



The flow of time, why time-quakes don't exist and who stole the Death Ray blueprints?

Have you ever thought of what will happen to you if some vagrant time traveller goes back in time and in their clumsiness changes things? Worse still, what if their tinkering in our past happened to effect your own lineage. For example what if they changed events which resulted in your grandparents not meeting and therefore never getting married or having children. That would mean that you wouldn't actually exist anymore!

While theoretically possible, most serious scientists don't believe that time travel will ever happen, or at least not for a very long time. It just seems to be too difficult for our current minds or our current technology to be able to resolve. So sadly, at least in our lifetimes, we're unlikely to have the convenience of Dr. Who's TARDIS nipping from century to century with little more than a few tweaks of the levers and the pressing of a few fat psychedelic buttons.

That is disappointing. But, by applying a modicum of common sense we all know that a blue English phone-booth isn't going to be the vehicle that either aliens or advance future-humans will use to ply up and down the river of time.

Now my concern is not really what type of vehicle they will use. Instead it is how much damage they will do to the present that you and I currently live in, and whether, after their ham-fisted dabbling, our 'present' will even exist at all!

You might think that the chances of some time travellers popping back into the 1940's for a bit of sight-seeing and just happening to land their spacecraft right on top of dear old Grandma and Grandpa are rather remote. Well think again! According to some theorists, if time travellers were to just land and step out of their crafts anywhere back in our past, everything would be changed in our present, including ourselves. In fact they believe we would literally disappear and be instantly replaced by a completely different present.

Sure, that may sound almost as far fetched as a flying phone-booth, but if we give it a second thought, it might not actually be that far from the truth.

Imagine for a moment that an intrepid time traveller decides, for the good of mankind, to go back in time to say early 1923 to assassinate Adolf Hitler. Their goal being to prevent the Second World War and therefore save more than a hundred million lives. Well that certainly does sound like a noble cause, and none of us would argue with saving millions of innocent lives.

Going back to early 1923 would be ideal because that was just before The Beer Hall Putsch and was prior to Hitler writing *Mein Kampf* so his radical ideas hadn't started gaining much traction yet. Plus, as Hitler hadn't risen to prominence back in the early 1920's he would be relatively easy to assassinate without the vast security mechanism that he would gather around him in later years. In theory it could be the perfect surgical strike to stop the entire evolution of the German Nazi Party before it even came into existence.

Yet, if such a venture was successfully undertaken we would all instantly cease to exist!

The reason is that the Second World War and all its horrors has effected the lineage of every single person living on earth today. Just think about your own family history. In one way or another the Second World War had a huge impact on your grandparents and great-grandparents. And even if they weren't involved in the fighting, it changed the entire course of history, and the course of their day-to-day lives. If that trajectory had been different in the slightest way, the world we live in today, and who we are, three or four generations later, would be entirely different.

To push the point - you and I simply would not exist, and we would be replaced by a completely different 'present' that has evolve since the course of time was interrupted back in 1923.

Now that causes a problem as many scientists have argued that if someone were to go back in time to change something, and if that change were to result in the time traveller themselves not being born, they could not exist to actually go back in time to make the change! This seemed like a reasonable physical law that would guard against the jarring planetary trauma of time travel.

But this is where I disagree with these scientific theorists.

To get our heads around this, firstly you need to view time differently. It is not an absolute that moves at the same pace for everyone, everywhere. Science has proven that time is like a flowing river. In some places it is fast and rapid, in others it is slow and calm. There is a reason for this. Rivers flow fast when they are constrained and there are close gorges and rocks, and they flow slowly when they are wide and shallow. Time flows fast when there is low gravity and space is wide and empty, and it travels much slower when there is high gravity with close stars and black holes.

Like rivers time also flows in a certain constant direction which always makes it hard, in either time or in rivers to travel against the current. Although you can change the course of both time and a river.

Let me explain by going back to our assassin who travels back to 1923 to murder Hitler...

When you apply cold Vulcan logic to the problem, I don't see any reason why the time-traveller needs to vanish in a ripping time-quake when he goes into the past and changes the trajectory of time, eliminating his parents and his entire time-line.

