

# An Introduction to Time Magic

*"I have made many trips back in time, but for reasons I cannot explain, I cannot go back to the same time more than once, and it never lasts more than a few seconds. To date, all attempts to change events have failed."* - Lieutenant Green Laurels

---

## The Future Is Not Determined

When dealing with time magic and the future, it is important to remember that the future is still subject to change. There are many who have made predictions and prophecies, some of which have proved very accurate, but it is important to remember that oftentimes prophecies involve things that the prophet wants to happen, and works to ensure.

Two basic things generally determine the accuracy of a prediction, how far in the future it is, and how big the event is.

- The bigger the event, the more effort is required to influence it.

Chopping down a tree is easier than chopping down a forest.

- Distance in the future is simple enough. The further in the future an event is, the more chances there are for things to happen.

*"It was prophesied that Nightmare Moon would return and bring about eternal night. And return she did return, just like the prophecy said. Yet her night was far from eternal."* - The Candid Sayings of Princess Luna, as recorded by her Sister.

A pony who travels to the future should not expect it to be as they saw it when they get there the regular way.

## The Past Has Already Been Determined

When dealing with time magic and the past, it is important to remember just how resistant the past is to change. There have been some who have dabbled in time travel before, but very rarely with any significant success, outside of simple observation of past events.

Developing magic to travel back in time is hard enough. Usually the forces cancel each other out. See [Consistency Protection](#) by Greenhill and Small Fossil. Even when that obstacle is avoided, the effort required is no less

than the effort required to make the change, as well as every change that follows it.

This can be broken down into two primary factors. How far in the past it is, and how big the event is.

### Event Size (And Negative Feedback)

*"Imagine that the timestream is a stream, that's where it gets its name, you know. It is a gross oversimplification, of course, but the analogy will serve the demonstration. The stream winds back and forth. If you remove part of the bank, the stream widens, but then the flow of water slows, and more sediment is deposited in return, until it narrows once again." - Professor One Stone.*

Small Changes can be made to the past, so long as they don't have any lasting impact. Someone can go back in time and maybe have conversations and walk around without much effort, but nothing history changing.

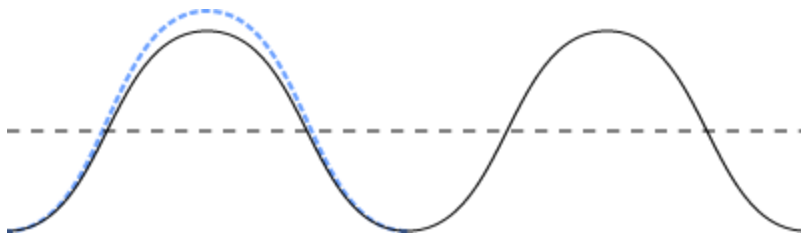


Figure 1. A change in the timeline is corrected by negative feedback, leaving no long term effects.

Large Changes that have a lasting impact require a great deal more effort.

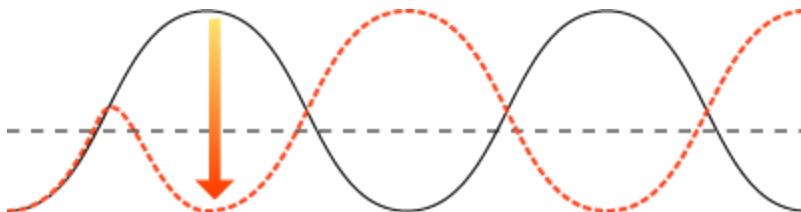


Figure 2. A major change requires not just initial force, but continued force leading up to the present.

*"We talked for some time. Of course, as soon as I got around to warning myself, the spell ended." - Twilight Sparkle's letters.*

## Event Distance (And Exponential Difficulty)

*"Now imagine that winding stream is just a slice of the ripples in a pond. As time goes by, they spread and grow to be vastly larger."* - Professor One Stone.

The difficulty of any change is amplified greatly by how far into the past is made.

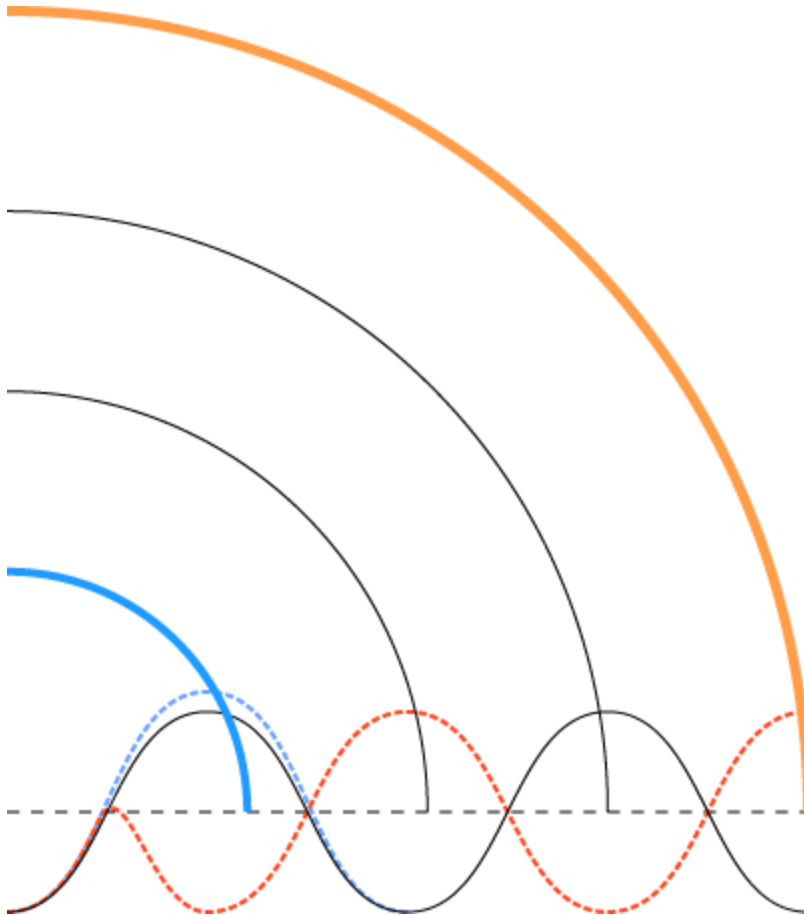


Figure 3. More distant ripples grow exponentially larger

*"For the longest time, I thought six seconds was pretty good. Six seconds to undo one mistake. I managed ten seconds once. I don't think I could do that again. This is harder than it looks."* - Brave Point the Dashing

((In game terms, if someone wants to make a meaningful change, they need to be able to essentially undo not only the action itself, but the actions in between as well. All with the same spell.

However, going back in time without making meaningful changes is possible, right up until the point when the characters would change something big. Doing both is something better left to megaspells, plot devices and nigh omnipotent embodiments of chaos.))