

## The New Time Machine

Darian Reinhart was a brilliant engineer, but his personality offended a lot of people. I don't think he meant to be offensive. Understanding human emotions just wasn't one of his strengths. I say he was an engineer because that was what he did for a living and his first undergraduate degrees was in electrical engineering, but he also had a PhD in Physics, a second bachelor's degree in history, and he was working on a third bachelor's degree in literature when financial concerns forced him to drop out of school and go to work as an engineer. Definitely a man with many interests.

We roomed together for two years while he was working on his electrical engineering degree, and I got to know him fairly well. I was amazed at his intellect. He would sit down with an engineering textbook, more equations than text, and flip through the pages as though he was skimming a novel the day before a book report was due. When he was finished, he had absorbed all the concepts, learned all the principals, and seemingly retained it forever. He generally read all his textbooks cover to cover at the beginning of a semester and never had to open them again.

On the other hand, he was often baffled by the reactions of other people. He would frequently interrupt people to correct minor errors in their narrative, and he seemed surprised that they were offended rather than grateful for his correction. He seemed indifferent to other peoples' problems, offering solutions rather than sympathy, and he frequently tried to answer rhetorical questions such as "What the hell did he expect me to do?" He had few friends as a result, and as far as I know he only had one girlfriend in his life. That relationship only lasted a few weeks, and it came to an end after she came to our room, much distraught, and tearfully recounted how she been in a minor traffic accident, and had gotten a ticket for it.

To his credit, Darian did not interrupt her story, although I could tell by a few involuntary twitches that he was restraining himself. (He *had* learned a few things about human psychology.) Unfortunately she ended her narrative by saying "Why did the policeman give me a ticket? I didn't do anything wrong!"

Darian promptly answered her question, explaining why what she did violated traffic laws and citing the specific traffic ordinance that applied. He tried to end on a cheerful note, saying "The good news is that the points should come off your driver's license in two years. It might take longer for your insurance rates to come back down, though." I think that was the end of their relationship.

I took a job in another state after I graduated, but I kept in sporadic touch with Darian through occasional emails. While I was slowly climbing the corporate ladder in my job Darian worked for a few years at a government research laboratory, was hired away by a major electronics company that profited greatly from his patents, and then left to form his own company. He sold that company after a few years, earning enough money to retire at the age of 35. He used some of his retirement cash to buy the assets of a failed research and development firm, which gave him a building, a laboratory, and machine tools to follow whatever project struck his fancy. That building happened to be in the same city where I was working, so we got together for an occasional lunch or after-work beer. (I drank the beer. He drank Pepsi, no ice.)

I regarded Darian as more of an acquaintance than a close friend, so I was surprised when he called me one day and excitedly asked me to come by his shop so he could show me his latest project. I guess maybe he didn't have any close friends at his new location. When I arrived, Darian ushered me into the "visitor's lounge, which was an anteroom to the former CEO's office. Judging by the dust, it hadn't been cleaned since Darian bought the building. He handed me a warm Pepsi and waved me to a leather couch, while he sat in an overstuffed chair that faced the couch. A glass-topped coffee table was between us, with a half-finished Pepsi near Darian's chair.

"Have you ever read H. G. Wells's *The Time Machine*?" he asked?

"Years ago," I said. "Probably when I was in junior high. I seem to remember something about peaceful people dancing in fields while evil creatures lived underground."

"Yes," Darian replied. "Thousands of years in the future mankind had evolved into the peaceful but purposeless Eloi who were being harvested like cattle by the murderous Morlocks. But in the beginning of the book Wells described a dinner with the inventor of the time machine. Did it not strike you as odd that none of the people at that dinner were named?"

"I'm afraid I don't remember that part," I said. "It's been a long time since I read it. If I noticed they were unnamed at the time it must not have made much of an impression on me."

"Really?" Darian said incredulously. "The main characters were referred to as the Time Traveler, the Psychologist, the Editor, the Doctor, and so on. Wells usually named his characters. There was Griffin in *The Invisible Man*, Nuñez in *The Country of the Blind*, Dr. Morreau in *The Island of Doctor Morreau*, and many others. OK, the narrator in *The War of the Worlds* was unnamed, but he was just an observer. He had no impact on the plot. It's hard to think of another major work where so many characters are unnamed. Why do you think Wells didn't give those characters names?"

