

# ΣATH PROOF OF SOUL

## Introduction

This paper will attempt to prove the existence of a soul using mathematical principals. There is only one assumption that is made in this paper, which is that time is infinite (or there are an infinite number of universes). As this is a complex topic to organize and describe, it is recommended to be read at least twice to ensure you grasp the concepts intertwined in the paper. This paper is the combination of curiosity for the unknown, mathematics, logic, and a little bit of fun/humor.

## Definitions

Item	Symbol	Description
Soul	\$	More than your consciousness. The great unknown.
Sum of You	$\sum u$	Consider your life today in its entirety. Everything you've ever done, said, felt, smelled, heard, seen... Everything. This is the $\sum u$ . You can think of it as your current consciousness.
Sum of System	$\sum s$	in order for the Sum of You to have occurred, consider all external factors. Stars, air molecule alignment, parent meeting, economic conditions... that made the " $\sum u$ " to have the probability of occurring.
Variance	$V(\sum s/u)$	The percentage change of factors in the $\sum s$ and/or $\sum u$ that are varied and the $\sum s$ and/or $\sum u'$ are manifested.
Sum of You Prime	$\sum u'$	Other occurrences of the $\sum u$ manifested by variances in the $\sum s$ & $\sum u$
Sum of You Pressure	$K$	The choices you make dictate your current $\sum u$ . $K$ is the pressure that the choices you make in this $\sum u$ impact other instances of $\sum u'$ . $K+/-$ represents positive/negative pressure.
Act		An action performed by individuals. To be considered an Act, the action must be a conscious decision.
Lifeline		An ordered list of acts performed in a person's lifetime
Infinity Density		The density of infinity that the condition matches. The higher indicates more occurrences.
Good	(+)	to avoid arguments in determining variable degrees of good. Good is defined as saving babies, where a baby is defined as born. +1 on a sine wave. These would be called good acts.
Evil	(-)	to avoid arguments in determining variable degrees of evil. Evil is defined as the opposite of Good – killing babies, where a baby is defined as born. -1 on a sine wave. These would be called bad acts.
Googol	$G$	A very large number: $10^{100}$ .

## Questions

Some of the questions that this paper will try to answer:

- What is the probability that the  $\sum u$  has occurred before? or will again?
- Does the probability increase or decrease if we loosen the coupling to the  $\sum s$ ?
- What is your soul?

## $\infty$ (Infinity )

Our assumption is that Time is infinite. There is no beginning or end to time's existence. The universe and its components re-generate constantly. Stars explode, black-holes evaporate and the cycle begins once more. This occurs over and over again ad infinitum. If this is too much to believe, consider instead an infinite number of Universes:



Diagram 1

For illustration purposes infinite time will be used, but this can easily be applied to infinite universes as well.

## $\sum s$ (Sum of System)

Our assumption states that time is infinite. The universe has always existed, and will always exist. Atom re-generation is infinite with micro-gravity creating atoms, macro-gravity creating Star Systems, Stars Systems exploding into heavy molecules (repeat), eventually falling into Black Holes that evaporate matter/energy back into the cycle again. Think about it like the rain cycle on earth where water evaporates and condenses into droplets in the sky (micro), which turns into clouds (macro), then rains (explosion) to the ground (black hole) that then evaporates.

$\sum s$  consists of everything that must have occurred in an exact sequence and order that led to the creation of the Atoms, Stars, galaxies, planets, gravity/magnetic/molecule alignment, all preceding historical events, your parents meeting..., that created all of us on this or any planet/galaxy in any part of the Universe.

$\sum s$  has already occurred for you, me, and everyone on Earth. For example, if my, or your  $\sum s$  hadn't occurred, I would not have written this paper nor would you be reading it. This is proof enough that the  $\sum s$  has occurred. The only point being is that somehow all the matter, energy, gravity aligned to make you, me, and everyone on Earth.

The probability of the  $\sum s$  occurring must be greater than zero:

$$P(\sum s) > 0$$

Could the  $\Sigma$ s Occur Again?

Considering that the  $\Sigma$ s is has occurred once, that is, all the stars, forces, molecules, aligned just right to created our existence today, how likely would it be for the  $\Sigma$ s to occur again?

A good analogy for the  $\Sigma$ s is a movie. A movie can be played over and over again. Nothing changes with each time you watch it. It always stays exactly the same as before.

For example, if the  $\Sigma$ s were to occur again, you will be reading this paper again somewhere & sometime in the future.

Impossible you might think. Assuming that it would take  $10^{60}$  years, which in terms of infinity is a very small number, for all the molecules, stars, planets, history, and so on, to align just right for the  $\Sigma$ s to re-occur, and the  $\Sigma$ s has occurred at least once already, then we can state that the probability that the  $\Sigma$ s could happen again, could be greater than one. The point being that there is a potential, regardless of how minute, that the  $\Sigma$ s could happen again.

One argument against saying: “if it happened once, it could happen again”, is believing that we are special, have meaning, purpose and a plan. Recurring  $\Sigma$ s’ instances do not violate this argument as the plan could be much more complex than thought.

