## **GIANT STEP**

By Ray Vukcevich

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GREGORY FIGURED THE young policeman would hit him tonight, because at some deep level the policeman knew that but for the grace of god and the fact that people still paid taxes for prisons and the personnel to put and keep other people in prisons, he might be homeless and living in a space suit just like Gregory. Just a paycheck away and frightened with pale blue angry eyes and a goofy cowlick, he probably had a pretty young wife who sent him off to work with a kiss and a tuna fish sandwich wrapped in waxed paper, maybe the same waxed paper that blew across the rainbow oil slick in the gutter puddle by Gregory's feet.

In a sudden flash of inspiration, Gregory knew what to say to him. "Well, Officer," he shouted through his helmet, "we can't move along, because all motion is impossible. Zeno proved that thousands of years ago."

Nancy, also suited and sitting on the sidewalk beside Gregory, touched helmets with him. "Is that logic I smell?" Her seven-year-old granddaughter Kim stood behind her. Kim's parents had died years ago in the food riots. Like the god of Amos, the government still guaranteed the people clean teeth. Kim hung out with Nancy and didn't talk much these days. She wore a silvery suit sized down for the temporally challenged, and tonight she tapped the side of her helmet with a white plastic spoon and stared up into the sky.

Silver suited figures of all sizes moved in and out of the street shadows, dodging sluggish honking cars and tracks and flickering with neon when they passed under the signs of surviving merchants. The suits had toilet functions, heating and cooling units, rechargeable batteries, waterbottles, and air tanks, all the comforts of home. Best of all, supporters of the plan privately claimed, once you sealed a wino up in a space suit, you couldn't smell him. At curfew you could pile the people up like cordwood. But hey, skeptics had cried, surely there can't be enough space suits for what amounts to maybe a third of the population. No problem. We make more suits, put all those guys who lost their jobs when we canceled the space program back to work.

The young policeman squatted down in front of Gregory. He unhooked his big flashlight and shined it in Gregory's face for few moments. Then he put the flashlight away. Maybe he had more curiosity than most, Gregory thought, maybe if the universities had still been funded, he could have been a passable student. Maybe he wouldn't hit Gregory, after all.

"So what's the story on this Zeno guy, Professor?"

"Yes, tell us, Oh Wise One," Nancy said. "How is it that all motion is

impossible?" Nancy was an out-of-work English professor and tended to scoff at all things scientific. She pulled Kim around and down on her lap and wrapped an arm around the child. There weren't many stars to see through the smoggy city lights, but at least one of them captured Kim's attention. She settled back and stared up at the night sky.

"Well, suppose you want to move from here to, say, Mr. Wilson's Store." Gregory pointed at the small grocery occupying the bottom floor of an otherwise gutted building at the end of the block. "To do that surely you'll admit you'd have to go through a point that is halfway between here and there. Say, that big pile of steaming garbage in front of the gun shop. Where the dogs are?"

"Yeah. So?" The policeman said.

"Well, to get to the pile of steaming garbage, Officer, surely you can see you'd first have to go through some point that is halfway between here and the garbage, say that broken fire hydrant."

"Yeah, okay, first I walk to the fire hydrant, then I walk to the garbage, then I walk to Wilson's store. So what's the problem?"

"But to get to the fire hydrant, you'd have to walk through a point that is halfway between here and the fire hydrant. Right?"

"I suppose."

"But to get to that point, you'd have to walk to a point that's halfway between those two points and to get to that point you'd have to walk to a point that was halfway between those two points and so on and so on."

The policeman didn't look happy, and Gregory thought maybe he'd made a big mistake talking about Zeno. What if paradoxes pissed off the police? Gregory pushed on anyway. What else could he do? Just go silent?

"No matter how small the distance, Officer, you still have to first move through the halfway point. So not only can you not move from here to Mr. Wilson's store, you can't move away from here at all. And that's why we can't move along."