"Maybe he thought that would make it more mysterious?" I suggested. I was struggling to follow his train of thought.

"It was supposed to be science fiction, not a mystery!" Darian said derisively. "You want science fiction to be as believable as possible. You don't obfuscate things that would add to the credibility."

He looked at me expectantly, waiting for me to give him the answer he wanted.

"I don't know," I said honestly. "Why do you think he did it?"

He leaned forward and almost whispered his reply. "Because it wasn't fiction!"

He sat back with a smile on his face and took a swig of Pepsi. "Wells was protecting the identities of the men who knew about the time machine."

For a moment I was too dumbfounded to reply. “Wait a minute. That book was written, what, a hundred years ago? You mean to tell me people could travel through time back then, but with all the advances in science we’ve forgotten how to do it? Besides, isn’t time travel impossible?”

“It was written one hundred and forty five years ago,” Darian corrected. “There was only one man who could travel through time back then, and he disappeared along with his machine. The reason nobody’s invented another time machine since then is because, like you, they think it’s impossible. Time is just another dimension. We live in a three dimensional world which happens to be traveling through the fourth dimension of time at its own pace. We’re like a snail, crawling on the surface of the earth. Essentially a snail lives in a two dimensional world because he can only move on that surface – forward, back, left or right. If the surface happens to go up the side of a hill the snail moves in a third dimension, up and down, but only because the surface he’s crawling on moves in that dimension. It never occurs to him to jump through that dimension to arrive at another point on the surface of the earth without passing through all the intermediate points because he’s not capable of jumping. He would need a machine, like a catapult or an airplane, to do that.”

He looked expectantly at me to see if I was following his logic. I nodded yes, and he continued.

“We’re like that snail, only we move in three dimensions. We also move in the fourth dimension of time because our three-dimensional world is moving through time, but like the snail it never occurs to us that we could jump through that dimension and return to our three-dimensional world at a different point of time.”

“So what you’re saying is we could jump through time if we just had the right machine?” I asked.

Darian set his Pepsi on the table, stood up, and motioned me to follow. He led me through a machine shop to a room that appeared to have once been a small warehouse for the shipping department. It was empty now, except for a strange contraption in the middle of the room. It looked like a steam punk version of a mechanical bull. Glittering brass and nickel, with a leather saddle in the center surrounded by gauges and levers. Long crystal rods ran on either side of the machine. Darian beamed at it with obvious pride.

“This is a time machine?” I asked suspiciously?

Darian smiled and nodded. “It took me a long time to untangle Wells’s clues. Finding the Editor was my first break. There were only a few newspaper editors in Wells’s circle. The Time Traveler turned out to be a man named Timothy Asquith. He disappeared in 1892, three years before Wells’s story was published. His estate was eventually sold for unpaid taxes to a retired banker who made very few changes to the house. When he died it was bought by a couple who renovated everything. They sold the books in the library, but they saved Asquith’s personal notebooks and papers because they thought they looked ‘interesting.’ They put those in a trunk in the attic, and amazingly they were still there when I contacted the current owner. The papers included all of Asquith’s drawings and notes on how he built his time machine. I’ve made some improvements, particularly to the controls as there are much better electrical components available now than in his time. I also added thrusters based on satellite

technology so I can move the machine in our three-dimensional world. That way I don't have to worry about landing in the middle of some future object the way Asquith did."

"Does it work?" I asked.

"I haven't tested it yet," he said. "I'm still checking out the individual components, comparing them to Asquith's notes and drawings to make certain everything is correct. There is a certain element of risk to time travel, and I wanted to let someone know what I was doing before I tried it. If I don't come back, the notes and drawings are all upstairs, in the drafting room. Contact Professor Phil Morgan at MIT and tell him what happened. He's the only one I trust to take a serious interest in time travel."

He handed me Professor Morgan's business card.

"When are you going to try it out?" I asked.

