

The Awareness Theory of Everything

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Quotes:

“To Be or Not to Be – that is the question”

– *William Shakespeare in “Hamlet”*

“To Be **and/or** Not to Be” – that is the **answer**

– *Nathan Hamaoui*

Abstract:

This paper presents a unique ‘Theory of Everything’ that starts from the bottom up – building the universe from almost scratch. It then proceeds to define and map basic physical concepts including time and space. Viewed from this theory’s perspective, many currently axiomatic and paradoxical phenomena make natural sense.

What ‘is’ implies:

When considering questions of the nature “What is the Universe” or “What is an atom” or what is anything, we should first note what the word “is” is implying. It is obviously implying the existence of whatever it is we want to consider. But even more so, though very subtly, it is also implying the existence of an observer, or of a frame of reference, or at least of some container, within which what is being contemplated, exists.

Is there a bird in the cage? Is there a cloud in the sky? Is there a pain in my stomach? Is he happy? All these questions questioning the existences of different things, are essentially asking whether that something is contained or perceived within some container or perception.

But since ultimately it is us that are asking, we must ultimately imply a perception that perceives rather than a container that contains.

Either way, mathematically speaking, when something ‘is’, we can call the perceiver or container a set, and what it perceives or contains, its elements.

So the question: “What is ‘x’?” Implies a set ‘S’ that contains an element ‘x’.

Similarly when we ask “what is the Universe?” we are implying a set that contains the universe as an element.

But the “Universe” by definition should really include everything including all perspectives (brains?) in which it exists! But how could anything include its observer, the perspective considering it?

This enigma, by the way, is very strongly felt in the realm of quantum physics. There we talk about the simultaneous possibilities of exclusive realities (ie: a cat being both dead and alive) that ‘collapse’ into one of these realities as soon as the act of observation by some observer comes about to impose a specific reality and to determine what exactly does exist.

In summary, in order for anything whatsoever to exist, it must be with respect to some perspective, sometimes referred to as “Observer”, which “registers” its existence.

This observer reference frame is at the base of our theory. The perspective that we will assume is awareness. This awareness will even contain any possible perceived observer supposedly perceiving ‘its’ Universe.

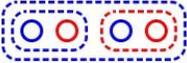
Since the awareness is at the essence of any existence, we shall therefore name our proposed theory of the universe “The Awareness Theory of the Universe”, or “The Awareness Theory of Everything”, and the “Awareness Theory” for short.

Building the Universe

Let us begin by assuming an existence – any existence. This implies an awareness perceiving this existence. Let’s represent this existence as a blue circle thus: . Perceiving this existence also implies perceiving its non-existence; something like looking at a brand new object and retroactively perceiving its non-existence. (Or in set theory, set ‘A’ that contains an element ‘e’, $A=\{e\}$, allows for the definition of another set ‘B’ that contains the element ‘not e’ or ‘-e’, $B=\{-e\}$). Let’s represent the non-existence of the original existence by a red circle thus: . Now that we have these two distinct perceptions represented by  and , we can contain them both in a new perception. We can represent this

existence non-existence awareness duality with a blue boundary enclosing them both like this: . As with the original existence, this new existence also implies its own non-existence possibility which we can represent by replacing

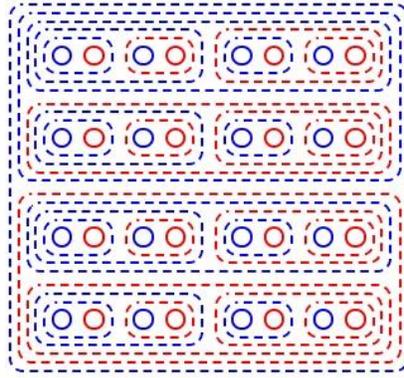
the blue surrounding boundary with a red one thus: . These last two can now in turn be represented thus:

. The basic idea is that once an existence has been contemplated, its non-existence can also be contemplated into a new element. Mathematically this can be called applying the ‘not’ operator to any variable. Once both have been contemplated we can conceive of these two together as an existence in and of itself - as a brand new entity. This last action can be called applying the “and” or the “or” operator.

This process can be continued indefinitely to produce an exponentially bigger and more complex “awareness”.

