

THE NATURE OF CAUSALITY

This work aims to demonstrate that all things are caused. It outlines a logical notion of causality; it is not a scientific hypothesis as it is not built upon any empirical data. As such, this work's notion of causality is one of a logical truth, in the same way that $1+1=2$. In addition to an examination of causality as a logical claim, this work will explore some of the implications of this claim, as well as why this work does not approach causality from an empirical perspective.

This work makes significant use of quotations from other thinkers, whose ideas help to bring the reasoning to life. In particular, this work makes extensive reference to the philosopher David Quinn and his book, *The Wisdom of the Infinite*, which is recommended reading. In many ways, this work is simply a reworking of Quinn's examination of causality, and was originally written for my own purposes as a philosophical student; every thinker must reinvent the wheel, as it were. However, if it is of assistance to other thinkers, I make it freely available to that end.

PRELIMINARY DEFINITIONS

This work will demonstrate the truth that "All things are caused". To understand this, we first need to define what is meant by a "thing":

A "THING" = "THAT WHICH IS FINITE"

"FINITE" = "THAT WHICH IS BOUNDED, LIMITED AND FALLS SHORT OF CONSTITUTING THE TOTALITY OF ALL THERE IS"

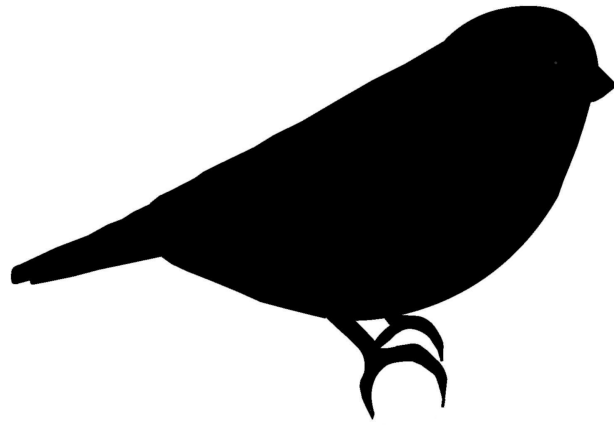
In other words, a thing is simply any entity that is less than the All. Since there can only be one All by definition, everything else will be less than the All and is therefore finite. A thing can be an object, a place, a person, a concept, an event or anything that is less than the All; a thing is any finite entity.

Next, we need to outline what it means to say that a thing "exists". Differentiation forms the basis of existence. In order for us to conceive of a particular thing, it must be differentiated from everything that is not the thing. If a particular thing did not relate to everything it is not, it could not be differentiable as a distinct thing. If a thing was not relative to anything else in any manner, if it was not bounded or limited in any way, it would necessarily be the All; it would be infinite.

"INFINITE" = "THAT WHICH IS NOT BOUNDED, LIMITED AND THEREFORE CONSTITUTES THE TOTALITY OF ALL THERE IS"

The relationship between "a thing" and "everything it is not" is inherent in what it means to be finite. A finite thing falls short of constituting the All, so an immediate duality is created between the thing in question, and the rest of the All that the thing falls short of.

As an illustration of how a thing necessarily relates to what it is not, consider the image below:



This is a simple visual example of a black bird upon a white background. It is only through the contrast between the black bird and white background that the bird is able to be identified. In this case, the bird only exists by way of contrast to what the bird is not (the white background). Fundamentally, differentiation forms the basis of existence. This leads us to the definition of existence:

"TO EXIST" = "TO PRESENT AN APPEARANCE TO AN OBSERVER"

"Any thing is what it is because it appears in relation to what it is not. If it was not for this boundedness, this relation to other things, this demarcation by other things, the thing in question would necessarily be the All. Therefore, things being relative to what they are not is the basis of existence, which is to say a thing cannot be at all - present an appearance - other than by way of demarcation from other things." – Dan Rowden.

In other words, existence is a dualistic concept:

"Existence is always dualistic in nature. Just as "up" can only exist in relation to "down", and "big" in relation to "small", so too an existing object can only exist in relation to what is not that object. In more formal language, "A" (which stands for any thing in the All) is always dependent upon "not-A" (the rest of the All) and vice versa." – David Quinn.

This leads us to the definition of what a "cause" is, which makes up the body of causality:

A "CAUSE" = "THAT WHICH IS NECESSARY FOR SOMETHING TO EXIST"

Under this definition of a "cause", it becomes immediately apparent what it means to say that all things are caused. Any thing's existence has a necessary relation to everything it is not. Since this relation is necessary to its existence, it is therefore causal to it.

To summarise the considerations so far, for any thing to exist there is a necessary relationship between it and everything it is not - the rest of the All. This relationship is inherent for a finite thing – there is an immediate duality between the thing and the rest of the All that it falls short of. Furthermore, if this relationship was not present, it would be impossible to single out discrete things. As with the visual example of the black bird, its very form or identity only exists by way of contrast to its background, as well as everything else that is not the bird. It is impossible to attempt to list everything that is not the bird: the River Nile, Westminster Abbey, the orbit of Neptune, a broken light bulb etc. Therefore, it is far simpler to say the bird exists by contrast to **everything** it is not (the rest of the All). Since this relationship is **necessary** for any thing to exist, all things are caused by their relation to everything they are not. Causality describes the necessity of relation between a thing (A) and everything it is not (not A).

