Fundamental Theory of Change – A text into time

There will be a lot of bold statements in this text, many without any given proofs, just due to the common sense nature of the claim, or easy realization by the reader after some thought.

Time does not exist. Everything that has been associated with 'time' is actually a change, and time was invented to account for this idea of change.

Change is universally constant and occurs only in one direction, and the accepted standards of time track this change precisely.

If time tracks this universal change perfectly, then is there a difference between time and change?

The answer to that question is yes, as will be discussed in the following text.

This text is not meant to discredit the idea of measuring time, but to explain why time as we know it is a different concept.

Chapter 1: Observation

Theory: Nothing exists without an observer.

Proof:

How many people are on the planet right now? 7 Billion? 8 Billion? How do you know?

The only answer is: someone [with credibility of some sort] told us.

Suppose you had perfect recall of your memory. How many people have you observed over the course of your life? If you wrote down every person you ever interacted with, how many could you list? Is it 7 billion? Probably not.

How many people have lived in history with no evidence of their life left behind?

We all know the famous people with significant accomplishments throughout history, but what about all of the other people with no memorable accomplishments? Even those with direct descendants may be wiped from history due to their lack of notoriety.

If a tree falls in the woods, does it make a noise?

Science and logic say that it must – no event can occur without the associated aspects also happening – but without an observer that tree could fall, but also rot and disappear without any notice. So, did that tree ever actually exist at all?

How many planets and solar systems have been born and destroyed before humans started observing the stars, and how many were completely beyond earth's view for their entire existence?

Unless there is an observer, nothing can be known. And when the first conscious observation happens, that is when the events begin.

This is very similar to dreaming. There is never a beginning to the dream. Dreams begin in the middle with the action already in progress.

Human memory solidifies between the ages of 2 to 5. the world does not exist to anyone before these memories.

Observation creates. And defines. Very much like Schroedinger's Cat, the cat exists in both states (alive and dead) until positively observed.

How does this apply to time?

Scientists tell us the universe is 14 billion years old, and humans have just popped into existence in the last 10,000 years with recorded history. That is the middle of the dream. We don't know what happened before that.

We can all **speculate** and find evidence of things that **might** have happened, or that lived before, but we will never **KNOW** about it without an observer, or more accurately, without observing for ourselves..

This is the conundrum of time.

The first problem with 'science' time is that it has to always exist. Time has to exist without an observer. Everything has to fit into nice little time compartments. The sun was born 4 billion years ago, etc.

With change, nothing needs to happen before the observer arrives.

Much like a hotel room – check in time is 3pm. When the hotel guest steps in the room, it is organized and ready, but the room could have been in any state up to that point. The hotel guest doesn't know what happened in the room before the door opened at 3pm. There could be speculation and some evidence, but the guest will never **KNOW** exactly what happened.

Another good example is how people change personalities based on who is around. The observation by others changes how most people behave.

In church, a person behaves to a certain standard. At a football game, there is another standard. When that person is alone, there is another behavior.

The best example for how people behave without observation is when a crowd gathers in masks or disguises to hide their identities. The group may get violent or hateful, or attack a person or business, etc. People in a crowd don't feel there is any observation going on, so they act accordingly.

If every person in this crowd knew they were personally being observed, it would follow that they would behave differently in most cases. Thus, observation can cause change, but change is inherent in everything.

A computer needs a clock generator to work. Without the clock the computer wouldn't be able to work. The computer doesn't know what happened before the clock started. There might be evidence – files and other stored records on the disks, etc – but it doesn't **KNOW** what happened before the clock started.

Those computer files could be from a different computer, or downloaded over the internet. The computer knows they are there, and can work with them, but can't prove that the computer created those files in any form.

The second argument against time is that it cannot be stored.

There are 7 fundamental units in physics:

Length Mass Time Electric Current Temperature Intensity Quantity

Suppose you had to make a box containing each of these units for an alien world to understand. How would you package these?

Length and mass are easy – just include a ruler and a standard mass – a meter stick and a kilogram weight perhaps.

Temperature could be done with a thermometer, but the markings may be difficult for the aliens to correlate. But because temperature has an absolute zero, there is a universal start to it.

Quantity would be hard to understand in a way, because it could be confused with mass, but showing some way of counting is sufficient, such as one, two, and three marbles, and then larger sets, up to 100 for example.

