Elod Pal Csirmaz

Primus Vittason

The Journey and the Experience

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Foreword

It was a dark and stormy night. The kids had fallen asleep, and I went downstairs to continue digging in the kitchen. I just cleared the foundations of the house when the spade turned a brown leather bag out of the ground. There was a notebook in it, and two rings. They did not look particularly old; maybe about 40 years, roughly when the housing estate was built.

The notebook was handwritten, but was laid out like a printed book. It was obviously copied from somewhere; there were no corrections or any extra marks. The title page announced that it was written by one Primus Vittason. It even had a table of contents, and numbered pages.

The rest of this book reproduces the notebook as I was not sure what else to do with it.

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Part I

I. Introduction

We humans have inquisitive minds, and we want to understand everything. Our own existence is no exception. Yet facing the fundamental questions of our lives reminds us of death and fills us with dread and terror, and so we do everything to escape their beckoning.

What do We Want to Understand?

It is not death, which is only part of the question and is easy to deal with; and it is not exactly the ultimate reason or meaning of life, because either no such thing exists, or it is biologically determined for all known creatures. Instead, it is more the question of the identity of something that exists; how that identity evolves in time, and how it interacts with other identities.

The question of one's identity in the most abstract sense, or that of the self, or the I, encompasses all questions about the reason for living, the

reason to live, life after death, and, perhaps most importantly, before it.

Contemplating this matter is a personal journey, as shown by the many competing and contradicting philosophies that from ancient times have grown out of our forlorn quest to squeeze a drop of meaning out of the barren randomness of our universe.

Water

S is in a bathtub. She has turned off the tap a few minutes ago. There is silence all around. And a voice inside says, 'Oh, the water is getting cold. Why is the water getting cold? Just when I'm getting in. Same thing every day. Look at my toes. Same toes. Bit less pale, perhaps. Do I know these toes? Are they my toes? It'd hurt if someone cut them off, so I guess they're mine. Then I have twenty toes. 'Cause it'd hurt if someone cut off Jay's toes, so they are my toes, too. Twenty toes. Does Jay also have twenty toes, then? And four eyes because he cares about mine? But maybe he doesn't want my eyes. They're a bit crap.

'But they are all I have. Bit crap, but still OK to see the stairs. For a few years, and then that's it, all darkness. Closed in all day into the darkness. I'll still have my toes, though. And water. Damn it it's really cold now.'

The Experience

Part I explores what I termed the Experience. It is possible that the Experience can never be conveyed fully in language. I have attempted to describe it in the following ways:

The Experience is the feeling that there is only one being that is I. I question if there ever was, or ever will be, another I.

The Experience is solitude, it is to be alone.

The Experience is being trapped in my body.

The Experience is the state of experiencing myself.

The Experience is the terror I feel when confronted with the limits of existence.

The Experience is the realization that I am completely at odds with everything else in the world, past, present, or future; for nothing else is I; everything else is different.

You can already see a focus on the I: I am trapped, I am unique. Why unique? Because whatever is trapped inside my body, is unique to me—it is me. It marks a unique part of space for the body

it is connected to. This body looks very similar to other human bodies, but that is not really true: it is inherently different from all others because they are not me. In fact, it is (and I am) inherently different from everything else in the world, for everything else is not me, too.

This separation of the I from the rest of the world is already there when René Descartes, in his Discourse on the Method, wrote 'I think, therefore I am.' This asserts that the I necessarily exists in his program of extreme doubt where the existence of everything is questioned. In other words, he could only assume the existence of the I, but not the existence of anything else.

This difference between (the) I and everything else is vital and primeval. It gives rise to the Experience, and we call it the **Primeval Difference**.

Now we can add to our statements about the Experience:

The Experience is the contradiction between my body being precious and unique, as it is me; but at the same time similar to all other bodies. The Experience is the helplessness that I can be so easily destroyed, that my body is so fragile.

II. Perception and the Mind

Material Perception

When we perceive something, we always do so on the physical level. We call this **material perception**. We see light, we hear sound, we smell small molecules floating in the air, and so on.

This is not a surprising statement, but it has wide-ranging consequences. One is that even though we say things like 'I see you are happy,' we can never actually see the happiness, only that someone looks and sounds like someone who is happy. Therefore, if someone (or something) can mimic being happy, we are forced to assume that it is indeed happy, as we will find nothing to contradict this assumption. It also means that ultimately, machines can be intelligent and can have emotions, as there is no inherent reason why they cannot appear to be intelligent and have emotions.

This reasoning is related to the Turing test for intelligence. The test, invented by the computer scientist and mathematician Alan Turing, avoids having to define intelligence by saying that a machine is intelligent if it is indistinguishable from a human.

The exact mechanism of the test is that a human asks written questions of two contestants, a computer and another human, that are hidden and who respond in writing. After a while, the questioner needs to guess which one is the computer, and if the guess is no better than a guess completely by chance, it means that the computer fooled the questioner and appeared just as intelligent as a human. And so the computer can be said to be intelligent.

(By using written communication only the test avoids tasking computers with having to look and sound like humans, although with modern advances in synthesizing speech and faces this may no longer be a problem.)

In other words, it defines an intrinsic property, intelligence, based on whether the entity appears to be intelligent, very much in line with the tenet of material perception.

Observing

When we observe something, it happens via our bodies. We see with our eyes, we hear with our ears, we touch with our skin. So, it is not only true that observation is limited to the physical; it is also always mediated through the physical — our bodies.

It is true that there have been claims throughout history of other kinds of observations: clairvoyance, out-of-body experiences, and so on. But none of these phenomena have been possible to independently and scientifically verify, that is, in a way that can be repeated under controlled conditions.

James Randi's foundation created the One Million Dollar Paranormal Challenge offering the prize money to anyone who can do so but could not award it to anyone.

The Brain

Dualism maintains that humans are not mere physical beings, but also have a divine spark or soul that enables them to think, talk, and be intelligent. One argument for this is that the physical brain is too simple to give rise to the amazing range of human creativity that we see. This is simply wrong.

It is true that if you open a skull, you will not find Hamlet's monologue or a yearning for ice cream among the main cells in the brain, the neurons. Each neuron is basically like an electric switch, and as such it is too simple for that. But break open a microchip in a computer instead. Will you find the video of the cat on your screen among its main components, the transistors? These are again just like miniature electric switches, and so individually they are too simple to represent a cat. Yet we know it is there because many transistors together can create this representation. So why couldn't many neurons write Romeo and Juliet or be excited about lemon sorbet?

For our purposes, memory (a faculty to store experiences) is of special importance, as well as cognition (by which here we mean a faculty to compare and evaluate them). We know that physical damage to the brain can alter both faculties in humans. All of these make it logical to assume that the

brain, a part of the human body, is doing the remembering and the thinking; that memories (and cognition) are encoded physically in the brain. That is, **memory and cognition are functions of the body**.

The Mind

The mind is simply the brain, which is made of the same kind of material as the rest of the human body. No one has ever discovered anything special in the brain that would make it inherently different from the body, and no one has ever discovered anything special about what humans know or do that cannot be explained by the workings of the brain. Nothing special or extra is needed than the body to give rise to a mindful sentient being. We do not need metaphysical entities to account for the functions of the human mind, or the semblance of free will it produces.

It is also easy to see that while our whole bodies define us, thinking is localized in a part of the body, the brain. We don't think — or at least not much — with our fingers in the same way as we don't digest with our knees or walk on our eyes.

The Chinese Room

The philosopher John Searle created a thought experiment to show that no computer can ever be said to have a mind or be conscious. By extension, this assertion would contradict the suggestion above that the human mind is nothing but the product of a physical, mechanical brain, for the brain is also 'only' a computer, a physical system that obeys known rules.

The thought experiment goes like this: suppose there is a person who does not speak Chinese, locked into a room with a big book of rules. They receive questions written in Chinese on pieces of paper through a slot in the door. They then use pen and paper to follow the rules in the big book and produce some Chinese characters based on what they received on the pieces of paper. These turn out to be responses to the Chinese questions in Chinese, which they post back through the slot. For someone outside the room, it seems they are having a conversation in Chinese, yet the person does not speak a word of Chinese.

Since the book clearly does not understand Chinese (it is about Chinese, but has no understanding), and the person does not understand Chinese (they have understanding, but not of Chinese), they together don't understand Chinese, Searle says. And they are just like a computer with a program. So no computer will ever understand Chinese, even if they appear to do so.

