real numbers, but only the ones that are computable with some algorithm, and this subset happens to have the same cardinality of integer numbers, while real numbers have the cardinality of continuum, as explained in "Emperor's New Mind" of Roger Penrose. In the case of indefinable entities of dualist theories, you can see that even a procedure to approximate an element with increasing precision cannot exist. Incidentally, this criterion applies for every number of perfect copies of objects that might even be produced. Think of some microscopic crystals that could be built using a given molecular structure as model. How many copies could we build in theory? Infinite as the integer numbers are? Much more than that: we are limited by physical resources and the time availability, but as there’s no way to define an algorithm that could distinguish all the theoretically possible copies and list them exhaustively, the cardinality of the set of all the perfect copies of something is greater than the cardinality of integer numbers. This is another indication of the problems inherent our naive notion of "instance" and "instance identity" discussed above, and stops us to reasoning about a theoretical set of “all the possible living beings with all their possible physical copies”, hoping that such a set should have to be so vast that it would certainly have to contain my individual physical person to be exhaustive.

In both cases, we cannot appeal to the common sense statement: "given an infinite expanse of time, everything will happen, however improbable”. That assertion requires that the conditions for something to happen should be finite in number, although a huge one, as it would be if we could describe a human brain accurately until the Plank scale level, so it may apply only to the reductionist theories that do not require an infinite amount of data to define univocally the personal identity of conscious living beings. Despite this limitation, these living beings could be infinite in number like integer numbers are. But if you want to adhere to a dualistic theory, or a reductionist theory where the personal identity requires an infinite amount of information to be defined, you have to accept as “given” without any logical reason that you are

a “gifted person” born despite the mathematical probability was zero. This is definitively a mystical assumption. So, what is less mystic? To imagine that there are some universal rules that favour my existence, or prevent that my existence might be repeated more than once, or to assume that, given the fact that my presence here and now guarantees that my outcome was possible, then it will continue to remain possible for each time that, in some world, all the required preconditions will be satisfied? I think that the latter option is the more logical and the less mystical, because it doesn't force any universal law to be concerned anyhow about my personal existence, at least not beyond that point that still seems inexplicable, but I have to take notice of it, i.e. the possibility of my own birth. This leads us straight to the problem we have to face next, that turns out to have OI as the only rational answer.

4) The Individual Existential Problem

What we mean when we ask ourselves "Could I have never existed?", and why only OI can give a rational answer. An overlook to the General Existential Problem.

So far we have seen that, despite what appears at a first look, a careful evaluation shows that OI does not need anything of technically weirder than what alternative theories would require. It just uses as normal rules some phenomena that alternative theories are forced to admit in exceptional circumstances. Everybody has their personal beliefs and may well think that some problems are destined to remain unanswered, but by evaluating the problem that I am introducing, you should acknowledge that OI can lead us one step beyond all the alternative theories. We just need to acknowledge and overcome our usual preconceptions.

Under the name of "existential problems" a few questions arise which could usefully be divided in two groups: one related to the "Individual Existential Problem" (IEP) and the other related to the "General Existential Problem" (GEP).

The IEP concerns questions as "why (even) I exist?", "could I never have existed?", "which are the conditions required for my existence?", "what is the probability that these may happen?" and also "can the world really exist without me?"

The GEP concerns questions as "why life exists?", "could life never have existed?", "which are the conditions required for the existence of life?", "what is the probability that these may happen?" and also "can the world really exist without life?"

You may see that the questions in these two groups are essentially the same, the former referred to a specific subject (me), the latter, more generally, to all the living beings (and could be restricted to all the conscious living beings). In extreme synthesis the OI strength over all the alternative theories is that it solves IEP directly reducing it to GEP. My existence is no more an individual problem but becomes a general problem. This may seem a minor advantage, but it truly is the only way to eliminate an otherwise unavoidable feeling of having been the subject of some grace or luck or something of irrational and inexplicable. But let us see this in detail.

