<u>Stuart Ackerman</u> The Coriolis Effect

Jacob Wilsey bit his lip, waiting for the perfect bead of solder to drop onto his circuit board. Nothing but a perfectly round silver ball would do. Anything else would be scraped off so he could re-solder; but he rarelyhad to do this. He had honed his soldering skills to as close to perfect as possible.

He became obsessed with anything of at least marginal interest that crossed his path. The laboratory in his basement overflowed with half-finished projects that had started as obsessions, but quickly became uninteresting. His life's history matched his basement's; it consisted of a long series of events, mostly uncompleted, that simply failed to keep him intellectually occupied. His hopes fora successful life rested in the back of his mind along with his incomplete doctoral studies, his disassembled 1934 Ford Coupe, his relationship with his wife, and hundreds of other disregarded heaps of rubble. None of this mattered to Jacob Wilsey at the moment. Only the various possible solutions to his current obsession had any real meaning; and of these solutions, only one had plausibility. The obsession that currently kept him occupied was to

The obsession that currently kept him occupied was to harness all the unused knowledge in the world. The fact that he had not thought of a solution that worked did not make this obsession an impossibility; it was obviously just a problem that he had not attacked in enough depth to solve. Looking up every fact that had no use and putting it to use would be impossible. Making his obsession into a global obsession was more realistic, but he could not trust other people with such complex issues. He would have to do it all himself. The key was in the Coriolis Effect. People knew the Coriolis Effect had importance, but Jacob had a hunch it was even more important than they realized. Ruth Wilsey meekly tiptoed down the damp grey cement steps that led to the basement. She stood behind her husband who was soldering a green printed circuit board the size of a slice of bread. The smoke from the acid core of the solder rose in a steady white stream. To Ruth, it must have looked as if Jacob had an exhaust hole hidden in his greasy black hair.

"Jacob?"

He threw his chalk white arm behind himself and waved her away.

"Hungry, Jacob?"

He wiped the sweat from his forehead, and gestured with the smoldering soldering iron.

'No use, Rusty. I'll get something later." He held his arms over his head and yawned. Ruth saw his shoulder blades bulge beneath his grey t-shirt.

"Sure?"

"Later, Rusty."

She turned and went back up. He slapped the board down on his bench. There used to be something about her, something that had kept him interested for years. He hadn't been able to believe her perfect proportions and had once measured her waist at exactly twenty two and three quarter inches. From the moment that he'd met her until a few years after they were married, Jacob did not desire to play with his mechanical toys. He let her convince him to quit college — to get a teaching job at the local high school. He let her occupy him with fruitless hours. If he had persisted in what he called "the sloth years" any longer, there might have been a child running wild destroying order in his lab. Now forty three years later, Jacob congratulated himself for coming to his senses. He had started calling his wife Rusty rather than *My Love* or *Dearest;* he'd gotten back to work on things with real rather than personal significance.

The only thing left from that island four decades in his pastwastheteachingjob. Every weekday, Jacob slithered into class. Motivated only by caffeine, he demonstrated the significance of mathematical formulas in the mechanics of his students' everyday life, then rushed back to his basement. He had a loose mastering of names and faces, but rarely associated the two.

He remembered his first lecture on the Coriolis Effect. He had explained how the Earth's rotation influenced natural circular motions like hurricanes, tornados, and whirlpools. This bored the class until he explained that the Coriolis Effect made the water spin counterclockwise when they flushed the toilet; not only that, but if they had lived in the Southern Hemisphere, say in Australia, the water would spin clockwise. That evening he had received several angryphonecalls from parents who wondered what Jacob said to make their children lock themselves in the bathroom and repeatedly flush the toilet. He had told one parent, "Knowledge is useless without action." He had confided in Ruth that these "walking wastes of energy could never learn."