Let us call any partial awareness instance (any circle or encircling boundary) an ‘id’. and let us call the collection of an id, and all ids contained within it, a universe id or a ‘Uid’ for short. It represents a complete awareness - however small or however large it might be.

The following picture represents a Uid, five (binary) orders of magnitude larger than the very primary original id represented by the original single blue circle. Blue enclosures represent existences while red ones represent non-existences.



A Uid⁶

The above Uid was “constructed” by assuming an existence - the smallest blue circle at the top left; Its non-existence, represented by the red circle next to it, is instantaneously and immediately implied and ‘aware’ of. Now that they both “exist” (can each be considered elements in their own rights) in some way, we can represent both of them together, with a blue circle enclosing both. This in turn implies this later id’s non-existence, the red circle to its right - with all its contents, then both of these ..., and so on and so forth till the all-encompassing outermost id was completed and the whole Uid was ‘aware of’. We can therefore name this Uid a “Uid⁶” – for representing a Universe of six levels of nestedness.

This mechanism we just described, we postulate, gives rise to the underlying structure, the framework, the ingredients - the fabric of our universe! That and that alone is the material of primordial space-time. These are the building blocks of everything that we know - space, time, light, matter, present, past, you and me!!!

We will pause to let that sink in for a moment...

I now immediately imagine hearing from the readers an equally big and very warranted ‘EXPLAIN!!!’

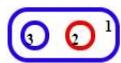
So let us now proceed to see how that works. But we will need to define and name a whole bunch of new concepts and terminology along the way.

Classified Ids

Any containing id (any whose level is greater than one), contains two immediate children: an existence id and a non-existence id, which it can perceive in two distinctly different ways. For example i1 of:  can perceive its two contained ids (i3 and i2) as two separate and distinct ids, just as we might perceive two separate and distinct objects standing before us each in its own location. Or mathematically speaking, ‘A **and** not A’.

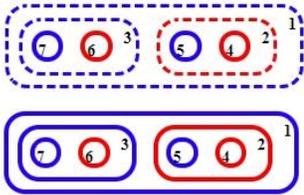
Alternatively, i1 can perceive its two contained ids, i3 and i2, as two views of one and the same id, just as we might perceive one single object from two different perspectives. Or mathematically speaking, ‘A **or** not A’.

To distinguish between these two very different possible perceptions by ids of their immediate contained ids, we will use solid lines to signify an id that perceives its two contained ids as being two distinct ids ‘And-ed’ together thus:

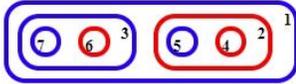


And we will use dotted (as opposed to dashed) lines to signify an id that perceives its two contained ids as

being one ‘Or-ed’ in separate instances thus:  . So for example, if all higher order ids in Uid:

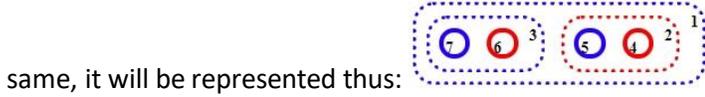


perceive their two immediate contained ids as distinct, it will be represented thus:



This whole Uid will perceive four distinct first order ids.

If on the other hand, all higher order ids in the above Uid perceive their immediate contained ids as being one and the



And the whole Uid will perceive the following four distinct states of only one id:

1. one existence:
2. or otherwise:
3. or otherwise:
4. or otherwise:

In summary the two different perception possibilities discussed would be represented thus:



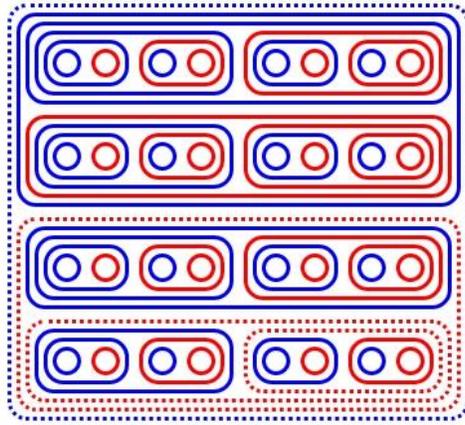
A Uid with all its ids thus explicitly specified or classified will be referred to as a classified Uid or a CUid for short.