This may seem like a very abstract notion of causality because in everyday language, causality refers to processes or events unfolding that give rise to other things, like a seed being a cause of a tree. However, everyday notions of causality boil down to the nature of causality outlined above, because specific causal processes are a subcategory of “everything that a thing is not”.

If we identify a seed as being necessary for the existence of a tree, then this is simply a specific example of “a cause” and is part of everything that is not the tree. Causality as a principle distils to the consideration of what is **necessary** for something to exist, which includes specifics such as seeds causing trees, but in the final analysis, it describes the relation between a thing and **everything** it is not. This relationship is not solely one of contrasts, in that the concept of a particular thing needs everything it is not to have meaning; rather, it includes all considerations as to what is necessary for something to exist, including any creative processes that allow a particular thing to arise. The important thing to recognise is that whatever is posited as necessary for the existence of something, it will just be another aspect of the relationship between “a thing” and “everything the thing is not”.

LOGICAL PROOF OF CAUSALITY

In outlining what is meant by causality, in that any thing necessarily depends on everything it is not, in that (A) and (not A) arise together and only have meaning in relation to each other, this also constitutes as the logical proof of causality:

It is impossible for any given “thing” (A) to exist in the absence of “not-thing” (not A). This was demonstrated with the example of the black bird, which generated the definitions of “to exist” and “a cause”. As a further example, consider the following:

“Imagine a tree existing on a plain. Now mentally take away everything that is not the tree - the plain, the distant mountains, the sky, the grass, and so on. Keep on doing this until there is nothing left except the tree existing in a void. Now take away the void. Do you think the

tree can still continue to exist in such a situation? Logically, it cannot. Its very being as a tree, its features, its structure and shape, is as much dependent upon the existence of the void, or whatever happens to be surrounding the tree, as it is upon its own constituent parts.” – David Quinn.

This visual example summarises all the considerations as to the necessity of the relation between (A) and (not A). For there to be a tree, there must be the notion of “not tree” for the concept of a tree to have any meaning. (A) and (not A) arise together, as do the specific forms of “tree” and “not tree”. Consequently, any thing has a **necessary** dependence upon everything it is not for its identity as an existent thing to have meaning. Therefore, all things are caused by their relation to everything they are not, as this relation is **necessary** for all things to exist.

A second logical proof of causality is that **it is impossible for any “thing” to exist without its parts**. This conclusion is reached by defining a thing to be “a whole”.

“A WHOLE” = “THAT WHICH IS COMPOSED OF PARTS AND IS COMPLETE IN ITSELF”

Any thing is complete in that all the parts that constitute it are present **and** arranged in a manner that produces the form of the thing in question.

Consider a ship for example. Were it not for the ship’s parts – the decks, hull, rudder, engine and so on, the ship would not exist. Furthermore, the existence of the ship also requires the parts to be assembled in the correct manner – if all the parts of a ship were simply thrown into a disordered pile, there would be no ship. Of note here is the fact the ship’s parts and their arrangement are **not** the ship itself, yet are **necessary** for there to be a ship. The rudder, for instance, is not the ship itself but merely a part of it. This demonstrates that a thing has a **necessary (causal)** relation to its parts **and** their proper arrangement.

Furthermore, the process of recognizing that a whole consists of parts is not restricted to objects that already consist of discrete physical components. Consider an electron, which does not consist of discrete physical parts. We can, conceptually, divide an electron into two half-electrons and conclude that the electron could not exist without these halves. It is irrelevant that an electron is not actually two halves fused together because, by definition, when we conceive of an electron, we are necessarily conceiving two half electrons; a whole comprises of parts. We can also apply these conceptual divisions to the ship example. A ship cannot exist were it not for the two half ships; it is irrelevant whether ships are actually manufactured as two halves that are welded together, as there would be no ship without the two half ships no matter how it is actually assembled. In other words:

“Imagine a whole cake that has no division between the two halves. The two halves of the cake are still real, even though they may never be cut apart, or may never be able to be cut apart. You cannot observe the two half cakes, as they are not separated, and we don't know whether the two halves can be separated - yet the two half cakes exist!” – Kevin Solway.

Additionally, it is important to recognize that this analysis applies to any thing, whether it is an object, an event, or something abstract. For example, an event, such as a ship sinking, can only occur if the necessary conditions are present: a ship, an ocean for it to sink into; a reason why the ship is taking on water etc. These factors are necessary for this event to take place, as they are part of the very definition of what it means for a ship to sink; in the same way, the components of a ship being assembled correctly is the very definition of a ship.

The definitional truth that a whole comprises of parts also logically proves all things are caused: for any thing to exist, it is **necessary** that all its parts are present and arranged such as to produce any particular thing in question. Therefore, all things have a causal relation to their parts.