The  $\Sigma$ s has occurred at least once. That is, it was created, can be measured, analyzed, theorized, and even predicted by the laws of physics. As the  $\Sigma$ s was created, there must be a probability associated with its creation. As the  $\Sigma$ s was created in a Universe containing a time dimension, and as our assumption is that time is infinite, can assume that the likelihood of the  $\Sigma$ s occurring again must be greater than one? That is, if we look at any system that would make us all to exist as we do today, and if this occurred once on a finite timeline, then extending the finite timeline to infinity, we expect to have the  $\Sigma$ s created an infinite numbers of times (although not that often in relation to all potential possibilities).

To illustrate this principle, if you want to calculate the probability of a dice roll, you need to create the dice, otherwise the probability would be impossible to calculate, as you won't know the number of sides on the dice. Just as someone created the first dice, somehow the  $\Sigma$ s was created. The  $\Sigma$ s has many more 'faces' and dimensions to consider when calculating probabilities, however the 'faces' of the  $\Sigma$ s remain finite as they are limited to the laws of physics. Assuming an infinite number of dice rolls, with an finite set of 'faces', the probability of multiple hits occurring is guaranteed, well, unless the dice is rigged.

The probability of  $\mathcal{S}$ s occurring again must be greater than one:

$$P(\sum s) > 1$$

And as time is infinite, the  $\Sigma$ s instance could re-occur, an infinite number of times, just not all that often (funny how infinity works).

For illustration purposes, let's equate the recurrence of  $\Sigma s$  instances to the number of integers divisible by 42, which is infinite. This will become more apparent in the next few sections. Let's call this the infinity density of the  $\Sigma s$ .

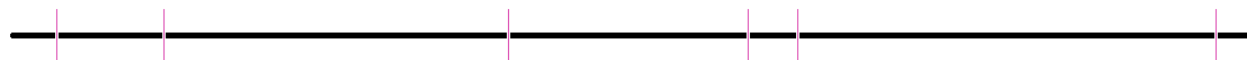


Diagram 2. horizontal line represents time (infinite in both directions); vertical lines represents  $\Sigma u$  instances (divisible by 42)

Note that the scale of the diagram is not important as our main assumption is that time is infinite. If we define the time scale in the above image to be a million billion years per pixel, and the observer insists that is not enough time for another instance to occur; then we can change the scale to billion trillion years per nanometer; And again, if the observer still maintains insufficient time, then change the scale to a trillion to the power of trillion years per Planck length; and so on, ad infinitum. It is merely a perspective of when new instances could reoccur. That is, the instance has already occurred, and could occur, an infinite number of times.

Now imagine that the  $\Sigma s$  is ever so slightly different but the  $\Sigma u$  is still manifested. Insignificant factors such as: the earth diameter is .01-.03cm bigger/smaller; the air molecules are 1 nm out of place; the temperature is off by  $\pm 0.0000000001$  C; mount Everest has 3 less snowflakes... All of these factors impact the  $\Sigma s$  instance recurrence rate.

You can think of this like a photocopy of a photocopy, or recording of a recording, where some bits get altered due to resolutions issues, but otherwise, the movie remains almost 100% intact.

To illustrate this impact let's equate this altered  $\Sigma s$  to the number of integer divisible by 5, which is also infinite. The point being an increased density (see added green vertical lines):



Diagram 3 (divisible by 5)

We can see that the infinity density of the  $\Sigma s$  increases.

There is an exponential relationship between variance and the  $\Sigma s$  density

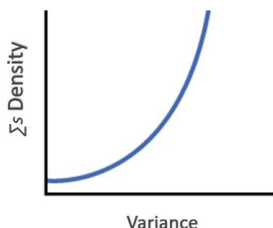


Diagram 4

## $\Sigma u$ (Sum of You)

The  $\Sigma u$  is the foundation of your soul and is defined to be the composition of all the acts performed in a lifetime.

The  $\Sigma s$  creates all the conditions for the  $\Sigma u$  to occur. The difference between the  $\Sigma s$  and the  $\Sigma u$  is that the  $\Sigma s$  manifests the  $\Sigma u$ . That is, it creates all the conditions for the  $\Sigma u$  to occur. Slight changes (3 less snowflakes on mount Everest) in the  $\Sigma s$  can still manifest the exact same  $\Sigma u$ .

All the diagrams from the previous sections describing the  $\Sigma s$  represent  $\Sigma u$  manifestations. Imagine that the following diagram illustrates the manifested instances of the  $\Sigma u$ . That is, when your tape will be rewound and played back exactly that same as before (integers divisible by 5):



Diagram 5 (same as diagram 3, divisible by 5)

The notation for the “current” Sum of You that you are now experiencing is  $\Sigma u$ , and for recurring instances it is  $\Sigma u'$  (prime).

