A Push to the Right

"Wow." David said, his heart pounding in his chest. "Will you take a look at that?"

He stood and pointed to the large screen on the wall. The science team had taken over the lecture hall of the physics building with all their video and signal monitoring equipment. Their desks spread around the floor for this unique event, history in the making. Scientists all over the world had telescopes trained on the comet. The press had been invited and sat in the upper seats, their cameras recording each new development and the excitement of the scientists.

David was still not sure how the comet had changed direction in the last few weeks. They had been tracking it each day, posting updates to the website. Today, they were live. A magnetic attraction seemed to have developed between the comet and Mars as it passed. Only it didn't pass. It turned toward the planet and broke into pieces. The first two pieces in the string had already burned up in the thin atmosphere. The group shouted each time the video of the explosion reached their screens. They were like schoolboys cheering on their favorite team.

Several of the other scientists looked up from their smaller screens to see what David was pointing at. Some stood, milling around with stunned amazement on their faces. The third piece of the comet had just hit Mars and exploded with an intensity far beyond that of any measureable nuclear device. The powerful light from the blast momentarily blinded their instruments. When the light subsided, David saw the impact seemed to cover over half the planet.

He ran over to Dr. Ralph Fredrickson's station. It was Ralph's job to monitor the signal from the seismometer on the Curiosity rover. The other still-functioning rover, Opportunity, was on the other side of the planet but didn't have a seismometer. "There's no doubt that one hit the surface," David said to Ralph. "Did you get a reading yet?"

"It's coming in now," Ralph said. It takes over four minutes for a signal to reach earth from Mars. The scientists in the room didn't think about the delay. For them, the action was happening in real-time. The signal from Curiosity was there. "Here it is."

David blinked, his veins pumping with adrenaline.

"It's off the charts," Dr. Fredrickson shouted. "Over a ten. It's a good thing it landed where it did. There's no way Curiosity could have survived that."

David leaned over to stare intently at the little screen. The shock wave had already bounced back from the other side of the planet twice, no three times now. Several of the other scientists left their monitors and joined David who was still standing next to Dr. Fredrickson.

"It's ringing like a bell," said one scientist.

"That was huge," said another.

Even after breaking into pieces as it passed the Roche limit of Mars, each part of the comet still packed a tremendous wallop. David estimated the third piece to be about a hundred and twenty miles wide, about the size of Metropolitan Los Angeles. That was bigger than the asteroid that hit the earth and wiped out the dinosaurs.

He turned to his colleagues. "There's no telling what kind of effect that impact will have on the small red planet. I can't wait to analyze the data from the comet."

"So, you still insist on calling that thing a comet, Dr. Mitchell?"

Without turning, David knew that voice belonged to Stan Johnson, science reporter from the Denver Post. He had not enjoyed their last encounter a few weeks ago.

David spun around from the seismograph station to stare down his old nemesis. In all the excitement, he had forgotten the press was there. The look on Stan's face told the same story.

Arms folded, he stared right back at David. What did this man know? Why did he make David feel so uneasy?

"Well, yes, until it broke up a few days ago, it was a comet." David decided to play nice to see if it would get him anywhere. "But you're right. We've never seen a comet with a head that big." He looked to see if Stan had a recorder going, but couldn't tell. "I mean, come on Stan, you saw the tail. It stretched for millions of miles."

"Maybe something else caused the tail," Stan said looking rather condescending. "I think you know more about that comet than you're telling us." Stan stepped a little closer, his lips tightly pressed together. "Anything that could cause an explosion that big had to be an asteroid. That tail wasn't from melting ice, was it, Dr. Mitchell?"

"What are you getting at, Stan?" David stepped back hoping to distance himself from this pain-in-the-neck. "It was just an incredibly big comet. It had a tail. It broke into pieces when it got too close to Mars and now we're seeing the results." David turned to run. "Now if you'll excuse me..."

But Stan gripped David's arm and wouldn't let him get away. "Maybe the tail was caused by plasma interaction, not melting ice. And maybe, just maybe, your comet that's still coming towards us is just as large. When are you going to come clean about that?"

David looked around to see if anyone else was watching this exchange. He hated the fact that Stan knew so much about astrophysics and cosmology. He might actually like the guy if only he weren't such a nosy reporter.

David shook off Stan's hand. "I don't know anything more than I told you in the press conference the other day. Because of the angle from behind the sun, we won't be able to get accurate measurements for a few more days. I'm sorry."

David turned, and prepared to walk away.

"One last question," Stan said with contempt in his voice.

David stopped walking. He let his head fall forward until his chin rested on his chest. He took a deep, steadying breath then turned around and waited. If Stan weren't a science reporter, he wouldn't put up with such intrusive interrogation.

"When will you know what kind of effect that impact had on the orbit of Mars?" Stan said. "And is it possible the collision could have nudged Mars out of its orbit?"