About IEP, we have to notice that all the mystery comes from the existence of other conscious beings who are different from me. Even if we adopt the informatics model according to which each of us is represented by a row in the table of All the possible Conscious Living Beings (the ACLB table), each having an univocal

set of attributes, this doesn't prevent me from wondering when finding that I am the “exclusive user” of the specific row that contains my description. I am aware that all the admissible descriptions are present, so I am not wondering about the basic fact that my specific row exists, but I wonder how even I am one of the holders of one of the descriptions listed in the ACLB table. The simple fact that according to any alternative to OI, each other row in ACLB table describes a structure that once actualized lets another "instance of consciousness" different from mine emerge, forces me to realize that *a priori* nothing in any row could ever reveal that it will let my "instance of consciousness" exactly emerge instead of another one different from mine, no matter if using exactly the same data that happen to define me. The pure fact that "I" find myself to be the instance of consciousness that emerged from a given row is a thing that I have to take as given only *a posteriori*, but it cannot have any intrinsic motivation. The limit of every reductionist theory is that all they can say is “how” the things are, “how” the phenomena work, but they cannot say anything about “who” somebody is. Even if we could have all the available information, all what these theories could say about me and you would be that I correspond to the description in the row X and you correspond to the description in the row Y. But they cannot give any reason about why I find myself to correspond to X and not to Y, or why I find myself to exist anyhow, considering that according to any non-OI theory I must assume that the whole world would exist even without my humble presence. This is the fundament of IEP: for each non-OI theory, my personal existence will remain forever an unavoidable mystery.

This line of reasoning is easily misunderstood or rejected as it seems to be fatally dualistic, so I will try to explain it in more detail. I understand that this reasoning requires to imagine to be "floating over the world" and examine the table, the rows, me and my description from a transcendental and dualist point of view, but consider it as a free speculation like the use of complex numbers while computing some mathematical equations: what really matters is that the result is expressed only using real values. I fully realize that even when assuming that the conditions for my birth are somewhat complex, as they are finite in number, sooner or later they could materialize and so, considering all the possible worlds, it may sometime happen that I am born. I have dedicated the previous chapter to explain that it must be considered true for every reductionist theory that does not assume the need of an infinitely lengthy description to define a given conscious being, so I do not wonder why sometimes my combination is selected, but this does not resolve the IEP. The deeper mystery is to find myself alive, whatever the combination I find myself associated with. The Ticket Holder Problem that I presented in my first writings would mean exactly this. If I imagine to codify all the content in my "personal row" of the ACLB table in a single integer number (very huge indeed), the result could be considered as my ticket number in the lottery of life. When the fate’s hand extracts my number, I come to life. I do not wonder why I have one number instead of another one, as I do not wonder about my hair or eye colour or other attributes of mine. I do not wonder how small is the probability that my ticket number was extracted in the lottery of life, because I am perfectly aware that anyhow, sooner or later my turn will come, as the extractions are infinite and can be considered fairly random, as we discussed early. I just wonder about the basic fact of finding myself with a ticket in my hands, gazing at it and wondering why. The real mystery of the Individual Existential Problem is not the circumstance to be occasionally one of the winners of the game, but the more basic observation to be a player of the game.

The mystery is how it happens that I own a lottery ticket, not that my ticket was extracted. The mystery is that a specific row exists in the ACLB table which defines exactly an entity that, once actualized, lets my personal subject-in-itself emerge. This doesn't mean that a row like the one that defines me could not have existed. This means that, as other rows generate a person who is not me (a "non-me" person), I can easily

imagine that even my row could have generated another one "non-me" person, letting me out of the game. If I imagine to examine all the rows in the table, I can imagine to find the row that defines me, but I can also imagine that I could have been generated by another row, even if it's not the case, and I can also imagine that I could have not been generated by any row at all. Even if I understand that my row is a necessary element of the ACLB table, which would be uncompleted otherwise, there's no reason that could explain why I found myself to be one of the subjects generated by whatever row in the table. I cannot see the necessity of my being a subject-in-itself, as many other ones exist and I can well imagine that one more "other one" could well take my part, leaving me outside the game. This problem is raised as I realize that other people exist, and the world will exist even without me, so it is unavoidable for all kind of non-OI theories, be them Closed or Empty Individualism, of reductionist or dualist type. At this point I am forced to accept as a inexplicable mystery the simple fact of being one of the many subjects generated by some row of ACLB table.

