# **Contents**

•	Construction notes	Ū
2	Overview	7
	Time travelling	7
	You can travel time and space at will	8
	There is one and only one temporal line	8
	Moving beyond three dimensions	9
	The two paradoxes	10
	Grandfather paradox	11
	Bootstrap paradox	13
	The causal loop	14
	A small dictionary of time travel terms	15
3	Mechanics	17
	The timeline	17

	Retirement or Death	18
	Age	19
	Scars	20
	Attributes	21
	Moves	21
	Time travel moves	21
	Plain moves	27
	Special moves	29
4	The opening game	31
	Preparation	32
	First move	32
	Second move	33
	Third move	33
	Fourth move	33
5	Appendix	35

## The Timeline

Ronie Uliana

v0.4.0

# **Chapter 1**

# **Construction notes**

Some notes here to help me (Ronie) to write. This section will be removed from the final version. If you are reading that for the first time, it will be good to skip that chapter now and come back later.

The way things are going, two aspects are standing out:

 Time travellers have a limited lifespan. So time is precious (I'm liking that a lot). It could be even some kind of currency.

That also limits how good someone is at something. I think it's the perfect excuse to contact others and to build teams. Characters can't know everything in a lifespan, so they need to rely on the knowledge and ability of others.

That also would mean science stop evolving before reach immortality, or even expand lifespan beyond 100

years. Instead the end of the world or human extermination, there is this idea in the back of my head of a *second dark age*. It happened before, right? What prevents it to happen again?

It's promising.

 The Journal is very useful. However, I'm still not sure how much work it will be. I'd like to keep the "game maintenance" at minimum, but just annotate something is really powerful.

An alternative I'm strongly considering just to keep track of the Age available and let the player narrate that period as a flashback, if that's even necessary.

- 3. I want to avoid the *Time Cop* theme as much as I can. Why? Because every single time travel movie or book is about change the past and then other trying to prevent it \*sight\*. Yeah, I don't want *yet-another-fix-the-timeline* fiction. Update: No need for that anymore, there is no paradox.
- 4. There is no such thing as absolute time. Time is personal.

I need ideas for a scenario. It must be very appealing.

Exploiting the future seems interesting.

Random notes about the scenario:

I want to keep them together. It's easy for a time travellers to play the lone wolf. One idea is that they have strong feelings toward each other, but they don't know why. That would mean sentiments crosses time.

- · what kind of scenario do I want?
  - Hack and slack
  - Supers
  - Exploration?
  - Scifi? (Natural genre, but what if we jump out of that?)
  - Investigation (Already have The Four Foxes)
  - Horror? (With the right monsters, that would do)
  - War? (Not likely, I've tried too hard to avoid time cop to fall in a war)
  - Heist? (That's very interesting, as the planning can be made after the heist)

What about nested heists?

Or heists needing different things in time? Can we actually think of and adventure with that? Well, yes... going to past for stories and building plans. Or to *build* things ourselves.

Why just not teleport there and out?

Slice of life? (That would be REALLY weird... but...)

#### What time travellers can't do (adventure ideas):

- Any high specialized task. Actually, they can do that, but it costs a lot of time. Better to get someone else to do it.
- Teleport to unsuitable spaces: inside small spaces (like a safe), water, gas, space.

# **Chapter 2**

## **Overview**

## Time travelling

**The Timeline** is a time travel RPG inspired by Aetherco's C°ntinuum and using the *Powered by The Apocalypse* system. The system follows two premises:

- 1. You can travel time and space at will.
- 2. There is one and only one temporal line.

Those two items need a lot of explanation. But bear with me, we are going through them all.

# The first premise: You can travel time and space at will

If you have a time travel machine and want its best version ever, just go as far as possible in the future and get it. That's what *everyone* is using.

So, what does it look like?

Well, the answer is obvious: it allows you to travel to space and time at will, no energy required, no setup time, extremely portable, and so on.

Actually, the best machine possible is not a machine, but a *skill* you learn.

# The second premise: There is one and only one temporal line

There is just one timeline. We can't change the past. And as every future is someone else past, we can't change that too. The universe **is**.

It that's so, does it mean we have no choices? Is everything already decided and we are just following a script without knowing it?

