## No Country For Young Men

Chris Fievoli, BMath, FSA, FCIA

The alarm in Dorian West's hotel room went off, as usual, half an hour before he planned to get out of bed. He needed the extra time, as his arms and legs had once again stiffened up overnight. Even when he did manage to raise himself to a sitting position, they still felt like steel pipes. He had spoken to his doctor about it, but there was little he, or anyone, could do at this point. He was told that's just what happens once you reach the age of one hundred and fifteen.

Slowly and methodically, he shuffled over to the bathroom, where he would spend another half hour preparing himself for the day. His appointment at the Magnolia Life Assurance Company was at ten o'clock, which meant he had just over ninety minutes to walk the four blocks to their head office. It would be close, but he figured he could make it in time.

By the time he reached the sidewalk outside the hotel, he was already exhausted. Stopping to catch his breath, he took a moment to observe the activity on the street, or more accurately, the lack of it. The sidewalks were virtually empty, except for the odd wizened individual ambling along to whatever endeavour occupied their day. A public transit bus zipped silently past him, remotely-controlled from some unknown location, stopping every few blocks to pick up and drop off its slow-moving cargo of passengers. There were no cars on the street, as virtually nobody felt comfortable driving anymore. The pavement itself was in sorry shape, full of potholes, massive cracks, and barely legible painted markings. There simply weren't enough people young enough and fit enough to do the labour required to repair them. Like the crumbling buildings that filled the city, they were simply left in a permanent state of neglect.

As Dorian began his journey, he felt the familiar buzz of his Blackberry in his coat pocket. He pulled it out to see a message from his old colleague Kent Melville, inquiring where and when they would be getting together. He had known Kent for decades now, and always made a point of catching up when he was in town. He sent a quick message back suggesting they meet in the bar at the hotel at six o'clock, which would spare Dorian the inconvenience of trying to navigate his way around the city at night.

He paused for a moment to stare at the device in the palm of his hand, noting how the basic design hadn't changed in the last eighty or so years. They had always said that innovation in technology was the province of the young. Examples such as this made that old maxim even more apparent.

Dorian remembered being young. It was a time of great promise, when all the dreams and expectations of scientific research seemingly were on the verge of being realized. Just as he was qualifying as an actuary, the first reliable cures for cancer were being widely developed. Within a couple of years, effective treatments for heart disease followed. By the end of the decade, the illnesses which had plagued countless generations beforehand seemed to finally be on the verge of eradication. It was an exciting time, as the quality of life for everyone was expected to vastly improve.

The actuaries, it seemed, were the first ones to see the potential downside to these great advances. As life expectancy increased, pension plans and companies that issued life annuities were the first ones to feel the pinch. Expected payouts began to run substantially longer than anyone had imagined, and the losses began to mount. There was an offsetting

benefit on the life insurance side, but the mortality risk had been reinsured and retroceded so many times over the years that there was no benefit left to be had. A handful of reinsurance companies nestled somewhere in the Austrian Alps became extraordinarily wealthy as a result. Eventually, the life insurance market dried up altogether. With the possibility of dying becoming more and more remote, no one bothered to buy coverage any more.

The pensions industry eventually disappeared as well. No one could afford to pay incomes for another seventy years after workers retired. Companies began cutting back their benefits, and ultimately eliminated pension plans altogether. Given that individuals found it impossible to save enough to support themselves for an increasingly longer period, the concept of retirement evaporated. Besides, the labour was needed, due to another demographic calamity that no one had anticipated.

As advances in medical science reached across the globe, former third world countries were able to finally climb out of the poverty that had plagued them for centuries. At the same time, though, birth rates declined precipitously worldwide. Europe, which had long ago dropped below one child per couple, was emptying at an alarming rate, and the immigrant population simply didn't exist to make up the difference. Even the United States, which had resisted the trend for as long as it could, soon found itself with plummeting birth rates as well, until it reached the point they were at today. Zero population growth, but not for the reasons anyone imagined. There was virtually no one dying, and no one being born. You simply had a world where everyone was getting older year by year.

These were strange days to be alive.

These thoughts swirled through Dorian's head as made his way to Magnolia's offices. He had expected to be retired — and deceased — long before this. Instead, he was still making a living, consulting with the handful of insurance companies that still existed. Magnolia was one of the survivors, having accumulated huge blocks of business at discount prices from other companies that either went insolvent, or just didn't want to bother any more. By now, they were just in the process of letting their policies run off, trying desperately to find a way to make money off a block of annuities that refused to go away. That was to be the topic of this morning's meeting. Dorian had completed the valuation of their annuity business, and he knew he was going to be disputed.