But far from supporting this conclusion, the Chinese room is actually a very good argument for emergent qualities. Neither the person nor the book has an understanding of Chinese, yet their combination does, and together they function as a Chinese-speaking person with consciousness. Similarly, no single neuron in the human brain can speak a language or be conscious, yet these are true of the whole brain.

Searle's argument is said to apply to computers with programs only, but that is just another way of saying that as soon as you can separate a system into a processor and a program, or into neurons, somehow it suddenly loses all claims to be conscious, because clearly the component parts are not.

This is very much linked to how we define consciousness. The best we can do is to say that something is conscious if we think it is, or if it is like a human being, which we usually think is conscious. We refer back to Alan Turing again and his Turing test, which defines intelligence this way (something is intelligent if it behaves like a human being) — the equivalent may very well be the only definition we have of consciousness.

Also note that following from material perception, when we judge something to be conscious or not conscious, we can only use information of that thing that reaches us — in the case of the Chinese room, the pieces of paper coming through the slot. We cannot see 'inside' the thing to make our judgment. Something is conscious if it appears to be conscious, just like we deem another person sad or happy if they appear sad or happy — we don't dissect their brain first to try to see if they really are.

Free Will

One of the main arguments against seeing the human mind as a physical system is **free will**. A physical system is considered predictable, mechanic, whose future states can in theory be predicted from its initial one. How could such a system have free will?

There are many questions and problems bundled up in the above argument; we will need to restrict ourselves to just touching on them.

First of all, humans are largely predictable: psychology, psychiatry and sociology describe and predict our behavior very effectively. So maybe we have less of a free will anyway than we imagine.

Secondly, physical systems are only completely predictable in classical physics, and even there only in theory. For example, predicting the movements of three celestial bodies (just three, without anything else in this simple universe) using classical physics is already so complicated numerically, that it can only be predicted inaccurately and with very great effort.

In quantum mechanics, some randomness is creeping into physical reality, which makes such predictions impossible even in theory. Indeed, some physicists, like Roger Penrose, find free will exactly here.

But on the most fundamental level, what would free will be? It would mean that a human, given some well-known conditions, can choose to act this way, or that way. To test whether the human indeed has this choice and is not simply at the mercy of the chemical processes in its brain, we would need to recreate the initial conditions exactly many-many times, and observe if the human behaves the same way all the time, or its mind can shake off the shackles of deterministic physics and somehow contradict it. This is the basis of all (scientific) knowledge: repeatable experiments.

The sad truth is that we never are (or will be) able to recreate the initial conditions exactly. If nothing else, time has changed: in our world, time

appears to be monotonic, moving forward all the time, and we can never jump back to a previous point to do a 'what if' experiment. This means that we will never be able to determine if humans indeed possess free will or not.

Does this mean that all experiments are flawed? Yes, it does. But most systems that we experiment on are simple and robust enough, and they do not require a complete recreation of the initial conditions. If we release a cannon ball from the top of a tower, it will fall with roughly the same speed today, and tomorrow, if the sun shines, or if it rains. But free will precisely aims at determining whether there is any wiggle room in the laws of physics, and whether they can, somehow, be navigated or controlled. Such approximate experiments would not help us settle this question.

Some would argue though that time is not actually monotonic. There is space-time, and one can move in time similarly to moving in space. Therefore, it could be possible to recreate the initial state perfectly and test free will. It is indeed true that an almost forward flowing time is not inherent in most physical processes as they can happen forwards as well as backwards (with some extra conditions). Yet we do experience time as a separate, monotonic thing, and how this kind of time emerges is the subject of active research. As far as I understand, the

current theory is that due to how universes evolve, certain processes (that usually go forward in time) are simply more probable than processes that go backwards.

Ultimately though we do not have the final answer about time, while understanding its exact nature would be crucial in understanding a scientific experiment, an initial state, a consequence, or something that goes against consequences: free will. In summary, we simply cannot decide at the moment if humans have free will, and if it turns out that time is indeed monotonic, the question itself is nonsensical.

III. Entrapment

What is Entrapment?

We now know that when we perceive the world, it happens via our bodies, and these perceptions are also stored in a memory that is encoded in the body. These statements are trivial, but they have an important consequence: if we consider everything we have experienced, we necessarily find that each and every one of these experiences happened through the same body — our body.

In other words, we always, inevitably, feel to be inside our bodies. We always see the world from our bodies: through our eyes, and from the point in the world where our bodies are. We always hear, smell, and touch the world from the very same point, and we affect the world by movement and voice from our bodies as well. We are trapped in our bodies. This is called **Entrapment**.

Is Entrapment really true? It must be, because it is a logical consequence of how perception, memory and cognition work. Isn't it self-evident? In a sense, yes. But we tend to forget it. We tend to conveniently overlook how much we rely on our bodies in our existence.

We dismiss supposed phenomena that would go against this conclusion like mind reading, effect at a distance, out-of-body experiences, clairvoyance, etc. for the same reasons as before.

The Prerequisites of Entrapment

Next, we dissect the definition of Entrapment above, with special focus on what is required for its emergence.

First of all, notice that if Entrapment means that one is convinced that one always sees (and interacts with) the world from one's body, then it is equivalent to realizing that all previous interactions with the world happened via the same body as the current one.

Of course, strictly speaking, the body is not the same atom-by-atom as the one through which previous observations were made, but a sufficiently slow rate of change allows the mental faculty to keep identifying the physical body with its abstraction of it, and build a sense of permanence.

We are making no assumptions about 'who' is making the interactions or observations via the body. The above statement, although it may sound complicated, really just makes it explicit what 'always' means: that whenever something occurred, it occurred in the same way.

This means that Entrapment requires (1) memory (for one needs to recall previous interactions), and (2) some level of cognition (as one needs to be able to compare how these interactions happened).

Memory and cognition are therefore the prerequisites of Entrapment, and, by extension, of the Experience.

Memory

It is illuminating to consider what or who can satisfy the two requirements of Entrapment. Memory, surprisingly, can be quite universal — even a piece of rock can be said to have a 'memory' of things that happened to it (like chips missing or discoloration) as physical interactions will change its physical

make-up. In fact, any physical interaction, by definition, will do so.

We may consider here, as a possible counterexample, completely reversible processes, which, once reversed, would leave the rock in its initial state. But it is very unlikely that this could occur, as it is unlikely that the atoms of a rock, once disturbed (or simply moving about) can ever all return to exactly the same positions.

With this kind of memory, it is clear that the information carrier that records the events is the rock itself; that memory is at the same point in space as the 'body' of the rock. And we have already argued that human memory, in a similar fashion, is localized in the body, and, in particular, in the brain.

It is important to clarify that it is not allowed for the memory to 'remember' other interactions with the world that did not happen through the body, as then the feeling of Entrapment would not arise.

On the one hand, this is consistent with regarding the memory as part of the body, for what else the body, a physical system, would remember than the things that happened to it? On the other hand,

creating fake memories where we experience something that happened to a different person is actually one of the ways in which we escape the feeling of Entrapment.

Of course, they are not fake in the sense that information about another person, say, in a story or movie, reaches us as part of some physical interaction like sound and light. But then we focus on this other person almost as on ourselves, and regard their experiences as our experiences. Notice how we ourselves live through the emotions presented to us: we are frightened by a horror story, become excited when the hero finds a winning lottery ticket, become tearful when we see someone walk aimlessly in the rain against a backdrop of a violin solo.

This skill of living through experiences presented to us as our own is an extremely important human trait that allows us to remember, learn and benefit from others' experiences as if we lived through them. This is one of the main functions of art, which is the most effective at making us process experiences this way, teaching us about happiness, love, loneliness, loss, depression, and so on, all the while we are in a cinema, theater, or at home in an armchair, physically perfectly safe from the experience itself.

But this skill can also make us think we are, in a sense, one with another person from another time and place, thereby effectively escaping the temporal and spatial limits of our bodies. We travel in our minds. If we are unsatisfied with our lives, we focus on people we would rather be. If we are confronted by death, loss, and grief, we find solace in living through someone else's story. I call this **dilution.**

Not only is dilution extremely helpful as it allows us to acquire much more experience than we could do directly, almost tapping into a common consciousness of humankind, it is actually our main mode of existence. We are constantly distracted by stories, by reading posts from friends or by chatting to someone, where we focus on and identify with that someone else.

The flipside of this is that we pretend we are something we are not, and we forget to focus on ourselves. This diluted mode of existence masks our limits and the true nature of Entrapment.