There is no free will in a single timeline universe.

Well, that doesn't sound like a great premise for a game. What's the point of playing if you can't change anything?

Free will doesn't lie between past and future, but between what

you *know* and what you don't. Non time travellers only know their past, and can decide their future. Time travellers, on the other hand, know parts of both past and future, and can decide the gaps.

The point is not on changing events you know the result, but exploiting them on places you don't know the outcome. These are the places where we can do permanent change.

Free will lies in the gaps between what you know and what you don't.

## Moving beyond three dimensions

Or, "how travel through time looks like?"

Moving through time isn't hard, the problem is to escape your immediate Known in a way you don't need to cross it when moving towards the past. The Jump is exactly that, a movement you learn that avoids your physical body and your conscience to occupy the same place at the same time.

Time, for us, is a dimension as traversable as any other. The tricky is to learn how to *bend* the dimensions in a way that where you are right now is touching somewhere else, then you just move in that direction. That way, we avoid occupy the same place twice when moving. We call it Jump, but it's more like a sidestep.

How does it look like?

To be honest, it's quite unimpressive. There is no sound or

special effects, no more air displacement than when you walk. It looks like someone is walking into a corner, but there is nothing obstructing the vision. It's possible to do it even on a busy crowd, it would looks like someone enter in front of the observer. If someone is looking directly at you, then you are going to cause the scariest moment in that person's life, but no more than that.

It's like to walk around a corner, but there is no corner.

So, you do that in two easy steps: first you bend the dimensions the same way you would bend a sheet of paper letting different parts to touch. Then you sidestep through the touching part.

Ok, I give you that, it requires more training than I've told you, but the basics are quite simple.

There is **one limitation**, though. If you can't move, you can't travel in time. It can be a small step, or even falling from a chair, but you need to move.

### The two paradoxes

When we talk about time travel and a single timeline we also need to talk about paradoxes and how to solve them.

In reality, we don't know if time travel is possible and exactly how these paradoxes could be solved, or even if they would. Also, our very limited 3D minds can't understand manipulating time as just another dimension. That being said, this is fiction, which mean we are going bend the paradoxes until they suit for the game. Shame on me.

One of the keys to understand how to solve paradoxes is to understand that time is *personal* (ask Einstein). Everyone experiences that differently. We are going to expand that to its limits.

The other key is to understand that all paradoxes are variations of only two of them. Let's dive into them.

#### **Grandfather paradox**

You know this paradox. You travel to the past and kill your grandfather when he is just a child, so your father never born, so you never born. Then, who kills your grandfather?

Let's get this straight: there is no paradox here.

The way we told the story is actually incomplete, it's half of it. What follows is it as a whole.

You travel to the past, kill your grandfather, your father never born, you never born. *Then* there is no one to kill your grandfather, as well as your father, and you born. The story repeats, you kill your grandfather and so on.

Why that's not a paradox? Because there is no contradiction there. Everything follows their logical conclusions and sequence of events. What happened is that the same time happened with different events twice, but it happened sequentially from the point of view of the time traveller.

Does that means the universe diverged and we had two different realities at the same time? Well, no. That means

**both** things happened in the same timeline. Similar to the Schrödinger's cat experiment, those events were undetermined until someone experimented them, at that point, they become concrete for the point of reference of their observer, which happens to experience them sequentially. Everyone else see it just once.

Without traveling through time that seems illogical, but just because we are used to the notion that only one thing can happen at a given time. From the strictly logical point of view, there is no paradox.

Loops happen.
But only the time traveller knows them.

Let's go for another example:

You travel back in time to kill Hitler and prevent the Second World War. You do that and the war doesn't happen, but then you have no motivation to go back in time and kill him, so you don't. That makes the war happens, and now you have the reason to get back in time and do it again.

Between the time Hitler is killed and the time you jump back to do it, all events happen just from you perspective. You're the only one that experienced that time twice which, for you, had no superposition. You lived that period with the war, and subsequently one without it. Everyone else experienced just the first version.

In truth, you don't even experienced that. When you kill Hitler you Fall (more about Falling below), but now you have strange memories of things that never happened.