They were to meet in the conference room on the third floor. Dorian made it on time, but the CEO and CFO were late, as usual. He wasn't surprised. They were both fifteen to twenty years older than him, and had difficulty getting around these days. Dorian sat patiently and looked at his surroundings. The walls were dingy and in need of a good cleaning; the carpets stained and cluttered, with bits of paper and debris piled up in the corners. Even the ceiling lights were dim and in need of replacement. He looked up to see a huge brown stain that covered over half of the plastered surface; it wasn't there the last time he was here. If they could find someone to make the necessary repairs, it would look much more presentable, but that was a young man's job, and thus not likely to be completed.

Ivan Chesters, the CEO, was the first to arrive, rolling himself into the conference room in his shop-worn wheelchair. Adam Payne, CFO, followed a few minutes later, hobbling in clumsily with the aid of a walker. They exchanged pleasantries before getting down to business.

"How was the trip?" Ivan inquired.

"Tiring," replied Dorian. It used to be a two-hour flight to get there, but no one felt comfortable piloting planes any more. Now, it was an uncomfortable seven-hour train ride.

Adam cleared his throat loudly, and gripped a copy of Dorian's report with his gnarled hands. It was printed in forty-point font, making it much thicker than it needed to be. "There are a few items we would like to discuss with you," he intoned. Small talk was not his preferred way of conducting business. "Specifically, the assumptions that were used to value this block of annuity business."

Dorian knew they would key in on this. He had his answers rehearsed and ready in his mind.

"If I read this correctly," Adam continued, squinting at the report through a pair of eyeglasses that covered half his face, "you have completely eliminated any mortality assumption from your valuation."

"Effectively, yes," Dorian replied. "There is a base mortality assumption, but it is so small, that any meaningful margin reduces it zero. So you are correct in that the reserves presented in that report use no mortality."

Ivan wrinkled his brow, such that it matched the rest of his face. "So, effectively, you're saying no one will die? Seems a bit extreme to me."

Dorian knew they would jump to that conclusion. "No, not exactly. It's just that the probability of dying has gotten so low, that adding any margin for uncertainty effectively eliminates the assumption altogether. Actuarial practice has been moving in that direction as of late." He knew this last statement would hold no significance for them, but he decided to add it anyway.

Adam shook his head in disbelief. "That may be fine for other companies, but I question whether it's appropriate for our business." He paused to swallow a handful of coloured pills that he kept in a black zippered bag.

Dorian knew this argument would be raised as well, and he was prepared to address it. The notion that, somehow, this company had the foresight decades ago to sell these products to individuals with higher than normal mortality was absurd. Especially if the policies were sold by other companies altogether, as was the case here. It was fallacious to think their experience would be different from anyone else's. "There is nothing to suggest, in any studies, that one company has a particular advantage over another in terms of annuitant mortality. This has been researched fairly thoroughly, and the profession is in agreement on that point."

Adam continued to scowl at him from across the table. "But did you study the experience on our block?"

"No, there was really no point. As I said, there is no acceptance of the notion that – "

Ivan cut him off. "I really think that is something that should have been looked at," he said curtly. Adam nodded in agreement; the look in his eyes indicated that he was not going to be convinced otherwise.

Dorian knew when to choose his battles. "What I can do," he said, "is take some time this morning to look at your company experience. But, honestly, I don't think it will show anything different from what I have already told you."

"Let's do that, then," Ivan said. "I think we would all feel better if we knew for sure, instead of surmising." Somehow, Adam had dozed off in the interim. Ivan nudged him awake with a sharp elbow in the ribs.

Dorian didn't mind the extra work. It would mean a few extra billable hours for him, and if it made them happy, it would be a win-win.

One of their younger assistants – she couldn't have been more than eighty – ushered Dorian to a small office in the far corner of the building. A couple of large black wires drooped from the ceiling tiles above, but otherwise, it was a decent enough workspace. The windows afforded an unobstructed view of the city below. Dorian could see the iron frames of several uncompleted building projects; beyond that, he spotted a handful of schools which had clumsily been converted into retirement homes.

Turning to the computer screen in front of him, Dorian set to work. He expected that the task would only take a couple of hours. He already had access to all the policy data, and using one of his pre-programmed experience study programs, he expected to have a quick assessment done by lunchtime. Then, he could demonstrate to Ivan and Adam the folly of their position, and he would be on his way.

