## Bifurcation

## A short story by Tom Schneider

Remi couldn't stand it inside the bubble. She ran for the exit. There really was no exit; it didn't matter which way she ran. No exit, and yet everywhere an exit.

"Let her go," Professor Phering grabbed Will's arm and arrested his first movement in her direction. "Of the few people who have been here in the bubble, most have been like her, unable to tolerate the world as it is here."

"I don't understand. It's a little disorienting, but I still have my wits about me," Will yelled at the professor over the roar of the machinery.

"Just wait. It will get worse. She was just ahead of you in her perception," Professor Phering cautioned.

The roar was accompanied by streaks of colored light that swirled about them. It had at first been a subtle thing perceived at the edge of his peripheral vision. Now, seconds after Remi had run, Will was only beginning to see the intensity of the disorienting alterreality that she had succumbed to. The roar was not just that of the machinery. It was the sound created by the rippling of time and space at the edge of the interface ten meters from them in all directions. Remi stood yet at the edge of their subset world pausing to look back at Will. She wanted so much to stay with him, but she just couldn't. She turned away and vanished through the wall of fury that had now become opaque.

"We are fully immersed," the professor declared. "Now we make our adjustments."

A moment later the quiet hit them with a stark definitiveness. The sudden and instant release from that unholy sound made the mind grasp how thoroughly it had, up until then, enveloped them. Now, the scene was totally different. It wasn't the lab that Will stood within anymore. It wasn't even the same time of day as it had been when they fired up the machine only moments ago.

"You will have to do it without her. It will be harder this way, but you can still save the world," Professor Phering stated. His drama was not overplayed. It really was this serious.

The professor had seen the future, but it didn't take a time machine for the world to know they were in trouble. Leading scientists all over the planet had decried the period of mass extinction that we were presently at the beginning of. But the professor knew one thing that everyone else didn't. His colleague and best friend, Dr. Fredrick Rousseau, had the answer to mankind's problem. They had kept Rousseau's efforts to find this world-saving solution close to the vest these last few years, as the revelation of it and all its consequences would shake the world. They weren't ready to weather the controversy. At least, they weren't foolish enough to let the world know of their work before it was complete. On the day that Fredrick Rousseau found the final piece of the puzzle, he had called Professor Phering. "I have the final solution. It's tested, it works, it's 'safe'," he told him. He was in his car as he spoke, on his way in to his workplace. Phering heard the crash.

Now the good doctor Rousseau was dead, and the secret that could save humanity was lost. Phering knew that there was one hope. His experimental machine could fix this. He could travel back, but no more than seventytwo hours. Ethically, in his first travels, he had refrained from any actions that could change the future, or just as correctly stated, change the present. At least, he would not change things significantly, but there was that butterfly effect. A butterfly flaps its wing somewhere on the continent of Africa, and as a consequence a year later, a hurricane that otherwise would not have existed, strikes North America. Little differences triggering bigger and bigger ones. So you couldn't help but change the future, but you should do your best to limit the damage. It hadn't taken the first human to develop this capability long to come up with an excuse to violate that ethical standard. He had only had the thing working a few weeks. This situation, Fredrick Rousseau's death and the world at risk, justified his bold and unethical plan, didn't it?

With time so short, he grabbed almost the first people he could find to help him, daughter Remi and her husband Will. Will had married the boss's daughter last year. The somewhat feeble professor knew that his young assistant, Will, would be the man for the job this time, just as he had approved of him as his daughter's groom last year.

They knew the exact time that it happened, and they were pretty sure they knew where. If Will was going to prevent the accident that killed Dr. Rousseau, he would have to move quickly, have to make decisions in the next hours with lightning speed.

Presently, Will and the professor stood in sudden silence, eyes focused on the instruments in front of them. Then they looked up from the control console that had been transported with them. Remi stood there. It was her, alright. She wore a blue plaid long skirt that hugged the hips of her long-torsoed body. A coordinated top, solid in one of the blue colors of the plaid that it stole from the skirt, fit tightly over the rest of her. Will welcomed the sight with adoring eyes even though he had just seen her seconds ago. She had overheard Professor Phering with his words to Will about saving the world.

"I'm still here. Will doesn't have to do this alone," she said.

"But I saw you leave the bubble," Will exclaimed.

"No I didn't. I started to, but I decided to stay."

The professor had used the time after the phone call, feverishly digging for information about the crash. But Dr. Rousseau was far away in another state. It was the professor who phoned in the 911 call to the Orleans Parish emergency hotline. At least, that is who they connected him to when he explained how he had heard the crash over the long distance call. Following that, he had worked frantically to gather information from the local police. They wouldn't understand the time constraint he was up against even if he tried to explain it to them. Time was ticking, and he was only going to be able to go back those seventy-two hours, maximum, if he was lucky. It wasn't something he could control as well as he would like.

There indeed had been a head-on crash on the old Highway 11 bridge that crossed Lake Pontchartrain connecting the suburb of Slidell to New Orleans and to Tulane Medical Center where Dr. Rousseau conducted his research. It was the commute route that the professor knew was Fred Rousseau's daily routine to take. The six mile long bridge was an alternative route that paralleled the Interstate 10 main bridge that most commuters took. Police reports confirmed two fatalities, the drivers of two cars. Armed with the information he could gather so quickly, he set the machine to push them back as far as it could.

