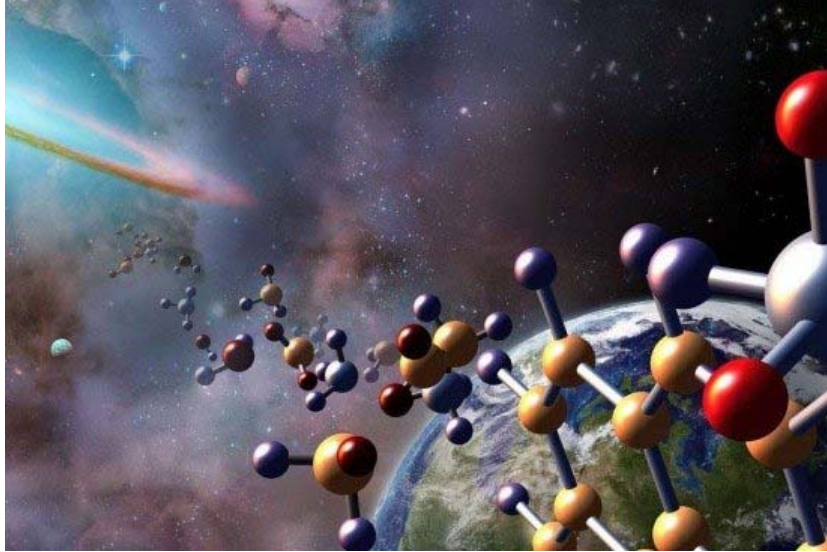


Intelligence, Consciousness, and the Origin of Life



Then the LORD God formed a man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being.

– Genesis 2:7

What is the relationship between consciousness and evolution? Is there consciousness in all existence, or is it only experienced in more evolved forms of life? At which point of evolution can it be said that consciousness actually begins? We can be certain that more evolved animals are conscious, at least to their environment. But what about less evolved forms of life, such as bacteria or plants? After all, they are made from the same organic cells as we are. And what about inorganic compounds and chemical elements? Is a rock or air, which are filled with atoms, conscious? Are the atoms themselves conscious? These are deep questions that are difficult to answer. Before answers can be found, we must first have a reasonable definition of consciousness, as well as a basic grasp of how life has evolved to such a point that we can actually think about and understand the pathway of evolution and purpose of life.

Life is constant movement, change, and evolution. There is no such a thing as a final end to the physical world, only an unending cycle of the metamorphosis of all that exists from one form into other forms. When a physical form decomposes, all of its components return to the elements or



simpler compounds that made them up. So it doesn't ever truly disappear. These simpler particles can also decay, but in this case, they are transformed into different elements or compounds. According to the first law of thermodynamics, energy and matter can never disappear; it can only change its state.

Matter is made up of atoms. Each atom is like a mini solar system, filled with mysteries that we, as of yet, do not fully understand. In the beginning of evolution, atoms started combining with other atoms to create molecules, which in turn form various compounds and then energetic reactions and conversions, such as electromagnetic radiation. The age of our universe is estimated to be 15 billion years, and the age of the earth 4.5 billion years. At a certain point, sometime between 3 to 4 billion years ago, evolution crossed the boundary of pre-biotic chemistry and gave birth to the first cell. This was the beginning of organic, or biological, life as we know it.

Just as atoms are considered to be the units of matter, cells can be seen as the units of biological life. A cell can exist on its own, or when combined with other cells, it can be part of a more complex organism. When we say something is alive, we imply that it has a cellular structure. Each cell is a basic particle of individual existence: it can metabolize, reproduce, and protect itself from the environment. It is surrounded by a membrane which, much like the walls of a house, serves as a clear boundary between the cell's internal and external environments. Life on earth began at least 3.5 billion years ago. The earliest evidence of multicellularity dates from between 3 to 3.5 billion years ago, when cells agreed to live together and become part of a more complex system, a multicellular individual identity. From fossil evidence, it was only about 550 million years ago, during what is called the 'Cambrian explosion', that the diverse animal kingdom that we know today began evolving.

