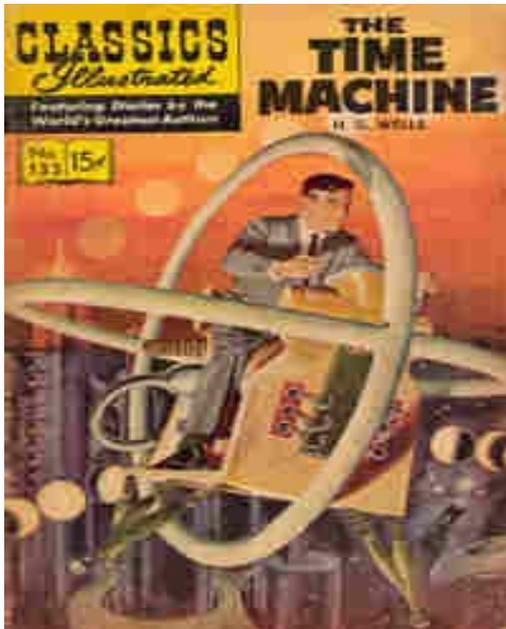


## The Morlock Project

Time Travel – is it possible?

This question has vexed my generation and generations before and after us. Ever since I read the HG Wells novel over 40 years ago at the age of 10, getting my own Time Machine has rarely been far from my mind.



### Executive Summary

**The Morlock Project is an investment fund to finance the research and development of, firstly a receiver that can receive stock price information from the future!**

**This “fuure” information will be sent by means of color coded sub atomic particles. In the event of the receiver failing to receive signals, we would be required to build a transmitting time machine, this is a more daunting task.**

**We require a financial structure that guarantees a profit share to our future partners. This investment is not for widows or orphans.**

Each wave of science fiction has felt less need to introduce the basics concepts of time travel and the genre has taken its place alongside Vampires and Cyborgs as standard elements of our media culture. My interest however has been at a more practical level and unfortunately the results have been less than stunning. In the same way as I am skeptic of spirituality, mind reading or telling the future, I am not able to embrace the concept of time travel without seeing it in action. This has not stopped me from extensive study in mathematics, statistics, physics and metaphysics. While 30 years of searching may seem to have offered up scant progress, I feel that we are today closer than we have ever been to Time Travel.



Personally I have learned to skirt the mathematics involved, but the guts of it still eludes me. I can talk about Space Time with the best of them but I don't really [grok](#) it. (From Stranger in Strange Land.) I am left rather like Woody Allen, “*So quantum physics tells us that Space and time is the same thing. I ask someone how late is it – he tells me about 2 miles. What good is that?*” When I read the [Road to Reality](#) by Roger Penrose, I get lost in topology.

I have spent most of my time on the mundane task of prediction the future. And this done with the even less exiting technique of “extending the past”. To forecast the future, first we understand the past and then project it into the future. This lead me to problems like predicting the drawing of a card in blackjack and forecasting econometric variables. The best Book available is [Time Series Analysis](#), 800 pages of beautiful maths by James Hamilton. Years of research has tough me that this is vaguely possible, but still fraught with uncertainly. There are great statistical techniques for forecasting, but none of them could ever achieve what is possible if we could get a reliable messages from the future. If we could predict the future then we could predict events like the Stock exchange or the Lotto. We would not even need compound interest - riches would await those that can see the future.