Intensity and current are more difficult, not because the ideas are hard to grasp, but because the methods of generating these ideas are not reliable over centuries, or comparable to earth standards from a different viewpoint. A circuit with a battery could be made, and the current could be a set amount – but the battery may run out, etc, because of the reality of the system.

Imagining perfectly ideal situations, a circuit of a known current could be created and stored in the package, as well as an intensity system for either a star or just a light.

All 6 of these unit bases have ways of creating or showing what they are. Also, all 6 have definite zero values.

But now, how would time be captured? Does time have a zero?

There are a number of ways to show **CHANGE** but no way to capture 'time'.

Just having a clock that counts 1 second over and over would be a way to show change. But that doesn't count as time. How would a human calendar be made understandable to an alien race? In fact, even in recorded human history there have been many different calendars, making it hard to understand for humans sometimes. Some calendars start counting when a king or emperor began their reign. Calendars can also be based off of historical events – comets and such, or most recently, following the standardization based on the birth of Christ. None of these actually satisfy a zero moment for time, these are actually just zero moments for some change in human events.

Change also has the problem of no zero, until the realization hits that change requires an observer, so change always has a zero based on observation or the observer.

Chapter 2: What is 'time'

The previous chapter addresses the two main problems with time: storage and no zero point, and this chapter will address the keeping of time.

The first principle of the Fundamental Theory of Change is that the rate of change is constant everywhere. This should come as no surprise to most people, being as time is considered constant everywhere.

The first objection is going to be "but what about relativity?"

Ok, remember that change requires an observer, so change happens constantly everywhere **to every observer**, but only when that observer comes back and references another system does the sum total of the change look different in the 'relativity' sense. Each 'twin' sees the same rate of change, and only when comparing themselves to each other does the extent of the differences appear.

During any motion, change is constant for every observer. Comparative change can be different, as explained by relativity.

The system of time adopted for humans is actually based on observed change. One day is based on the rising and setting sun, the four seasons based on position of the sun and changes in temperature and foliage, a year based on the recurring pattern of seasons, etc.

All of these units of time were based some observable change. We also watch people change as they age, but there is no repeatable change pattern during the aging process, so people just get older.

Time, as we know it, is just a way to categorize change into some bracket. Years are bracketed into different historical eras based on events or people. The biggest time event was the birth of Jesus Christ, which sets the stage from B.C. [before Christ] to A.D. [Anno Domini, year of our Lord] and current history uses this date as the starting point. Side note, the calendar goes from 1BC to 1AD, there is not a 'Year Zero' defined in the current system.

Before the birth of Jesus Christ and the subsequent calendaring systems based on it, time was usually quantified by the year of the current emperor or ruler, or from some major event, like the founding of the city of Rome, for example. All of these were significant changes from a cultural perspective and allowed for keeping track of the position in time. There wasn't a universal system of comparative times, and in early Greek culture, for example, when years were based off of the era of each ruler, there was no easy way to account for or 'schedule' for future events. If the calendars reset, any event scheduled for "year 25 of Caesar's reign" then gets reset when the emperor changes.

The current calendaring method is universally synchronized on a singular event, while allowing forwards and backwards tracking of events – but still based on observable changes.

In simplistic terms, the rate of change of the Universal Change Constant is the same as the time system developed and in use by every observer. One second of 'time' is can be defined as being exactly equal to one second of 'Change' in the Fundamental Theory of Change.

Time, as constructed, describes a continuous series of change events and labels them such that each event aligns with others to give order and remembrance, but doesn't create these events – Change does.

Why doesn't time exist then?

Because time from change requires an observer, and as such that makes every observer experience a different 'time' relative to each other. There is no absolute 'time' as we know it, only absolute 'change.'

Starting with a single person is one way to examine the difference between time and change. For this one person, their life can be represented by a continuous curve – and a convenient one to use is the Spiral of Archimedes, as shown below.



Mathematically, the Spiral of Archimedes represents the equation  $r = \{\text{theta}\}\ \text{or, for simplicity, with}\$  some constant of proportionality, r = k [theta], in the polar coordinate system. It may be that k is some other function of other unknown variables.

Change, in The Fundamental Theory of Change, causes the value of theta to increase at a uniform rate, and this produces the rotation along the axes at a constant speed. The life of a single person can be represented as a car driving forward along the red curve, and drives one lap every year. The first year the car moves a distance, and the second year that distance is longer, and the third year even longer, etc. This could also help explain the feelings of how fast time moves. A young child feels like it takes *forever* for Christmas to arrive, whereas an older person has the years just fly by due to the speed needed to complete one lap on the curve.