Basic cellular composition is the same in both plants and animals. The human body is made up of countless cells, of which different groups have developed high levels of specialization. Among these, some make up the muscles, some the fat, some the inner organs, and some others the brain and nervous system. The human multicellular system is unbelievably rich and complex. What caused these cells to organize? The greatest minds on our planet could not even come close to designing such a high level of organization between cells, and our knowledge of the human body is still very limited. Cells that live and function together need a whole new set of tools. They have to come up with ways of staying together, communicating, and sharing oxygen and other nourishment. They also somehow need to understand the plan directing specific cells to take on specialized jobs in



different parts of the body. There has to be some kind of intelligence orchestrating these things, one which is far beyond Darwin's principle of natural selection. Natural selection certainly does have some validity, although it sees evolution from a rather simplistic point of view, without really explaining the 'why' of life.

It took a long time for single-cell organisms to evolve. Each cell exists as something of a separate, mini universe. And what are these cells composed of? They are made up of molecules, which are, in turn, composed of atoms. But the molecules of life, biological molecules, are not just any molecules. For organic life to have begun, specialized carbon atoms first needed to develop. Atoms differ in their internal structure, such as by the number of electrons, neutrons, and protons they have. For example, the most common natural carbon isotope, carbon-12, contains 6 electrons, 6 neutrons, and 6 protons. It is the energy of the electrons that causes different atoms to bind, creating different elements, such as gases and metals. Each different chemical element is made of atoms having the same number of protons. Ninety-six per cent of the human body is composed of just 4 elements: oxygen, carbon, hydrogen, and nitrogen, with the remaining 4% being a variety of other, mostly trace, elements. Oxygen, carbon, hydrogen, and nitrogen are known as the main organic elements because they form the building blocks that make organic matter possible. It was the combination of these elements that allowed the creation of a single biological cell and the birth of life as we know it.

But, coming back to our main topic, was there consciousness before biological life evolved? How do atoms choose to behave in a certain way, so that they can organize themselves into molecules, cells, and multicellular organisms? Is consciousness already in life's basic atomic units? There is a belief in some spiritual traditions that consciousness is in everything. But is this true? In order to say that everything is consciousness, we must also include the inorganic realm in this 'everything'.

However, for consciousness to be conscious, its subjective dimension of me has to be evolved or awakened, even just in a minimal way. There is no such a thing as consciousness without me. Of course, we can use this term in a wider sense to include a kind of pre-conscious, instinctive, rudimentary consciousness that lies at the base of the physical universe. For instance, an electron is not a mere inanimate particle – it is alive and has a purpose. Because it has a purpose, it contains information and an intention that is directly linked to the wisdom of life. Perhaps it even has an element of free will and makes choices; at least, this is what seems to be implied by some quantum mechanics discoveries. The information contained in atoms is not enough to result in self-reference



or a sense of me. Their purpose seems to be more about evolving into more complex structures, such as giving rise to organic life. Instead of using the term 'consciousness', it may be more prudent to say that there is intelligence in atoms: a type of pre-conscious combination of information and intelligence.

Is it True that “Everything is Consciousness”?

Saying ‘everything is consciousness’ could be intended to mean one of two things: that each basic particle of matter is conscious, or that all matter, both organic and non-organic, is embraced within universal consciousness. These are two very different interpretations. The main problem with them is that people who use these concepts indiscriminately do not really understand what they are saying. It is therefore important to look at the underlying meanings and implications of each of these concepts. In the normal understanding of the term ‘being conscious’, it is highly unlikely that universal consciousness maintains continuous awareness of every aspect of manifested reality. It might rather be said that universal consciousness created various physical and energetic laws by which the physical universe is unfolding. However, staying with the sense of the term ‘being conscious’, it is much more likely that universal consciousness is selective, meaning it is only conscious of those aspects of life that are themselves conscious of their higher subjectivity (having realized the light of individual pure subjectivity). To clarify: it is probable that universal consciousness is only conscious of those manifestations of the objective universe that have crossed threshold into pure subjectivity, meaning their me has reached union with universal I am.

The next question, a crucial one, is whether the elements which constitute the building blocks of the manifested world are, in themselves, conscious. Here, again, we must be clear about the meaning of ‘conscious’. Being conscious of what is external to us is very different than being conscious of oneself. As an example, most humans can be regarded as being relatively conscious of their environments, but they are not conscious of themselves. The answer to the question ‘who am I?’ is elusive for them. By this definition, we can say that if humans are invariably not conscious of themselves, it is unlikely that atoms are either. It is also unlikely that atoms are conscious of their surroundings, because for that a sense of me is required. Having said this, it would be a mistake to think this means that atoms do not possess intelligence.