"Probably in a few days," he said. "But I can't be certain. I tend to lose track of time and ignore my phone when I'm in the middle of a project. Come back here in a week, and if I've been successful I'll tell you about it. If I haven't finished it yet we'll meet the following week. If I'm not here, contact Professor Morgan. Here's a key to the building."

After handing me the key he picked up a micrometer and began measuring something on the machine. I realized my visit was over. He had a habit of abruptly ending conversations that way.

I didn't hear anything more from him for a week, so I came back on the appointed day. I entered the building and called Darian's name. There was no answer. I wandered through the empty front office and the machine shop. With trepidation I opened the door to the warehouse storeroom. It was empty. Wherever Darian had gone, he hadn't come back. I was looking in my wallet for Professor Morgan's card when I heard a voice behind me.

"Looking for me?"

I spun around and there stood Darian. He looked even more disheveled than usual, with patches of grease or soot on his face and arms, grimy hands, and a tear in the left knee of his jeans. It looked like he hadn't shaved for several days.

"You're alive!" I said with relief. "Where's the time machine?"

"Long story," he said. "I'm famished. Let's go to the nearest burger joint and I'll tell you over lunch."

Darian looked in no condition to drive, so we took my car. He didn't have his wallet with him, so I paid for our lunch while he cleaned up in the rest room. Then we sat down and he told me his story while we ate.

“When I first tried the machine, it didn’t work. I triple-checked everything against Asquith’s notes and drawings. I had made some minor corrections to a few components because his calculations were based on outdated theories. The science of physics has advanced significantly in the last hundred years. When the machine didn’t work I remade those parts exactly according to his design and the machine worked perfectly. I guess modern physics doesn’t have all the answers.”

“The sensation of time travel was exactly as he described. I could still see the physical world, although dimly, as though through a mist. At first it looked like I was watching a speeded up movie, and then as the machine accelerated everything became a blur. The sun and the moon became glowing bands across a blue-black sky. I had the sensation that I was falling, and I held on to the machine for all I was worth.”

“I traveled about 800,000 years forward in time because I wanted to see the world Asquith had described. The improved controls I had installed let me fine tune the machine so I could slow down almost to a complete stop without leaving the time dimension and ‘landing’ on the three-dimensional earth. That let me observe things without becoming visible myself. The Eloi were dancing and gathering flowers in fields, exactly as Asquith said. I didn’t see any Morlocks, but of course they stay hidden underground during the day.”

“I then traveled back to within a few hundred years of the present, hoping I could blend in with the people there and learn about the future without disrupting things. I slowed down to observe the world before I landed. The thrusters worked beautifully, allowing me to travel wherever I wanted. What I saw disturbed me greatly. Many cities were in ruins. Not destroyed as by a war, but falling apart as though they had been abandoned. They weren’t abandoned, though. I saw people moving about. They lived in what remained of the buildings, many in basements as the upper stories had collapsed. I saw no ongoing construction, no stores, although there did seem to be some people bartering on corners, and no evidence of manufacturing. I did see what appeared to be a fight, or maybe a riot, with a large crowd of people. I didn’t want any part of that, so I moved on without landing.”

“I saw other cities that were bright, clean, and humming with activity. Those cities were surrounded by walls, but there were well-kept agricultural fields, lakes, parks, and beautifully landscaped open areas outside the walls. People seemed to be going in and out of the city freely, so I decided this was a place to explore. I found a secluded spot in a forest outside the city, landed, and camouflaged my time machine with leaves and branches from nearby bushes. Then I began walking toward the city.”

“I passed some agricultural fields on the way, and noticed that all the work was being done by machines. Not metal androids like in cheap science fiction movies, but simply machines operating on their own, with no seats or other provisions for an operator. They were focused on their individual tasks and totally ignored my presence.”

“As I got closer to the city I began to encounter other people. Their clothes were not radically different from mine, and nobody was wearing uniforms or anything unique, so I didn’t feel out of place. The others seemed to take no notice of me. A few waved and smiled at me, and I returned their greetings. I was satisfied that I could pass unknown among them as we walked through a gate to the

city. A man on the other side of the doorway was smiling and greeting the people as they returned. When I walked through the door a bell rang and a red light started flashing. He looked at me with a puzzled expression, and I suddenly fell unconscious.”