The relative effect is that "time" varies as the "speed" of the car varies.

The position of the person can be calculated by using the age as defined in 'years' by counting which lap the person is driving on, much like the rings of a tree. The time since birth corresponds to an exact point on the Spiral, and also determines the speed of 'life' as well.

Events and memories are sign posts or markers along the way.

Every person ever born has their own spiral. Imagine this one person's life spiral as being on a sheet of paper. All of the people ever alive would be a pile of papers, each with a spiral on it.

Recorded history can then be represented as a stack of these sheets of paper, one person on top of each other, in historical order based on the moment of birth. All of the papers are glued together and there is a rod going through the origin to allow for the stack of papers to turn. This stack of papers, or lives, is constantly rotating at the speed of change – one rotation, or lap, per year.

The observable earth history, therefore, could be represented by a tube containing all of the rotating Spirals containing every person's life. The direction of time is constructed by observing the layering of the Spirals, new births on top of old lives, and the direction of the turning of the papers inside.

One fascinating aspect of the Fundamental Theory of Change is that it creates many interesting possibilities with regards to how to address time – the first being that time is also an observational construct.



One of the first questions for this theory is 'what happens when two people experience/observe things together?'

This very good question allows the power of the Fundamental Theory of Change to be explored.

The stacks of paper in the tube are not single dimensional elements. While the papers are flat in the 'time' dimension (birth order), the lives of the people on the paper, in fact, connect on many other dimensions. Temporal and Physical dimensions overlap people in life, and thus Time and Space would be two of the dimensions. People cross paths and arrive at the same location at the same time, so there must be a way for this to be represented and explained by the Change Theory. And shared experiences create memories as well, whether people are in the same location or far apart, so there must be a way (or "place") to connect and store memory and sensory data.

With the calendaring system, the event is considered universally fixed, for example, the date of some event, such as 9/11. In the Fundamental Theory of Change, every event is just ordered sequentially to the observer. For example, "last week I was there." "yesterday I did that." etc. Without some method of a universal calendaring system, time would be relative and hard to keep track of. But to each of the observers, days consist of the details of their lives, and change marches on.

The invention of the universal calendaring system truly was a pivotal moment in human endeavor.

Returning to the question of 'what happens when people experience the same thing together' produces a great thought experiment within the Fundamental Theory of Change.

Consider an event, say someone's birthday with 20 attendees. The calendar is set to a specific date and hour, and 'time' says that everyone is there at the exact same moment.

In the Fundamental Theory of Change, each person has their own Spiral, and live their lives in their own observable time. This means that the event happens and they all interconnect for those moments, but the people don't all need to be **existing together** for their observations.

That statement takes a bit more explaining with an example. The event is Cousin Lois' birthday. Let's focus on 3 people at the party. Joe is 22, Jane is 24, and Rob is 30. They all attend the party and interact throughout.

Each one is driving their 'car' along their curves in their observational life.

'Time' says that each one should be driving side by side for those moments, and at the same speed, for each of those interactive events.

In the Fundamental Theory of Change, they could all be at different points in their lives, and most likely are. What this means is that at the exact "time" on the calendar for the birthday: Joe could actually be 80 years old in his own observational change life, and looking back at the birthday event when he was 22, just as a memory.

Jane could be 24 and observing the moments as they happen in real time,

and Rob could be only 11 and will experience that event in his future, 19 years from now.







All three will experience the event, and observe it on their Spiral, but it doesn't have to happen that all 3 observing at the same point in their own observational spirals.

The Fundamental Theory of Change focuses on each person's observable changes, and develops 'time' from there, such as making calendar markers, rather than being calendar driven. Events still happen at the prescribed dates and in order, but the calendar date isn't the same for everybody.

Another aspect of having an observational based system of time is that it allows everybody to be alive – right now - but in their own era.

For example, George Washington is still alive, but living in the 1700s, which people in the 2000s can't interact with. To George Washington, people alive in the 2000s don't exist, because he has no way to observe them, and to the people living in the 2000s, these people only know of Washington from the history books because there is no way to have an observational interaction within the system/cylinder before being born.

One aspect of the Fundamental Theory of Change is that everybody ever born is current alive in their own observable lifetimes.

Chapter 3: contradictions

How can everyone ever born be currently alive?