Intelligence is the fabric of life. This is something physicists have repeatedly failed to acknowledge. They discovered that time, space, and gravity are interconnected, but they rather prematurely



pushed intelligence aside, as if it belongs to some uninvolved third party 'observer'. Intelligence is an indivisible part of the space-time continuum. Once one realizes this fact, it is obvious, and yet the vast majority is not aware of it. Even scientists, who are exercising their own faculty of intelligence, are unaware of what intelligence actually is. Although their minds have developed to an extraordinary level of sophistication, they lack spiritual intelligence, which, from a deeper perspective, means that they are not really conscious.

This seems to be a paradox in human development. Gurdjieff said, "The greatest barrier to consciousness is the belief that one is already conscious." To attain a much deeper and fuller understanding of the universe, scientists would have to awaken spiritually, but they have a deep resistance to entering the inner path. That resistance seems to have two main reasons. The first one is that the inner path and spiritual awakening does not conform with their principles of a 'scientifically' verifiable reality. The second is that their minds are so busy with complicated thoughts and suffocating layers of mental energies that it has become impossible for them to meditate. They have become so dependent on, and addicted to, their mind that it has effectively crystallized, trapping them in a mental prison.

From Information, to Intelligence, to Consciousness

In addition to and beyond the physical components, there are three nonphysical, invisible building blocks of reality: information, intelligence, and consciousness. Information is always present as the indivisible base of all that is. Energy is also information, and an atom's existence cannot be separated from the information it carries. As an example of information's inseparability from its 'host', our mind is composed of infinite bits of both conscious and unconscious information, and if all this information were removed, the mind would have no substance and would cease to be a mind.

Next, there is intelligence, which causes information to behave in a certain way. Basic intelligence can be defined as the will, or pre-set programming, of information to manifest particular actions. For instance, an atom may remain on its own, or it may bond with other atoms. This goes far beyond information because there is a choice being made. Interestingly, in the past, great thinkers, such as Descartes, favored a more mechanical interpretation of reality; they were like children, fascinated by mechanical laws and how things could be assembled and function mechanically. When Descartes was asked why a dog cries when it is beaten, he answered that a dog is the kind of machine that is supposed to behave in that way. Later on, he even wrote a treatise, "Man Machine,"



in which he extended the principle of mechanics to human beings. We can take issue with this interpretation of human behavior for obvious reasons, but it did have beneficial by-products, such as allowing people to appreciate – and get in touch with – how mechanical their psychological, emotional, and physical conditionings are. The mechanical man Descartes described reminds one of Gurdjieff's 'man machine', but the latter's teaching also said humans have the capacity and responsibility to transcend their mechanical nature. For Gurdjieff, one is born a machine, but one is meant to become a soul.

There is no doubt that information and intelligence permeate nature. The latter is not what would be considered pure intelligence, but a very rudimentary intelligence which is at the base of all life and matter. This intelligence is embedded in the instinct of life, and underlies the hidden purpose of creation – evolution into consciousness. So while that basic intelligence is indeed partially 'mechanical', it also has the capacity to evolve, learn, and graduate into making its own increasingly higher choices. If we are able to see this intelligence in all things, we cannot fail to be amazed and lost in wonder. We are not merely living on the planet earth – we are living in an incredibly complex, sophisticated, and extraordinary realm of intelligence. Even the simplest events in the physical realm are governed by this extraordinary intelligence.

So we have information and intelligence. Where and how does consciousness figure in the scheme of things? For consciousness to come into existence in the realm of manifestation, the sense of me has to be developed, or else our reality is just limited to the interplay of information and intelligence. The development of me is the highest and greatest miracle of life on earth. The trouble is it takes 'me' to appreciate 'me', and that me is so undeveloped in most humans that they are neither aware of its existence nor even of its potential to exist. From a spiritual perspective, this is nothing short of a tragedy. If existence gave you a 'me' as your very purpose and destiny and you do not recognize it, meet it, appreciate it, and realize its essence – what are you? From the viewpoint of reality, those who do not honor and fulfill the goal of the awakening of me must be seen to have failed in their evolutionary purpose. This is not a judgment, but an objective observation. We have been granted a certain degree of free will and are wasting the precious opportunity it offers. Our responsibility is to serve life, and doing so brings us the ultimate fulfillment.