Cognition

Let us move to cognition, more specifically, to the kind of cognition required for Entrapment. I do not believe we have a clear definition of what cognition is, or when we can say that something possesses it. The best we can do is, again, to fall back on a kind of Turing test, which in effect says that humans have cognition, and something else has cognition if it is sufficiently similar to a human (in some way relevant for cognition, whatever that may be). But there is a catch.

We may generally like a definition of cognition that says that rocks do not think (and do not die when we turn them into counter tops), but can we say for sure that crows, dogs or elephants do not reflect on their past experiences, or fear, or, however unlikely, think about death? What would make us absolutely certain that trees do not have some kind of cognitive powers, which may be the right ones to experience Entrapment?

The problem with the Turing test-based definition of cognition is that once an object or organism is unable to communicate its thoughts or feelings to us humans, it is immediately rendered insufficiently human-like and fails the test. For how would we even have a glimpse of the existence of these thoughts if we receive no information about

them? Dogs and trees may well contemplate death, but until we find a better way to communicate with them, we will never know.

Is there a Soul Inside?

But what is trapped inside the body? The notion of the soul comes immediately to mind, and with it innumerably more questions. Can the soul be somehow grasped or defined? What happens to it after the death of the body?

One can imagine the body as the actor on stage, and the soul, or self, or I (and so on), to be the playwright speaking through it. Or the body as the character in a video game, and the soul the player controlling it. This view would marry well with the tenets of reincarnation or the idea that souls have an afterlife having left the body.

But such a view seems to contradict experience and logic. Leaving one's body is at best uncommon, and at worst impossible — again, it has never happened in a controlled environment. Taking control of another body also falls into this category.

If so, we are forced to conclude that one soul is only attached to one body. How does it do that? What is the difference between human bodies that allows my soul to select my body? It appears fruitless to argue that some physical variation, like the DNA, accounts for this permanent link. This would of course fail in the case of identical twins. As we shall see, it is unclear where a body is, anyway, making such a link even more difficult to understand. And, in general, variations from person to person appear too small to control — somehow — something as fundamental as the identification of an external soul. It is, of course, no surprise that such arguments are doomed to fail, as they aim at explaining something supernatural in purely physical terms.

So why are we trying to grasp the human soul on materialistic grounds here, when it is clearly impossible? Science, by the very way it accumulates knowledge, is only able to know what is general, as it concerns itself with phenomena that are capable of being reproduced reliably and many times. Science, therefore, will never be able to account for individuality, which, perhaps, means that it cannot be expected to discover the physical difference between human bodies I referred to above.

To this we respond that if and only if the subject at hand cannot be satisfactorily explained within the materialistic framework should one consider anything meta-physical. When Napoleon asked Laplace, 'Where is God in your theory?' he

replied, 'I don't need that hypothesis.' Do we need it? Do we need the notion of the soul?

Entrapment and the Soul

Having considered memory and cognition in relation to Entrapment, and, separately, the mind, we see that these are all rooted in our physical bodies. And so, if memories are recorded in the body, then it is unnecessary and unlikely that they are duplicated in the soul; if thinking is done inside the body, then it is unnecessary and unlikely that any thinking is done in the soul.

The soul has therefore become an empty shell; without memories and without a history it is devoid of an identity. Therefore, even if there is a host of souls that animate our bodies, it would cause no difference if a soul attached to this body or another one — souls could even switch any time without any noticeable effect, as the memories they would see at any point would be from the pasts of the bodies, not from their own pasts.

Souls are therefore not needed to create the sense of Entrapment: the brain is complicated enough to do so. We can go further, as based on the above, souls are actually superfluous complications, and history has taught us the principle of Occam's Razor, which dictates that unnecessary things seldom exist.

IV. Body and Care

The Boundary Problem

There are no objects.

While this may sound somewhat surprising, it is in fact a simple observation. On the atomic or molecular level, nothing can tell us where one object ends and another one begins. The body, for example, is a collection of cells, which are collections of molecules, both held together not by chemical bonds but by secondary forces – while at the same time, dirt, dust, creams, parasites stick to the skin using the same forces. Objects we hold are kept from falling to the ground by friction between them and our skin – in other words, they, too, stick to the skin using secondary forces. So if there is a specific thing these forces connect to us, is it another skin cell of us or is it a piece of Camembert?

To highlight this problem from another angle, consider this: there is no way to tell whether a carbon atom around the surface of our skin belongs to us or to the cheese we are eating.

We call this the **boundary problem**.

That is, objects are abstractions of collections of mass in the world that are somehow useful for the observer to consider as a single unit. In other words:

Objects are subjective.

Our focus here is on the human body, and we can demonstrate its fuzziness by referring to the cellular, molecular and atomic levels. But it is worth noting that atoms and their constituent particles are also likely to be abstractions of even deeper levels of some physical reality, for example, the vibrating strings of String Theory.

What is the Body?

The body is the physical system that we associate with ourselves. Entrapment also suggests that, for all intents and purposes, it is the instrument of perception, that is, we use the body to perceive and, moreover, to interact with the world.

But what is our place in the world? Where am I? How far do our bodies reach? These questions are more complicated than they seem because in

reality, we do not know where exactly our bodies are.

In a sense, the boundary problem is the contradiction between the fairly certain human feeling about the place and the extension of the self and its body in the world, and the fact that microscopically, there cannot be a clear boundary.

To have a better grasp at the spatial limits of a body, let us consider bits of matter, or regions of space, that, if they change, have an effect on our mental state. Clearly, parts of the body connected to the brain via nerves fall into this category (a pinprick in one's finger causes pain, for example) and so we should consider them part of the body. But it can also be argued that changes to one's hair or nails (e.g. a bad haircut, a lock cut during one's sleep, a broken nail) can also affect one's mental state (cause distress) if discovered via visual or tactile clues. Indeed, we generally consider these parts of the body as well.

But notice that objects traditionally regarded as separate from the body, for example, possessions, can function very similarly to nails and hair: just consider the distress caused if one discovers that someone scratched their car while they left it in the supermarket car park.

Care

We have seen that the boundary between our body and the world is rather fuzzy, and that things outside our bodies can function similarly to it in that we care about them. This is quite obvious in the case of possessions: our shirt is no more or less alive than our hair; we are similarly saddened if either of them does not look its best, yet one is traditionally regarded as part of the body, while the other is not.

One could argue that the hair is somehow permanently attached to the body while it remains easy to take off a shirt, but on closer inspection this difference looks less and less clear: hair cannot be permanently attached as it grows and is replaced and sometimes some fall out, and we have the boundary problem which makes it clear that the difference between their attachment is merely one of grade.

In a similar fashion, the concept of the body can be extended to other humans whom we care about — for example, accidents happening to family members and loved ones affect us similarly to accidents happening to ourselves, while we are much less affected by events occurring to unknown people.

It therefore no longer seems very useful to talk about a hypothetical unified body; instead, we say that we are defined by a fuzzy collection of things (physical systems) that affect our mental state if information about them reaches us. We will call this region of space our **Care**. Care may also include concepts and abstractions like nation and country, which shows that Care is a crucial component of one's identity.

Dilution in Care

Care, therefore, can link other humans to us, to the self, which has an effect similar to internalizing experiences from others. That is, this is also dilution, just approached from a different angle: **dilution** in Care.

One can argue that the more the self, via Care, extends to possessions and other people of interest, the more it protects itself from its demise, its death with the body.

Experiences from others (art, communication) overcomes **localization**. They **generalize** the self.

V. Death

What is Death?

Death, at first approximation, is the destruction of our bodies. As we have established that there is no need for a soul (and so it likely does not exist), and that faculties like memory and cognition are functions of the body, death means the destruction of the self.

Note that here, we use 'body' in its original sense. In the case of one's death, other objects, organisms or humans in one's Care continue to function — while, arguably, the circle of Care itself ceases to exist.

Incidentally, it has been suggested that we humans disproportionately fear non-existence after our deaths, but no one cares about non-existence before we are born. This must be because of information. We seem to know something about the world before our birth, but we will miss out on everything that comes after we die.

What does the destruction of the body mean? Most events leading to death are not physically extreme (high-energy) enough to, for example, change the atoms in our bodies; they may not even change the molecules too much. What they inevitably change instead is the physical arrangement of the elements or parts of the body, which leads to the loss of various functions (movement, speech, cognition, etc.). Among these are the ones that are prerequisites of the Experience, so once dead, we can no longer have the Experience.

This change of arrangement that leads to a loss is similar to how information encoded in macroscopic systems can disappear apparently without a trace. We can burn books, destroy paintings and computers, and never be able to recreate the text, the picture, or the data. This will not come as a surprise to anyone, but it seems at odds with the assertion in quantum mechanics that no (quantum) information is allowed to be lost.