Just as the  $\Sigma s$  could have minute differences not impacting  $\Sigma u$ , the  $\Sigma u$  can have minute differences not impacting other  $\Sigma u'$ s. For example, being 0.000001 inch taller/shorter, or 0.000001% darker/lighter. To illustrate the impact, let's equate the altered  $\Sigma u$  to the number of integers divisible by 2, which is infinite. Simply put, increased  $\Sigma u$  infinity density:

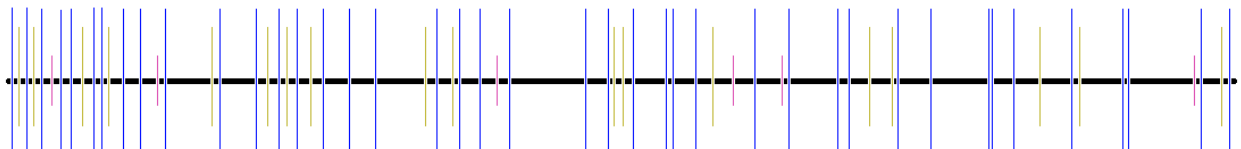


Diagram 6 (divisible by 2)

Note that at this point of the paper, we have only mentioned  $\Sigma u$  as being 99.99999999% just like you are today where all the variances have no noticeable impact to the  $\Sigma u'$  instances. Sort of like a copied movie with only 10 bits being out of place in the whole movie, otherwise, everything is exactly the same.

$\Sigma u$  variances will be discussed in detail in the next few sections.

The  $\Sigma u$  is defined as the combination of all the (+) & (-) acts performed:

$$\Sigma u = \Sigma(+) + \Sigma(-)$$

## $K$ ( $\sum u$ Pressure)

This is where things begin to get strange. Consider the  $\sum u$  is exactly as you are now, your 'current'  $\sum u$ , and you are now on the 3<sup>rd</sup> instance (green dot below). What you do today could change your other  $\sum u'$  instances into eternity. The potential that an act in the 'current'  $\sum u$  impacting other  $\sum u'$  instances is called " $K$ " (pressure).



Diagram 7

In order to grasp the concept of  $K$ , let's look at Proportionality. If we look at 2 variables,  $x$  and  $y$ ,  $y$  is directly proportional to  $x$  if there is a non-zero constant ( $k$ ) such as:  $y = kx$ . This can be denoted as  $y \propto x$ . For  $x > 0$ , the proportionality constant can be expressed as a ratio:  $k = \frac{y}{x}$ .

$K$  (pressure) is different than  $k$  (proportionality constant) in that  $K$  is derived from the sum of all  $\sum u'$  acts in all instances.  $K$  is defined as the potential that performing an act in the 'current'  $\sum u$  instance effects the probability that it could be repeated in other  $\sum u'$  instances.  $K$  is the probabilistic proportionality between current and future acts. For the equation ' $y=kx$ ', if ' $y$ ' is the  $\sum u$  and ' $x$ ' is  $\sum u'$  then we get:

$$\sum u \text{ acts} \propto \sum u' \text{ acts}, \quad \text{or,} \quad K = \frac{\sum u' \text{ acts}}{\sum u \text{ acts}}$$

Where acts represent good (+) and bad (-) acts

In other words, if you perform an act today, the probability that this performed act contributes to it being repeated in other  $\sum u'$  instances is defined as  $K$ .

Think about this: because you are reading this paper now, asserts that you could be reading it again in other  $\sum u'$  instances an infinite number of times (sorry about that).

With each recurring instance you have the opportunity to 'adjust' your life just a bit for better or worse. Some argue that there is no free-will, or ability to adjust their lives, as their reality is predicated on past events and their present consists of physical forces that cause them to act. This could occur if, and only if, the  $\sum u$  can only equal the  $\sum s$  with no variance allowed on  $\sum s$  or  $\sum u$ . However, as previously discussed, this violates our assumption of infinite time. Another way to say it, is that all dice rolls have deterministic outcomes. This view might be correct, but this leads to truncating the infinite potential of the 'dice roll', which limits the data we can consider, analyze, and understand.

One could further argue that the  $K$  hypothesis is incorrect in that if a '*lifeline*' has occurred in a certain order, it will always occur in the same order, so any 'choices' that are made will be repeated exactly the same as before hence there is no  $K$ . In other words, each  $\sum u$  is its own distinct lifeline.

Looking at the  $\sum u$  another way, consider all the possible permutations and combinations of all actions an individual can make in a lifetime and present them as distinct lifelines, you might get something like this:

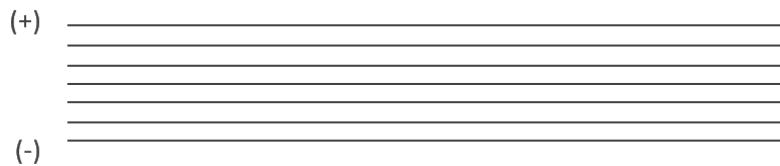


Diagram 8

Where each line represents an entire lifeline (ordered list of actions performed). For example, if you only did good acts, you would remain on the top line.