The two logical proofs of causality outlined above are more accurately a single proof: **any thing that exists has a necessary (i.e. causal) relation to everything other than itself**. For any thing to exist, it is necessary that there is: (1) everything which it is not; (2) the presence of all its parts, and those parts being arranged in a manner that produces the form of the thing. However, (2) is a subcategory of (1) because a thing's parts fall into the definition of "everything that a thing is not". Therefore, the relationship between a "thing" and "everything it is not" is necessary for the existence of all things. All things are caused through this relationship – the existence of any thing is wholly contingent upon the rest of the All.

CAUSALITY AND EXISTENCE

The analysis also points to the fact that causality and existence are interwoven concepts; where there is existence, there is causality:

"It is in the very identity of an existing thing that it has causes and consequences, just as it is in the very identity of a triangle that it has three sides. Thus, in order to promote the view that non-causality is possible, you have to mentally block out the identity of what it means to be an existing object. That is, you have to emasculate its existence. To exist means having a particular nature with particular traits and intrinsic to this situation are causes and consequences. Existing literally means being an effect and causing consequences. So from a logical standpoint, it is impossible to divorce causes and consequences from existence.

For example, consider fire. It is the very nature of fire that it emits heat and light in cooler, darker surroundings. You can't divorce these consequences from the fire without mentally destroying the very nature of what fire is - i.e. without emasculating its existence and turning it into a featureless non-entity. As soon as we identify an object and determine its characteristics, we are in that very moment also affirming the truth that it is the result of a particular set of causal conditions." – David Quinn.

CREATION

We will now examine how everyday causal processes fit into causality as briefly explored in the beginning. Specific processes that bring something into existence are just part of “what is necessary” and therefore form a part of “everything it is not”, like the parts of a car are necessary for the existence of a car and are part of “everything the car is not”. It is important to recognise that “everything the thing is not” means the rest of the All; absolutely everything but the thing in question, including its parts and associated processes. For example, if we were to examine the causes of a tree, we could identify: the bark, the branches, the leaves (its parts) as well as: the seed, its access to soil, nutrients, sunlight, carbon dioxide (the processes that brought about the tree). However, the parts and processes are part of “everything the tree is not” which shows that they boil down to the definition of causality outlined in the beginning.

It is important to go beyond notions of causality that refer to specific processes, because ultimately there is no such thing. The fact that **all** things are caused means a specific causal process is never a definitive explanation for the existence of any thing. The causes themselves are caused. As with the tree, in talking about the soil, nutrients and sunlight being some of the causes, we are not providing a definitive explanation because those causes are themselves caused. For instance, the sunlight comes from the sun, which functions through nuclear fusion, which is dependent upon an abundance of hydrogen etc. Consequently, notions of specific causal processes are made for practical or scientific purposes only:

“We could, for practical purposes, assert that a seed is the “cause” of a tree, while things like space, gravity, soil, carbon dioxide, etc, are its “conditions”. The reasoning? Space, gravity, soil, etc, are also the conditions for an endless number of other things, not just for a tree, while the seed is specific to the tree itself. The trouble with this analysis is that it breaks down very quickly when you look into it more carefully. For example, it’s easy to see that if we placed a seed on a dish in a vacuum, then it definitely wouldn’t grow into a tree. It needs the right conditions to be in place before this can happen.” –David Quinn.

The above alludes to the arbitrary distinction between a “cause” and a “condition”. When examining how something comes into existence, we cannot place greater significance upon one particular cause over another:

“The problem with this argument is that it is ultimately impossible to distinguish between a “background condition” and a “cause”. All causes are merely “background conditions” in the end. It is impossible for any one thing to cause another thing into existence all by itself. It always needs the help of countless other causes (or “background conditions”) to do its creative work. It is powerless all alone.” – David Quinn.

Causality deals with what is necessary for a thing to exist, which in the end, comes down to everything the thing is not. Imagine you are standing on a giant spider’s web suspended over a deep hole. When you look down, you can see that only a relatively small number of

strands are directly preventing you from falling down into the hole. However, in truth, every strand is holding you in place, as a web only works when all the strands come together to support each other – no one strand could hold itself up or bear all your weight. The same is true of causal processes. Whilst we can conceive of specific processes bringing something into existence, the fact that all things are caused means no specific causes ultimately have any more significance than any others in the All. The All is like an indivisible web of causality, so notions of specific processes are ultimately meaningless.

Philosophically, all we need to understand is that the existence of all things is caused by a thing's relation to everything it is not. That is, the only sufficient explanation for the existence of something is the All, as this explanation does **not**: ignore the fact that **all** things are caused thereby placing greater significance upon particular causes and ignoring others; or make arbitrary distinctions between causes and conditions. As such, causality as "a thing's necessary relation to everything it is not" is the clearest definition there can be.