“When I came to I was leaning back in a large, comfortable chair in what appeared to be an office. A man sat in another chair facing me. He was dressed like the other people I’d seen, but wore a white vest over his clothes. A patch on the vest had two snakes twirling around a stick, so I assumed he was a doctor. He was leaning forward and staring at me intently. I tried to sit up, but discovered I was paralyzed from the neck down. It wasn’t painful, but it was damned scary not being able to move.”

“Well, young man,” he said to me. “You’re a bit of a mystery. You’re not one of us, and you’re not one of them. Tell me, who are you and where did you come from?”

“I don’t know what you mean,” I answered. “I’m a human being, just like you.”

“You’re a human being all right,” he said, “but your DNA isn’t quite like mine, or anyone else in the cities for that matter. It’s not the same as anyone from outside the cities either, although it has features of both. It appears you’re one of our ancestors, which means you come from an earlier time. I’m guessing you were brought here by a rogue time traveler. In case you didn’t know it, time travel is a serious crime. So tell me, who brought you here, and where is his machine?”

“Why is time travel illegal?” I asked. I didn’t want to tell him how I got there until I knew how much trouble I was in for traveling through time.

The doctor sat back in his chair and seemed a little less menacing. “Time machines won’t be invented for another three hundred years,” he said. “We know that because the inventor came back to our time on one of his first test runs. Unfortunately, he also brought a virus that was totally harmless to people in the future. He didn’t know he was bringing it, of course. It was just in his body. We found out why it was harmless to people in the future because it killed fifty million people in the cities before we developed a genetic modification that rendered us immune to it. We tried to share that with the people outside the cities, too, but they were suspicious and didn’t share it openly. The death toll outside the cities was even worse. We made time travel illegal as a result of that disaster, and of course that law carried forward so it’s illegal in the future as well.”

“You keep talking about people inside the cities or outside the cities. Aren’t they all the same?” I asked.

The doctor looked at me like I was a curious lab specimen. “You must have come from a long time ago,” he said. “We used to all be the same. Humanity has made a lot of progress over the years. As we progressed, we tried to eliminate the gap between those who were most successful and those who were least successful. Many of the least successful had turned to crime. In less enlightened times they would have been punished or imprisoned. We tried to rehabilitate them. We taught them how to succeed without crime. We forgave them, and we relaxed the laws that punished them if they suffered a relapse. This helped some, and emboldened others. Some of the most progressive cities eliminated

punishment for minor crimes altogether, essentially making it legal to steal anything below a certain value. The emboldened ones began stealing small amounts over and over. They weren't stupid. They just had no inhibitions against stealing so they took advantage of the laws that were meant to help them. They stole from each other, too, which led to violence and gang activity."

"It wasn't long until the people who didn't believe in stealing began to flee the progressive cities, moving to cities where they would be protected from theft and violence. Likewise, people who were in trouble for crimes in the cities that still enforced laws fled to the cities that didn't enforce them. Eventually society split into two different types of cities, and this happened so long ago that we can now distinguish which type of city a person comes from by their DNA."

"Doesn't anyone ever move from one type of city to the other?" I asked.

The doctor shook his head. "Not any more. A long time ago, when someone committed a crime in a crime-free city they were given the option of prison or banishment. They usually chose to flee to one of the other cities. Now they're so afraid of the violence in the other cities that they choose prison. And back when there was still work to be done, we allowed people from the other cities to come into our cities if they promised to work and obey the rules. That seldom worked out. Sooner they'd break the law and we'd have to send them back. They'd grown up in a society with no rules and they saw nothing wrong with taking whatever they wanted, regardless of who it belonged to. Sometimes they'd even kill to get what they wanted. When there was no longer any work we had no need for them so we decided not to take the risk of letting them into our cities. That's why we do a DNA scan at our gates, and that's why you're here with me now."

"Why is there no work?" I asked.

"It's all done by machines now. There are still some professional jobs, of course. I'm a doctor because most people would rather talk to a human about their problems than talk to a machine, but machines do most of the diagnosis and treatment. And there are artists, writers, inventors, scientists – anything that depends upon extremely creative thought is still usually done by people. But the machines are getting better at those jobs, too. Someday we'll all live lives of leisure."