When, after about an hour's effort, he was able to get his first mortality ratios, it was apparent that he had made some sort of error. The ratios seemed to be off by a factor of ten or so. Assuming he simply misplaced a decimal, Dorian carefully went through his calculations in search of his mistake. When he failed to find it, a feeling of concern began to come over him. Mortality rates ten, eleven, twelve times expected simply didn't make sense. Did he read the experience data correctly? A check of that appeared to confirm that he did.

Perhaps the data itself was faulty. He got a hold of his contact in the IT area, a nonagenarian by the name of Justin who, despite repeatedly cursing the systems he had to manage, proved to be a reliable resource. Together, they made the requisite checks, and determined no problems from that end either. They even opened a few claims files and verified that the death notices were in fact valid, and duly documented.

Dorian worked straight through lunch, now feeling somewhat panicked at what he saw. The last thing he wanted to do was go crawling back to Ivan and Adam, watching them sneer over him as he shamefully admitted they were right. But they couldn't be right, could they? The answer had to be somewhere.

He began to drill down into the numbers. Perhaps there was a difference by sex; no, the ratios for males and females were both consistently high. He suspected there was a geographical difference; that perhaps some region of the country had been ravaged by some disease, even though he probably would have heard about that already. But, with some minor variances, each region of the country exhibited the same pattern. Annuity amount, year of purchase, indexing provisions – each aspect generated the same unbelievable results. It was maddening.

Dorian needed time to clear his head. He stood up, stretched his arms, and began to slowly wander the halls. None of the office workers seemed to notice him. They all sat hunched over their desks, apparently unable to sit upright. The one thing that struck Dorian was how quiet the atmosphere was. No animated conversation; none of the office chatter that was so commonplace back when he started his career. It seemed like everyone was resigned to the fact that this was their fate; to toil away at jobs they had no business doing at their age. Doian tried to make eye contact with some of them, trying to elicit a smile, or a friendly nod. He was unsuccessful.

He returned to his desk after about fifteen minutes. The break had done little to inspire him, but at least he had a few ideas about what to look at next. One of them was looking at the results by year of death. It was then that things began to come together.

What he saw was intriguing. As it turned out, the mortality experience was actually close to expected, up until a year and a half ago. Then, for some reason, the rates began to climb, accelerating with each passing month. For the last quarter, they were ridiculously high. But why?

The solution came to him in a flourish. Dorian immediately began to feel nauseous; his temples started to throb as a migraine formed in the front of his head. The problem now was no longer how he would refute Adam and Ivan. It was what action he would have to take himself.

They gathered at half past three in the conference room. Ivan was actually on time; Adam arrived a few minutes later. They took the same seats across the table from each other. Dorian sat silently, knowing he would have to choose his words carefully. After taking a moment to compose himself, he spoke.

"I'm going to have to resign from this case," he said solemnly.

Adam was clearly perplexed. It didn't appear that Ivan heard him clearly.

"For whatever reason?" Adam inquired.

Dorian cleared his throat. "It's become apparent to me that certain actions are taking place which I cannot condone. At the same time, I do not have adequate proof to raise them with the appropriate authorities. So, the only alternative is for me to walk away."

Adam turned the corners of his mouth down in disdain. "I have no idea what you're talking about. Will you please explain what's going on?"

"I think you know exactly what I'm referring to."

Adam raised his hands upwards. "Enlighten me," he said, with a shrug of his shoulders.

Dorian swallowed hard, and spoke. "I have reason to believe that you are murdering your customers."

Adam's reaction caught him by surprise. Rather than express shock or dismay, he smiled. But it wasn't a pleasant smile; it was one of vindictiveness. Adam began to laugh. At first, it was a low chuckle, but it soon turned loud and derisive. Ivan joined in, evidently finding humour in it as well.

"That is absolutely preposterous," Adam declared. Their laughter dissolved into fits of coughing and hacking.

A bead of sweat rolled down Dorian's temple. "I don't believe so," he retorted. "The mortality ratios on your business have shown a definite and steady increase over the last fifteen months. Something happened to cause that. It couldn't be accidental. And, given that you stand to make money every time one of these contracts terminates, I could come to no other conclusion."

"And your proof of this is where?" inquired Ivan.

"That is the problem," Dorian admitted. "Apart from what I see in your experience data, there is no other proof. Which is why I opted to resign from this assignment, rather than pursue it further through official channels."

"Well, isn't that handy," Adam replied indignantly. "Make a ridiculous accusation, and then walk away from it. That's the problem with you actuaries. You look at a bunch of numbers and think you have all the answers. You make assumptions, and think that gives you the conclusions. But in fact, you have nothing."