It could be asked at this stage: "What if there is no process that brings about a thing? What of things popping into existence out of nowhere? Whilst such a thing would be caused in the sense that its parts are present and the thing exists by contrast to the rest of the All, what of its moment of popping into existence? Is that moment causal?" Consider the following:

"Let us assume for the sake of argument that a particular thing, such as a positron-electron pairing, just pops into existence out of nothing whatsoever. Initially, there is an empty void, and then suddenly, there it is: a brand new pairing. Now imagine the existence of a hypothetical force which is powerful enough to prevent the pairing from arising. It is easy to see that if such a force were to exist in a particular location, then no pairings would be able to arise in that location. The natural impulse of the Universe to spontaneously produce a pairing would be negated by the existence of the force. The creation of the pairing necessarily depends on this force not being there at the moment of its creation.

It does not really matter if such a force actually exists or not. Just the fact that we can imagine its existence is enough to validate the argument. It proves that quantum particle pairings are indeed dependent upon the right causal conditions for their arising, the same as anything else in the Universe.

The pairing is also dependent upon the Universe possessing a natural tendency to spontaneously produce them in the first place. If the Universe was set up in a different way, or if it did not exist at all, then it would be impossible for the pairing to arise. Similarly, if there was no space or time or quarks, or if there was no Big Bang to begin with. All of these things count as contributory causes of quantum pairings. It is clear, then, that the idea of things being able to pop into existence without any cause whatsoever is absurd. It simply cannot occur." – David Quinn.

CAUSALITY AND THE EMPIRICAL REALM

The issue of addressing causality from an empirical perspective is that no definitive conclusions can be reached. We cannot empirically affirm causality, as we are unable to establish, with absolute certainty, direct causal linkages between a supposedly causally linked series of events. Due to the limitations of our awareness, any supposed series is ultimately just a sequence of appearances. Furthermore, we cannot offer empirical proof of non-causality as the possibility of hidden factors beyond our awareness is a persistent unknown; our inability to perceive necessary causal linkages does not mean they are not present. Therefore, causality is an issue that the empirical approach cannot resolve, due to the nature of empirical knowledge:

*“This is uncertain knowledge. It concerns **sensory** data about specific things. It is uncertain knowledge because the senses are limited, and cannot reveal everything about anything. So there are no certain and absolute proofs about scientific knowledge. It is always in a state of becoming, of contingency, of relating to constantly changing fragments. This kind of knowledge relies on “a posteriori” proofs, because the proof comes **after** a line of thought, in the form of sensory evidence.” – Kelly Jones.*

However, the empirical approach points to causality in a general sense:

“To insert non-causality into the fabric of Reality is to assert that at least some things happen by unbelievable coincidence.

To illustrate this point more clearly, let us consider the everyday act of turning on a light switch and observing light flooding a darkened room. As we all know, the appearance of the light is due to the many causal processes which are initiated when the switch is turned on. A circuit is closed, allowing an electric charge to flow through the connecting wires, which then causes the filament within the light bulb to become charged, and so on. This is why, barring unforeseen or unusual circumstances, whenever we turn on the switch, light always appears an instant later. It never appears by itself, for example, with the switch remaining off. Nor does it ever appear ten seconds before the switch is turned on. On the contrary, the same ordered process always seems to occur, without fail, until the components break down in some way.

Now suppose for the sake of argument that scientists were to assert that light from a bulb arises without any cause at all. This might sound ludicrous, but it is essentially no different to asserting that electron-positron pairs arise without cause. You would reckon the fact that light always seems to appear whenever the switch is turned on would automatically present a major problem to the scientists. If light really does arise uncaused, then why does it always appear in that particular instance and in no other? Why does it not appear at other times, or in other kinds of circumstances? Wouldn't the fact that it always appears the instant after the switch is activated constitute the most amazing coincidence? Undoubtedly it would.

To grasp the scale of the coincidence that we are looking at here, imagine an infinitely large barrel that contains an infinite number of lottery balls. Imagine, also, that this infinitely large barrel somehow gets spun each week and six numbers are drawn out of it. Finally, imagine that the same six numbers are pulled out each time. Such an occurrence would be truly amazing, to say the least. Even if it just happened twice in a row, it would be incredible - let alone three or four or five zillion times. And yet this is precisely the sort of mind-boggling coincidences that quantum physicists are asking us to believe is happening within the quantum realm all the time.” – David Quinn.

QUANTUM INDETERMINACY

From the above, and the earlier example of the positron electron pairing, it is nonsensical to claim that the quantum realm is not deterministic, as the same set of particles with consistent characteristics arises constantly. If there were no factors that determined what occurred in the quantum realm and it was truly random, we would expect to see an endless array of phenomena because there would be no causal factors influencing what could or could not arise. Furthermore, quantum theory is able to predict, albeit ambiguously and statistically, the behaviour of particles. If there were no factors which determined the behaviour of the quantum realm, quantum theory would be useless in trying to predict such behaviour. Indeed, we find that quantum theory is a powerful predictive tool, whose accuracy is:

“Equivalent to predicting the distance between New York and Los Angeles to within one hairsbreadth.” – Richard Feynman.