Time and Space

We can readily map our concepts of time and space within our awareness theory framework as mere classifications of a set of ids as being either, one and the same, or as being distinctly different entities. Something like looking at the blades of a rotating fan and either perceiving only one blade in its many separate states or times, or perceiving numerous distinct blades all at once. Another analogy would be someone contemplating their existence a moment ago – obviously two distinct conceptions of the exact same thing as opposed to someone contemplating their and their friend's existence as they face each other – obviously a conceptions of two distinctly different things.

Uid's can perceive or relate to any of their contained ids as being distinct or as being the same. When they view their contents as distinct, that is a spatial classification. When they perceive their contents as being identical, that is a temporal classification.

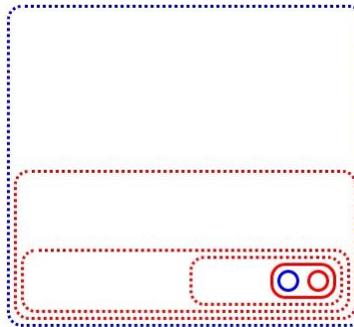
The following is an example of a possible classification of a Uid⁶ where a solid circle represents a spatial classification and a dotted circle represents a temporal classification.



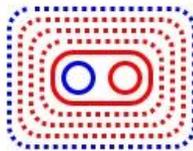
A CUid⁶, some of whose ids are time differentiated.

CUid snapshots:

A time dependent 'observer' would perceive this CUid⁶ in only one of its specific time instances for example, thus at T=1:

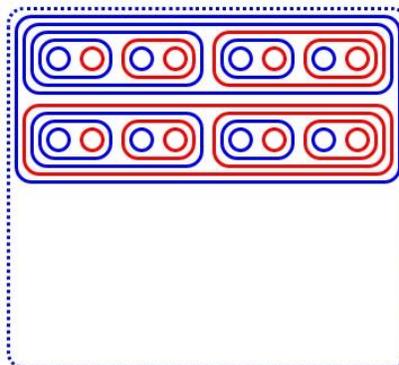


Note that in any time differentiated id, we would only observe one of the contained ids. But in actuality, no 'space' is left behind either so the following is what is perceived by our time dependent observer:

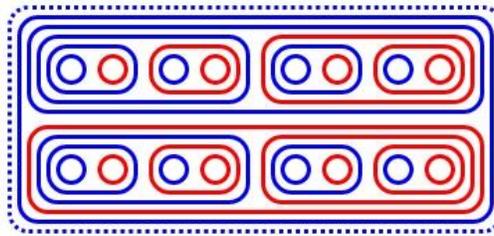


A classified Uid⁶ at time 1 (CUid⁶₁)

And thus at T=5:



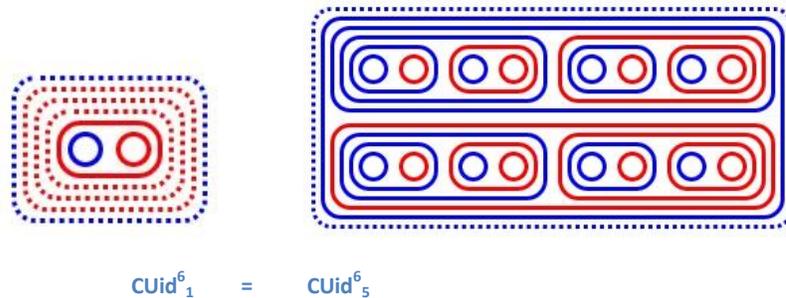
After closing up the gaps, it would appear thus:



The same CUid⁶ at time 5 (CUid⁶₅)

Note the difference in color of the circles where blue represents a specific existence and red represents a specific non-existence.