There had been a student that Jacob considered uniquely gifted. The boy listened intently and thought Jacob's word was law. He did everything he could to encourage the child's mental stimulation, even paying the boyto assist him in the basement lab. Soon, however, Jacob found that the reward of working quickly far outweighed the limited satisfaction of teaching as the child slowed the pace of his work. Jacob now knew that he could only work alone. No one would understand what he was doing. In fact, they might endanger his work.

This experiment was particularly crucial. The significance of his completed work would change the world forever. Jacob would permit nothing to interfere. He locked the lab with a deadbolt and two padlocks before going to the kitchen. Ruth sat at the table peeling the greasy yellow skin from a leftover chicken breast with her teeth while reading *The Fourth Deadly Sin*. Jacob took a Coke from the refrigerator. "Jacob, aren't you going to eat anything?"

He slammed the door and started back down to the lab.

"How many pounds have you gained since we got married, Rusty. Fifty? Sixty? Huh? How many?"

"You have to eat something, honey. You're going to starve down there."

Jacob turned and faced her, pointing with the wet Coke can. "You used to have a twenty two inch waist. Twenty two inches."

"1'm not fat, Jacob. So I gained some weight. Everyone does."

"1 didn't."

He turned and walked down the stairs. It was true. Not only had he not gained weight, he had lost some. In the last two months alone he had gone from 131 to 123 on his homemade digital scale. He looked over his shoulder and found her reading the novel again. He yelled back up the stairs. "It's sloth, Rusty. Just one from three of the seven deadly sins you indulge in."

"What the hell are you doing down there anyway?" She garbled with her mouth full.

"And gluttony! You can't even swallow before you talk."

"Forget it, Jacob. I don't care what you're doing anyway. It's stupid. Who needs you!"

He snorted a deep inhaling chuckle. "And finally there's envy. You're a walking Lawrence Sanders novel,

Rusty." He inhaled another elephant seal laugh and unlocked the door to the lab.

This would be the one. Not only did Jacob feel a larger compulsion than ever before, but this experiment would make a difference. He could forsee an end to inefficient energy sources, inefficient devices, and inefficient people. Everything had a reason for existing. Knowing that reason, Jacob could put everything to use and set the world free from waste.

She could not comprehend that. She refused to understand any of his work. When he took their first car apart to try to design an automated driver, she could only complain about the money and the waste. She couldn't see the possibilities. "She never sees the possibilities," he muttered aloud. "There are none so blind as those who will not..."

He set down his soldering iron. "Rusty! Rusty! Come down here! I want to tell you something." He pivoted on his stool and faced the door. "How can I expect her to see if she doesn't know where to look?" he asked himself.

Ruth hopped down the steps, her yellow flowered blouse concealing a small tummy bulge, but nothing that kept her from looking trim.

"Did you call me?" she said, twisting her dry white hair into a bun.

"Sit down, Rusty."

The floor around her feet displayed various wires, cogs, electronic components, and rat droppings. "I'll stand if you don't mind. What did you want to tell me?"

Jacob walked without lifting his feet, gesturing with open hands in the air. "Just imagine that there was no waste in the universe. Everything had a purpose."

She put her hand to her chin. "O.K."

"Easy, right? Right?"

"Right."

"Right!" he yelled, startling her. "That's because everything does have a purpose. Only, we're too stupid and fallible to know them all."

"Got it."

He clenched his fists, beating the air with each stressed syllable. "Yes! And that's why I have to have enough time to figure everything out... discover everything's purpose."

"You've got time, Jacob," she snickered. "I doubt you have that much."

"Exactly!"

She leaned against the cold cement wall. "You lost me."

He went into what looked like phony concentration. His hand tapped and stroked his chin. His eyes darted to the upper corners of the sockets.

"Ah," he snapped, pointing at her. "We're both 72, but you have white hair and mine's still black... Why?! Because different people age at different rates. Right?"

"Jacob, maybe we should have some din-"

"I just have to live forever. There has to be a way to do it."

Ruth kicked a discarded rusty nail a few inches. "Jacob-"

"I just have to build a time machine so I can go to the future when they have immortality so they can give it to me and I can find purpose for everything. Do you see?! It's the Coriolis Effect. If I figure out the relationship between it and time— I have the circuitry to do it! I just need to work it out."