"I think maybe I'll honk you with my stick, Professor," the policeman said.

"But it wouldn't be a real bonk, would it, Officer?" Nancy asked. She reached out and patted the policeman's knee. Nancy, tough as nails in the old days, a deconstructor of Brontes and cooker of fiery curries, had nonetheless taken instruction from the streets and could now do a respectable grandmother whenever the occasion demanded.

"What do you mean, Nancy?" Gregory sounded nervous and he kept an eye on the policeman's nightstick.

"Well," Nancy said, still smiling at the young policeman, "if motion is impossible, yet we still perceive motion, it must mean that we are deceived. What we see is an illusion. If the officer hits you with his stick, you'll only think it hurts."

"Idealism," Gregory said, making the word sound like another name for utter nonsense.

"Exactly," Nancy said. "And since all material matters are illusions, we can, in fact, move along as this nice young man has suggested we do by simply imagining ourselves elsewhere."

"You are at least half right," Gregory said. "There is a way out of this conundrum. The answer requires no mysticism, however. It's just simple materialism. Imagine we've cut our distance down until it is very very small." Gregory took a nail from his utility pouch and scratched a line in the sidewalk.

## XYZ

"The space between X and Z is the first tiny, tiny distance you must move before you can move on through the rest of the halves and finally get from here to Mr. Wilson's store," Gregory said.

"Seems pretty big to me," the policeman said.

"It's a diagram!" Gregory heard the irritation in his voice and added in a softer tone, "It's blown up."

"Oh," the policeman said. "I suppose you'll say we have to move through Y to get to Z, and you'll start this whole stupid business all over again."

"No," Gregory said. "That's my point. At some very small scale, there is a point where we move from X to Z in one discrete step without going through Y. That's what makes motion possible. We move in tiny little steps. We sort of putt-putt along through, well, hyperspace, for lack of a better word."

"I'm sure glad you got rid of the mysticism, Gregory," Nancy said, "but your putt-putting along will be a little slow for the officer, I think. In my scheme we can move long distances very quickly."

"I don't see why, in principle, we cannot move long distances in my scheme, too," Gregory said. "If you can move a small discrete step without passing through any intermediate points, I don't see why you can't move a large distance in a single step."

"Look out!" Kim cried.

Nancy grabbed his hand, and Gregory looked up in time to see the policeman's nightstick coming down at his face.

Before the stick could crack his faceplate, the policeman disappeared. In fact, the whole street disappeared.

Gregory, Nancy, and Kim popped back into existence overlooking a dry red river valley. The empty red rolling vista went on and on forever. Red sand beneath their boots. Red dust blowing everywhere. Funny looking daytime sky. No bushes. No birds.

"So much room!" Kim stretched out her arms and skipped around in a circle.

"Where are we?" Nancy shouted through her helmet.

"Mars, I think," Gregory said. "Well, I hope the implosion at least knocked the cop over."

"Maybe you convinced him," Nancy said. "Maybe he's realized that all motion is impossible and he's just sitting there with that silly stick of his. In any case, you can see I was right. Idealism wins the day."

"Materialism," Gregory said. "The evidence is clear."

"You're both wrong," Kim cried. "I did it!"

Gregory grabbed her shoulders and stopped her dancing. He bent over her and touched his faceplate to hers.

Nancy leaned in, helmet to helmet, too. "And just how did you do that, young lady?"

"Yes tell us," Gregory said.

"I wish I may, I wish I might," Kim said.

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Ray Vukcevich has sold over a dozen short stories to Pulphouse: A Fiction Magazine. His short fiction has also appeared here and in Asimov's Science Fiction Magazine. He has taught high school English and journalism, and university and community college computer science. He has also been a bartender, a computer programmer, and a real estate/stock market investor. Now he is a research assistant

for the Institute of Cognitive and Decision Sciences at the University of Oregon

None of those jobs explains where the inspiration for the wonderfully off-beat "Giant Step" came from.