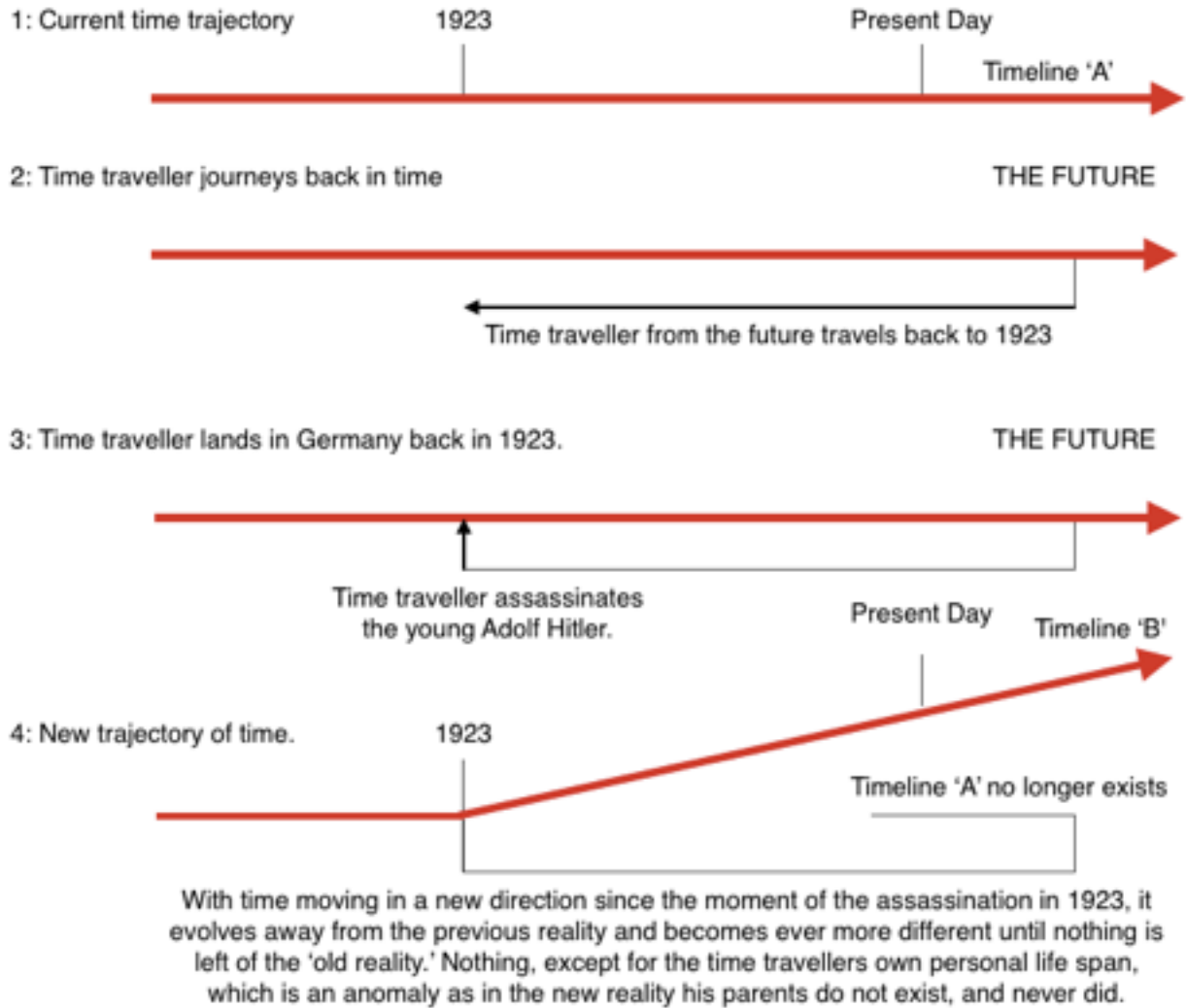
My thoughts on this are simple: The time traveller was born in his timeline, which we can call 'Timeline A'. He then goes back in time to 1923 and changes the direction of human evolution from that point on. We can call this new time trajectory 'Timeline B'. In this new Timeline B the time-traveller is not born and does not exist. But because he travelled back into the past to a point BEFORE he changed the course of history he is now embedded into 'Timeline B' and therefore will continue to exist in that new reality. He is definitely an anomaly, but he is there because he WAS born, and nothing can change that. It's just that he was born in a timeline which has been replaced by Timeline B so his own timeline (Timeline A) and everything in it no longer exists - and actually, according to Timeline B, never did.

Yes, I know it is complicated, but let me draw a few diagrams on the next page showing how I see it working which might be bit easier to follow...

I believe that with all the remarkable discoveries we are making in the field of quantum mechanics we will soon enough discover how to manipulate both time and space. This could be through the folding of space-time, the taming of worm-holes, or perhaps even accessing parallel universes or a higher dimension. This will require an extraordinary amount of energy, but again as we unlock the secrets of things like anti-matter, or start to harvest the output of black holes and super-nova, the solution to this too is likely just a matter of time.