In the calendaring system, the driving 'force' is the chronological time of the universe – it is **now** Jan 1, 2000, for example. And everybody must obey that date – many people haven't been born, and many have died.

In the Fundamental Theory of Change, the time is relative to each observer, so everyone can be alive at the same time, just not interact across lifetimes.

Everybody alive just observes changes in their own life, with change driving everything at the same rate. Only recorded history is able to carry over from past to present. That recorded history travels at the speed of information along the stack of papers, so as someone creates a record of history, that recorded history passes along to the future generations.

But people do die, so what happens then?

To answer this question requires another body of exposition.

Hopefully the idea of having a stack of lives in a 'tube', 'changing' (rotating) at a constant rate makes sense. But like the philosophers of old, the next question is 'what exists outside of that tube?' It's turtles all the way down isn't the answer in this case.

It may be that the oatmeal tube cylinder that we are currently in is the only object in the universe, and outside of the tube is 'heaven' or 'the abyss' or something outside of the observable universe. This 'cloud' that exists outside of the tube could be heaven, and when a person dies, their soul drops off the paper and then exists in the cloud. Or if it is the Abyss, then their existence just ends.

The Fundamental Theory of Change doesn't purport to definitively answer the question of 'what happens after we die?' The theory focuses on examining a world driven by 'change' instead of 'time' and how observation becomes the primary evidence.

However, it is this fact of 'observation' being the critical structure that allows for many of the possibilities for what happens after 'death.'

Possibility 1: The Bible truth.

It is quite possible that the tube exists inside a cloud, much like a chicken rotisserie turning on a grill. The spit turning at a constant speed represents the change everyone is experiencing, while anyone watching the grill does not experience any change. This 'changeless' cloud could be defined as the afterlife, or heaven, or hell or some other cosmic entity.

God exists in this cloud, the heavens, and watches the lives of everyone as the spirals rotate.

When someone dies, their spirit departs from the oatmeal tube and joins up with others in the heavens. These could be angels or other spirits, or just souls going along with an existence in heaven. Or hell.

This would produce a single lifetime for each person, after which each person goes to meet Jesus. The bible says in Hebrews 9:27 King James Version (KJV) 27 And as it is appointed unto men once to die, but after this the judgment:

Possibility 2: Reincarnation.

It is also possible that each person exists as one person over and over, reliving the same life each time through. This is hard to prove or disprove, but anecdotal evidence, in the form of deja-vu, could be explained by having remnants of past memories stick from a past life.

Past memories can be imagined as a dream – sometimes dreams are not remembered, sometimes dreams are remembered vividly, but after time they fade and can't be recalled anymore, with just snippets remain.

Nothing in the Fundamental Theory of Change claims that each person needs to remain as their own person, but the Bible claims each person is their own soul, and that soul is forever, so while reincarnating as someone else is perfectly acceptable, keeping with Biblical claims, each person, if reincarnated, would live the same life over and over.

Possibility 3: Multiverse.

Possibility 3 and Possibility 2 are very similar, as they both deal with reincarnation. The difference is that Possibility 3 adds in the multiverse.

What is the multiverse? It is the theory that there exists parallel universes in which events occur just a bit differently, or very differently, but that can't be seen.

For the Fundamental Theory of Change, the multiverse is a collection of cylinders or oatmeal tubes, each spinning at the rate of 'change' for that universe – which could be the same all over, or it could be at a different rate internally, as long as everybody in that universe experiences change at the same rate.

In each oatmeal tube of lives, something differentiates that universe from another universe, although that difference could be great or small.

The multiverse might just be a collection of change cylinders arranged in a probability distribution of what is most likely to occur. There are infinite cylinders in each portion of the distribution, but the most likely ones are clustered around the most common outcomes. A person sneezes at 1:33:04PM on July 1, 1998 in one multiverse, but it is at 1:33:08PM in another, but everything else is exactly the same from beginning to end for everybody else.

Alternately, it is also likely that the sneeze changing to 1:33:08PM – that four second difference – causes a cascading sequence of events and produces a Cat 5 hurricane in the next month, producing a completely different universe outcome altogether. But that outcome universe may be probabilistically less likely, so it doesn't exist as often – or rebirth happens in the most common universes.

One way to imagine the multiverse is to hold up your hand, palm facing you. Keeping your fingers touching could look like the probability density of the current universe. The middle finger is tallest and represents the current life you have, which is the most common probability. The other fingers represent similar universes where something – probably something minor – is different. This would be like the sneezes at different time.