The original goal of evolution – progressing from information, to intelligence, and then on to consciousness – is to awaken our pure subjectivity. What is the point of this life, with all its atoms, elements, and multicellular organisms, without the awakening of me? The whole of the manifested,



cosmic reality would be a complete waste if it failed to support the awakening of me. The problem is that even though a basic sense of me manifests spontaneously in more developed systems of life as a natural outcome of global evolution, the actual awakening of me is a function of our free will and higher intelligence. This is where we must venture beyond the mechanical nature of life and take responsibility. The awakening of consciousness happens at a crucial boundary, where mechanical evolution meets the arising of free will and spiritual intelligence.

Mysterious Beginning of Consciousness

The birth of consciousness is a manifestation of creation's symphony, composed of the union of countless elements and expressions of nature, and orchestrated by life's innermost intelligence for one supreme purpose.

Is there consciousness in lower forms of life? It is difficult to say because of the widely varying definitions of 'consciousness'. We could change the question to: Is there a sense of me in the rudimentary forms of nature? Where is the actual entry point of the sense of me in manifested reality? There is certainly no sense of me at the subatomic level of electrons, protons, and neutrons, because the arising of consciousness requires a higher order of organization.

Is there consciousness on a cellular level? If so, it would logically follow that there was consciousness on all levels of biological life, from microbes right through to plants and animals. But this category seems too broad to generalize about. Even if we look at the human baby – and most of us have some fragmented memories of being one – does a baby have a sense of me? A baby does not feel separated from its environment, but it does know that it exists. It is in what could be called a state of 'unconscious non-separation' (not to be confused with unity), because it is still unclear about its boundaries and has not yet acquired an identification with a learned personality. And yet, it feels, suffers, and experiences needs. It cries and wants food, attention, and affection. It obviously does possess a sense of me, albeit in more of a vague, subconscious way. Of course, a human baby and a single-cell are extremely different cases. But putting ourselves in the mind of a baby can give us an inkling of how it feels to be in a deeply subconscious state, perhaps not that dissimilar to the sense of self found in the lower life forms.

An atom does not want to live or die – it just exists. Atoms react through chemical bonding or attraction based on their electromagnetic forces. Their existence can be considered to be



unconscious in regards to having a sense of me. On the other hand, cells, as individual biological units of life, show definite signs of a will to live. They have a metabolism and actively work to grow and multiply. Unicellular organisms move for their survival, seeking nourishment and evading predators. It seems logical, then, that cells should have some very primitive sense of me, but it would be so exceedingly subconscious that we, as humans, could not conceive of it being a 'me' as we understand that term. It might theoretically be possible to establish a table indicating the hierarchy of consciousness, from the purely unconscious, through the primal subconscious (devoid not only of self-reference but also of any sense of awareness of the outer world), and the more evolved subconscious states (in which a basic awareness of environment begins to dawn), right up to categories which have a semi-conscious and self-conscious sense of me.

Do plants have a sense of me? Not all plants are equal, but all of them sense and respond to their environments and even compete for resources to ensure their survival. When sitting under the shade of a large tree, many people sense its powerful energy and presence, as if it possesses a life of a much higher order than what is normally attributed to plants. So, does a tree have a sense of me? While plants, including trees, do not have minds or the capacity for self-reference, they do have a relatively highly evolved intelligence as individual multicellular life forms. They respond to environmental stimuli and communicate with biochemical reactions through signaling pathways. Despite the fact that these pathways are not linked to a central nervous system and brain, there is good reason to suggest that plants have as much of a subconscious me as many people do, and are seemingly often more intelligent. However, the different evolutionary pathway plants have taken almost certainly means their experience of reality – and potential for consciousness – is very different than that of humans.

So people who follow vegetarian diets for moral reasons may be somewhat mistaken as to the degree to which they are actually fulfilling their aims. Eating vegetarian food just means that animal cells are consuming plant cells. Since we know so little of the plant kingdom, it is generally assumed that it is more moral to eat them than to eat flesh. The fact that we have taken a different evolutionary pathway to plants does not mean that humans are superior to them. Some plant species may even be more highly evolved than certain animal species.