The likely explanation to this apparent contradiction is that a special macroscopic arrangement, used to encode some useful information, represents a very-very tiny amount of energy which is drowned out even by energies of chemical processes. A fire converting the carbohydrates of a book into water and carbon dioxide does not care much if the pages are filled with random letters or the text of Hamlet. It is likely true that burning a book of Hamlet will increase entropy more than burning a book of random letters, but this difference is likely to be very tiny. In other words, in the macroscopic word, we can store information virtually for free, but we can also easily lose it. And this is also true of life.

Therefore, **humans are information**. But at the moment we cannot download this information and store it in cloud computers to ask someone a question or let them see their children after they have died, so the best way to preserve this information is to let people live.

Agents

It is convenient to define death as the destruction of one's body, while we have seen that the body is an ill-defined concept. We introduced Care to take its place, but it is also clear that most objects or entities in a circle of Care survive if someone — a body — dies.

To be able to describe what we mean by death better, consider that different objects (remember that objects themselves are subjective abstractions over material reality) that belong to a circle of Care around the 'self' do so to different degrees. What we mean by this is that they belong to the circle of Care because information about them affects the self, but this effect can be larger or smaller. Actually, arguably everything is included in the Care, as all changes can be said to affect us to some degree, while it is also clear that e.g. this link between our finger and us is much more immediate than, say, between us and an unknown person.

If so, we can attempt to define the other extreme of Care — here, instead of extending the original body, restricting it to a region of space or set of objects that are linked very closely to the self. We name this the **Agent**.

We can then redefine death as the destruction of an Agent. It may be that the Agent does not include the whole body, or even the whole brain — we can consider someone to survive an amputation or a stroke affecting part of their brain. Conversely, we can mourn the loss of a person even if parts of their bodies, technically, survive.

As we shall see, the concept of the Agent turns out to be very helpful in our further investigations.

Do We Need Death?

Humans may be unique in the fact that they are aware of their own death. But is it required for the Experience?

It is important to note that **no one actually knows that they are going to die**. We merely assume, based on our similarity to other people, that we are also going to die, and with largely the same consequences. If one either rejects this assumption of similarity (for example, I could think I am superman — everyone else dies but this does not apply to me), or rejects that the outside world actually exists (people appear to have died, but this may not be real or true) then one can also assume that they will not die.

Of course, if one assumes that one will continue to exist infinitely (and without aging and ailments), it is easier to sidestep the problems posed by the Experience as even if one is limited in space (as the body is not infinite, and so one only has a narrow perspective of the world), one has all the time to compensate for this limitation. (Here we presuppose traditional space and time.) In other words, even if one experiences Entrapment, it can be seen much less of a problem; even if one is unique, it is much less frightening.

In this sense, being aware of death certainly makes dealing with the Experience more urgent.

Still, even without awareness of death, many aspects of the Experience continue to hold true. One is still limited to one's body, so Entrapment is there; one is still different from everything else, so so is the Primeval Difference, and one can still see oneself as unique. And it is likely still true that one's body, and together with it, one oneself can be destroyed with relative ease.

Overall, an entity that has the expectation to exist indefinitely may find it less important to consider different facets of the Experience, but it is still affected by them. Death is therefore not required for the Experience.

Entrapment means that the self is limited in space; birth and death mean that it is limited in time.

Surviving Death

We have established that humans are information. But if so, what happens to this information after death?

Clearly, with the disintegration of the system that is the I or self, the I as a generator of information ceases to function. However, in a sense, the information it expressed continues to function — its verbal messages are translated, reinterpreted, and through these processes it in effect continues to participate in various dialogs.

Is Plato dead when he argues in the head of a student reading *The Republic?* Is Shakespeare dead on stage? It seems any information continues to function as long as it exists, which entails that physically, it escapes destruction, and a manuscript, a recording, portrait, sculpture, painting or image survives. Pharaohs had their deeds recorded in hieroglyphs carved in stone apparently to make sure the text survives for eternity. Nowadays one can leave an electronic trail of information on the Internet and on various social networks. These trails can become our pyramids, as long as they are not forgotten, or simply deleted.

There is a very narrow channel of information through which we get to know another person: sight, hearing, touch, but perhaps most importantly, verbal communication. This is in line with the tenet of material perception. If so, much of this information, especially verbal communication, can be deferred — for example, when reading some writing —, and can also be deferred beyond the person's death. Such communication can continue to influence and so in some sense, for other people, the person continues to function almost as if alive.

Sadly, being not dead in the eyes of others is not a substitute for the Experience, the state of us experiencing ourselves. We feel that this would be lost even though we understand that after our deaths there will not be anything to experience the cessation of the I.

Will Quantum Physics Save Us?

While in our everyday lives most things obey classical (macroscopic) physics, it is now well understood that it is just an approximation for physical processes that are relatively slow and low energy. Quantum processes are still there, but we usually do not need them to explain things, just as we do not need an interferometer to bake a cake.

Yet quantum mechanics poses basic questions about our reality. One famous interpretation of why everything behaves like a wave and can be in multiple places and states at once until we look at it when it 'collapses' into being in a single place again is Hugh Everett's many-worlds interpretation, which basically states that this collapse is merely apparent: actually, everything can be in multiple states and places at once, but since it includes us, we only see one of the possibilities. That is, there are many parallel worlds, and they somehow contain all possibilities and configurations.

This idea has inspired many novels and movies that use alternative realities in their plots, and one cannot help but wonder if one could cheat death this way, as even if we die in one world, surely it is possible that we continue to exist in another. Sadly, the latest research into quantum mechanics and how it gives rise to the classical world seems to suggest that this is not so.

No, it is not that the alternative Copenhagen interpretation is true, which, roughly speaking, suggests that the collapse is real, but requires something with a consciousness looking at the system. That this is not true is not surprising because consciousness is not something that is a special physical thing.

Instead, quantum Darwinism suggests that non-classical configurations that are permissible in quantum mechanics (like a football in a superposition of being in two different places at the same time) very quickly deteriorate into stable states (which happen to be permissible classical states) when they interact with the myriad of particles that surround us.

So, it is not really someone looking at (in other words, measuring) a system that causes it to collapse into a normal, classical state, but its interacting with a big environment. In a sense, the environment keeps measuring everything which forces everything into becoming classical.

This is true of large collections of particles, which includes the human body. So, it seems likely that although we may need to invoke quantum mechanics to explain some processes, like how signals

in neurons are transmitted, large, macroscopic properties of our bodies, like our position, or basically whether we still function or are dead, are describable with classical physics.

One can also argue that even if we continue to exist in an alternative world, a version of us does cease to exist with death, which is an existential threat in itself, especially since no one has demonstrated the ability to communicate with alternative realities, so for all intents and purposes our only accessible version dies.

Can you Die without Time?

A set of unsolved problems in modern physics is regarding 'the arrow of time.' On the one hand, physical processes can happen both forwards and backwards in time (with some extra restrictions; for more on this, see the so-called CPT symmetry): if a ball falls down, it speeds up; if someone throws it upwards, it slows down at the same rate, just reversed. On the other hand, there are processes that we only regularly see happening in one direction, like a mug falling from the table and breaking into pieces.

Traditionally, entropy is cited as the reason why such processes do not happen backwards, as entropy should always increase; things should always become more chaotic. But this is not a hard law: entropy can be decreased with energy, and processes may happen backwards, just with much smaller probability. For example, if we shoot the pieces of the mug towards each other and ensure that the atoms inside the fragments are just at the right place, they may re-form their bonds and we may just be able to recreate the mug itself. It is just quite unlikely.

Moreover, as e.g. Roger Penrose points out, entropy can only increase if we originally started from a low entropy state. The beginning of the Universe, the Big Bang may have been such a state, but problems with this view of time do not stop here.

As I understand the state-of-the-art theory about why time is moving forwards is related to sub-universes (bubbles with specific physical constants inside) expanding and the flows generated by this process.

Now, if time is such an uncertain thing, and basically things are likely to move forward in time, but could move backward as well, just with a much lower probability, do we still need to reckon with the end of our existence? Here, as elsewhere, I argue that without a way to cheat death using loopholes opened by modern physics, we need to, we

can, and we should consider our existence in terms of classical physics, as our bodies are macroscopic.