This cannot be simply dismissed saying that it is not a reductionist way of reasoning, because this answer does not resolve the mystery of being part of the game. I am aware that I am speaking about an abstract subject-in-itself that should be interpreted as a phenomenon generated by a physical process, but even in a strictly reductionist theory I can well distinguish between all the material things required to generate a phenomenon and the phenomenon in itself. I can accept to consider myself as an illusory subject that emerges from a sequence of mental states that are originated as side-effects of the brain activity, but what constitutes the illusion must not be confused with the subject experiencing the illusion. The fact that each neural network may create its own illusion different from others does not imply that the subject that experiences it should be considered necessarily a different subject. This is what we experience directly in each instant, as we remain the same person through the continuous changes of our brain's neural network. This is why reductionist theories that deny OI must admit EI, that considers the persistence of the subject just another illusion, even if our memory deceives us, letting us believe to have a continuous existence. But even this explanation cannot give a reason of my being one "instance of consciousness" gifted with the exclusive owning of a "life fragment" that allows me to be alive by time in time.

Even if you do not accept this line of reasoning as a non-reductionist, I wonder how you may feel comfortable imagining that your destiny is linked forever to a specific key value combination, without the feeling that this implies some kind of 'exclusive privilege', even if you do not assume that your key value combination necessarily imply your current welfare state. How can you not wonder about the fact that there are some events which are able to cause your existence, and let you become (or let you feel like you were) an actual "instance of consciousness"? You have to accept as 'given' the fact that your destiny *ab aeterno* was to represent the consciousness when and only when it emerges in a body that has those attributes that are supposed to define you. We must be aware that considering each "instance of consciousness" permanently associated to a row, enables them to be considered as some absolute metaphysical entity like the non-instantiable consciousness of OI is considered to be. To think to have been 'graced' to be one of the allowed "instances of consciousness" is not less mystical than assuming that the consciousness is always the same, because the "instances of consciousness" delegated from the eternity to manifest themselves in some specific circumstances have the same "absoluteness" of the "Cosmic Soul", but it cannot give an answer to the IEP as OI does. The supremacy of reductionist OI over non-OI reductionist theories consists in the fact that it does not require us to accept any kind of gift or luck, nor anything of inexplicable from a rational point of view, that should be accepted as 'given'.

OI solves the Individual Existential Problem reducing it to the General Existential Problem, that is a huge

problem common to all the theories. It may seem a minor difference, because its referring to GEP means that even the OI answer to IEP will remain incomplete, but it is the only solution that does not require us to surrender to accept IEP as a given fact, without any possibility of explanation. IEP is generated simply noting that the (presumed) existence of other persons different from me is a undeniable statement that the world could have existed even without my humble presence, and this is just what forces me to consider myself the recipient of a special grace or lucky. Until we don't break down the (presumed) distinctions between different "instances of consciousness", nothing will prevent me to wonder why even my personal “instance of consciousness” was one of those gifted by the exclusive owning of a specific row in the ACLB table, whatever row it finds itself to be generated from.

Considering each "instance of consciousness" as a different entity just because generated by different structures, force us to face the IEP. Force us to believe that our “instance of consciousness” had necessarily to be one of those existing. This is not a rational consequence of the fact that all the possible events, sooner or later, will happen. OI may seem to require an even greater 'privilege' ("why just my instance of consciousness happens to be the only one existing?"), but it really does not, as there is nobody who may remain 'excluded'. Imagining that even the non-instantiable consciousness of OI raises the same problem is a logical error, because it implies that we consider that other possible consciousnesses are arbitrarily eliminated to let the consciousness be one (one random from the many). This reasoning has lost view of the basic fact that we are here examining the possibility that the consciousness will be non instantiable, exactly because the concept of "multiple instantiation" leads to many unmanageable problems. So, we don't have to “choose one” and always use it: we have to postulate that the consciousness is non instantiable and so it exists or does not exist, it manifests itself or it does not, but it can never be chosen from no alternatives at all.

After what we said about the problem with the concept of individual instances of consciousness, the non-locality, the mystical appearance of multiple births and other technical problems that seemed to afflict only OI, we saw that it is sufficient simply to apply in a different scale the same solutions that all the reductionist alternatives need to apply in exceptional circumstances. Once eliminated all preconception of additional technical difficulty for OI, nothing else still impedes to consider OI a viable solution, the only one that can offer an explanation to the IEP. Someone still could prefer to think to IEP as a unanswered problem. But, as it is originated by the simple existence of other supposed “instances of consciousness” different from mine, without OI it is destined to remain a unanswered problem forever. Once we saw that a solution exists, and that solution is the only possible solution, we should take it as true, at least until someone gives evidence of some error or proposes a better one (that, I imagine, will not confute it but refine it).