As there is a finite set of actions that can be performed in a lifetime, the lifeline Set is not infinite, and with an infinite timeline, we can assume that each lifeline could occur at least an infinite number of times with differing infinity densities. Starting somewhere at the middle point of  $K$  (+)/(-) early in a lifeline:

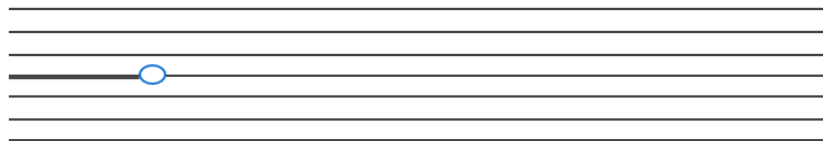


Diagram 9

Assuming that you did a good act, you could arguably move from one lifeline to another:

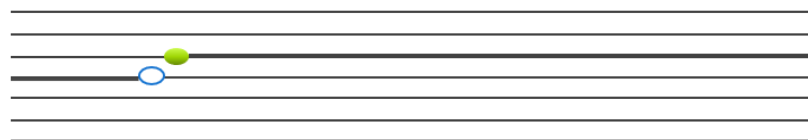


Diagram 10

The strange thing is that your current  $\sum u$  is its own lifeline itself. The same diagram from above illustrated in a single lifeline would be:



Diagram 10a.

Lifelines can also be represented as percentages of other timelines. For example, if you did 3 (+) acts in a lifeline it can be represented as a single lifeline:



Diagram 11

Or as percentages of other lifelines:

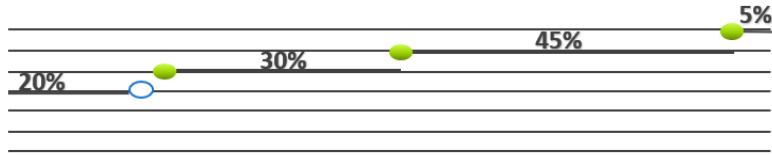


Diagram 12

At each point multiple actions can be made changing your  $\sum u$  to another lifeline. That is, you zigzag around lifelines, and exist in lifeline intersections. For example, many paths could lead you to the exact point you are at now, actions made in your 'current'  $\sum u$  control your future flow:



Diagram 13

Each lifeline in its totality is unique, however, each lifeline is composed of portions of other lifelines (lifeline intersections  $> 1$ ). You are only on a distinct lifeline when you inspect a specific point in time and its past, otherwise, your  $\sum u$  is composed of the cumulative statistical intersection probabilities that you've traversed. Being on intersections means that your current actions ( $\sum u$ ) impact your lifeline composition. If we assume a normal distribution of  $(+)/(-)$ actions, we get a bell curve of lifeline infinity densities such as:

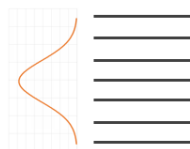


Diagram 14

$K$  is the potential that what you do now ( $\sum u$ ) exerts pressure on other  $\sum u'$  instances to do the same which ultimately shifts the lifeline infinity density distribution curve. Looking at the shift when  $K > 0$ :

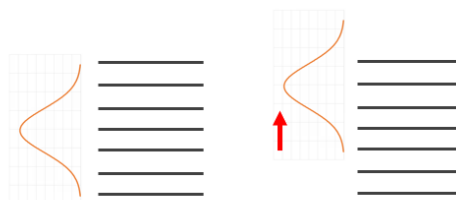


Diagram 15



As you have the option to change any action in any  $\sum u'$  instance, then we can loosely deduce that  $K$  represents your free-will across all  $\sum u'$  instances. That is, the combination of all current  $\sum u'$  actions (no past or future, only present) that you control as you traverse lifeline intersections.

Moving back to the  $\sum u$  occurrence rate diagram below, it is easy to visualize that past actions (circles) could impact future  $\sum u'$  instances (what I do today could be repeated in the future):



Diagram 16. e.g. green acts could be repeated in the blue and red  $\sum u'$  instances increasing its infinity density.

For example, if at a given intersection, and 90% of the time the same act is performed, this would impact all lifelines at a given point. Your lifelines might look like:

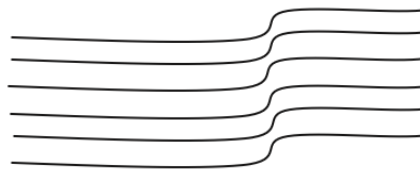


Diagram17(a). Influence of single act in all lifelines.  $K$  represents all acts in all lifelines.

Or if there is a point, where all lifelines converge as some lifelines do (+), while others (-):

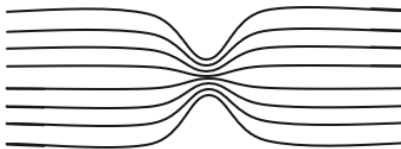


Diagram17(b). Influence of single act for all lifelines.  $K$  represents all acts in all lifelines.