It is indeed interesting and important to consider if our existence is determined by some quantum process, and whether alternative universes or reversing time to before our deaths would be possibilities, but such attempts can look like grasping at straws. Arguably, since our bodies are macroscopic, we should be able to use classical physics to describe our existence, death, and experiences highly accurately. If it paints an unfavorable picture of our existence, it may be better to learn to accept it as something that is probably largely true than to engage in quantum escapism.

Part II

VI. Introduction

In Part I, we introduced the Experience as a personal phenomenon. In Part II, we explore whether Others have the same Experience as well.

Empathy

At first sight it could seem that learning about the Experience and the fragility of existence could make people start valuing life as something to cherish and preserve, and avoid killing, maiming and hurting other humans as well as other organisms and structures, from animals and books to planets. In short, I was hoping to see that the Experience led to empathy. But there is a way it can all go wrong.

The Experience is a reminder of non-existence, of death, but, to be specific, it is a reminder of my death. It will likely lead to one valuing life more, but first it will make one value one's own life more. There is nothing in what we established so far that would force someone to think that others, other

humans, and maybe other entities can have the Experience as well, making them equivalent to us, and, most importantly, making their claim to existence the same as ours.

The Experience may lead to goodness and a more meaningful life if it is paired with empathy, but that empathy likely needs to have existed beforehand. Without it, protecting one's own existence could even be used to justify violence.

In Part II therefore I express the belief that other Agents also exist in the world, who can also have the Experience, who are therefore not in any way less valuable than myself. In short, I make the conscious decision to reject a Solipsistic world view — a concept we will define shortly.

Rudolf Carnap, in his 'The Elimination of Metaphysics Through Logical Analysis of Language,' argues that metaphysical statements cannot be proved or disproved by experience; instead, such statements express an attitude to life, a guidance of how we should conduct our lives. What we are doing now is metaphysics, and indeed we will express a diktat, tenet, or rule to guide us. And this guidance, the choice we are making, is that we choose to acknowledge

that Others exist, and their right to do so.

If Others exist and they are on the same level as us, then our world is filled with bodies as Agents. We start by trying to identify ourselves in such a world, and by exploring another world that is the opposite of what we want to live in — where only I exist.

VII. Selectedness and Identity

Selectedness

The arguments and statements we have made so far are objective truths. That is, they apply generally to all selves and all I's, even though we set out to understand our own place in the world. What we have said does not explain the subjective experience of being locked into one's body (Entrapment), of being limited in space and time in an apparently random manner (Why was I born in this place at this time?), of being **Different** from the external world (as everything else is not me), and of being **Unique** (as there is only one me).

It is as if one self (one Agent) has been selected to be I over all the others. But what does this mean exactly? How has it come about?

If we model our world as some kind of physical reality with a number of thinking Agents, and we look at such a world from the outside, we see that all Agents will experience Entrapment as long as they are physical systems. This is because then all their memories are encoded physically as well, and we can follow the argument we made previously about comparing previous memories to the current perception of the world and about the realization that perception always happens from the same body. However, nothing explains or illuminates why one of these Agents appear to be **Selected** to be 'I.'

We can look at the consequences of the same argument in different ways. One way is to say that whichever Agent is Selected, it will think that it has always been Selected since it experiences itself as a continuously existing entity with a permanence to its identity. That is, if this body is I, it has always been I, since it was the same body in a previous experience the memory of which is encoded in the body itself.

Another way is to say that even if Selectedness somehow migrates from one Agent to another, all information an Agent has access to from the past is still the memories encoded in its body. No information transfer happens with the migration, and so even if this migration is happening, no Agent can detect it.

Note that this is the same argument that we used to hollow out and ultimately discard the

notion of the soul. Indeed, the role of the soul we scrutinized, which was to identify people, and the role of Selectedness, which identifies the 'I,' is the same, and neither can be linked to anything in physical reality.

Selectedness therefore has some strange behavior. It seems to be there, but where, or whether it moves, cannot be detected. This can be explained if we say that Selectedness is not an objective, but a subjective phenomenon.

Note that we are assuming that only a single Agent is Selected. This tallies with our subjective experience and with Uniqueness, and mirrors our implicit assumptions that Entrapment is into a single body, and Care is centered around a single Agent. That said, we appear to be describing a subjective — psychological experience of identity, and in theory we could leave open the possibility of multiple Agents developing a common identity. After all, why couldn't I somehow think that I and George are one person? Can the notion of group identity be grasped this way? Can an identity somehow survive the death of an Agent if it is linked to

more? These are important questions, but for now we will disregard this potential complexity of identity.

The Clone Argument

The **clone argument** yields similar results. It basically says that creating an equivalent copy of a body (and Agent) does not change the Selected status of the copied Agent, and since the original and copy Agents are physically equivalent, Selectedness cannot be a physical property.

The argument runs like this: a body or Agent being copied does not experience an interruption in its existence, so its Selectedness cannot be altered by the procedure. If it was Selected, it continues to be so, which also entails that the clone cannot be Selected. In other words, **if I am cloned, my clone will not be me**. Finally, since the physical makeup of the original Agent and the clone are the same, Selectedness cannot depend on any physical information in a body. The information whether a body is Selected is external to its physical information — in fact, it depends on who the observer is.

But we have made many assumptions here. To begin with, due to Werner Heisenberg's Uncertainty Principle, it is not possible to measure atoms in the body to be cloned completely accurately. Moreover, particles in the original body are disturbed by the act of measurement, which we ignore when we say that Selectedness cannot be taken away from the original body by cloning. Also, the original body and the clone will necessarily occupy a different region of space — or time —, and so, in theory, they are distinguishable and necessarily different to some degree.

Still, as we argued elsewhere, it is unlikely that a body cannot be cloned accurately enough to expect Selectedness to apply to both the original and the clone; in other words, we expect that something as fundamental as Selectedness does not depend on minute variations on the quantum level. This suggestion is supported by the observation that in time, particles in a body undergo many-many changes, yet the body (both our own and others') is perceived to survive and be largely equivalent to its previous versions.

Note that the argument presented here is simply the previous argument, in new guise, against the possibility of a soul latching onto a body based on the fact that bodies lack some physical *differentia specifica* that would allow a soul to select a body or Agent. And let us remind ourselves that the boundary problem adds to the difficulty of finding such a link. If we regard the soul as the vehicle

which confers identity to a body, that is, if my soul Selects my body, we see how the two arguments are identical.

Identifying the Self

But, almost defying physical reality, we could take the clone argument to its extreme, and suppose that two, perfectly identical bodies exist at the same time and same place. Then we ask, is it possible for a mind or consciousness encoded in or implemented by one body to assert that it is not the other one?

Since all possible observations this consciousness or Agent can make is the same for both bodies, there is no way for it to do so. That is, it could identify either body as itself.

This is a crucial point. Objects, bodies and their identification are not objective phenomena, but are human — or, to be more general, mental or psychological — constructs. In other words, it is the Agent that learns or decides which body it is in. Admittedly, objectivity creeps in here as largely inevitably an Agent will learn to identify itself with the body it is implemented by, so this identification is predictable by an external observer, which lends this process some objective reality or constraints. But the

identification with the implementing body is not wholly inevitable: one can imagine contrived examples where an Agent — brain — is tricked to experience the world from a different body. Indeed, such ideas often surface in sci-fi as they undermine the normal sense of identity, with uncanny results.

Pushing the notion of learned self-identification to the fore can help us overcome some of the difficulties posed by the boundary problem. Although the two descriptions are logically equivalent, it is more fruitful to think that an Agent is learning not what it is in the physical world, but what it is not: first, objectively existing things that are outside its control, and second, other Agents or entities that are on the same level and have the same claim to existence as itself. Reaching this second stage is actually the second stage of our Journey, beyond the Experience.

As the Agent learns what parts of physical reality it is not, it no longer needs to answer the question 'Which body am I?' — and so we no longer need to define what bodies are, which, as the boundary problem shows, start who-knows-where, end who-knows-where, and are separated by who-knows-what. Instead, the Agent gradually learns to identify itself to different degrees with various regions and entities in space, effectively mapping its

physical core, the physical Agent, through the fuzzy body and finally its region of Care.

Notice that his negative learning appears to match well with theories about how infants experience the world, from initially thinking that they have control over everything — that is, that they are everything — to realizing that some objects behave independently and follow their own rules. To these, we usually learn to attribute objective existence.

This psychological model of self-identification also solves some paradoxes around clones: if something is perceptibly different from what I habitually associate myself with, I will say it is not me. This is true of perfect clones placed at a distance. I will not see them as me, which is what we expect. But this does not hold for a clone at exactly the same place as me, as I will not know which body I experience or am looking at.