The confusion surrounding quantum mechanics and indeterminism is that different notions of indeterminism are used interchangeably, which highlights the importance of clearly defining terms when engaging in thought. Scientific indeterminacy with regards to the quantum realm is a practical problem, not a philosophical one. We are only able to statistically predict the behaviour of certain particles, but it does not follow that this means the quantum realm is truly indeterministic in a philosophical sense. Scientific indeterminism simply means we are unable to discern the causes of certain phenomena, not that such phenomena arise uncaused; these are two different claims. Our inability to empirically establish direct causal linkages does not mean that causality itself does not exist:

“It is like arguing that since it is impossible to prove beyond doubt that smoking can cause lung cancer, it is possible that lung cancer can arise without any cause at all. It is false reasoning. The reality of causality doesn't depend on our ability or inability to establish specific causal connections.” – David Quinn.

The above means that any issues regarding causality in the empirical realm do not speak to any logical notions of causality; they are two distinct entities:

“Affirming the logical truth that nothing can arise without cause is different from affirming that two successive events are causally linked together in an immediate sense. One can affirm the former while recognizing the impossibility of affirming the latter. In other words, causality can be affirmed as the principle of all creation in a general sense, even though we do not have the means to affirm particular instances of causation.” – David Quinn.

It is important to remember that science and philosophy are two different spheres of interest. As such, we should be wary of any philosophical claims that scientists make as a result of their research:

“The scientific assertion that subatomic particles arise without cause is one made from a practical standpoint, rather than from the ultimate one. Physicists assert it because they cannot yet find causes (or “background conditions”) for the particle that fall within their area of interest. In narrowly focusing their attention upon those kinds of causes, they tend to ignore the array of causes which fall outside of this arbitrarily defined realm, such as the existence of space and time and the Universe itself. The reader needs to be aware of this dynamic whenever he hears or reads a scientist making a philosophical pronouncement, not just in connection to quantum physics, but to any aspect of life. The sheer fact that it will be generated out of a scientific perspective almost guarantees that it will have nothing to do with what is ultimately true in life.” – David Quinn.

THE FUNDAMENTAL NATURE OF CAUSALITY

Having established that causality is a logical truth, in that all things are caused due to the necessity of relation between any thing and everything it is not, we can now examine its nature and place within Reality. Causality is the most fundamental principle there can be because it always lies at the heart of any explanation for something. Whenever you explain why or how something has occurred, you will be referring to causal processes, otherwise your explanation would not be an explanation at all. If I was to explain “Why did it rain today?” for instance, my explanation must refer to causal processes that brought about the rain – the sun’s energy evaporating water, the water’s condensation into clouds etc. However, in the act of giving my explanation, I am simply expanding the truth that “It was caused”. Ultimately, my explanation for the rain simply refers to specific manifestations of causality. In other words:

“Everything is explained with this simple principle alone. Indeed, it is the simplest and most elegant explanation imaginable. And what’s more, no other explanation is possible. Any attempt to create an alternative explanation will always assume cause and effect and make use of it. Whether it is a religious person positing a God or a divine force to explain the Universe, or a physicist positing a quantum vacuum or a set of laws, cause and effect will always be at the heart of it. All other explanations are essentially cause and effect fleshed out into more complicated forms. If you were to boil them back down to their essence, then only cause and effect would remain. Cause and effect is always the core explanation (the

trunk), while religious beliefs and scientific theories are the decorative, incomplete descriptions of certain kinds of causal processes that are observed in the world (the branches)." – David Quinn.

The allusion to a creator God in the above is significant as it speaks to the essential nature of causation. If I were to posit the existence of a God as an explanation for the universe and life on earth, I am simply referring to a specific causal process which simply expands the truth that "It (the universe and life) was caused". A God would be useless without the principle of causality as it could not be the cause of the universe and life without it. Therefore, causality is the fundamental explanation, with a God as an expansion of the idea. As such, causality renders God as a philosophically meaningless causal hypothesis, and even if true, is fundamentally no more significant than any other causal process.

In order to recognise that causality is found at the heart of all things, you need to broaden your conceptions of it. I have refrained from using the synonym "determinism" because this can have narrow conceptions. Determinism in everyday language usually refers to classical physics, such as Newtonian mechanics and examples concerning billiard balls or dominoes are usually offered. Whilst these processes are part of causality, they are far from the extent of it. Things having causes does not mean everything unfolds in an orderly, predictable way. Causality produces violent and unpredictable things, like earthquakes, tsunamis and solar flares. You need to use your imagination to see causality at the heart of all things, from making breakfast to the incomprehensible energy and violence released in a super nova.

WHY IS THERE CAUSALITY?

At face value, this seems to be a reasonable question to ask at this stage. Having identified causality to be the very essence or creative force of Reality, do we not need to explain how it came to be? This question is generated out of a lack of thorough understanding about the true nature of causality, and is ultimately meaningless. This question is formed from viewing causality to be a specific principle or mechanism that has a reason for being, like a scientific law or empirical theory. However, to ask for an explanation of causality is to ask "What caused causality?" which is meaningless as any answer would necessarily be causal in nature, which points to the eternal nature of causality – it never changes, never was not, never will not be:

"Cause and effect can't be caused to begin or end, as any beginning or ending requires causation." – Kelly Jones.