#### **Bootstrap paradox**

The bootstrap paradox happen when an object exists in a time loop, but nothing created it. For example: imagine you travel to the past with a copy of *Les Miserables* from Victor Hugo and give it to him. He copies your version and releases it with his name, then you buy the book in the future to give it to him. But then, if he just copied your version who created the story?

Another version is when you receive a beautiful pocket watch from an older version of yourself. Then you use it for a few years, travel back in time and give exactly the same clock to your younger version. So who built that clock? It was never built, does that means it comes out of nowhere?

Anything can exist in a closed loop.

Again, there is no paradox here for the same reason. There is no *logical* contradiction. What happen is that we are used to associate an event to something that happens previously in time, meaning something in the past *caused* an event in the future.

However, our current notion of causality is itself paradoxical. If everything has a previous event that caused it, then there is an infinite line of events. If not, we are admitting there is an exception to the rule we just stated. Which means that there is an event without cause.

Nothing logically prevents you of giving your past self something you received from yourself.

Does that mean you can give yourself an atomic bomb, or the secret of the immortality? Well, yes. However, things are not

that simple, of course.

Imagine you give you back an atomic bomb, then you use it. You can't give it back to you anymore, you need to find another one. Anything you receive from an older version of yourself can't be consumed, otherwise you need to replace it.

What about knowledge? Any sufficient advanced knowledge needs a lot of time to be understood and applied. It's not just a matter of follow instructions, because they are going to be complex and need other things you don't have yet. Taking the "secret of immortality" as an example, just to understand the whole theory and process to create it would take years, and even so, you probably going to need processes that were not invented yet.

Could I give to myself a simpler version of it? Well, there is no simpler version, otherwise it would be already available by now.

There is no shortcut for sufficient advanced knowledge.

If you want a real life example of how that looks like, google for "ABC conjecture proof by Shinichi Mochizuki".

### The causal loop

The supposed paradoxes above are the two examples of causal loops. The first one is a bit more complex because it needs two passes on the same time to become self-consistent. The second is called a *closed loop* and it's self-consistent by

itself. Both seems to cause infinite loops, but they happen just once. Why? Because that temporal loop was always there, it doesn't repeat. Repetition is something we created to understand the same event happening at different times, but when we understand that time *is*, there is no such thing as an infinite loop.

In the game, we call the loops that need two passes to be consistent as *Schrödinger loop*, and the ones that are self-consistent as *closed loops*.

## A small dictionary of time travel terms

- Jump To move through time and space.
- Jump Up To move in the direction of the future.
- Jump Down To move in the direction of the past.
- Plain Jump Teleport. You move in space, but not Up or Down in time.
- Jump Out To move in time or space away, no matter if Up, Down, or Plain.
- Fall To instinctively Jump Out, without controlling the destination. That happens when you create a time paradox or push yourself too hard.
- · Mule Someone that Jumps with tons of stuff.
- **Timeline** You personal past and future. Everything that happened and will happen to you. The more blanks you have, more free will you have.

- Age Your personal past. That has nothing to do with your birth date, but how long have you lived and what have you experienced.
- Known What you lived, your personal past. All the time behind your current Age.
- Unknown What you still have to live, your personal future. All the time ahead your current Age.
- Site A place in time. The same place in different times are different sites.
- Closed loop A loop in time that is consistent by itself.
   It's exemplified by the Boostrap paradox.
- Schrödinger loop A loop in time that needs different events happening at the same time to be consistent. It's exemplified by the *Grandfather paradox*.

# **Chapter 3**

## **Mechanics**

#### The timeline

The Timeline is a sheet of paper where everyone is going to mark when and where they are. It's used to keep track of the game and avoid creating obvious paradoxes.

It starts with a blank sheet of paper with a point for every character stating where and when they are at the beginning of the game session.

Every time someone Jumps, add another point and write where and when it represents. Draw a line from the previous point to the new one and add the name of the players that did the Jump.

[Ronie: That definitely need and extended example and a lot of playtest to check how effective it is.]

### The journal

The Journal are the annotations of where your character were at each point in time. You are going to fill it as result of some moves.

When you want to retire your character, the journal will have it's whole life.

Each entry in your Journal has 2 things:

- 1. Where and when.
- 2. What happened there.