VII. Solipsism and Beyond

What is Solipsism?

Solipsism is the idea that nothing is certain to exist — or actually nothing exists — outside my mind. A Solipsistic world view is what we expressly decided to avoid, but investigating it turns out to be most fruitful.

Notice that it is impossible to disprove Solipsism: I can simply maintain that everything, including you, is a hallucination generated by my brain. Counterarguments exist though which aim to show that Solipsism is not a helpful position to take. One of the most powerful ones point out that there are many things my mind does not seem to be able to control, like my hunger, or whether it is cold or hot outside, and so on. A model of the world where these do exist objectively (that is, independently of me or anyone else) is simpler than to say that I am imagining these things as well, but they are somehow different from other things I also

imagine that by contrast I can control. And, by Occam's Razor, the simpler model is true.

Not to mention the fact that if only I exist, and I imagine the world, I also need to image an I-in-the-world, something that seems to be inside the world. But this is actually I, capable of imagining a whole world, including its representation in the new world, and so on. Even if one can cut through the infinite loop here, or show that some of the thinking is faulty, this example shows how unnecessarily complicated a Solipsistic world view can become.

But Solipsism remains a valid model of the world. Nothing can ever happen that could force us to abandon this world view. The first counterargument I mentioned simply says that things I cannot control behave just as if they existed independently and objectively, so let us just say that they do.

Notice, however, that Solipsism could solve a lot of our problems. If only I exist, then by definition I am special and, in fact, Selected. It is not surprising that I become identified with my body, that I am Entrapped in this body, because there is no alternative.

Technically, my body may then also be imagined or hallucinated by my brain, in which case we still do not know why I am associated with that body and not another one. This is the same question as with objectively existing bodies, which shows that the two ways of thinking about the world are really equivalent. Maybe my brain specifically hallucinates a body for me, but this would be outside my control. If so, my relationship with my body would be just as uncertain as if it existed objectively.

Solipsism would Help

Notice that Solipsism, both in the sense we are using it in (nothing exists outside me), and its weaker form (no intelligent brain exists apart from mine), results in a world with a single brain / body that I can identify myself with, and this fact is objectively observable — provided that anything can be said to be objective in such a world.

As mentioned before, such a Solipsistic world would solve our questions about identity, Entrapment, uniqueness and Selectedness. We already know that any physical brain or Agent necessarily experiences Entrapment. So, there is no choice here, there is nothing more to explain. And as to

why it gets entrapped in a particular physical structure, how Selectedness comes about, there is no question or choice, either: there is just one suitable structure in the universe, so I am necessarily entrapped in there.

This is true in both space and time in the strong form, as really anything only exists when my brain exists. In the weak form, it is only true in space, as there we could imagine a universe before or after the existence of a suitable brain, when clearly I cannot exist, either. In both forms, if I exist, only one suitable brain exists.

And since there is only one brain in the universe, it is no longer a problem that we cannot formulate an objective statement, that is, find some physical aspect, that would be true of my body / brain, but not others. Conversely, we have argued that if there are multiple brains, that is, if Solipsism is rejected, any statement about the I is true of any other Agent or brain. It is never possible to grasp the special status of the I objectively — it is not an objective property of the universe. That is:

Rejecting Solipsism is asserting that there is no objective I.

Solipsism in Space and Time

Next, we dissect what we mean by Solipsism here. We separate two aspects of the fact that I am the only existing thing, which, somewhat crudely, we will call the temporal and the spatial. Temporally, this means that the world does not exist outside the time I exist; that is, there is no such thing as a world without me. Even if I was born at a specific point in time, and I will die at a specific point in time, the world only exists through me, so there is nothing outside this temporal region that we can meaningfully talk about. And that may include time itself. Spatially, we can say that when I exist, my brain (or Agent) is the only brain.

These two facets shortcut two different types of questions about our uniqueness and existence. We will now state them, as if Solipsism makes these questions around existence go away, then these are also the questions that need answering when we reject it.

The opposite of the temporal facet of Solipsism is that the world does exist when I do not exist. This immediately means that it is possible that I do not exist. So, the question here is: Why do I exist?

The opposite of the spatial aspect of Solipsism is that there are many brains in existence. This immediately means that I could have been another

brain. So, the questions here are: Why do I have this body (and not another one)? Why do I have this identity?

IX. Why

My World, Your World

Having rejected Solipsism, we are left with the questions 'Why do I exist in this universe?' and 'Why do I exist here in this body, and not somewhere (or indeed sometime) else?'

The second question asks about Selectedness, and we already know it is not a property of the world — it depends on who the observer or speaker is. That is, it is a property of a world-observer pair or dyad. If I observe the world, I can say 'This is my body,' whereas if Alice observes the world, she will indicate a completely different body. And we are both right. This is because I am talking about the world-me dyad, the world-according-to-me, while Alice talks about the world-Alice dyad.

Of course, using names would identify bodies objectively; we all agree which Agent/body is Alice. And you could say that the word 'I' is just a

language construct conveniently referencing the speaker. But the differences between the world-according-to-me and the world-according-to-Alice cut deeper. Our experiences of these worlds are significantly different.

We tend to forget that we are not experiencing the world, but the world-according-to-me. The sleight of hand of science is that it deludes us into thinking that we can experience the world directly, without the additional baggage of the observer, and that Alice's world and my world are always the same.

We Cannot Cope with Randomness

So why do I live in this body? Why do I live now, and not in the Middle Ages? Or in the future?

It is tempting to say that which body I am is completely random. From an outside point of view, we live in a universe that has a number of systems, all limited in space and time, that are capable of the Experience. We have been calling them Agents or brains. One of them happens to be this me, it is Selected, but we do not know which one will be Selected, or why. We know though that whichever gets Selected will necessarily think that it has always been Selected, and that nothing physical

separates the Selected Agent from the non-Selected ones.

Of course, it is not like there are candidate Agents, and one of them becomes me — the me is not pre-existing to be matched with an Agent later, but I exist through an Agent: I am the Agent. So, for all intents and purposes it is uncontrollable and therefore, in a sense, random, which Agent I am.

The problem is, we, as a species, are unable to deal with randomness. This manifests itself, among other things, in our clinging to a higher power or will, a design or a master plan in the world. We feel that it would somehow demean us if we conceded that, for example, we or humans in general exist as a result of highly unlikely random events rather than as a result of some necessity.

As an aside, let us, for the moment, forget about the question whether the Universe is deterministic, which would mean that there is a master plan. Even if it is, with our current knowledge and tools, we cannot determine it sufficiently to predict, for example, individual actions or thoughts.

Our thinking is teleological: that is, we seek a purpose in everything, even though every fact appears to point to its precise lack.

Is, for example, the fact that most organisms around us devote most of their time and energy to reproduction a result of a sentence in Genesis? Cannot one argue that in any population where some living organisms focus on creating offspring, and others do not, the former will soon crowd out and finally destroy the latter? Looking at the overall population a few million years later, as we do, we will hardly see any exception to the reproduction rule. Or, to take another example of teleology, what would we think of Douglas Adams's famous sentient puddle, who gets convinced of the existence of a deity because he fits his hole so well it must have been designed for him?

But our inability to grasp randomness does not end here. There is also our sense of justice. It is unusually hard for us to accept that random bad things can happen to otherwise good people. While it is natural and laudable for everyone witnessing an unfortunate accident to wonder what could have been done to prevent it — for example, lock your doors, drive at an appropriate speed, and so on —, we usually go further than that, and, deep down, remain sure that the victim must have done something to deserve what had happened.

It is not difficult to see this kind of thinking in action: take one of the worst crimes, rape. Who has not heard that the victim 'had it coming,' encouraging healthy males by lewd behavior and scant clothing?

And then, last but not least, there are the games of chance. I hope no one thinks that anyone would spend real money on horses, blackjack, lottery or fruit machines unless they believed in lucky streaks and third time's the charm, almost deliberately turning a blind eye to the fact that one draw, deal or race has, or at least is supposed to have, no effect whatsoever on the next.

Randomness is a beautiful and liberating thing. We need to stop believing that our thoughts or wishes can alter the course of events, or that anything has happened, ever, with us humans in mind, and the world will be a better place to live in.

This kind of teleological thinking is why saying that there is no real reason why I exist here and now, why I am who I am, feels like shrugging our shoulders. I do not know — so I will say it is random. It does not feel satisfactory, and that is entirely expected.