It is worth to mention that OI offers an easy solution to all the questions on personal identity which alternative theories have to manage introducing artificial hypotheses, none of them being definitively convincing, as described at http://plato.stanford.edu/entries/identity-personal/, where OI is not even mentioned. Moreover, it resolves the problem of determining the instant when a foetus begins to have a personal identity, as it has not to be chosen or determined in a precise moment, and can become a gradual event like our everyday awakening. Many other questions related to the “Doomsday Argument”, to the “Self Indicating Assumption” and in general to all those that involve the observation selection effects (described by Nick Bostrom at http://www.anthropic-principle.com/book/book.html), can be managed using OI avoiding the paradoxes described in the article. But all these questions may allow alternative explanations than the ones provided by OI, at least if we acknowledge the possibility of multiple births in the same world. Instead IEP is a problem that is caused by the mere fact of considering other conscious

beings as having a different personal identity from me, so it is an unavoidable and unanswerable problem common to all non-OI metaphysics.

The key point in OI is the acknowledgement that personal identity doesn't depend by any set of data, but directly by the function of consciousness, so that the data may give each time the form and the limits that the consciousness experiences, it may define "how" the consciousness is, but it cannot influence "who" the consciousness is. This does not require any form of shared information nor shared willingness among us. Each time we live a life, our thoughts are limited by the information stored in our memory and our individual intelligence and imagination. Realizing that logically we must be always the very same person doesn't gives us instantly any paranormal faculties. But I can attest that it gives us more reciprocal empathy or, at least, more willingness to be more sympathetic. In my ordinary life, I try to give my best using my faculties in the more useful way I can find, but at the same time I can deal with my failures with more courage, knowing that even the successes of others will be always my successes too.

About GEP, we have to notice that is not influenced by OI/EI/CI in their reductionist or dualist versions. It represents the most difficult problem we can ever face, and I wonder if we really can imagine a solution. It can be split in two problems:

1) The Theoretical Problem: We have to take notice that, between all the possible worlds that could ever exist, there exists at least one that allows the presence of life. This is not to be taken for granted. The existence of life could have been a problem without any solution. But our presence here demonstrates that at least one solution exists.

2) The Practical Problem: Once a theoretical solution is given, this doesn't mean that the corresponding world must actually exist. We know that everything can be created as a void fluctuation, but even this implies that the void exists as also the rule that it can have fluctuations. The difference is the same between a project of an engine and the existence of a fully functional engine. It is what Stephen Hawking asks at the end of his book "From Big Bang to Black Holes": "What is it that gives life to equations?".

Maybe the answer is really beyond our faculties. My wildest imagination leads me to think that the basic rule-of-all-the-rules is composed by two conditions for the actual existence of a world: the internal logical coherency and the presence of consciousness. According to this view, each possible world can be expressed as a formal system complex enough to allow the enunciation of Gödel's proposition: "I am not demonstrable in this formal system". This is how I conceive the consciousness in a material world. Something that emerges from the specific world's rules, but is not demonstrable inside those rules. This could be possible only if we concede that the world could have some rule that is not completely deterministic, but just probabilistic, as the quantum mechanics is supposed to have. This indemonstrability could be the root reason why it is questioned if the consciousness requires an unavoidable dualist conception. The comparison of the consciousness phenomenon with an indemonstrable proposition in a formal system shows that it does not require to presuppose the existence of any metaphysical substance other than the material substance which the world requires already, and it can be interpreted in a logical and non-mystical way, even if it will stay forever beyond the possibility of any definitive scientific explanation. Here I am speculating, but I am not using the Gödel's Incompleteness Theorem to advance the OI cause, just to show how the phenomenon of consciousness might be something that manifests itself in this world, even if it cannot be demonstrated by the physical laws.

The Theoretical Problem may help us to understand the main issue of IEP: the problem with my individual

existence is not linked to the improbability of the actualization of all the conditions that are presumed to be required for my individual birth. This would be the equivalent to the Anthropic Principle that explains why our universe is fine-tuned for life postulating the existence of many other universes: it is obvious that we could never have been born in a world unapt to life, so we have not to wonder about the perfect conditions that we notice in our one. It is the application of the selection effect due to the presence of observers explained by Nick Bostrom in his paper. I understand and agree, but the correct comparison is with the Theoretical Problem of GEP: the real inexplicable mystery is the mere fact that there exists a whatever combination of fine-tuned forces and laws of physics that allows the existence of life, that the problem admits at least one theoretical solution.