However, to view causality as a fundamental principle is ultimately limited. Causality is merely a concept that describes the unfolding of Reality, it is not something that can be found at the root of Reality – it is not a "bottom line" like a scientific theory of everything or fundamental equation:

"The person who properly understands cause and effect also understands the way in which it doesn't exist at all. That is to say, cause and effect cannot be separated in any way from the natural unfolding of the Universe. The natural unfolding of the Universe is all there is.

"There is nothing infinite apart from finite things." – David Quinn.

In other words, to grasp at the idea of causality being a "bottom line" to Reality is erroneous as there is nothing over above the unfolding of reality. To view causality as a principle over and above this would be to engage in unnecessary conceptual layering.

THE SEAMLESS CONTINUUM

The fact that causality cannot be carved up into distinct processes points to the seamlessness of Reality and how cause and effect is merely a concept – since Reality is seamless, it is only conceptually divided into "causes" and "effects". Reality is a seamless continuum because causality, or the unfolding of Reality, is a continuous, uninterrupted process. This implies that no thing can have a definitive origin; there is no critical moment in which a thing comes into existence. As soon as a beginning is identified, an arbitrary carving up of the continuum takes place whereby all the causal processes that came prior to the beginning are ignored. Essentially, in designating a beginning, you are prompting the question "What about all the things that happened before this point?" In other words:

"At what point exactly does a human being come into existence, for example? At the moment when the male sperm penetrates the female egg? When the conceptus is formed? A month after conception? The moment of birth? No matter where we decide to draw the line, it will always be an arbitrary decision on our parts. It will always be a construct of consciousness that we mentally project onto the proceedings. In reality, there is only a continuum. The human never really comes into existence at all - except as an illusion.

Nothing in the Universe has a beginning or an end. The causal processes that comprise a particular object cannot be separated in any way from the causal processes that comprise the rest of the Universe. It is our conceptualizing minds which arbitrarily carve up this continuum into "things". It is we who decide where one thing ends and another begins." – David Quinn.

The above alludes to the illusory nature of boundaries, but this requires some qualification before we explore why. Boundaries are something we perceive otherwise we would not be unable to distinguish one "thing" from another – differentiation is the basis of existence. Causal factors coalesce into "things": people, trees, mountains and so on. In other words, reality is not like a homogenous fuzzy mist in which there are no distinctions. However, we would fall into error if we were to conclude that each "thing" is a truly discrete, independent object as we would ignore the seamless nature of Reality. From a deeper, causal perspective, boundaries are illusory because causality is not bound by them:

"It is often assumed that our skin forms a boundary between what is inside our bodies and the rest of the Universe. But as far as causation is concerned, it is as though this boundary does not even exist. The air that we exhale from our lungs easily finds its way into the cells of trees and plants. Our voice slides effortlessly from our larynx into the ears of those around us. The heat inside our bodies increases the surrounding air temperature to a small degree. The viruses in our sneezes create infections in the bodies of others. The decisions formulating in our brains influence the behaviour of others and exert ever-widening consequences in society. All of these examples demonstrate the obvious truth that the boundary between the world and us is non-existent. The causal processes inside our bodies merge seamlessly with the causal processes in the outer environment to form one vast sea of causation. In a very real sense, "we" are not even there." – David Quinn.

Likening Reality to a body of water is a useful metaphor to summarise the above analysis of seamlessness and lack of inherent separation between things:

"The fact that all boundaries are illusory does not mean that Reality is merely a featureless, homogenous soup in which there is no differentiation at all. Instead, think of Reality as a kind of flowing stream in which eddies and bubbles and all sorts of weird and wonderful shapes are constantly being created. While these eddies and bubbles certainly exist to our senses and seem to possess boundaries, it is easy enough to see that if we were to alter our perspective sufficiently enough their boundaries would magically disappear and we would observe their lack of separation from the rest of the stream. Similarly, even though Reality is constantly differentiating itself into distinct forms, its sheer lack of boundaries dictates that these forms ultimately have no beginning or end, and ultimately no real existence." – David Quinn.

INHERENT EXISTENCE

All the considerations so far have been leading up to the conclusion that all things lack inherent existence; things do not exist of themselves, they are merely an appearance formulated by causality, like the eddy in a stream, and possess no intrinsic separation from the rest of Reality. Things have a derived existence and are dependent upon their causal factors, like a shadow on the ground:

"It is easy to see that a shadow has no say over any aspect of its existence or behaviour. It is entirely the product of external factors: the object casting the shadow, the topography of the ground, the refractive properties of the atmosphere, the existence of the sun, and so on. Viewed in this way, a shadow is like a puppet and all these other factors are the string-pullers. They say to the shadow, "Assume a long thin shape!" and the shadow automatically assumes a long thin shape. They say, "Become small and round!" and the shadow immediately obeys without question. They say, "Disappear!" and it immediately vanishes as though it never were." – David Quinn.