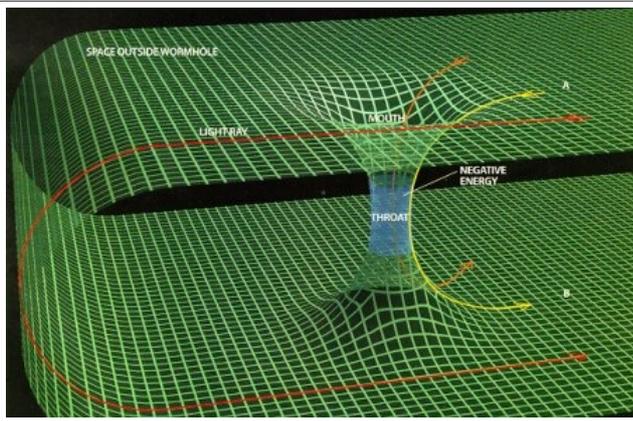
I have largely buried this dreaming and settled for a life in suburbia. But the spark has been reignited. My recent ideas of Time Travel began with inspirations from my 10 year old son, Dan who is an avid Cartoon Network addict in a generation for whom time travel is as natural as thumb entry keyboards. “Dad, why can't we invest \$100 in a bank today and then go into the future and collect it. With all that interest we would be rich.” I then explained to him how we would be very rich. The concept of compound interest and how \$ 100 invested at the time of the European colonial landings would amount to fortunes the size of countries today. After a while I recalled that this is not original, I first met this idea in [The Door into Summer](#) by Robert Heinlein. I soon gave my son all the arguments about why Time travel is not possible, it kept him quiet for a while. But the idea will not lie down and he keeps coming back. In our discussions have evolved significantly and it even have name now, after the anti heroes of HG Wells – The [Morlock](#) Project.



So why is Time Travel not possible? Well first there is the [grandfather paradox](#) , a metaphysical paradoxes of meeting your past self and/or killing an ancestor to change your own future history. Ray Bradbury took this to the extreme in [The Sound of Thunder](#). These make it an uncomfortable future, but none of these paradoxes actually preclude Time Travel, the simply make the outcome weird.

*A person with a new idea is a crank until the idea succeeds - Mark Twain.*

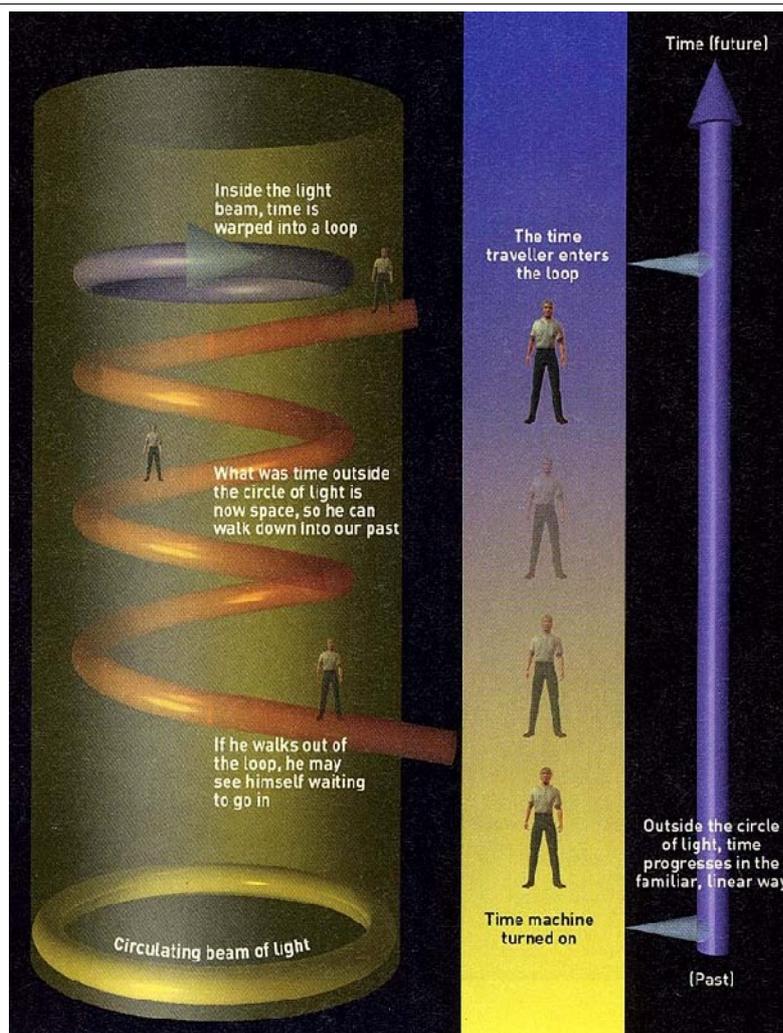
For most of my life Time travel has been simply the stuff of fantasy, but from the end of the 20<sup>th</sup> century a debate amongst physicists has begun. For a brief introduction, read about [Dolansky Time Machines](#) or Morris Thorne Worm holes. In the one corner is [Ronald Mallett](#), a proponent of a theoretical time machine based around lazer technology. In the other corner is Olum and Everett, backed by the work of no less that Stephen Hawking and his theorem of [chronology protection conjecture](#) which, in summary prevents the appearance of closed timelike curves. Try follow the arguments, but if you can actually figure it out, call me because I can't. The main reason we believe that Time Travel is not because Physicists tell us so. It is a leap of faith. You cannot hope as a non specialist to understand the issues. I have 3 degrees in Applied Mathematics, so I am no slouch with numbers, but the grasp required of relativity and quantum physics is simply beyond me.