Sometimes a single entry can cover years of a character's life. If that happens, also take note of how long they spend there and dedicate a small paragraph describing life during that period.

Entries in your Journal consumes Age sometimes, but not always. If you run out of Age, the history is complete and you can't play with that character anymore.

Don't fill your Journal on every Jump. The moves will tell you when to fill it

#### **Retirement or Death**

We start at the end. You already know how your character is going to end.

As you age, your body become too fragile to support time travel. You are still able to Jump, but you need to stay closer

and closer to when medicine is advanced enough. If you are old enough, in a bad situation you can lose conscience and die in the far past.

When you build your character, you decide their fate upfront.

If you want it to retire, choose an Age of Retirement. From that point on, your character is no longer playable. Add to you Timeline where and when he or she is going to retire and doing what. Younger versions of you can visit your older version at any time.

If you see you character as someone who's not going to stop until they drop dead, choose an Age of Death. If you ever play him or her beyond that Age, they will die in game. You can play the dying character at any game session of your choice, just let the Game Master know your intention.

Don't worry about playing the last game of you character. You always can play their younger versions as far as your timeline has blank spaces.

Ages for death and retirement are anything close to 100 years old.

### Age

You can play with several versions of your character, even multiple versions at same time. However, the versions are different not only in attributes, but in physical appearance.

Divide your character in 4 Ages between your Recruitment and your Retirement (or Death), they can have different sizes, but each one follows the other. The first time you play with a ver-

sion of your character at that Age, fill the blanks.

#### **Scars**

When you create your character, describe 5 scars and how they look like.

Scars are physical or mental. They are never too severe as the character can jump Up until the medicine is advanced enough to cure anything.

Scars are big enough to be noticed, but small enough to not be worth the time to fix them. Things like physical scars, mannerisms, or small phobias are perfect. They are marks of experience from your character.

#### Examples:

- A great scar in you chest, from the shoulder to you hip.
- A mark around your left arm as if it was severed and sewed back.
- · A scar over your face, crossing your eye.
- · Your left leg is mechanical.

Even if you choose to be one-eyed or have a mechanical leg, you are as capable as ever. Scars are for the fiction, they do not affect game mechanics.

#### **Attributes**

There are only two attributes in The Timeline:

**Body** - The state of your body. That includes strength, agility, and stamina. That decreases as you age.

**Mind** - The state of your mind. That includes logic, perception, and knowledge. That increases as you age.

This game assumes you start as an young adult. So you peak physical condition is in the very beginning of the game, as time passes, you Body decreases as you Mind increases. It's possible to be in great shape when you are older, but that means the time you use to keep your body well shaped others used to train their minds

You have +1 do distribute between Mind and Body. An attribute can goes negative, giving you more points to add to the other. No attribute can go beyond +2 or below -2.

Every future version of yourself can have different attributes, but the Body cannot be greater than +1 than the previous version of yourself, and the Mind cannot be lesser than -1.

#### Moves

#### Time travel moves

#### **Plain Jump**

When you want to **teleport without move in time**. You're there. Don't roll nor mark anything in The Timeline or your

Journal.

You can't jump if you are not able to move.

#### **Jump Out**

You disappear from the current time and appear at any time or locale you want. Don't roll:

- When jumping to somewhere already in The Timeline: draw a line from where you are to where you are going and add your name on it.
- When jumping to a new site: create it in The Timeline and do as above.

If you jump without knowing where and when you are, you can't draw a line, so you Fall. You also can't jump if you're not able to move.

#### Fall

**Just after you start a Schrödinger loop**, you instinctively **Jump Out** randomly. *Roll + Mind*:

- On 10+: You Fall a few seconds above your *last* jump. You know exactly where and when you are.
- On 7-9: You Fall a bit Up or Down from where you were, you know where but not when you are. The Game Master secretly records when you are.

 On -6: You Fall somewhere Up or Down, and possible Plain far, you don't know where or when. You are obviously a strange in this place. The Game Master secretly records where and when you are.

A *Schrödinger loop* happens every time you change *your own* past. Things like killing Hitler, preventing your grandfather to meet your grandmother, travel 10 seconds back to meet yourself, and so on. Check "The two paradoxes" to understand exactly that means.