The same problem cannot be avoided also when we are reasoning in a non-OI way about the IEP: what I wonder about is that there exists a whatever combination of fine-tuned attributes that define a living being that, once actualized, allow the emergence of my "instance of consciousness". I wonder about the problem of the emergence of my "instance of consciousness" that admits at least one theoretical solution. I cannot accept it as 'given', without the feeling of accepting some mystic assumption. How can we feel comfortable with it, even when assuming the most radical reductionist theory? I know that all the possible cases may happen. But where is it written that my individual consciousness could arise as a side-effect of one (whatever one) of these cases? Where is it written that my individual consciousness had to exist anyway? OI solves the Gordian node stating that you are the consciousness, so if consciousness is possible, you have not to be thought as a particular "instance" of it, but just as a different form of the consciousness phenomenon. If you look back to the table with all the conscious beings we have discussed, you can see that anyway, every traditional reductionist theory it forces you to consider yourself as "the consciousness, when it is instantiated with some peculiar key attributes". So where is the trouble in considering yourself as "the consciousness, however this is instantiated"?

In this way, the consciousness may be considered a basic concept as time and space are, a fundamental element required to give an actual existence to any kind of possible world, even if each time it comes to existence, its conditions are necessarily relative to the context world. This may seem a solipsist view, and in a certain sense it is. Daniel Kolak in "I am You" uses the term "Independence-Friendly solipsism". But traditional solipsism denied the existence of others, or at least the possibility of the demonstration of their real existence. According to my view of OI, each of us has a real life, but our lives are always experienced by the same "I", even if each time it assumes different form and memory. According to this view, OI may allow us to define a 'real' experience distinguishing it from one that is just imagined: an experience is real only if its consequences are experienced by our common "I" more than once. Imagine you had a dream where you meet a friend and give him an information, and your friend had the same dream, so once awake he can use that information. I think that your dreamed experience should be classified as 'true', not just as an imaginary one. The “I” must be considered being always the same also in every possible parallel universes and even in every eventual artificial consciousness created inside a virtual world. No matter how many levels of abstraction you may imagine, the experience of the consciousness has always the same subject: you. This is allowed by the general nature of our informatics approach, and is required by the IEP, otherwise it will reappear as the spectre of the unanswerable question: “why I exist?”.

To conceive the world as the cross product between the consciousness and all the possible contexts that allow the consciousness to emerge lets us imagine the highest possible level of freedom. We can consider us experiencing all the possible variants of multiverse proposed by Max Tegmark in his article “Parallel Universes”, or all the possible stories that we could find in “The Babel Library” narrated by Jorge Luis Borges. We may even imagine the possibility to generate artificial consciousness, in some virtual world, and

we must be certain that, if a real consciousness emerges, that will be another one of our own real experiences, just like the one that we undergo today. We should not be envious or uncaring about other people's life conditions. Everybody else's life is always another experience of our own. We should always keep this in mind when relating to each other, trying to gain the best for everybody from the available world resources. There's no need of imagining an afterlife, or of hoping for a form of complete awareness of all the universe. Maybe our current human condition is already one of the best forms of consciousness that is possible to attain, and becoming conscious of the necessity of Open Individualism is the only way to elevate us from our short-sighted lives and to motivate our efforts to build a more comfortable world for everybody.

References

Stephen Hawking, "From Big Bang to Black Holes", Bantam Press, 1988
Douglas Hofstadter, "Gödel, Escher, Bach", Basic Books, 1979
Douglas Hofstadter and Daniel Dennett, "The Mind's I", Bantam Books, 1982
Douglas Hofstadter, "I Am a Strange Loop", Basic Books, 2007
Daniel Kolak, "I Am You" , Springer, 2005
Derek Parfit, "Reasons and Persons" , Oxford University Press, 1984
Julian Barbour, "The end of time", Oxford University Press, 1999
Jorge Luis Borges, "The Library of Babel", Editorial Sur, 1944
Paul Davies, "Cosmic Jackpot ", Hougthn Mifflin, 2007
Roger Penrose, "Emperor's New Mind", Oxford University Press, 1989
Max Tegmark, "Parallel Universes", Scientific American, 2003
Nick Bostrom, "Anthropic Bias: Observation Selection Effects in Science and Philosophy", Routledge, 2002
Eric Olson, "Personal Identity", Stanford Encyclopedia of Philosophy, 2010