David opened his mouth; let it hang open for a second. The audacity of this guy. Closing his mouth, he pinched the bridge of his nose between his thumb and forefinger, shook his head, then looked away. "Stan, are you suggesting the asteroid's impact could have pushed Mars closer towards the Earth?

"You just called it an asteroid." Stan hooted, smiling broadly. "And yes, that's what I'm saying . . . and asking. My readers aren't going to care about this story unless it affects their daily lives. You know that. They love the disaster stuff. Real "2012" movie theatrics. I can help you get your message out if you give me something to work with here."

David sighed. He looked around the room at the other scientists who looked baffled. He took a deep breath and let it out slowly. "Stan, come to my office tomorrow. We should have the calculations completed by ten o'clock."

"So, you've already thought about the possibility of an orbit change? I knew it," Stan said, gloating like he won the Pulitzer Prize for journalism. "I'll see you tomorrow, Doc."

Laughing, he turned around and walked out of the lecture hall.

David continued to stare at the door long after it closed. This just got complicated.

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"Dr. Mitchell?"

David looked up from the large screen on his desk. His office was on the fifth floor of the physics tower. Ten o'clock sharp. He hadn't heard the elevator ding.

"Oh, no," he said before he could stop himself. He hoped Stan hadn't heard.

David pushed back his chair and stood. "Come on in. I was just reviewing the report. It looks like you might be right."

Stan nearly jumped to David's side. "Where? Can I see?" He scanned David's monitor. "Is this it?" he asked, pointing to a section of the report with a computer-generated illustration. It showed a projection of the position of Mars relative to the earth over the next six weeks.

"Yes, I'm sure that's the part your readers will find most interesting. I know I did. I've scheduled a press conference for two o'clock this afternoon but I'll let you have a copy first." He watched Stan carefully to gauge his response. But he was not prepared for Stan's reaction.

"Thanks," Stan said, offering his hand that David reluctantly shook. "How would you like this spun?"

"Excuse me?" David crossed his arms and eyed the reporter skeptically.

"You know. What do you want in exchange?" Stan said looking directly at David like he should know what game Stan was playing. "You wouldn't be giving this to me early unless you wanted something. How about some mention of your comet in a favorable light?"

"I don't get you," David said uncrossing his arms to rest his hands on the desk top.

"You've been on my case for days, accusing me of hiding something ever since I announced finding my comet. What's going on?"

Stan laughed and took a seat in the chair in front of David's desk. "You should see the look on your face. You'd of thought you were making a deal with the devil."

David slumped back down in his chair. "I don't understand—"

"Look," Stan said. "I think I know what's going on. This is serious stuff. If your comet is what I think it is and if it's going to come as close to earth as I believe, then it's going to cause a lot of panic—end-of-the-world stuff. You and I are not the first ones to have this conversation."

"Go on," David said irritated that he was losing his tentative grasp on the situation.

"Well, by the looks of what I just saw in your report on the projected trajectory of Mars, that little red planet will look real big for a few weeks, but it will pass us by with little effect."

"And..." David said. Who was this guy?

"And it would be real helpful if we put two and two together. Our close encounter with Mars will be relatively harmless." Stan leaned forward, tapped the desk for emphasis with his finger. "Wouldn't you like a paragraph or two about your comet coming right behind this one, with wording to the effect that maybe your comet's encounter will be similar?"

"We don't know what the effect of the planet will be," David said at a loss. Where did this man get his information?

Stan smirked. "OK, if that's how you want to play it, fine." Stan learned back in the chair. "You just called *your comet* a planet. You know it's bigger than what just hit Mars yesterday and pushed it a little to the right." Stan paused, rubbed a hand down his face. "I suspect someone in the government has asked you to play this whole thing down. Why, I don't know. Maybe it's to buy a little time for some secret project or something."

David threw back his head and laughed. "I've said it before. You've been watching too many movies like '2012'." He laughed again. Then David sat up in his chair, leaned forward and looked directly at Stan. "There is no conspiracy to downplay the severity of the close encounter with the planet. We really won't know anything until we can get accurate measurements."

"And that's just what I'm going to say in my story when I mention your planet . . . uh, I mean comet . . . that should be here in what, about seven weeks?" Stan stood up. "Thanks for the advance copy of the report. I assume you'll email it to me when it's complete."

David stood, wondering if the perplexed feeling he had showed on his face.

"I know you've got my email, but here's my card." He laid the card on David's desk and walked toward the door. "I hope to see the report on my computer when I get to the office in about twenty minutes. Thanks."

"You're welcome," David said. He finally had some good news to report to Tom Keys. The interview with the 9News TV reporter the other day hadn't gone as well as he had hoped. She seemed bored the whole time they chatted and her report only aired at the end of the ten o'clock news. Nobody saw it. Stan's story might just get some momentum to this thing.

Although David didn't realize it, the planet was just about to speak for itself.