Now spread your fingers apart. The middle finger now represents the cluster of universes your touching fingers just were. That is the highest probability universe, and all the surrounding ones with just minor changes.



As you follow down your middle finger up to your ring finger, there is a dip and a gap. This represents a low probability set of universes. Something like 'an asteroid hit at 1000BC and killed all humans', or 'people are born with 5 arms' types. Something that is low probability compared to all the other universes.

The ring finger represents a new cluster of universes, with a significant change from the middle finger cluster. 'The Americans lost the Revolutionary War', or 'Germany won WW2' type universes. In that cluster is the minor change universes – like the different times of sneezes from before, but now all happening under a different victor than the other universe cluster.

In the multiverse exists an infinite number of universes, all with something different.

A little thought experiment can help to show the infinite magnitude of the possible universes. There are 31.5 million seconds in a year, thereabouts. Suppose every person on earth has a decision to make every 2 seconds throughout the day on average. That is 16 million decisions per person. And for simplicity, say each decision is a heads or tails type of decision. Each decision creates a new possible universe. For each person, that turns out to be – not 16 million times 2 – but 2 raised to the 16 million power. The result is 8.5 with 4.8 **million** zeros after it. That's a big number.

If a sheet of standard printer paper were to print 3000 of those zeros, it would take 1,600 pages just to print the zeros of the number.

And that is just one year for one person, multiply by every person who ever lived, and possibly animals and trees too, and how long they lived, and that adds many more zeros again. That's a lot of universes. An impossibly big number of universes.

Imagine the single finger multiverses – with small changes close to the tip, and bigger changes further away. This would very much look like a hill of sorts. A hill with trillions of universes inside of it, all slightly different from each other. Zooming in on the top would show that many of the cylinder surfaces overlap. The overlap represents all of the events that are the same. A zoomed in hill surface might look something like this:





How does this relate to the question 'what happens when somebody dies?' Putting the theory of reincarnation together with the Biblical claim of each person having a permanent soul, then the multiverse theory suggests that each person jumps from universe to universe – as themselves – after one life ends, and begins a new life, as themselves.

This possibility also can explain deja-vu, as the faint remembrances of past lives, but it could also explain why deja-vu is just a passing feeling. One event doesn't follow the same path in each universe, so there are just glimpses of 'this happened before' because the entire event follows a different trajectory to fruition, only part of the event happened the same way as you are currently experiencing.

Expanding on the hill model for universes, changes in the major events would create different hills, representing mutually exclusive events. For example, an asteroid wiping out humanity in 1000BC, and Julius Caesar becoming emperor would be mutually exclusive, because humans wouldn't have been around to establish the Roman Empire. Additionally, since only one victor can emerge from any war or conflict, those would also create separate hills.

All told, there are trillions of trillions of hills as well, looking much like a set of waves in the middle of an ocean, and expanding forever in all directions.



The peak of all the hills would be the most likely universe in that set, and all other close universes would be the small changes, whereas the bottom of the hills would be the greatest changes from the central universe, and have a much lower probability of occurring.



Possibility 4: The Abyss

It is also possible that after dying, each person just fades away into nothingness. This is not as exciting as the other possibilities but should be considered.

Out of all of these Possibilities, the multiverse in Possibility 3 is the most fun to examine.

Starting from Biblical truth, the claim that each person is a permanent soul says that we are all comprised of three parts – body, soul and spirit. The body is the physical form, with all the senses and physical interactions with the world around us. The soul is the life force that is permanent and will reside in heaven or hell for all eternity. It is very possible that the 'soul' is responsible for memories – acting as a hard drive of sorts for any learned information. And the spirit is the part of each person that interacts with God through faith, hope, prayer, etc. The spirit died when Adam and Eve sinned, and that is why Jesus desires all people to come to him and be saved, and 'born of the spirit.'

Where is the soul now?

It is quite possible that the soul exists in the 'cloud' outside of the multiverse, and is what interacts with the mind to control the body.

How can this be?

Imagine a computer doing a task – like running an app or opening or closing the garage door. The computer interacts with the physical world, selecting things when pressed, etc, and operating the garage door, but there is something beyond that – a person operating the computer to direct the steps.