We, as human beings are no different. We are things like any other finite mode.

"We are no different to any other being or thing in the universe. So by understanding ourselves we understand all other things. By the same token, by understanding the nature of other things, we can understand ourselves too." – Kevin Solway.

These considerations reveal our notion of "I", of us as individuals, being a discrete entity separate to the surrounding environment, is an illusion.

"Self-existence can be visualized as volcanic islands projecting above the sea. Underneath they all slope into the substrate in which they are one. And the sea is our deluded thought." – Kevin Solway.

The illusory nature of "I", or the ego or self, is a critical issue to understand. Having a deeply rooted belief in one's own intrinsic existence can have dire consequences for those who harbour that delusion, as it forms the foundation of attachment. There is a two-fold error when an attachment is formed. First, that "I" am an intrinsically discrete entity separate from the rest of the universe and therefore there is an inherent separation between myself and the environment. Second, the things within my environment possess their own intrinsic existence and are therefore "real".

"The nature of attachment is this: believing that things inherently exist, such that an attachment is possible. To abandon attachment requires a highly logical mind. Such a mind reasons perfectly that all things are causally created, and, being causally dependent, each thing does not exist intrinsically." – Kelly Jones.

In realising that there is no inherent separation in Reality, where things have a derived, contingent and impermanent existence, we can see how damaging our ignorance of Reality can be, as it keeps the ego alive within us:

"Ego's basic aim is to maintain the false self's illusory boundary between it and everything else, at all costs. The constructed self, set up against the rest of the world as if there is an inherent separation, naturally appears vulnerable. Believing the worst case scenario is the self's death, or loss of its boundary, 99.99% of people spend their entire lives building up security systems to protect it. They really believe there is a three-dimensional, physical world out there, beyond themselves, that encroaches on their territory. This gross delusion leads them on in a fanatical comedy, slaving at ridiculous, endless tasks to keep the false self 'alive'. Insurances to protect a family of selves, of children, lovers, shelters, means to entertain it and avoid becoming conscious, and so forth, are all mechanisms of nature that kill off intelligence and conscience. So much mad obsession obscures the truth that Reality has no inherent form, or things, or nature, divisions, boundaries, or truths." – Kelly Jones.

As a final analogy to summarise the considerations about inherent existence, consider the following:

"The fool says "I live for now until I die." This is like a drop in the ocean arguing its own independent existence." – Kevin Solway.

In our ignorance of the illusory nature of separation and inherent existence, we are like a drop of water thinking it is separate from the rest of the ocean; the ocean of causality that is Reality. Clearly, a drop of water is in no way separate from the ocean. Indeed "a drop" is a conceptual construct that refers to a particular body of water within the ocean; such a concept is not ultimately real, just as the concept of "I" is not ultimately real:

"Our existence as an independent and substantial entity is also an illusion. We are nothing more than a conceptual construct which is projected onto a conglomeration of parts. We are like the fist that vanishes as soon as the hand is opened." – David Quinn.

In seeing through these illusions, we can abandon them and become enlightened as to the true nature of Reality. To continue the "water drop" analogy in relation to enlightenment:

"The experience is like that of a drop in the ocean, who lets the ocean in." – Kevin Solway.

In letting the ocean in, we are recognising that we are not separate from the rest of Reality. In having a deep understanding of causality, we can drop the illusion of the ego, go beyond it and live without it.

WHY IS THERE SOMETHING RATHER THAN NOTHING?

This is another question that emerges from a lack of understanding causality. Any states of "somethingness" or "nothingness" are themselves causally created. For example, "nothingness" is a state that arises from there being an absence of "things". If any "things" were present, there would be no "nothingness".

Furthermore, the notion of absolute nothingness is an incoherent concept, for it ignores the dualistic nature of existence; (A) and (not A) arise together and give meaning to each other. "Nothingness" only has meaning by way of contrast to "Somethingness":

Mitchell: *So why couldn't there have been "nothing"?*

David: *Because the very concept of nothing means "absence of something". You couldn't have the nothing without the "something" otherwise "nothing" would be meaningless.*

Mitchell: *So "nothing" is the same as "absence of something" . . . ?*

David: *That's what it means, by definition.*

Mitchell: *So if there was nothing there would be something. . . . ?*

Kevin: *Exactly. (The Hour of Judgment, "The Nature of Existence")*

CAUSALITY AND FATALISM

Causality (or determinism) is sometimes confused with fatalism. However, the truth that all things are caused does not lead to a position of fatalism. Fatalism is a notion that concerns itself with an inevitable event, such as "It is my fate to die tomorrow". This implies that this

event is inevitable or necessary, and is not subject to change. This is different from the claims of determinism.

Determinism claims that: **every effect is necessarily the consequent of causes.**

Fatalism claims that: **some specifiable (i.e. foreseeable) effect is necessarily the consequent of any cause.**

The fatalist says: **nothing can change what will happen; it will come about whatever is done.**

To which the determinist responds: **everything changes, therefore everything in principle can be changed, if the scale of causation is adequate to affect the scale of change required.**

In other words, an event is not inevitable as it can be caused to change. Therefore, we cannot claim that a specific event is inevitable as we can never possess complete knowledge of all the causal processes in Reality.