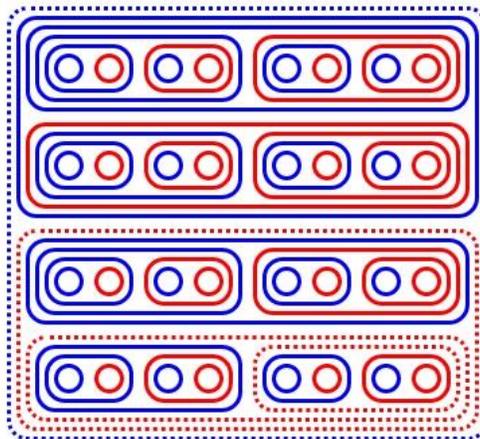
Finally note that T₁ and T₅ are two states of the same exact 'CUid' so that the following two 'expressions' are as equivalent as say two sides of a chemical reaction equation:



The above equivalency could be written as: $S_{t=1} + 4t = S_{t=5}$ where S represents 'State'.

This simply says that State 1 after 4 time progressions evolves into State 5.

Note that these CUid states do not preserve non-present information. We therefore refer to them as CUid snapshots, just like camera picture snapshots that only capture the instantaneous present. Two snapshots would be analogous to two points on a line that do not carry information about any other point on their line. If we wanted to represent any of our CUid⁶'s time states while still preserving all its past and present information we would display all its ids regardless of time instance thus:



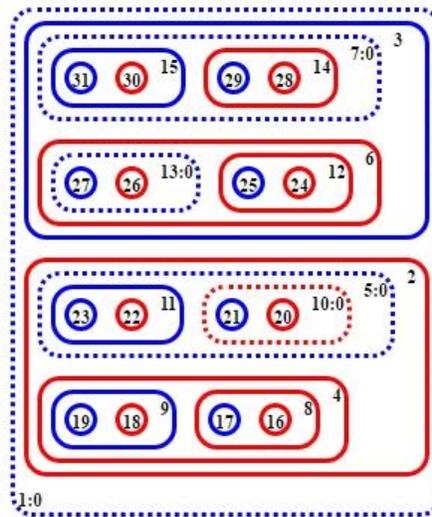
and would refer to any of its instances with the following notation: CUId⁶:t where t is its instance with respect to its Oid (outermost id).

Naming Classified Ids:

As previously explained, ids can be classified, as far as their two immediate children are concerned, as being either distinct or identical. The former is viewed as a spatial distinction, while the latter, a temporal one.

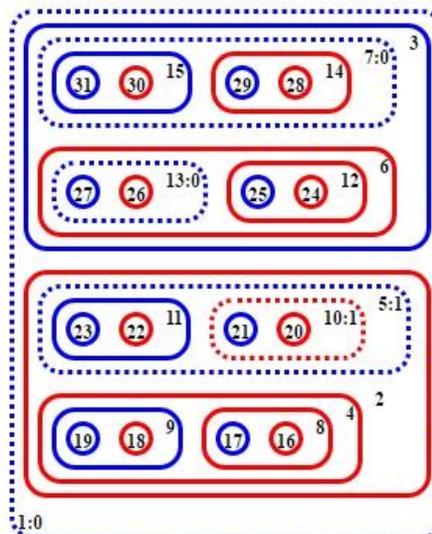
Each spatial id can be referred to as a 'spaceo' (pronounced: spay'-show) while each temporal id can be referred to as a 'timeo' (pronounced: time'-oh).

Timeos can exist in one of two states; 'isn't' (may be 'was' or 'will be'), or as 'is' ('is in the present'). We label the 'isn't' state, '0', and the 'is' state is labeled '1'. This label is appended to its name separated by a ':' for example: 'i7:0' or 'i10:1'.



Note that each timeo, represented by a dotted line border, contains an additional element in its name separated by a colon – its existence status of either 0 or 1.

The following represents the exact same id in a different status or phase or possibly meaning, at later time:



Note that two of its five timeos, 10 and 5, have advanced to state 1.

CUID Lifespans and Life Times:

Note that even though all timeos define only two states of time, CUIDs may experience many more states of being, depending on the amount and configuration of timeos they contain. In this case, for example we find that CUID '1', (the outermost id and all its content ids), spans or 'lives through' a total of five distinct states or life times (not lifetimes). Its lifespan, equal to its total life times, is therefore 5. Other CUID's within it may experience a smaller number of distinct states or life times and hence have shorter lifespans. One such example would be CUID 5 that contains only one timeo of the second order and which contributes two states. Therefore CUID 5's lifespan is 2.