Now they were in a field several miles west of campus, a different time *and* place. It was one part of the phenomenon that the professor had worked out and understood well enough to predict. It had something to do with the rotation of the Earth. He had made sure that the location already had cars parked and waiting. They checked the time, and disappointedly found that they had only transported back fifty-four hours. Almost forty-two hours had passed after the crash before they had initiated the time jump. This left them precious little time to find their way to New Orleans and intercept Dr. Rousseau, twelve hours to be exact. The professor didn't waste any time yelling, "Go! Get to Atlanta as fast as you can and catch a flight to New Orleans!" Will and Remi drove like maniacs from Georgia Tech toward the airport, until they received the phone call from the professor.

"I've booked you on a midnight flight. It won't do any good to get there much sooner. You can probably slow down a little. But then you never know. On second thought, keep up the pace."

They arrived at the airport with time to twiddle their thumbs; no traffic delays, no flat tires. Professor Phering continued to report that Dr. Rousseau still was not answering his phone. It could all be so simple if he just wasn't in the habit of shutting off his phone to be left alone in his experiments for days at a time. Will and Remi boarded the plane just before midnight, and then heard the disappointing announcement over the loudspeaker.

"This is your captain. I'm sorry to inform you that there will be a slight delay while we address a minor mechanical problem."

"Oh, boy. I've seen this before. 'Minor mechanical problem' seems to take hours to fix," Will commented to Remi while seated in their first class seats. They were the only seats available with the spillover from an earlier flight that had been completely cancelled. Might as well try to enjoy it. But that became even less possible when they received the news that, because of the delay, the crew now would exceed their continuous hours on duty restriction, and now they would lose even more time bringing in a new crew. Remi set a countdown timer on her smartphone. They knew the crash time to the second, and Remi notched up the stress level each time she announced the time remaining.

"Four hours!" Remi exclaimed when the plane finally went wheels up.

It was an hour and a half flight, and by the time they were on the road in a rental car, Remi was declaring, "One forty-eight! Hope the rush hour traffic in New Orleans isn't too bad."

It wasn't, but they still had to cross the entire city to reach the Highway 11 bridge.

"We're too late. What can we possibly do?" Remi fretted.

"We don't know exactly where on the bridge it happened. If we can reach the far shore at the end of the bridge, maybe we can block traffic. Anything to alter the time flow," Will suggested.

"Four minutes!" Remi shouted.

They reached the bridge with clear road ahead, and Will punched the accelerator pedal. The bridge was a narrow two-lane road with no shoulder. They came up fast on a slow moving car within a mile of the start of the bridge. Will braked and then swung into the oncoming lane to pass. He hurried back over into the right lane, but was immediately surprised to see the just passed car racing up beside him. The driver had one of those "Pass and cut me off! I won't stand for that" attitudes. And it became a race.

Will had the sudden horrible thought that perhaps *he* was about to be the one who causes the accident. Was this the consequence of time travel? You could change nothing? What will be, was inviolate? He pushed the accelerator pedal to the floor and again overtook the crazed driver.

Remi yelled, "Twenty seconds!"

He had built a several car lengths lead when Remi called out, "Ten seconds!"

He moved his foot from the accelerator to the brake and locked them up as he jerked the wheel to the left. The car spun sideways and continued to slide blocking both lanes. The pursuing car likewise locked brakes and each car plowed onward, but in those intense few seconds, Remi and Will focused their attention on the small red sedan approaching from the far shore. Dr. Rousseau hit his brakes at the sight of the blockage forming ahead of him. All three cars slid in uncontrolled trajectories constrained within the close confines of the guardrails. The three vehicles on converging paths slowed amid the screeching of tires and the smell of smoke from the friction of rubber skidding on concrete. But they couldn't slow quite enough. Will and Remi were struck from both directions simultaneously, and the sound of the crash eclipsed the screech of the tires that preceded it. The cars came to a stop with an assortment of damaged fenders and jammed doors, but the impact was less severe than it could have been, and everyone was alive. Will and Remi climbed over the seat and out the back passenger-side door that seemed to be the only one functioning.

"Are you all right?" Remi ran to Dr. Rousseau who sat dazed behind the wheel of his car. The just deflated air bag hung from the steering wheel hub and laid in his lap.

"You are Professor Phering's daughter, aren't you? What are you doing here?"

"It's a long story," she answered him.

They didn't even try to explain anything to anyone about time machines or time travel. They just settled up with EMT's, police, insurance companies, and found themselves sitting hours later with Dr. Rousseau in his Tulane Medical Center lab. Rousseau knew of Professor Phering's machine, just as Phering knew of Rousseau's work. They shared their ideas and projects, as they had long been good personal friends.

"So what is this world-saving discovery that we were sent here to protect? Can you tell us?" Remi humbly inquired.