It could be argued that if we had complete knowledge of all the causal processes in Reality, we would see a fatalistic position – nothing would be unexpected given our total knowledge. Whilst this may be true, it is meaningless from our perspective as we cannot have total knowledge, so any claims of specific events being inevitable will only ever be speculation until the event actually occurs.

Acknowledging causality does not mean we should resign ourselves to what direction causality may seem to be heading in, for this ignores the causal influence we have as individuals. For example, I may currently live an unhealthy lifestyle and wish to change. A fatalist may claim that my unhealthy choices are inevitable so I should resign myself to this lifestyle and accept an early grave. However, my wish to change, if strong enough to invoke actual action, would constitute a sufficient cause for the direction of my life to change course. It may be argued that we could see that my decision to change was always going to happen, if we had access to enough information. This may be true, but as beings with limited awareness and knowledge, this is meaningless:

“Determinism means all things are caused, but not that one can know in advance what all the specific causes are. Science makes predictions based on informed guesses of the causes responsible, but cannot know how all the indivisible, highly intricate streams of causal processes will unfold; so we can't know any future events for sure. It would seem the sun must rise tomorrow, but, as Douglas Adams put it, we Earthlings might not know about an intergalactic planning office, where we'd have advance notice of an approaching Vogon chaingang trawling behind a team of Vogon surveyors, preparing to blast the earth out of existence. Or, more seriously, some unprecedented cosmic event that draws massive solar rays around the earth for a month and burns up the crust to a sooty magma. Who knows?” – Kelly Jones.

FREE WILL

Having established that all things are caused, it follows that our thoughts, wants, wills and desires are also the product of causality – they are things like any other finite phenomenon. Any thought is bound by that which it is not and is a whole in itself that comprises of various parts. For the thought to arise in the first place, it depends upon the necessary conditions to do so – there cannot be anything present that would prevent the thought from arising. Thus to talk of thoughts not being subject to causality is nonsensical.

Could it not be argued that **we** are the cause of our wills and desires? To that end, consider the following:

- ⌚ By definition, you only **willingly** do what you **want** to do.
- ⌚ You do **not** control and therefore do **not** choose what you want, want to want, or want to want to want etc.
- ⌚ Therefore, your will is **not** yours to chose because your **will** is founded upon **unchosen wants**.

The second premise of this argument refers to the “regress problem” of trying to establish where your wills and desires come from if we posit that we consciously choose them. By definition, if any will or want was not itself determined by a prior act of the will, then the will has not determined that particular will or want. In other words:

“Action based on conscious willing expresses a want, a particular end, a desire to cause certain effects; this desire stems from certain values and goals. Do we choose those value and goals or does Nature, speaking somewhat poetically, choose them for us? Obviously the latter is the case. We would slip immediately into infinite regress if we posited that we did [originally] choose these things because that would necessitate an underlying want and will (for those things) and we would have to subsequently posit a motivation for that and so on and so on....

*That is, we could never get to a **basis** for those original values and goals. To express it another way, choices are expressive of values, conscious or unconscious; to say that one chooses certain values (or wants) and is therefore in control, is to say that one already and originally possesses certain values and wants, but their basis is what? Obviously, it is an **unchosen nature**.*

The question is whether it's reasonable to suggest that one's nature, having been established by Nature as that which consciously wants and wills and chooses, can be said to be "in control" of such things, or whether since things express their natures as they necessarily must, whatever that nature is, speaking of being in "control" is pretty much

redundant: i.e. one does not will to will; one wills because it is one's nature to will." – Dan Rowden.

The fact that we cannot get to a basis for our wills and wants, if we posit that we actually choose them, indicates that such wills and wants are not freely chosen by ourselves.

Even if we assumed that thoughts do not arise through a causal process, then they must simply arise spontaneously, without influence or connection to anything else in Reality, for to assume any prior influence or connection would be to assume causality. If such a non-causal situation was the case, how could we attribute such thoughts as an act of will? Neither a causal or non-causal system grants the possibility of free will because we lack control in both scenarios. Furthermore, this is a valid dichotomy; either something has a cause(s) or it does not. Either a thought is influenced by Reality to whatever degree (causality), or it is not (non-causality). In either case, there is no room for a free will.

Discussions of free will can seem like a tired old subject, but in reality it is of great significance. By reasoning that free will is a falsity, we can further erode the ego or the discrete "I". In our mistaken experiences of free will, we are saying that "*I* want to do this" or "*I* have decided that". In recognising that "I" have not decided anything and my decision is the result of forces beyond my awareness and control, we can see through the entire notion of "I".

In recognising the illusion of free will, causality is unapologetically placed at the forefront of our awareness. It is an inconvenient truth as it were. In seeing that free will is illusory, no longer can we view causality and the contents of this work merely as a dry, abstract analysis; it is a reality that penetrates every fibre of our being and aspect of our lives.