The glib explanation of time travel is simple. According to Einsteins General Relativity Space Time are part of the same thing. Bend space you bend Time. Matter bends space. Therefore matter bends time. Matter can be replaced with energy  $E = mc^2$

Setup a circular lazer and with enough energy, you can bend space backward on itself and if it touches you have pathway or wormhole through time.

There are lots of applications in the world for special relativity and time dilation. The biggest is the World GPS system that has to be adjusted to take into account rapid speeds. But for tiem travel, I have never got past the special relativity argument that the basic blocking argument is that to travel back in time you will need to travel faster than the speed of light and according to Special relativity that is not possible. My understanding of general relativity is really limited, but it makes sense to me that is would take massive energy to move even a cricket ball close to the speed of light, faster than than would be completely impractical. Thats it no time travel. We are stuck in the rut.



For me, the biggest argument against time travel, is like the argument against miracles or UFOs. There simply is no evidence of it! If they had some how figured out time travel in the future then somewhere, some time a Phil-from-the-Future would have popped up some where in history. Its like the [Seti](#) project – not a sound. Then Dan gave it to me..

Dan starts from a completely different perspective. He takes Time travel as a given. He is not constrained by a 20<sup>th</sup> century education in special relativity. I am too locked up in the image of Bruce Willis or Arnold Swatzenegger speeding through time on a motor bike. For Dan the reason that we have not seen the evidence of Time travel is that we have been looking in the wrong place. The time travelers are not going to be some dinosaur hunter and his girlfriend, but rather barely visible sub atomic particles that duck through worm holes.

Once you think of particles or information rather than Cyborgs moving, then Time Travel becomes a lot less off the wall. You may still feel embarrassed to tell your friends that you invested money in it, but at least you don't have to think that you are personally losing it. It was a gut wrenching thing for me as a boy to get my head around the Special Relativistic concept that two separate objects could experience different time sequences. 30 years later it was an absolute shocker for me to grasp the idea of the [Go-Splat Photon](#) which effectively says that a Photon moving at the speed of light experience no time at all as it moves a Billion Light years from a Galaxy to us, that's got to be more weird than Time travel!



**Can you see it?** 20 years from now a mad scientist working at the CERN laboratory accelerator, coming in on Sunday morning while the rest of them are at Church or playing tennis and pushing Photons back to us in 2009? But if he could do that, surely he could pop it onto our Bloomberg Flat Screen TV right now? But there simply is no evidence of that. This does bother me. My gut feeling tells me that it can't be that far into the future before we do achieve time travelling photons. If we are getting no signals does this mean that whole human race wipes itself out in some Armageddon before we get around to finishing the Time Machine and is this ending in the near term future?.