Dr. Rousseau took the long view and gave them the big picture story. "When we engineered agricultural products, you know, GMO's and all, we opened up the even less desirable farmland to great productivity. It was a huge success. We gave our technology to the third world where populations grew exponentially. Between the exploitation of land in virtually any ecosystem that could now grow specially engineered crops, and just the simple matter of hoards of humans everywhere, we find ourselves teetering on the brink of becoming a single animal species planet. Such a planet is not one that will last long, and not one I'm sure you want to live on."

Dr. Rousseau continued, "We have to check the population. A good war used to be good for that," he said sarcastically. Or just plain Malthusian scarcity, but that will come too late for what's left of the planet. I have invented a serum that can solve this dilemma. With my treatment, a person can live to be five hundred years old, most of it youthful and vigorous."

"Whoa!" Will interrupted. "Ah ... won't that make things worse?"

Dr. Rousseau explained, "My serum grants a long life span, but with it comes a stipulation. Not a political or legal one, but intrinsic medically within the very treatment process. You will never have children. And so each individual may chose, not be coerced, but freely make the trade-off choice. We estimate that enough will make the choice for infertility to turn the tide of overpopulation."

Will and Remi flew back to Georgia, returning before they left. That is, returning before they left for the

past. They caught up with the professor on campus at his lab.

"I've been talking to myself," he said unsurprisedly, lots of people do that. But he meant, for real, talking to himself, another himself. He went on with more detail. "I followed you two when you departed the field for the airport, but our paths parted, of course, when I turned off your route and headed back to the lab. Here I found myself, another me, preparing to make the jump back."

"The time travel paradox!" Will protested. "You were by yourself the first time you prepared to make the jump. How can this be?"

The professor pulled out a blank 8 <sup>1</sup>/<sub>2</sub> x11 sheet of paper and put it longways, left to right on the table. He folded it in half, right side over left and creased the fold line with his hand. Then he folded the top half back the other way along a line one inch from the first creating a one-pane accordion. He straightened the whole sheet out and struck a pencil line left to right, starting at the left edge of the paper, crossing both fold lines and terminating in an arrow head pointing right.

"This is the arrow of time. We folded the timeline ... with our machine, that is, we folded the time line," the professor explained as he repeatedly folded and unfolded the accordioning paper. With the paper again flat he proclaimed, "There is still yet a single thread of time, but between the two fold lines and for an equal space to the left of the first fold line, there are two me's.

Prior to that, on this timeline, there was only the one me making the preparation. Then I did it again. I repeated the sequence of events that led up to the launching of our time transport, this time with the two me's. At least that's the way I remember it now. We are presently here." He pointed to a place along the pencil line between the two fold lines. "We are now approaching the second fold line. At the edge of the second fold line, the other me will disappear into the past, and I will be singular again."

"But we are not quite there yet. Where is the other you right now?" Will queried.

"He's inside the bubble!" Phering said to Will and his daughter as he pushed the door to the lab open and led them into the place where a huge whirling ball of colors spun before them. The professor's doppelganger had just activated the machine.

As they watched, an unexpected thing happened. Or maybe they should have expected it. They had in fact seen it happen before. Remi appeared from out of the bubble.

"I knew I saw you leave when the professor and I made the jump back!" Will declared, voicing his proclamation in the direction of the Remi who stood beside him, not yet realizing the contradiction before his very eyes in the image of a Remi also striding toward him.

The professor looked concerned. He spoke to his daughter standing next to him in his typically

unemotional professor-talk, but yelling over the roar, "You were on the cusp. Your indecision at the horizon of the bubble has resulted in a disturbing bifurcation. There is yet another you, a third one, inside the bubble about to transport back in time. This is not good." Even as he spoke, Remi number two walked toward them and the bubble disappeared.

"We are past the second fold line," Remi number one said with great distress. "What will happen to me now?"

"I feel so weak," Remi number two said feebly as her knees buckled and she fell into Will's arms. He gently lowered her to the ground. "I'm sorry I let you down. I couldn't stay in the bubble. Did everything work out?" Her soft voice was barely audible.

He bent over her as she rolled from her side to lying on her back. Just the slight turn of her body felt exhausting, but it was not the effort that so tired her. She felt as though all the meaning of her life, every memory, every feeling she had ever experienced had flooded over her in some kind of a repeat performance. And every experience yet to come hit her as well, in an impossible memory of the future. It was the powerful emotion of it all that disabled any more movement and left her pinned to the ground. It was like a hurricane-force wind of emotion that blew straight down on her that she was unable to lift even an arm against. Her watery eyes looked up at him with hopelessness. "What's happening to me? I should have stayed with you. I should have stayed in the bubble."

"You did stay. You just don't remember it rightly," Will said, and his voice was choking.

And then Remi number two admitted the truth to herself.

"I saw her. I saw her standing next to you as I stepped out of the bubble. I saw her, and I knew," she said weakly. "I'm not really here, am I? Hold me Will. I feel so drained, like I'm fading away."

"It's okay, baby. You *are* here. I love you and we're gonna be fine," Will said as he felt someone take his hand. And then she was gone.

He looked away from where she had just been, and his eyes followed up the arm of the hand that was grasping his until he saw that it was Remi number one who was holding his hand.

"What just happened here?"

"I don't know ... I don't know."