There are self-help books that say that the sure way of achieving or getting something is willing it to happen, or imagining that we already have it. In my opinion, this technique works because it pretends that there is agency where in reality there is none; it pretends that we have total control and responsibility over something where we probably do not. If we do not get the desired thing in the end, it was because we did not really want it; if we did, it was because we did. We no longer need to face the randomness of our environment, as the I supposedly has complete ability to act and control.

But it is clear that this is little more than victim-blaming directed against ourselves, where we would rather blame ourselves for not being successful than to face an inherently unpredictable and unjust world.

Unification

By this point it is clear that Entrapment, the Primeval Difference, uniqueness and Selectedness are different facets or expressions of the same phenomenon. In other words, any physical system that is capable of experiencing Entrapment will

necessarily do so, and will necessarily think itself unique, different and Selected. These concepts are one and the same.

I always experience the world from my body, so necessarily my body is different from all other bodies.

I have no other point of view, so my body is also unique.

I experience from this body, and not another, so clearly this body has been Selected.

What makes these connections even more obvious is if we return to the argument against dualism, against the idea that the body is somehow separable from the self. We have already argued that **I** am my body, or, from the reverse point of view, the body gives rise to the **I**, the body defines the I. If so, the above statements can be rephrased as follows:

I am this body as I experience through it. I am different from everything else.

I am here; and everything else is not here. I am unique in this regard.

This is me.

One can see how even the concepts of uniqueness and Selectedness melt away and become non-sensical once we understand that the I is wholly the

product of the body. How would not the I think it is unique to itself? How would it not think it is Selected, which becomes a tautology simply asserting its own definition and identity?

Our second question was why I wasn't another body. Now we also see how that is impossible, or is even a meaningless concept, since I am defined by it. It is the same basic identity issue that is highlighted by the children's joke: it's a good thing that I am not a rabbit, because if I were, I would eat carrots, and I hate them.

The Necessity of the I

The first question we were left with having rejected Solipsism was why I exist at all.

After all, an objective Universe was happy to exist before I was born and will exist after I die. In fact, for most of its existence, there is no I. And if it is possible for the world to exist without me, why does it have a period at all when I am included in it? Why are not all Agents or bodies Others, with no one being Selected?

We have again fallen into the trap of asking a misleading and meaningless question. We already know Selectedness is not objective, but depends on the point of view, on who speaks, and that all bodies necessarily deem themselves Selected.

We also presupposed that there can be a state of the Universe without I. But there are multiple problems with such a Universe. To begin with, as we argued multiple times, we do not and cannot really know if the universe existed before I, or will continue to exist after the death of the I. This is what makes Solipsism possible. We merely surmise, based on our observation of Others, and based on an assumption about the approximate equality of all humans, that since they die and the world continues to exist, I will die, too, and the world will simply go on without me.

Also, I can never experience a world without I — there would be nothing that could experience. When we theorize about a world without I, we imagine looking at it from the outside (indeed this is why souls are imagined to go to a place outside the world after our death), but that can never actually happen, because there are no outside minds. All brains and Agents are embedded in the Universe as physical systems, with now well-understood consequences.

If I experience, if I think, I necessarily exist — here we reach the same conclusion as Descartes. Therefore, any kind of thinking presupposes the existence of the I in the world. It is necessarily true

when making any kind of statement about the Universe; in other words, we necessarily evaluate logical statements about the world against a world with an I. In a sense, these statements always have a speaker, and the speaker always exists.

So why do I exist? Because I cannot not exist. However unlikely, it is a precondition about the world that must be true simply because the I is looking at this text.

This is similar to the existence of life on Earth. Even if it is unlikely, it is true, so it is implied in or a precondition of all statements we make.

Do these Questions Make Sense?

Unsurprisingly, questions like 'Why do I exist?' or 'Why am I here?' are not well-formed, because the referent of 'I' (and 'you', 'we', 'they', etc.) is not objectively defined. There is no objective meaning of 'I': the only case when the 'I' has an objective meaning is in Solipsism.

We can do two things to fix this.

We can make 'I' mean something if we require that the statement referring to 'I' is uttered by an Agent or other system. The 'I' is then understood to refer to that Agent. But in this scenario it is implied that the I exists — it cannot be otherwise. The other thing we can do is to change the question to remove the 'I', and name the entity in another way, such as 'Why does Paul exist?' This question is objective, by which I mean its sense does not depend on who utters it. It is therefore also applicable to Solipsism where we can question why the sole Agent exists.

'Why does Paul exist?' can again mean 'How do we know Paul exists,' which is a question of identification, or 'How did it come to pass that Paul exists?', a question of origin or genesis, to which we do not know how to reply yet.

But Why?

We understand now how the feelings of Entrapment, Selectedness, and, ultimately, the Experience arise, and that they are universal. We understand how the I's are defined by their bodies, and so exist because their bodies do.

'But why do I exist?' we insist. 'Why am I here and now, and not somewhere and sometime else?' This whole chapter is dedicated to Why? questions. But, ultimately, there are no good answers.

Imagine that someone shows a photo of a cat on a computer screen. 'A cat,' you say, and then they ask, 'Why?' What do they expect to hear? That it is a cat because it falls neatly into the cognitive category termed cat in the English language? That it is a cat because it has pointy ears and has fur? That the picture is a cat because the second pixel from the top left corner is gray? That I said it is a cat because the right neurons fired in my brain and those triggered my muscles to form this word? Or that I said 'cat' because I wanted to appear engaged in their horribly boring demonstration? It is unclear what kind of answer would satisfy them.

John von Neumann once said that in mathematics, we do not understand things, we get used to them. I think it is true of all knowledge.

When we learn to drive, we do not get to understand the car by having an eureka moment or by memorizing all the minute details and mechanisms contained in it. Instead, via experience, we gradually build a mental model of what we can expect to happen if we operate various controls. We get used to how it behaves. We become familiar with it.

We can listen to musicians or historians talk about Beethoven's 9th Symphony. We can learn about all the key and tempo changes, and personal ailments of the composer when it was written. Will we have an eureka moment of understanding the piece or our experience of it? I do not think so. Gradually, we become familiar with many aspects

of it. Gradually, by talking and talking about it, we delude ourselves into thinking we understand.

Similarly, by talking and talking about them, the feelings and experiences of existence as a physical system become familiar, and less overwhelming. We recognize them as universal, and so we accept that they apply to us. We no longer ask the big Why? questions because we cease to question what is familiar.

And we also understand that a Why? question cannot be satisfied. It asks how something originated (its genesis) at the same time as the intention, goal or reason of the thing (teleology). And in the case of existence, there is hardly any origin, as it is a logical necessity; and no goal or reason as our world is controlled by randomness.

So, instead, we talk **about** the thing, and keep talking until the thing becomes less frightening and alien. Then, we move on.

Why do I exist here, and why do I even exist? I do not know if these questions can be answered. There is a degree of immediacy to the realization that I am a given physical system with limits in space and time, and I do not know how I got here. There is comfort in the thought that all other similar physical systems do, or can, feel the same, but it will not really get us out of our predicament.

It is clear we do not really know what we are asking, or what kind of answers we are looking for. It is likely that language is inherently incapable of expressing something wholly subjective and personal as it exists as a tool of communication between many entities. It might be true that no statement about this special status of the I can be formulated in any meaningful way. These observations do not really help, but they may show that nothing ever will.

X. Others

It Could be You

We do not even need to go as far as claiming that where or when I exist is random, only that there is no real reason for my identity, for whichever body or Agent is Selected.

This is because if so, you could have been any other body or Agent. Therefore, next time you see misfortune befalling someone else, just remember: **it could be you** — provided of course that the subject of the misfortune is capable of the Experience. What, if not this fact, can generate empathy?

It could be you, we say, except of course that it could not: our identity is given by the it, the body, the physical structure, so if it was you, you would not be you anyway.

Or one could simply quip 'It could be me, but, it isn't,' falling back to a self-centered view of the world we are looking to avoid. Nevertheless, if we

interpret 'it could be you' as an assertion of the equal value of my and the Other's existence, and the common right to exist and ideally have a meaningful existence, too, then we see how keeping this in mind can help us.

XI. Conclusion

Respect

We saw how the only requirements of Entrapment are memory and cognition. We saw that the amount and complexity of memory required is limited; we argued that almost inanimate objects can be said to possess enough of it. Cognition or thinking does not need to be very advanced, either, although it requires self-reflection.

We see therefore that the Universe is populated by systems that experience Entrapment, and, ultimately, Selectedness. These could be people, animals, plants, stories, ecosystems, galaxies, and myriad other things. But we all face the same irrational reality and the same somber experience. We are all unique — being unique is not unique at all.