In conclusion, the boundary line between unconscious intelligence and the beginning of a basic subconscious sense of me is not a clear one. It is difficult to find a specific point where intelligence graduates to subconscious me. One could even develop the concept of a pre-subconscious me to



describe an in-between realm of evolution that precedes the arising of subconscious consciousness. For us humans, it is much easier to grasp the higher levels of development that follow: from a subconscious existence to the conscious mind, or from subconscious me to semi-conscious me, because this is part of our own recent history.

From Collectivity to Individuality

An important aspect of evolution is the development of the collective mind. For instance, when we look at colonies of ants and bees, their collective body resembles a multicellular organism. Even some species of fungi are known for their ability to spread on a huge scale, as if belonging to one entity. These collective systems are like a 'collective me' with countless tentacles contributing to the group's survival, procreation, and further expansion.

In such collective minds, like the colonies of ants, individuality has no meaning. Each ant is selflessly serving a greater whole, ready to die for the good of the community. In some ways, this seems to echo some political and religious movements, in which the sacrifice of an individual is felt to be justified if it serves the greater communal good. Such groups are examples of the collectivized me. If you look at how a beehive works, it is not that different from how a human society functions. Human societies are based on collective organization and tend to propagate the development of collective individuality. This collectivism is more pronounced in some cultures than in others, but it is present everywhere. Communism has been an example of the attempt to make societies conform to extremes of collective ideology, while more liberal societies espouse a higher degree of individual freedom.

Each human being, however, is collectively made, both in its cellular make-up and psychologically, the latter being a by-product of countless conditionings and acquired beliefs. People think that they have chosen to be Christians or Buddhists of their own free will, or that they have freely decided to be of one political persuasion or another, but in reality none of these beliefs are their own. Religion, ideology, and politics are, in principle, based on the collectivization of individuality. While it might be a necessary feature for the working of human society in its superficial exterior aspects, there is a point where it becomes a hindrance to realizing our spiritual destiny. A collective human, either as an individual or a group, can never enter the dimension of the soul. To realize our soul, we must be alone and free internally. Only an individual can be strong enough to free himself from the prison of the collective mind and realize his divine subjectivity. Society does not want



anyone to actualize their individuality, for it feels threatened by those who have the capacity to be alone inside. The collective mind evolved with the positive purpose of ensuring our survival in a communal sense, but brought with it the tragic by-product of fear of aloneness. Aloneness is the true passageway to individuality and the only access to universal pure subjectivity. It is the entrance for the pathway to the eventual fulfillment of our evolutionary purpose.

In addition to the development of collective structures (which are indeed very efficient in the task of survival), evolution has created another avenue – that of individuality. If collectivity had been the ultimate goal, humanity might well have already merged into one massive multicellular human or social entity. But this has not happened, because individuality is the ultimate destiny that life has in store for us.

One wonders why individuality should matter at all, when viewed from the perspective of life as whole? Individuality offers the only opportunity for the potential of self-reflection and consciousness. Life can exist without individuality and consciousness, but it is empty without the birth of me; there is too much suffering in life to make it worth living just for the sake of maintaining its unawakened continuity. Life without higher purpose has no meaning and no justification. At some point, it becomes a purely parasitic institution, feeding off the sacrifice of the individual to serve a collective, misguided, and unconscious will to live.

We spoke about the intelligence of atoms, of cells, and of multicellular organisms. None of these are making conscious, proactive choices. Their intelligence follows a deeper instinct and purpose, and serves a higher goal than that of simply prolonging their existence in the greater scheme of creation. Even though they are not yet self-aware, they are one with the river of evolution of all life forms flowing toward the arising dawn of consciousness. The birth of consciousness, which is the birth of individuality, and the birth of me is the true target and flower of existence. All the unimaginable complexity of life is wholeheartedly serving this single most important goal – to awaken the light of me.