However long it takes and whatever exotic technology is employed to do it, we should be open to the possibility that, at some point in the future advanced humans / cyborgs will work out how to traverse time.

Therefore we can assume that there is a reasonable possibility that someone or something from the future might well come back and start messing with our past which could be a serious threat to our very existence.



Let's imagine that in two thousand years time humans are able to build a working time machine, and they decide to come back to save the world from a major asteroid impact. Now imagine that just four minutes ago they set off on their time-travel mission. Literally, as you started reading this they were locking in the date and landing coordinates and as you got to the end of the first page they hit the 'GO' button.

Just two minutes ago they materialised in the distant past and after a quick scan targeted the approaching asteroid and vaporised it with a blast of their spacecraft / time-machine's ray-guns. That was thirty seconds ago. As a result everything has been changed and our present is completely different to what it was just less than a minute ago.

Did you notice the change? Did you feel the 'time-quake'?

No. Of course you didn't. There has been no change in our lives at all.

How could this be if this major change in the trajectory of our timeline happened just a minute or so ago?

Well, the reason why you didn't feel anything is that you and I are the product of that new trajectory's timeline, and it did NOT happen with a crash and bang a couple of minutes ago. Instead it happened with a very slow natural evolution starting way back in the past when the cataclysmic impact was avoided. Even though the time-travellers went back in time to make the change to the course of human history (and evolution) just a few minutes ago, that was in THEIR time. In OUR time it was a thousand years ago. So, changes and 'corrections' can be made to the past and there are no time-quakes, because, on a global scape the change and new evolution is gradual from the time the intervention is made so in any one single lifetime it is almost too small to be noticed.

Think about it... No matter how hard you try, you just can't remember anything about the great asteroid impact that happened back in 1054 A.D..

Well that's because it didn't happen. At least it didn't happen in our 'A', or is it now the 'B,' timeline...?

The way to think about this is to come to terms with the fact that as time is flexible and changeable there can be numerous timelines, all with numerous 'present times.' And this issue of 'present times' is important because you can only change the trajectory of time, and therefore the future of humanity in the present. This is why everything you do and every action you take today, will change the course of humanity's future. Most people don't appreciate this as our lives are too short to be able to see the long term 'butterfly effect' that we personally have on the distant future, however it is true that each one of us actively contributes to moulding that future. We should all therefore strive to make decisions and take actions that will be for the long term good.

If you do have a time machine and want to change some calamity in the past, you need to research exactly when would be the best 'tipping point' and then go back in time to that moment to

set off the necessary chain-reaction to achieve the desired result. When you arrive at that historic time and place you will have inserted yourself into that timeline's 'present,' so you can change events and shift human evolution in a different direction.

So now that we don't have to content with the horror of time-quakes, the only problem for the time travellers is that there is no point in going back home to the time they originally came from. While they would have the technology to do this, that future that they came from would now be completely different to what it was when they left (just a few minutes ago in their timeline). This is because their intervention would have shifted the trajectory of time. This would inevitably, produce a completely different future to the one they have just come from.

If they jumped back anything more than about a hundred years there is a good chance that their parents would now not exist in the old timeline, neither would the institute or the scientists who developed their time machine in the first place so no-one would know they had jumped back in time, or were about to come back. In fact, with longer jumps, say a couple of hundred years or more back, the future world they have just come from might not even exist at all. There is a good chance some other nuclear, biological or astral calamity might have wiped it all out sometime during the hundreds or thousands of years in-between.

These shifts in evolution with new time trajectories are the real limitations of time travel. While most people are completely unaware of them, for time travellers hopping instantly from one time to the next the absolute and total change to each 'future' jump is massive and exceptionally dangerous.

While this constraint is likely to discourage 'casual' time travellers, it would not be a problem for alien time travellers who don't risk losing their own parents and lineage as a result.