This is how the soul can interact with the world. The soul is the 'real' you – and knows everything, but is limited in what can be told to the body needing to experience things. The soul cannot just implant memories of past lives, it requires something physical to create the memories, otherwise the memories would feel like dreams. Each lifetime in the multiverse has data stored on a different partition of the memories hard drive, and the partitions cannot talk to each other.

The Bible says in Jeremiah 1:5 'Before I formed thee in the belly, I knew thee' - so there is a connection between God and the soul before birth or conception. This suggests that God and all of the souls of every person on earth exist together outside of the multiverse.

From your soul's perspective, the physical 'you' is the character in a computer game, and the soul is controlling the character though some form of communication – it could be the brain, or could be the heart, etc. There is no provable organ that the soul connects to, but since most people 'feel' thoughts are created in the brain, and have the most powerful senses (sight, hearing) in the head, it could be the connection from the soul is tied to the brain.

Consider the brain – it has been theorized and even experimented on to determine when thoughts occur, and it might be there is activity in the brain that occurs before a thought happens. This could be the soul interacting with the brain to produce said thought.

It also makes sense that the character in the computer game wouldn't know as much as the soul does. As you run through a game, you learn all the levels by memory, but the character in the game doesn't share that memory. You may have a map from the guide book or from the internet, or might have played the area before several times to learn a particular trick that is needed to move on, but you have no way to communicate your knowledge to your computer character. It may be the same for the soul. The soul may know lots of things, but has no way to produce that knowledge in your brain. Therefore, each life is a new experience for your physical self. How does this jive with the multiverse?

There is one verse in the Bible that specifically deals with the afterlife:

Hebrews 9:27 King James Version (KJV) states "And as it is appointed unto men once to die, but after this the judgment:"

One way of interpreting this verse is that each person lives one life, dies, and then goes to the judgment. There is nothing at all wrong with that interpretation, and it is probably the most correct interpretation, and should make everyone fearful for their soul.

This interpretation also matches with the verses stating that the souls of people who died believing in the Savior, but died before Jesus paid for their sins, waited in Paradise, or captivity, for the Savior. After Jesus rose from the dead, He took all those souls to heaven.

This interpretation suggests that the single oatmeal tube universe is how things are, and that there is a cloud, or heavens, outside of the oatmeal tube where all the souls and heavenly bodies exist with God.

Another possible way to interpret Hebrews 9:27 is to use the exact words, but stress it in a little different way. "once to die, but after **this** the judgment"

It could be interpreted as 'one death leads to the judgment' out of many lives and deaths.

In a way that may be similar to the game 'Press Your Luck', each square is a life, and only when the 'whammy' comes up does the judgment happen. It would surely be "pressing your luck" to live like that – that this life is one of many and most likely leads to another go around, hoping that the judgment doesn't follow this one death.

If the multiverse respawing theory is true, then each death leads to a rebirth in another universe – for good or for evil.

In a big stretch of the interpretations of Bible verses, the multiverse may exist in synchrony with the Bible. Consider the verse 1 Timothy 2:4, talking about Jesus, "Who will have all men to be saved, and to come unto the knowledge of the truth."

Maybe there is the perfect universe somewhere in the very middle of the multiverse, where there is perfect faith, and all people are saved and have pure faith in Christ. Maybe that is the universe God is waiting for?

The Fundamental Theory of Change and the 'cloud' could also explain when the Bible talks about time. 2 Peter 3:8 states "be not ignorant of this one thing, that one day is with the Lord as a thousand years, and a thousand years as one day."

If God and souls exist outside of the change – like looking at the rotating chicken rotisserie – all of the days could be seen at once, all of the interactions of every person, making time stop but all things known, but then also jumping ahead with perfect knowledge to any point in the oatmeal tube.

Aside from the Bible interpretations, the multiverse theory makes a lot of sense in other ways, such as why there are NPCs.

What is an NPC?

An NPC is a 'non-player (or playable) character' in a computer game. It is a computer controlled character that the player may interact with but that doesn't engage in the actual game by itself. The NPC theory states that there are people around that do not have any internal dialog or thoughts and just robotically go through life being controlled by a computer.

How does the multiverse explain this?

If there exists 8.5 followed by 4.8million zeros universes in one finger of the multiverse, it would be very unlikely for any two people to exist in the same universe in the same 'lifejump' if you will. This means that all of the interactions are pre-recorded and happen as they did, but with only one character actually in real time.