This is the main move for the game. It prevents the player to create what would looks like an alternative reality. In the beginning, this will probably be the second most used move after Jump Out, with experience in play, you and the players will naturally avoid it.

#### Mule

When you **Jump bringing more people or something large with you**, you overexert yourself. *Roll* + *Body*:

- On 10+: You Jump Out. Take that move instead.
- On 7-9: You Jump Out, but something went wrong. The Game Master will offer you an ugly choice or tell you what's wrong.
- On -6: You Fall. Take that move instead.

#### Call a Double

You call a Double from your past of your future. You play both. They will be around you as long as you wish. *Roll + Mind*:

- On 10+: You call an older version of yourself. He knows more than you, so that prevents something bad to happen. You can change one, and just one, -6 to 7-9 result while you're are together.
- On 7-9: You call an younger version of yourself.
- On -6: Same as above, but choose one of your versions.
   Before you depart from each other, narrate how you obtained a scar.

In any case, mark a small entry in your Journal telling where and when your Double were before jump to help you. If it's the first time you're getting a Double from an Age you never played before, also execute the move New You.

You play both versions of yourself.

#### **Serious Combat**

When you **fight without concealing your time travel**, mark Serious Combat with date and locale in your Journal, then *Roll + Body*:

 On 10+: Several Doubles appear and disappear hitting all targets and protecting each other. The targets are all knocked out or dead. You learned a secret about them, take +1 ongoing against the same group.

- On 7-9: Several Doubles appear in the combat as above, but the enemies hit some of you. You learned something, take +1 forward against the same group on your next action involving them. Take some time to recover.
- On -6: Several Doubles engage the combat and you win, but something wrong happened, like non time travellers saw you, non-combatants were hurt, someone used that as a distraction, or something else happened. The Game Master will not tell you what it was, effects will be noticed later.

The Game Master will tell what you learned.

In any case, describe the combat scene. If you don't feel comfortable doing so, ask the Game Master to do it.

#### Instant Skill

When you **need a new skill you don't have**, describe what you want to achieve. Then spend 3 years training, Jump Out, and Roll + Mind:

- On 12+: You got that incredibly well. You've found a grand-master and learned that skill at +2. Your first use outside training got impressive results.
- On 10+: You got that right. You've found a great instructor and learned that skill at +1.
- On 7-9: That works. You've found a competent instructor and learned that skill at +0. However, your first use outside training don't go as you intended. The Game Master will offer you an ugly choice or a worse result.

• On -6: Kind of work. You've found a bad instructor and learned that skill at -1. Your first use outside training went terribly wrong.

In any case, annotate that skill under the correct Age. Also, write a simple paragraph on your Journal describing the years you've spent training.

Why 3 years for an instant skill? Because more than that would make you look way older and different than you are now. If you really wish, you can choose to spend 6 years to gain +1 in the roll or 9 years to gain +2.

#### **Instant Ally**

When you need help, Jump Out, and Roll + Mind:

- On 10+: You've found a master. Everything goes smoothly and you own a favor after the job is done.
- On 7-9: You've found someone competent. However, something could be have done better, the Game Master will tell you. After the job is done, you own a favor.
- On -6: You've found a fraud. That person looked competent until now. The situation is now out of control.

Add a small paragraph to your Journal telling where and when you found the person who helped you.

#### **Instant Stuff**

When you **need something non-trivial**, name what's it and where it's right now. Then *Roll + Mind*:

- On 10+: Your future self left exactly what you wanted.
- On 7-9: Your future self left something different with a note "this one will do". It'll work, but not as well.
- On -6: You future self left exactly what you wanted, but it'll brake on the first use, it's malfunctioning, or will cause problems the Game Master will describe.

That doesn't apply to money except if you want an huge amount of it.

So, what is "something different"? For a tool, it could be something different, or something from a time you're not used to, like and old version of it, or o very advanced version. For money, it could be replaced by jewels or gold (not everyone is going to want that), or for a note with information you could use to blackmail the clerk. The important part is that's going to work, but can cause some problems down the road.

#### **Plain moves**

The moves below doesn't involve time travel. They never affect the Timeline.