She kicked the nail again.

He turned away, then back. "Get out! You stupid slob! Go get something to eat, you God damned cow. Get out

of here."

She stumbled quickly up the stairs.

The boy was holding a circuit board with a pliers as Jacob soldered. Jacob fed the solder to the tip of the iron. The gray wire turned silver as it melted, dripped onto the circuit board in a steaming mirrored drop, and sent a curling white tail of smoke above the connection. The boy watched the drop turn grey again as it cooled.

"Why does it turn grey like that?"

Jacob grinned. "Because when it's liquid, surface tension makes it perfectly smooth, allowing it to be a mirror. When it cools to a solid, it dries uneven. Therefore the surface reflects light unevenly, and it looks grey."

The boy looked up at Jacob, who was already looking at him. "How did you learn so many stupid things?"

Jacob bit his lip until it turned white. He let go, leaving pink tooth impressions.

"It's so funny. You even know why the water spins to the left when you flush the toilet. Wha'd you call that? The Cor—"

"The Coriolis effect," Jacob snapped imposingly enoughtosilence the boy. "The Coriolis Effect is the basis of earthbound physics. Without it, there would be no weather patterns, no ocean currents—"

"Yeah, but it's funny. Why do you need to know which way the water spins? It still flushes either way."

Jacob pulled out his wallet. "Here's your dollar. Go home."

The boy scowled, wrinkled pink flesh crept over his wide eyes. "Why?"

"You don't need to know why. Go home."

Jacob watched Ruth as she tripped into the kitchen. He turned and carefully soldered the last component into

place. He set the smoldering soldering iron tip down onto the wooden work bench. The circuit board slid neatly into a frame made from the front seat and cab of the Ford Coupe. Jacob got in, held onto the steering wheel and turned the ignition key.

Nothing.

He turned it again. A faint buzz built in the circuit board. Blue sparks flew down as if from a luminescent shower head. Spattering smoky drops of mirrored solder burned tiny brown holes in his pants. He thought he heard Ruth scream, but maybe not. Then it ended. The green circuit board sported a charcoal colored burn over most of its surface. He touched it, brushing the charcoal away. He looked at the blackened tip of his finger.

The door to the basement flung against the cement wall. Chips of sandy grey cement showered the floor. Ruth stood in the doorway, white light streaming in around her. She held her throat with one hand, waving something indistinguishable in the other into a silhouetted blur. He could hear a faint gasp, air and bubbling.

"Rusty..."

She dropped to her knees, waving for him to come up.

"Rusty? What is it?"

Yellow saliva full of bubbles dripped from the corner of her mouth.

Jacob got out of the car and took a couple steps towards her.

Ruth dropped the object in her hand. Jacob started up the stairs. As he reached the top, Ruth had already fallen back on the floor, gasping a monotone bubbling buzz. He picked her up from behind, wrapped his arms about her torso and wondered if he should squeeze his fist under her ribs; but he had hesitated too long. The gasping stopped. Her dry yellow eyes stared off into space.

Jacob cleared his throat and set her down quietly. He lightly fingered the chicken breast she had dropped on the floor. She really wasn't so fat. In fact, she looked almost as lovely as she did when he had married her. He stood. "Unbelievable," he muttered.

And he thought it too. It couldn't be. He had stood there staring while his wife choked to death. He couldn't do anything. He knew what to do; the Heimlich Maneuver would have saved her. Squeezing below the diaphragm created pressure in the lungs, forcing any foreign object to be expelled. He just couldn't do it. The same hesitation that kept him from completing anything he ever did struck again.

Jacob watched his smoldering soldering iron burn a charcoal black hole in his work bench. For the longest time he had worked on a time machine to go forward. A mind full of theories proved useless because he couldn't do anything with them. Now, here he was, naturally in the future, unable to go backwards to his wife. He couldn't even unplug the soldering iron.