Suppose there have now been one hundred billion-billion lifejumps of people so far in the multiverse. That wouldn't even begin to scratch the surface of universes to inhabit – that is only twenty zeros out of 4.8 **million** zeros that comprise this one finger of the multiverse. But that would still be one hundred billion-billion lifejumps for each person, which is already an eternity.

This means that because the multiverse is so large, if a person **never** jumps to that multiverse, their entire character will need to be 'computer driven' as an NPC.

Even if the character has jumped to that universe before, they probably aren't there now, so the interaction that you would experience would be their memory – and pre-recorded actions.

Maybe this explains why there is the theory that everything is a simulation. Because in each lifejump, there is probably only a single, or on rare occasions, a couple, actual person or people living the universe life, and everyone else is an NPC or a memory. It is possible that the universe seems like a simulation because each person is being driven by their soul, and the simulation seems very much like a computer game to the soul, and sometimes that feeling and memory does find its way into the brain.

Putting this into a Biblical context again, the multiverse exists inside the 'cloud' of heavens and souls and God, and Colossians 1:16 states "all things were created by him and for him", speaking of Jesus, and this could explain how God has both given people 'free will' and also predetermined things – like who would be saved. Romans 8:29 states "For whom he did foreknow, he also did predestinate to be conformed to the image of his Son"

If God exists outside of change, in the heavens, and can see the multiverse, each universe is created by Him, and has a completely known beginning and end, then each action is both free will but also predestinated by God at the same time. Free will to jump between universes, but each universe is 'played out' from beginning to end for every person.

The bible also may give support to the Fundamental Theory of Change in different ways. The bible says that God knows everything from the beginning, and guides our paths, and knows our ways, so that makes it possible that each universe in the multiverse contains a fixed set of events from one end to the other of the tube. In universe A, all decisions are fixed with person X doing Y. In a different universe

person X could do Z. But since God is outside of the change cylinders, God can see every event in every universe, and know it all – and potentially guide them too.

So from day 1 of a person's birth into a universe change cylinder, all of the actions carried out in that universe are known to any being outside of the cylinder. And with infinite change cylinders in the multiverse, every possible outcome is covered.

This verse is at odds with reincarnation into a different being, but the Fundamental Theory of Change doesn't preclude reincarnation in that some lives could be the same soul in different people. Charles b. 1820, d 1890, could become Rita b 1890 d 1940, etc.

The lives can't overlap, but the soul could go from one life to another in sequence, spending some time in the cloud.

Is living the same life over again possible?

This is a very meta question. With the infinite number of universes in the multiverse, it is possible that every rebirth puts the person into a new observational universe.

Chapter 4: time travel

Based on the information described above, the Fundamental Theory of Change doesn't allow for physical time travel. Firstly, since there is no 'time' to travel through, there isn't an actual medium to travel through.

Secondly, if every change cylinder has a fixed outcome from beginning to end, even going back in time wouldn't be able to change anything.

Thirdly, if every cylinder/universe is fixed from beginning to end, then what actually would happen if someone suddenly appeared? Who is this person? Where is their sheet of paper? What events would this person change that could cascade all along the cylinder/universe?

This again fits with the Bible, in that Jesus had to be born – not just materialize into existence at some point in time.

However, the Fundamental Theory of Change doesn't preclude interactions between different minds and thoughts from traveling backwards and forwards across the layers of lives.

For example, someone from 2200 could link minds with someone in 1889 and tell them about the future. The person from 1889 could then use that information to set a path towards a given outcome. But if both people are confined to the same cylinder, and each cylinder has a specific set of events that will happen, then it follows that the set path would have happened whether or not the person from 2200 communicated with the person from 1889 or not.

It may be possible for someone from 2200 in change cylinder A to communicate with someone from 1889 in change cylinder B, and set events in cylinder B, but the fixed outcome also would say that these communications are also very much unneeded.

The physical limitation of time travel aside, there also exist biological effects of any potential time travel.

The current biome on and in our bodies are specifically balanced for this time in history. Any person traveling back in time would encounter a new strain of viruses and bacteria that would most likely overwhelm their immune system.

Also, the biome that traveled back would spread to people and surroundings that had no natural immunity – and the new time traveling bacteria would be stronger than the bacteria of the current time, creating plagues and spreading diseases that will ravage the native population.

It is possible that the plagues of the current timeline were in fact caused by an outsider traveling from one universe to another. I don't think any proof could be found to disprove that idea, but also zero proof would exist to support that theory either.