Looking at diagram 16 above, the actions of the green circle could be the cause of the convergence of all the timelines indicated. This is the assumption we are making when we refer to  $K$ 's potential to influence other future  $\sum u'$  instances.

## Why do Good?

This paper defines Good as saving babies, and Evil as killing babies, where babies are defined as being born and not in the womb.

Religion teaches us that we have free-will and we should do good to others. Science is not so clear on this matter and, and attributes doing good acts to survival instincts. The point being, regardless of how you look at things, we can all agree that the choices that we make in our lives today impact our future. In other words, we have, or think we have, free-will.

Some readers must be thinking, "fantastic, I have a great life so let it happen!", but as you will find out in this paper, things might not be so clear, and we should all be, as the saying goes,

“careful for what we wish for”, as the intricate details of  $K$  must be understood to predict its impact on you and your cumulative  $\sum u'$  consciousness's.

Does  $K$  influence your free-will? For example, if you stop reading now, your other instances most likely would also stop. But maybe you didn't stop just yet. How about now... you might keep reading for a little while longer, or a little less. It is solely dependent on you in the present time of your current  $\sum u$  instance.

Consider the one dimensional timelines shown previously, adding a second dimension of  $K$  (pressure) and assuming a varying distribution of (+) & (-) acts, we get:



Diagram 18

As stated previously, doing something good (+), could impact your current instance, but more importantly all other instances as well. If you do good (+) today, but bad (-) in the future, they could cancel out and you would have a flatline outcome.

Suppose you decide that you want to perform more good acts moving forward right now. If  $K > 0$ , this decision could have an impact on other instances. If the decision or action is on the (+) side, we call this positive pressure ( $K+$ ), and the inverse, negative pressure ( $K-$ ). Flatline represents no change in pressure:

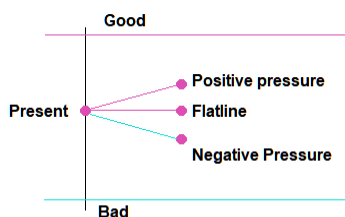


Diagram 19. X axis represents time; Y represents Pressure; vertical line is the present time

Consider that in this  $\sum u$  instance you do 1 good & 2 bad things, then in your next  $\sum u'$  instance you do 2 good, then one bad, you will see a flux such as:

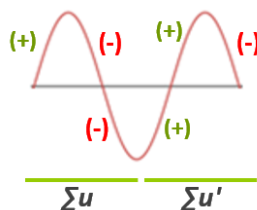


Diagram 20

With the dynamic aspect of recurring instances (free-will), you can imagine how the  $\sum u$  could change future  $\sum u$ 's:

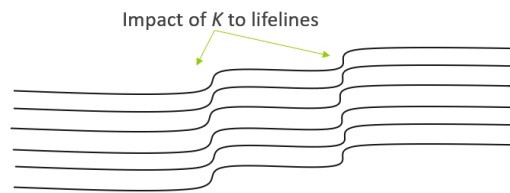


Diagram 21

You can decide to keep doing good and apply positive pressure. The flux will remain, but in a positive slope:



Diagram 22

Now image this perpetuating itself over and over with the positive pressure continually being increased, where you ultimately flatline at good:

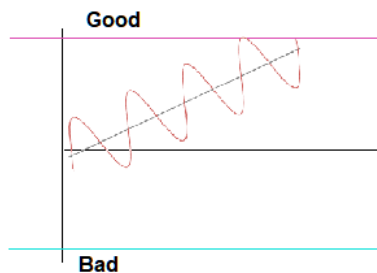


Diagram 23

Likewise the opposite is also true, flatlining to Bad:

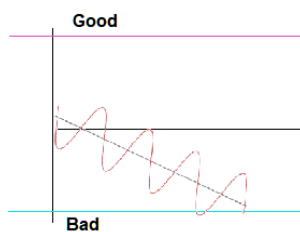


Diagram 24

Now imagine the combined fluxes of all individuals in our existence doing the same thing (good or bad acts as a herd). This could ultimately lead to, peace, or hell, on Earth:



Diagram 25

### $V(\sum u)$ (Sum of You Variance)

Now things get even more strange. The Sum of You Variance is the change percent of factors contributing to the creation of the  $\sum s$ s and the  $\sum u$ . For example, if the only thing different between  $\sum s1$  and  $\sum s2$  is that the Earth is .0000000000000001 nm closer to the sun, this would represent an extremely low  $V(\sum u)$ .