#### Investigate or Interrogate

When you spend time closely **investigating something**, *Roll + Mind*. If you **interrogate someone**, *Roll + Body*.

- On 10+: Ask the Game Master 3 questions from the list below.
- On 7-9: Ask 1.

Either way, take +1 forward when acting on the answers.

- · What happened here recently?
- · What here is useful or valuable to me?
- · Who's really in control here?
- · What here is not what it appears to be?
- · What should I be looking for?

#### Non-serious combat

When you **fight one or more NPC without time travel**. Roll *Roll + Body*:

 On 12+: You fight like a master. Not only you defeated them, but now they fear you, and you learned a secret about them. Take +1 ongoing on any action against the same group.

- On 10+: You fight well. They are defeated and you learn something about them. Take +1 forward on your next action against the same group.
- On 7-9: You defeat them, but they learn something about you. Take -1 forward on the next action you do against the same group.
- On -6: You are defeated. You got some bruises and have to retreat, they learn a lot about you. Take some time to recover and -1 ongoing on any action against the same group.

If you learned something, the Game Master will tell you what it is. If they learned about you, tell the Game Master what it is. After that, describe the combat scene.

Combat in The Timeline doesn't represent a single slash or a a shot, but a whole scene. If you have difficult describing it, or don't feel comfortable doing so, ask the Game Master to do it.

#### **Special moves**

#### **New You**

When you play a version of yourself for the first time:

- · Choose an Age slot.
- Fill when that Age starts and ends, if they are not already filled.
- Fill that Age attributes with points from the attribute pool. They can range from -2 to +3.

- Choose which new Scars you have at that age.
- Describe how you look like to everyone.

The Scars you choose will be also present in all future version of you. This move is also triggered when you Call a Double.

# Chapter 4

# The opening game

Time travel RPGs are quite hard to grasp because we don't think in four dimensions. Our first reflex is to *jump into the past and change it*, but as the universe **is**, therefore that's not going to work and the player will just get frustrated.

If that's the first time you are game mastering or playing this game, don't start creating your a plot or characters. Instead, start with a completely blank character sheet and run the *opening game*.

It's a game about your training as a time-traveller, we are going to introduce new mechanics and fill a little bit of the character sheet at each scene. By the end of the game, you'll have a full understanding of everything and a character ready to play future games.

Think about that tutorial level on video-games. It's exactly that.

### **Preparation**

The Game Master should read "Overview" and this chapter as a whole.

We are going to need:

- At least a pair of six-sided dice. Ideally one for each player.
- A blank sheet of paper in the middle of the table. It will be The Timeline, and will tracks where the characters are.
- · A character playbook printed for each player.

The Game Master should not explain the three premises to the players. They are going to be introduced during the Opening Game

Then, start with "First move" and do each move as a scene.

# First move: Jump Out and the First Premise

Note: The goal is to show how The Timeline in the table works, also that you can travel at will. Also fill the basics: who you are and from where did you come from.

# Second move: Fall and the Second Premise

Note: The goal is to show how the paradox is avoided in the game. I expect the players to feel quite limited as they can't change the past at first, but we also need to demonstrate how they *can* change the any past as far as they haven't experienced it first hand. Probably we need to do that in two subsections.

Idea: the task is to kill Hitler. That's going to show how it's not possible. Idea: a second task to help

Third move:
Call Double and the Third Premise

Third move: Infinite Money

# **Chapter 5**

# **Appendix**

#### **Videos**

#### Yet unordered:

- MinutePhysics https://www.youtube.com/watch?v= XayNKY9441Y (elegant solution to paradoxes)
- PBS Spacetime https://www.youtube.com/watch?v= YycAzdtUIko (time doesn't implies causality, but the other way around. A little dense.)
- VSauce3 ft Neil deGrasse Tyson https://www. youtube.com/watch?v=AORsw8NpN4E
- VSauce3 causal loops https://www.youtube.com/ watch?v=VpB3kan4BHQ

- Seeker https://www.youtube.com/watch?v=5hYBeFNSv2o (Retrocausality at quantum level, shallow, but easy)
- PBS Spacetime https://www.youtube.com/watch?v= 80RLN\_KwAgs (Quantum eraser)