The Miracle of Individuality

Why is individuation and not collectivization the highest goal of life? Collectivization and the higher organization of larger groups of the same life form is an important stage in evolution. But the true miracle of life, self-realization, does not occur in collectivity. It takes place in the heart of



each individual being as their illumination with the light of pure subjectivity. When we look at the evolution of life from a higher perspective, we realize how unbelievably long it takes for consciousness to develop, and we can then appreciate even more deeply the extraordinary intricacy and elegant complexity in the process of our spiritual awakening. There is a vast gap between the stages of intelligence and consciousness, because for consciousness to arise, the sense of me has to emerge simultaneously. It is indeed an incredible journey that takes billions and billions of years, from the unconscious worlds of atoms to the awareness of oneself.

If intelligence precedes consciousness, what role does the former play in the latter? Intelligence is the building block of consciousness, which is another way of saying it is the building block of me. Of course, the nature of both intelligence and consciousness is determined by the level of our evolution. In its initial stages, consciousness is living in a lower subconscious state, and its corresponding intelligence is also at a lower level. As our me develops, intelligence should also naturally develop. However, in reality, they are not always balanced. The combination of subconscious me and subconscious intelligence is characteristic of most of the multicellular life forms on our planet. In most humans, mental intelligence is more developed than consciousness, as virtually all of the focus of education and training is almost exclusively devoted to investing in the mind at the expense of our conscious identity. The purpose of the spiritual path is to recover the healthy balance between intelligence and me, which requires that our me reaches higher awareness of itself and realizes its nature.

Light and Life

One of the greatest miracles of life is light. It is no wonder that the speed of light is considered as one of the most important constants in nature. Nothing travels faster than it. Light is another name for electromagnetic radiation, which fills the entire universe – it is everywhere. Our eyes can only see a limited spectrum of light, between red and violet. We cannot see infrared or ultraviolet frequencies. Many creatures have developed the sense of sight, which is the sensitivity to light, as a valuable tool aiding survival. This sense of sight is also important in the development of consciousness, as external light acts in some way as the reflection of the inner light, and awareness of it stimulates the development of self-awareness and stabilizes our sense of self. In our relative manifested reality, the main source of light is the sun, but we have also learned to make light with fire and, more recently, through electricity. Light is first created on a subatomic level. When an electron becomes energized (excited) and jumps into a lower orbit (a quantum leap), this creates an



electrical discharge which then gives rise to a photon – the basic unit of light. Our manifested selves are made from atoms and illuminated with photons. We are made from the substance of this universe, from the particles dispersed by the explosion of supernovas.

Is consciousness made from the particles that constitute our physical universe? Our body is made of atoms, and our brain and nervous system of specialized cells called neurons, which communicate through electrochemical waves. Our nervous system radiates out from the brain and spinal cord. Consciousness can be likened to the radiation of spiritual light, consisting of what we could call 'pure photons'. But how can light be conscious if it does not appear to be conscious in nature? Pure photons, the photons of consciousness, are not like ordinary photons. They could be imagined as the energetic radiance of the divine, which we experience more deeply – and are more united with – the more conscious we are. Although it's hard to see anything particularly 'spiritual' in our ordinary subconscious, this elementary me carries a trace of the spiritual light. To awaken this light fully, it must become self-aware and realize its pure nature.

How can light become self-aware? At the start of the article, we spoke about the basic aspects of the subatomic world: information and intelligence. What we call 'consciousness' is the meeting between spiritual light and intelligence, whereby the light of our normal consciousness becomes transmuted into the spiritual light (made, perhaps, of pure photons). For that light to become truly pure, it has to undergo a complex process of transmutation, which is the true purpose of the spiritual path. This transmutation is a function of energetic evolution of the light itself (identity) and the awakening of our inner intelligence (self-knowledge). There is no self-awareness without tuning in to this inner intelligence, but without the light of consciousness, there is no self either. So both the inner intelligence and the light of consciousness need to be balanced in their highest alignment. Our light has to become pure light, and our intelligence has to become pure intelligence. The unity of the light of me and pure intelligence is bare attention, which is the essence of pure subjectivity. While consciousness is commonly associated with the faculty of recognition, it is much more than a mere faculty – it is an identity of me. This is the greatest wonder in life: that the self can acquire an identity of light. Establishing such an identity is a profoundly deeper state than the earlier stage of becoming conscious of oneself. Having one's identity in light is a confirmation of one's state of existence beyond all relative thoughts and perceptions. This is the state from which the light can finally say 'I am'.

Blessings,



Anadi

For a full glossary of terminology please visit our website www.anaditeaching.com/glossary