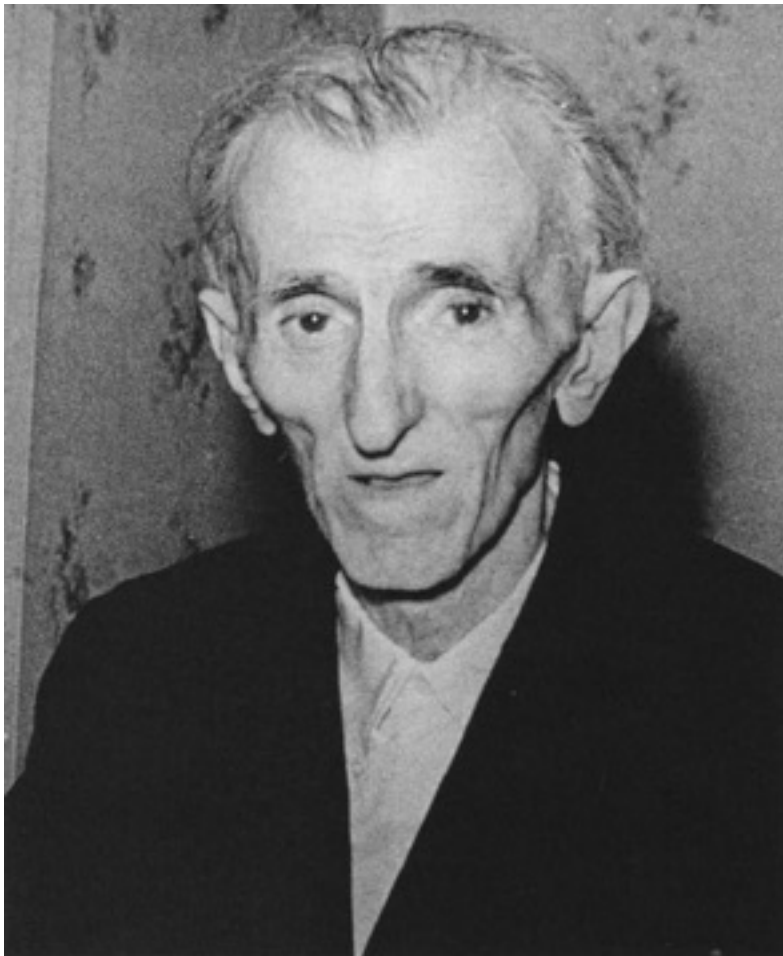
The question then is that if it is so easy to go back in time and change certain events that limit human development is there any way we can tell if this has actually already happened? If so, what sort of evidence should we be looking for?

It is hard to tell, because, unlike the time travellers we don't have the advantage of hind-sight so don't know who, or what will be the future calamity, or the trigger of it. In 1923 no-one could pre-

dict the horror that Hitler would unleash upon the world. To find these clues we have to shift through history to find and interpret the smallest, subtlest oddities. These will likely be an unsolved crime, probably a murder, or perhaps a break-and-entry where no-one understands how the trespassers managed to gain access, or what they actually did there. The location and the victim are also significant and should be judged against the influence they could possibly have on future world events, or the possible tipping point at that particular point in time.

This seems like an impossible search. Yet there are some strange situations that meet these tantalising criteria.

Take Nikola Tesla for example. He is credited with being a visionary genius who had an incredible understanding of electricity and how to harness its power. He was also exceptionally secretive and hid the methodology and findings of many of his more exotic experiments. A little known fact is that in the 1930's he designed a hypothetical 'Death Ray.'



The last known photography of Nikola Tesla taken at the beginning of 1943 just before his supposed "heart attack."

This weapon seems to have been a massive laser beam that he proposed would generate enough heat to literally melt enemy aircraft, battleships and perhaps even whole cities.

On January 7th 1943 Tesla was planning to present his 'weapon of mass destruction' to the American military. His premise was that the terrifying weapon would not just end World War Two, but all future wars as no-one would be able to rise up against its awesome power. The military

were skeptical, but interested, as they knew it would take something seismic to end the war and were already developing their theories for the nuclear bomb.

A meeting was set. But predictably Tesla didn't make it, and was found dead in his hotel room. The cause of death was noted as a heart attack, which seemed natural enough, especially considering that by then Tesla was eighty six years old. But the circumstances are perplexing.

As far back as 1937 Tesla is on record as saying that the Death Ray was "...not an experiment ... I have built, demonstrated and used it. Only a little time will pass before I can give it to the world." Yet, sometime between Tesla's death and the arrival of the police coroner, his room had been ransacked and all evidence of the Death Ray had been removed. All his belongings and his extensive papers were carefully searched and appraised by a Mr. John Trump. It is a coincidental surname and whether he was a relation of the President I am not sure, but his credentials were impeccable. He was an MIT professor and representative of the National Defence Research Committee. According to his report he found no evidence of the mysterious laser.

I think it is unlikely that the US Government found the blue-prints. If they had I am sure we would have seen some military application of the technology by now. So what happened to them?

It does seem feasible that some human or alien time traveller who witnessed the destruction caused when this super-weapon got into the hands of some power-crazed megalomaniacs decided that it would be better for the continuation of our species if this particular discovery was delayed until we develop the maturity and responsibility to better manage it.

Who knows that actual truth, but it is comforting to believe that even with all the mayhem going on in the world today, at least when it comes to extinction-causing blunders, there might actually be someone out there looking out for us after all...