"Do people in the other cities have these machines?"

"Some. The ones they stole. But they don't really need them because they don't create anything. We give them food, clothing, and other necessities. They are human beings, after all. We can't just let them starve. Besides, we learned a long time ago that if we didn't give things to them, they'd steal what they wanted and probably damage the fields, factories, and machines in the process. It's better to just give them what they want."

"You keep referring to these people as 'them' or 'the other cities.' Do they have a name?"

"I don't like to stereotype people by giving them group identity names," the doctor said, frowning. "I feel that dehumanizes them. Some people refer to them as 'mere lucks,' claiming they depend on

mere luck for their next meal, but that's not true. They're intelligent, rational human beings who have chosen an alternative lifestyle. They're not depending on luck, they've learned that if they don't produce food we will give it to them. The people who call them 'mere lucks' refer to us as being the 'enlightened ones,' but that's being judgmental. I don't think the people who live in the other cities are any less enlightened than we are. They're not evil, they're just different. I wouldn't want to live in their cities, and they don't want to live in ours."

He seemed to be lost in thought after he said this. He stared at the ceiling for a bit, with a hint of puzzlement on his face. I wondered if he was questioning what he had just said. It was as if he had heard these words from others so often that he had never actually thought to question them. It was hard for me to believe that a man who was as intelligent as he seemed to be could regard stealing, violence, and murder as simply an "alternative lifestyle." That it was perfectly OK to depend on charity from others for your food and medical care. Even if he didn't regard that lifestyle as "evil," could he at least regard it as being "wrong?" Could he accept the fact that it's OK to be judgmental about some things?

Then he seemed to shake off his doubts. He looked directly at me again. "I think you've distracted me long enough. Who are you, and how did you get here?"

I decided my best hope of getting out of there was to tell the truth. "My name is Darian Reinhart and you're right. I do come from a past era. I wasn't brought here by a time traveler, though. I built my own machine. In the era I come from, that's not against the law."

"I don't believe you," the doctor said. "Time machines won't be invented for 300 years."

"I'm afraid you're wrong about that," I said. "A man built one in the 1890s. He and his machine disappeared on his second time trip, but I found his plans and built another machine. This is my first trip through time."

"Your DNA says you come from the past," he said. "But I don't believe your story about building your own machine. You'll stay in this chair until you tell me where your machine is and we destroy it. If the technology we find in that machine is from the past, I'll release you. If it's from the future, you need to tell us where you got it. Either way, you need to resign yourself to living out the rest of your life in this era. I can't risk letting you go back to your own time."

I wouldn't have minded staying in that era. There would have been so much to learn, and so many new things to see. But I realized that staying might be more dangerous than coming back.

"That may not be a good idea," I said. "I left the plans for my time machine in my workshop and I gave a friend instructions to turn them over to a university if I don't return. That will lead to many more time machines, and many more time travelers. You've convinced me that could change the course of human events and threaten the entire world. I need to go back and destroy those plans and my machine."



“Why should I believe you?”

“Because you can’t afford not to,” I replied. “The moment you destroy my machine all history will change. Time travelers will have had hundreds of years to screw things up using copies of my machine. Your world may be unrecognizable, or humanity itself may no longer exist. Your only hope is to let me go back and destroy those plans.”

The doctor stared at me for a long time. Finally he stood up. “This could cost me my job,” he said. He flipped a switch on the chair I was sitting in and suddenly I was free to move. I came straight back and burned the plans for the time machine. Then I destroyed the machine itself; disassembling, smashing, and cutting the individual parts with a torch until they were unrecognizable. I had just finished that when you came in, which is why I was such a mess.

I thought about his story for a long time. “So history can be changed. The traveler from the future brought back a virus that killed millions of people, but it also made the people in his era immune to the virus. Time travel is dangerous, but if history can change it means humans might not degenerate into the Eloi and Morlocks you saw in the distant future.”

“I don’t know about that,” Darian said as he mopped up the last bit of ketchup with a French fry. “It occurred to me while I was destroying my machine that the term ‘Enlightened Ones’ could change over time to become ‘Eloi,’ and ‘mere lucks’ could become ‘Morlocks.’”