Naming Classified UIDs:

As mentioned earlier, a Uid is an outermost id or 'Oid' along with all its contained ids. A classified Uid or 'CUID', is a Uid, all of whose ids are classified. Given the following CUID⁴,



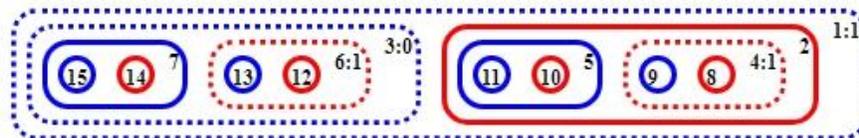
its complete name would be: $T^4T^3S^2Sst^2Sss^3S^2Sst^2Ss$

This is obtained by laying out the Uid in one straight line and traversing it from left to right listing its ids along with their levels as superscripts where 'S' is an existing spaceo, 'T' is an existing timeo, 's' is a non-existing spaceo and 't' is a non-existing timeo. A superscript of value 1 is omitted.

This name represents the Uid classified into spaceo's and timeo's but without specifying which of the two possible states each of its timeo's is in. In other words it names the CUID while its timeo's are in a duality state of both existing and non-existing.

Naming time instances of classified UIDs:

Assuming we wanted to name a specific instance of a CUID, where all its timeo states are specified – for example the following instance of the above CUID⁴, where 3 of its contained timeos (6 and 4 and 1) have advanced to state '1':



If we cycled all timeos in a manner that would produce all possible distinct snapshots, we would find a total of five of which this one would be the fourth. We would therefore refer to this Uid at time 4 as 'CUID⁴:4', and its name would be: $T^4_1T^3_0S^2Sst^2_0Sss^3S^2Sst^2_1Ss$

This name is obtained by simply adding the subscript 's' to all timeos where s is the 0 or 1 state of the timeo.

The Awareness Theory:

Very simply stated, our awareness theory of the universe postulates that **our universe at any given moment in time, can in theory be represented as such an instance of a classified Universe Id, a CUIDⁿ:t** Albeit one of **an unimaginable order of magnitude!**

This was but a brief introduction stating the core essence of a revolutionary new theory and model of the universe - one that is deceptively simple but powerful enough to define a whole universe in a most unified way.

The Challenge:

In presenting such a radical theory of the Universe, it is imperative to also extensively map our common concepts to it.

Just as the atomic theory is but a starting point in explaining all phenomena, likewise many volumes can be written to map out this theory into our real life perceptions.

Arriving at The Awareness Theorem as described until here is a major milestone and an essential key to understanding our existence and our Universe. But it is only the beginning. A major challenge still lies ahead. We must now map higher level known basic phenomena within this theory. This is considerably further mapped out in the book cited below.

Before even before continuing to map out where we see and explain all types of other things in this scheme, we can note a few fundamental points about this theory.

- The theory is very simple and based on a minimal set of concepts even more basic than space or time. Among these minimal undefined concepts, is “existence”. Correspondingly we have a minimal amount of undefined operators: “negation” for non-existence, and “incorporation” for “and”-ing ids together.
- The theory creates many similar ids. If we can map any complex id to, say, an electron, we can find many identical ones in this fabric. What other theory explains the existence of zillions of identical elements in our universe? What machine or process created so many identical protons or quarks? Our theory’s creation process is like an exponential Xerox machine that produces first 1 then 2 then 4 then 8 then 16 ... ids out of the original one!
- The latest quantum theories put the observer or the act of observation directly into the requirement for determining what exists (the collapse of the quantum wave function by the very act of observing). Our theory’s every id must be imagined to exist or not exist. A complex id exists all in one “imagination” or awareness. There is no external space or time outside or independent of this consciousness.
- Every id in our theory, no matter how complex or primitive, cannot be subdivided beyond the “size” of the original existence ○. So even when an id can be seen as two points in space , one cannot ask what is “between” these two points. There is an inherent quantum to this theory. So given a large enough “macro” id we can expect to be able to divide it further and further but unlike in Newtonian space we **do** expect to eventually reach the original existence ○.

Works Cited

Hamaoui, N. (2017). *The Universal Observer - The Awareness Theory of Everything*. New York: Lulu Press.