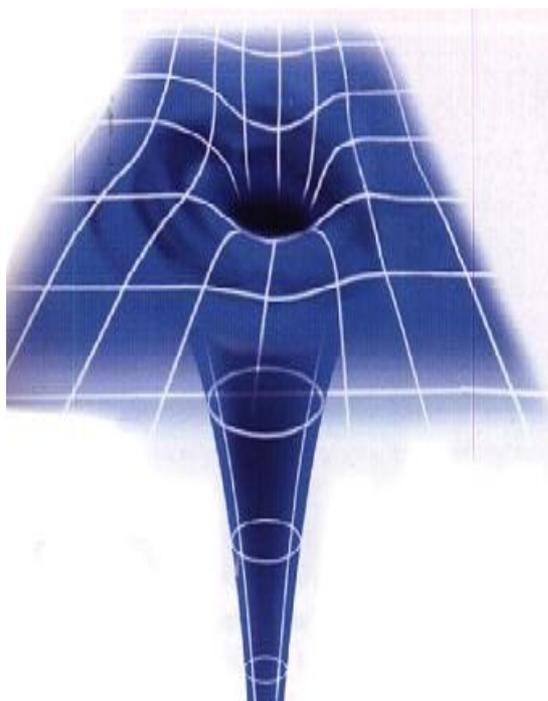
Ignore the premonition of world death and the business proposition is deceptively simple. Pick any stock market variable or sequence of winning Lotto numbers and keep publishing its data on the Internet so that it is easily available in the future. Build a receiver in the present day that can detect some agreed sub atomic particle and set it up in an open manner so that Phil-from-the-Future can easily point the output of his Time Machine onto our receiver and send us stock market data about what we can expect the stock market or Lotto to do next. This will be something like Spin or quark color codes to relay info. This approach to the project, swaps the problem of trying to make a Time Machine now to simply making a receiver now to receive signals from a future hypothesized invention. In theory, at best within minutes of us getting up the receiver, signals should arrive from Phil. This is not the only scenario, we may have to wait as the distance in space time may be a factor..

Here is what bothers me. Moving info from one Space-Time point to another is not going to be like moving it across a laboratory room. Like I said, forgive me I get stuck on topology, but I can understand that a laboratory bench on the earth rotates eastward at 10 000 Kms per hour, orbits the Sun at 100 000 Kms per hour and the Sun orbits the galaxy at 780 000 Kms per hour. Now I don't fully understand where the dimension of space time fits into the universal grid, but if you are trying to hit a spot in space time over more than a few seconds, it's going to be a long, long way away. It is going to be like hitting a molecule on the moon.

The silence we get from Future Phils is similar to the silent alien civilizations, that [Probability One](#) tells us must be out there. They are simply too far away in light years to send us a coherent signal. We are only going to be able to send sub atomic particles and only send them over very short periods of time, otherwise we simply won't see them. This seems to stop me dead in my tracks. Dan has all the answers. ...

We are still looking in the wrong place. It is not going to be some stranger sending us the messages it is going to be ourselves. Phil of the Future is us a few seconds ahead in time. OK that puts us back designing our own time machine and sending info back a few seconds. It is still challenging. A few seconds at the speed of light is like to the moon and back! Anything beyond that is going to require [Jumpers](#) or some Star Trek style teleporter.

The limitation of few seconds does limit our choice of investment instruments. You can hardly watch the signal and buy a Lotto ticket a few seconds later. Fortunately this is where statistics and Cybernetic trading systems come in. Modern computers can now issue 500 buy and sell stock signals rapidly. So the investment instruments would seem to be some highly traded, liquid volatile derivative. If you can believe time travel you have to believe we will be able to sort that out simply.



An interesting Grandfather Paradox is in the making. Up front we must commit to place a percentage of our profits into a Trust that Phil of the Future can draw on to build his Future Time Machine. We must also agree on a limit of profit to be taken. If we make this an open ended destruction of the world capitalistic system, we are sure to get some future government authority making it illegal for Phil to send us the signals.

The cost of building the transmitter may be horrendous. However our profits will be exceptional too. If we agree to accumulate the funds and always to make a portion of them available to credible applicants, we set up the time path for a planned future. The first signal may just be Phil's real name, which we would have to write into the contract to release the funds to him when he requests it.

The dual approach gives us two shots at the pie. Build the receiver and if we don't get an instantaneous response, build the transmitter. Get either of these right and we have the power to simply redistribute the world's wealth.