What we live with in our Universe commands respect because of this. It will not be possible to pay

equal amounts of respect to everything and preserve everything. We exist in some kind of balance; we exist at the cost of others. Even if we aim to avoid unnecessary suffering, even the act of washing our hands to avoid our own or others' illness kills millions of cellular organisms.

But we can start to notice.

The philosopher Agnes Heller said that the main difference between the Middle Ages and modernism is not that people are now equal. In reality they are still not equal in front of the law, or in their wealth or possibilities. The main difference is that now people think that inequality is a problem.

We can start to think that living constantly diluted and lost in other people's lives and paradoxically putting our existence first is a problem. We can pause, and by considering our own existence refocus us on what really matters and reconnect with all others that exist.

Admittedly, it is difficult to feel responsibility toward the existence of something on a completely different scale like a star or even a mountain. But we can start by respecting the existence of something closer, so we can at least say: We humans.

Psychological Constructs

At this point it is clear that the concepts of body, Agent and Care are fuzzy at best, and uncertain to the point of meaninglessness at worst. This is because, as every abstraction, they are psychological or cognitive constructs. We are making the decision what we regard to be part of our bodies, and what we care about. These processes follow a few rules in our world, though, and can also be misled. A brain, for example, could be tricked into thinking that it is somewhere else or is connected to a different body by replacing and overriding all neural signals that reach it.

The rules governing the construction of the body and the circle of Care likely evolved together with us. They represent what is important for our survival, for the physical survival of the Agent. The body sustains the brain, and it makes it possible to interact with the world to recognize and avoid danger and find and consume energy sources. So, a suitable nervous system evolved to convey sufficient information about the state of the body and information from receptors to the brain.

Already acquired energy sources (food) or objects that will contribute to them (domestic animals, land) or to our protection (buildings, home) are, by extension, also important, and humans

establish suitable information flows about them and integrate them in their circle of Care. It is the basic rule of survival that leads the human brain to almost universally place the home, the car (if available), food items and (by extension) possessions in its Care, and be affected by whatever happens to them. It also excludes part of the world, for example humans it perceives as different or Others, presumably to conserve energy, as it would be impossible to tend to everything.

But even though these general rules hold true most of the time, the fact that the body, Care, and ultimately a sense of the self are constructs means that they are rather fluid and can incorporate information from all sorts of sources, which will be important going forward.

Preconditions of Speech

Earlier we have described how the existence of an I is necessary and is implied by any kind of utterance, even by posing a question. This makes answering any kind of Why? question difficult, because the statement questioned is usually automatically true, and the only reason it is true is because the question was asked.

As soon as an I asks a question, the I necessarily exists. Because usually we consider something that can ask a question to be alive, life necessarily exists in the given universe as well. If we know that the questioner lives on Earth, then we also know that life exists on Earth. If the questioner is human, then we know humans exist. As long as the questioner is a live human on Earth, these cannot be otherwise; so how would we answer the questions Why is there life in this Universe? Why is there life on Earth? and so on? We could point to facts that appear to make it more likely that these are so (e.g. temperature and water on Earth, etc.), but ultimately the only reason these statements are true is because these questions were asked. That is, the existence of the I, life, and life on Earth are preconditions to an earthling posing a question.

If the questioner lives in Africa in the 15th century, they may also ask why they live in Africa, or why they live in the 15th century. Notice that these questions are less obviously tautological because we are aware of alternatives: humans have lived outside Africa and in other centuries, but we are not aware of life or humans elsewhere than Earth. However, the same principle applies. The only reason it is true that the questioner lives in 15th-century Africa is because they do.

Identity from Dilution

Another important aspect of considering alternatives like living in another place or at another time is that, again, identity is generated from facts of the body and its circumstances. The I cannot live in a different place or a different time for the same reason it cannot live in a different body: because it would cease to be this I; it would be another one.

This is, of course, the strict interpretation of identity. We are compelled to allow for some flexibility here as we would not like to say that Alice today is a completely different identity than Alice yesterday, although they clearly differ. As with all objects and constructs, we are prepared to see permanence where the change objects undergo is sufficiently small. With big differences, we do tend to see other people as different than before, for example, if their appearance has changed considerably, they have changed their gender expression, or we have learnt about an important aspect of their lives like sexuality.

This means that if we are prepared to accept more differences and still see the identity as the same, we can consider the I living in a different body, at a different time or a different place. What is even more captivating, is that the I forms its identity (as a construct) from the information available to it from its body and environment. If we allow extra information to contribute to this process, who is to say that, in a sense, an I could not form a 15th-century identity by incorporating a large amount of information from that era? This would undoubtedly be dilution, but not unthinkable: consider how we identify ourselves with characters in stories even if their circumstances are considerably different from ours, and how the incorporation of their information is identity-forming.

Cube People

Imagine a rectangular table, on which we keep throwing small cubes of different colors. These represent various objects or bodies. Also imagine the rule that once three cubes fall on each other and form a little tower, they become an interconnected body of sufficient complexity to have memory and cognition, the kind that allows for the emergence of Entrapment and the Experience.

Once a few of these towers (or cube people) have formed, we can imagine them asking all sorts of questions.

'Why do I exist?'
'Why do I live?'

'Why do I live on this end of the table, and not on the other, like Bob?'

'Why do I have two yellow and one red cubes, and not three greens, like Alice?'

How would we answer them?

The trick here is a perspective shift by pretending that the questions we want answers to are posed by someone else, and we (the I) need to answer them. By doing so, we have removed all the hidden preconditions of speech that arise from the I uttering a question, and we have made them more explicit as now an external entity is the questioner. Notice also that we have repositioned ourselves outside this table-world, and created, for the moment, an external mind. Remember we have argued that despite we usually feel our minds to be external, there are no external minds in our world, which in fact prompted some of the difficult aspects of Why? questions we are aiming to answer.

Another facet of this trick is that it allows us to return to an investigation of bodies and minds that are all objective and external to us as was done in the first part of the book. We understand that they all experience Entrapment and Selectedness, but we no longer need to consider how the subjective Selectedness of the I arises, which is how we started the second part. The cube people allow us to take the convenient external viewpoint again.

So, how do we answer the questions of the cube people? We need to tell them that without the preconditions around the I clouding our vision, **our existence and circumstances are truly random.**

'Why do I live?' Because three cubes happened to fall on top of each other, forming your body.

'Why do I live on this end of the table?' Because you happen to be the cube person who lives there. Have we thrown more cubes there? Then we can tell the cube person that it is more likely that they are born in this side of the table. Will it satisfy them? After all, likelihoods tell little about the fate of one specific individual.

To highlight another facet of this, imagine that having black cubes means being poor. 'Why am I poor?' Have we thrown around more black cubes than other colors? Then we can explain that more poor people live than rich people, so it is more likely that one is poor. Again, this does not explain why the specific questioner is poor. Have we thrown more black cubes on one end of the table? Then we can say that they are poor because they live there. Will it satisfy them? Maybe their next question will be why they live there then.

'Why is there life on this table?' Because the existence of special cubes and someone in the habit of throwing them neatly converged to create an

environment in which cube people have a chance to emerge.

'Why do I look like this?' Because you need three special cubes to reach the complexity at which you can ask questions. All the other creatures in this world, consisting of one or two cubes, are perfectly valid and may have some memory and cognition, but they cannot ask questions (at least in a way that we would understand), so the fact that you are asking a question implies that you consist of three cubes.

'Could I please have a green cube instead of this yellow one?' Sure, but a third of your memories and cognition are in that yellow cube. If we swap it out, you may not even remember hating the yellow cube and wanting a green one. You may even start hating the green one. You may become a completely different person.

Note that the cube people's existence is not random because their omnipotent benefactor, the Cube Thrower, strews cubes randomly in their world. If we create only green cube people on the left side of the table, and blue cube people on the right, any answer to their question as to why they are this color and not the other is still ultimately circular: you are this color because you live on this side, and you live on this side because you are this color. Their existence is still random in the sense

that it lacks a reason applicable to that given individual. In other words, even if there was a god who purposefully created green and blue people with a specific plan as to what they will do, there is still no inherent reason why a given person is of a specific color because their identity does not exist outside or prior to their physical being.

The identity and existence of the cube people arise from their cubes, just as our identity and existence arise from our bodies and their place in the world. Any one of these bodies querying why they have that given identity, how it arose and whether there is any reason behind it can only be given one answer, the one I am forced to give myself.

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