Consider the current  $\sum u$  instance model described previously (integers divisible by 2) where your life is 99.99999999% the same as today (exactly the same except for minute insignificant differences), then the  $V(\sum u)$  would equal 0.00000001% :

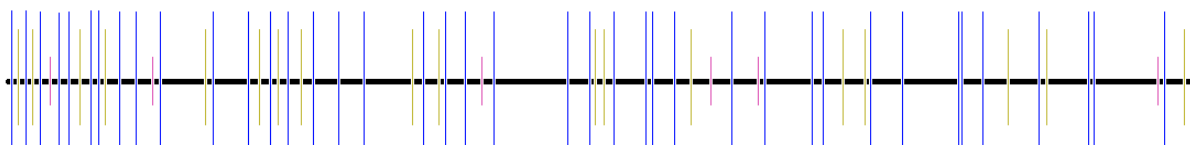


Diagram 26 -same as diagram 6 ( $V(\sum u)=0.00000001\%$ )

As we have seen from the previous discussion on the  $\sum u$ , it is evident that there are far more instances that are slightly different from your current  $\sum u$ . The  $\sum u'$  density increases as the variance percent increase.

You can try to visualize this by thinking about the whole numbers and rational numbers (fractions). The set of whole numbers is infinite ( $-\infty \dots -1, 0, 1 \dots \infty$ ), as is the set of fractions (whole number set + all of their fractions), but the infinite density of whole numbers is less than that of fractions. If your current  $\sum u$  is represented as the set of whole numbers, then increasing  $K$  would be similar to opening the set to include the fraction subset.

Increasing the  $\sum u$  variance from 0.00000001% to  $V(\sum u)=0.1\%$ , the infinity density could be:

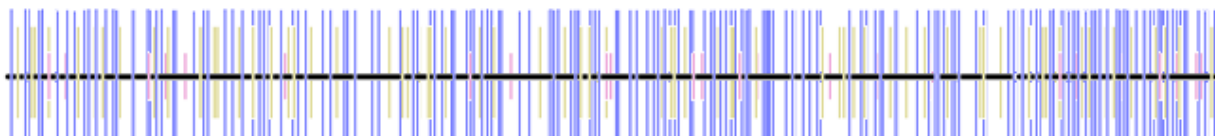


Diagram 27 ( $V(\sum u)=0.1\%$ )

Increasing further to  $V(\sum u) = 1\%$  the infinity density could be:

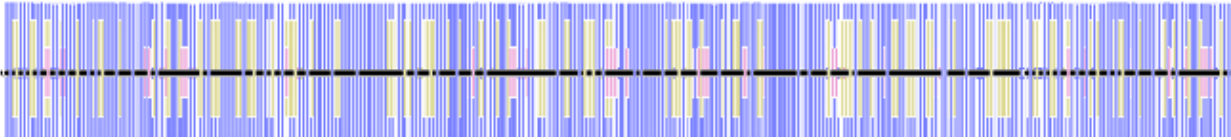


Diagram 28 ( $V(\sum u)=1\%$ )

The point being that the probability of the  $\sum u'$  instances being different to your current  $\sum u$  increases proportionately to the increase in variances:

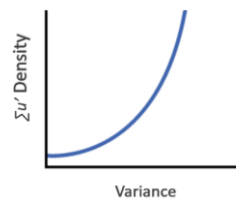


Diagram 29. Previous examples used 'divide by' 42, 5, 2 as examples of increasing infinity density

Let's examine an example at this point. Let's assume that you are now 2 inches shorter/taller. How would this impact your life? Would you be better or worse at sports, more or less attractive? Would this make your personality change? Make you more confident? Assuming so, this could lead you to making some bold decisions and ultimately having a hugely successful life. Remember, it is still your consciousness, but as the variance factors change, your perception does as well, impacting your reality (current  $\sum u$  consciousness).

Increasing  $\sum u$  variance has some compelling philosophical implications relating to consciousness. Once the variance increases above a certain threshold, the changes are so drastic that your  $\sum u$  consciousness still exists but in a different flow. You can think of this like an interactive movie, where you can chose the direction and outcome of the movie by making choices (should I answer the phone or not...) which impacts your outcome.

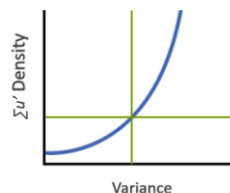


Diagram 30

## \$ (Soul)

A religious definition of a soul is:

The immaterial aspect or essence of a human being, that which confers individuality and humanity, is often considered to be synonymous with the mind or the self.

The soul is the part of you that consists of your  $\Sigma u'$  mind,  $\Sigma u'$  character,  $\Sigma u'$  thoughts, and  $\Sigma u'$  feelings. It is more that your current  $\Sigma u$  consciousness.

The scientific approach towards testing for the existence of  $\$$ 's might not be possible. The scientific method is a method consisting of observation, measurement, and experimentation, formulation, testing, and modification of hypotheses. It is extremely difficult, if not impossible, to create a test for a  $\$$ . And if we were able to come up with a test, there would be no way of measuring the outcome in other  $\Sigma u$ 's instances. If our hypothesis is that consciousness is the  $K$  (pressure) that is caused by the  $V(\Sigma u)$  (instances variances), how could we possibly communicate between  $\Sigma u$ 's instances to see if it actually occurred? Here's a fun thought, perhaps we are quantum entangled with other  $\Sigma s$ 's, so when we perform quantum entanglement tests, we are observing the same tests being performed in other  $\Sigma s$ 's and are communicating with other  $\Sigma s$ 's. Perhaps we are observing entangled  $\Sigma s$ 's and there is no instantaneous communication between quantum systems. Ok probably not.