"I will state it for the record," Ivan added. "We have not murdered any of our customers."

"You are free to pursue this with the police or whomever you wish," Adam said. "I strongly suspect that they will think you have lost your mind."

Dorian sat silently. What was he thinking? The admonishment at the hands of these two old codgers was humiliating. But he realized that he had only himself to blame.

"We agree it's best that we terminate our relationship," Ivan said coldly.

Dorian nodded, and lowered his gaze. He started to regret being so forthright in his accusation.

The doctors had told him to avoid alcohol, but Dorian made an exception today. He was finishing his first scotch, trying to get the attention of the waiter to bring him a second. It was relatively quiet in the poorly lit bar of the hotel. A few patrons sat huddled together, engaged in barely audible conversation. Others drank alone.

It was then that Kent Melville made his entrance, moving quickly for someone who required a pair of canes to get around. His face brightened as he saw Dorian, and he took a seat beside him. "How are you, old man?" he declared, as he signalled to the waiter to bring him whatever Dorian was having.

"Not a great day," Dorian confessed. "Some problems over at Magnolia." He was too tired to go into the details.

"That doesn't sound good."

"No. Had to terminate my contract with them, in fact."

Kent shook his head, as the waiter arrived with fresh drinks. "Sorry to hear that," he said, his demeanour now more reserved.

"It's all right," Dorian replied. "I'm better off not working with them. They were doing some things that I had a, shall we say, professional objection to." Dorian mentally cautioned himself not to get too far into the details.

"Hard to work with, huh? That's a bit surprising. They've always been cordial when I've had to deal with them."

Dorian raised his eyebrows. "You're a customer?"

"Yeah. A couple of annuity policies. Can't remember who I bought them from, but they're with Magnolia now."

Dorian's pulse began to race. If Kent was a policyholder, then he could be one of the people that they were targeting to kill. Should he say something? Should he warn him?

It immediately came apparent how silly the situation had become. If he really believed his theory, then he would almost be obliged to inform his old friend. But he couldn't imagine putting the words together. If he said anything, he would sound like a fool. And what is he was wrong? What would be the point?

Kent was now fumbling through his pockets, trying to locate his cell phone. "In fact, they've been sending me some interesting material. I'd been meaning to show you." Finally, he

located his phone and pulled it out. "Check this out," he declared, as he cradled it in his hand, eventually handing it across the table to Dorian.

On the screen played a video, featuring an attractive young - *very* young - woman, who could pass for someone in their twenties. She was obviously computer generated, since you didn't see anyone that age anymore. She flashed a brilliant smile as she recited her lines, extolling the virtues of the Magnolia Life Company.

"....as well, we are pleased to offer a wide variety of services to our policyholders, to enhance your experience as a member of the Magnolia Life Family."

Dorian shook his head. He was never a fan of corporate attempts to make their customers feel like part of a family.

A series of phrases sprouted from behind the model: Enhanced medical coverage riders, preferred payment investment plans, account management services. But it was the last one that caught Dorian's eye. He cautiously rolled the cursor over the line that read "Exit Assistance", and clicked on it.

The backdrop colours quickly faded to neutral grays and yellows. A second young model appeared, this one brunette, as attractive and unrealistic as the first. Her voice was evidently more sombre. "At Magnolia Life," she intoned, "we understand that the challenges of advanced age can create significant hardships for our customers. Many who are on their own have no one to turn to, and must face their various health challenges alone. For this reason, Magnolia Life offers a service to make your decisions easier. By contacting an exit assistance specialist, we provide you with access to physicians who have experience in final decisions, ensuring that the choices you make are carried out discreetly and confidentially, leading to an efficient — and painless — solution to your end of life problems."

Kent sat listening, and twisted his mouth into an expression of confusion. "What are they talking about?" he asked innocently.

"Isn't it obvious," Dorian replied quietly. It didn't sound like a question. "This is clearly an invitation to assisted suicide."

Kent appeared mildly shocked. "Didn't look that clear to me," he mused.

Dorian didn't make eye contact. "I suspect that was intentional." A look of concern passed across his face. "You haven't given this any thought, have you?"

"No, not seriously," Kent replied. He then shook his head, turned away, and smiled. "But I tell you, some days...."

So the old men were right. They didn't murder anyone; they simply made it easy for their policyholders to do it to themselves. In a world where old age felt like an inescapable prison, he could see why it would be tempting to some. The notion that it would represent a profitable venture to anyone else likely never crossed their minds. And, indeed, why would it?

Strange days, Dorian thought to himself. Strange days indeed.