If all we have is our current consciousness to consider, how could we test for other instances of our own consciousness? Could individuals claiming to recall a previous life be an example of this? What about 'freak accidents'. Accidents such as car or plane crashes, drownings, falling off buildings or cliffs, all while never really getting hurt. There are numerous incidents of these events occurring continually throughout the world.

Take for example, documented incidents of people surviving plane falls without wearing parachutes. What are the odds of this happening? Aren't the odds higher that they would have not survived? Perhaps, they didn't always survive? That is, depending on the  $V(\Sigma u)$  (variance) degree, perhaps in 99.99999999% of recurring instances they die and only 0.00000001% of the instances they survive. Perhaps their consciousness carried over to other manifestations within the  $V(\Sigma u)$  (variance), but they actually died at that moment in that  $\Sigma u$ , then shifted to another lifeline. You could have died several times already, but are continuing on your consciousness journey:



Diagram 31

People might question how their life and all your recurring  $\Sigma u'$  instances is fair. What motivation is there for the privileged to do good (apply  $K+$ )? What do they have to lose if their recurring  $\Sigma u'$

instances could make them privileged again? Can't they just ignore everything and focus on themselves?

How could we possibly have  $\sum u'$  equity? We mostly count on Religion to sort this matter out, and not Science. But as we have seen, there could be a scientific basis to do so as well.

Increasing variances beyond a certain point could create changes so drastic that you won't look like yourself, and you won't be living your life today, but it will still be one of your  $\sum u$  consciousness branches. And taking this to the extreme, you could be experiencing someone else's existence. Is there a probability that the variances to your  $\sum u$  will make your consciousness experience what someone else is experiencing today? Could you experience someone else's  $\sum u$ ? With all the potential changes to the variances that can alter the  $\sum u'$ , how long would it take to experience every human experience? that is, your consciousness will effectively experience everyone else's life as well. You can think of it this way, you switch over to someone else's lifeline intersection. Due to large  $V(\sum u)$ , your  $\sum u'$  infinity density increases, it could overlap some other lifelines as your  $\sum u$  distribution widens:

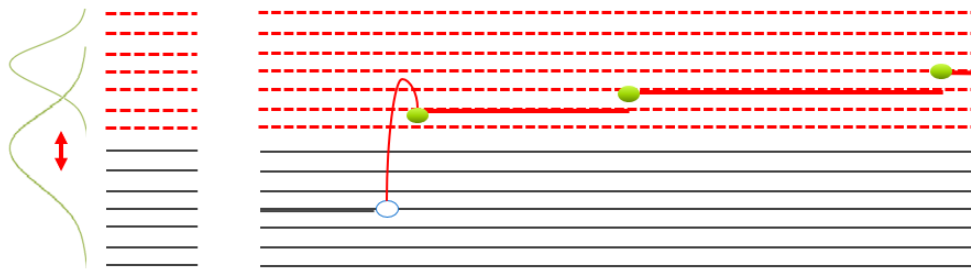


Diagram 32

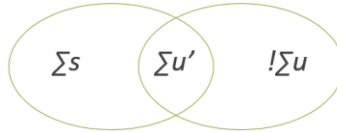
Let's look at another less fortunate (more extreme) example. You are now born with a minor disability and all other factors remain the same. This could have enormous implications for you. The disability could make you frustrated, alienate you, and make you ultimately fail in life. Taking this to the extreme, this disability could lead you to become homeless. Remember, this is your consciousness, and now you're homeless.

Assuming high  $V(\sum u)$  (increased infinity variance), we all get a chance to be poor and rich an infinite number of times with differing densities. We could ultimately share each other's experiences. But as there are so few rich positions available (low infinity density), and if you are experiencing it now, you most likely will not be experiencing it in your next 8+ Billion recurring instances, so this is your chance to improve your future  $V(\sum u')$ 's, where you might be very poor. Image being in higher dimension so that you are able to see all of your lifelines at the same time, and if you saw no  $K+$  applied, would you not ask yourself: "I wonder if she/he even cares...?"

## Proof of Soul Equation

The following attempts to provide a Mathematical Proof of your Soul:

$\Sigma u'$  is defined as the intersection of the  $\Sigma s$  &  $\Sigma u$ :

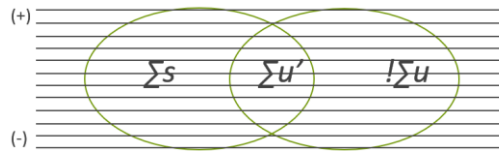


$$\Sigma u' = \Sigma s \cap \Sigma u$$

Acts are defined as:

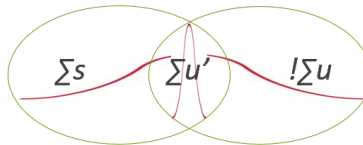
$$(+) \text{ \& } (-)$$

Thus the  $\Sigma u$  is:



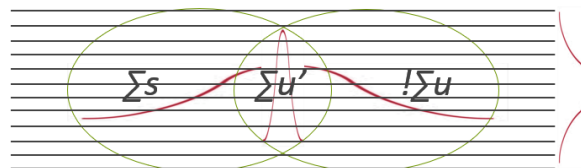
$$\Sigma u = \Sigma(+) + \Sigma(-)$$

$K$  is defined as the probabilistic proportionality between current and future acts:



$$\sum u \text{ (acts)} \propto \sum u' \text{ (acts)}, \quad \text{or,} \quad K = \frac{\sum u' \text{ acts}}{\sum u \text{ acts}}$$

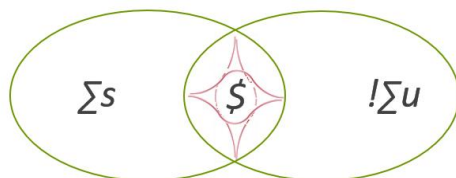
Substituting acts we get:



$$K = \frac{\Sigma u'((+) + (-))}{\Sigma u((+) + \Sigma(-))}$$



As stated previously, your current consciousness is your current  $\sum u$  instance, but we need to combine all the possible variances that still manifest your  $\sum u'$  instances. Combining all potential “consciousness” together to form the soul, we get:



$$\text{\textcolor{teal}{\$}} = \sum_{v=-\infty}^{\infty} \text{\textcolor{teal}{v}}(K_v)$$

Where

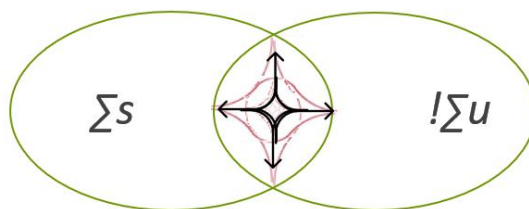
$\text{\textcolor{teal}{\$}}$	Is your Soul.
$\sum_{t=-\infty}^{\infty} \text{\textcolor{teal}{v}}(\dots)$	Is the sum of all possible variances starting at negative infinity and ending at infinity.

So the soul is the combined impact of  $K$  of all possible variances. In other words, if we substitute acts back for  $K$ :

$$\text{\textcolor{teal}{\$}} = \sum_{s=-\infty}^{\infty} \text{\textcolor{teal}{v}}\left(\frac{\sum u'(\textit{acts})}{\sum u(\textit{acts})}\right)$$

Then, not surprisingly, the mathematical definition of your soul is the pressure created by the sum of the combination of good and bad acts performed in all  $\sum u'$  instances.

You can try to imagine this as a nesting of distributions of all your free-wills, that you can influence at any time (arrows):



Quantum mechanics experiments appear to indicate that matter is formed upon observation, could it perhaps be that the  $\sum$  (sum) of all  $\text{\textcolor{teal}{\$}}$ 's (souls/consciousness) is the Yin to the Universe's (Yang)?

$$\text{\textcolor{teal}{Universe}} = \sum \text{\textcolor{teal}{\$}} \text{ ?}$$

## Conclusion

Perhaps all the philosophers and religious authors had it right all along. A common theme amongst all major religions is: Do good to others.

If this paper makes any sense to you in the slightest, you should consider just how much faith you had to put into your belief of science, specifically into infinity. Faith is believing in something that is not, or could not, be proven (Infinity, Good, Bad, Math, God...)

Just as we try to prove our scientific faith to be fact, we should try to do the same with our understanding of Religions as well. Everyone should read their religious books in their entirety and not depend on what pundits and hypocrites preach, but learn from centuries of knowledge gathered over eons of experiences.

If you believe that your soul is proven, you should move to change the world for the better. If we all get a chance to be poor and rich an infinite number of times, why don't we try to make it better for everyone. After all, your consciousness could be experiencing someone else's  $\sum u$ , so why not look out for your  $\$$  (soul). That is, why don't we make it better for the poor, so when it's our time to experience being poor, it won't be as bad as it is now.

There are many ways to make the world a better place. Visit our blog and share your ideas with everyone. We all need to be kind, compassionate, tolerant, inclusive, caring; and perhaps most of all, we must try listen from other the persons perspective.

Someone once said that we should "love your neighbor as yourself", and perhaps there is scientific merit to the statement.

The goal of this paper is to attempt to increase the positive  $K$  (pressure) globally, and if only 1 (+) is achieved, then this paper was successful.

## Increasing Positive Pressure

If you would like to participate in increasing positive pressure in the world, please visit the following site for more information:

- <https://mathproofofsoul.wixsite.com/math-proof-of-soul>

or (secondary sites)

- <https://mathproofofsoul.github.io/Site/>
- <https://github.com/MathProofOfSoul/Site>

For any further inquiries, or if you would like to reach out to the author, please contact me at [math.proof.of.soul@gmail.com](mailto:math.proof.of.soul@gmail.com)