## **Canning Vale Toastmasters Club** Tuesday 17 November 2020 Dan Churach



Thank you, Robyn and all of you Toastmasters for inviting me tonight.

Robyn thought I'd offer some insight into how I get my inspiration for stories, a bit about my research methods and how some of this might parallel with speech writing. Let me briefly cover this in ten minutes or so and allow plenty of time for some questions.

For starters, I must tell you that I am an educator through and through. I've been a teacher at one age level or another throughout my entire career, and that reality shapes all that I do. Funnily enough, my last two decades in education were at the tertiary level, mostly at Murdoch University here in Perth. A few times I made the faux pax of calling myself a 'uni teacher', but I was quickly corrected by some colleagues that at the tertiary level, we are 'lecturers'. But you know what... I still was a teacher for many wonderful years I spent at Murdoch.

You may be thinking why be so fussy about the title. That is only because I believe that teaching is a two-way street. The minimal amount of feedback necessary between a teacher and her or his student is at the very least a nodding head or a smiling face. So that teacher framework is a big part of who I am... but there is more to it than that.

I also LOVE learning, LOVE gaining new insights. And I also have a burning PASSION for science and the scientific method. Why? Because I DON'T believe we live in a 'post-truth world' and I DON'T believe that science is just an opinion. Science is based on peer-review investigation, and because of that, it is self-correcting.

Oh sure, scientists are human and therefore make mistakes. At least 5,000 humans died in the Chernobyl nuclear power plant accident in 1986. The NASA Challenger shuttle craft did explode killing seven astronauts in 1987. Most of us lived through the YK2 Bug scare that proved to be way off target two decades ago, and in the past couple of years, almost 400 souls were lost in two Boeing 737 MAX crashes. But crucially, an error in science is NOT a FAILURE – it's merely a step in pursuing new knowledge. Mistakes call for a new hypothesis to be tested. Mistakes are how we learn. Again, that self-correcting nature of the scientific method makes it so different from many other forms of human endeavour.

I also LOVE writing, and increasingly, I LOVE creative writing. I had my first taste of creative writing as an undergraduate when one of my professors, Judith Miller, challenged her students to be innovative in our weekly essays. I wrote my first published novel – PROOF – in the late 1980s, and after many rejections, it was finally published by a small publisher in West Virginia. I wrote my second novel while I was studying for my PhD externally right here at Curtin University. A small publisher in Canada contracted me to publish and, coincidentally, *BACK TO PARADISE* was scheduled for release within months of me finishing my PhD dissertation. But alas, that was never to be since Commonwealth Publications went out of business a month before that novel made it into print.

But now I'm retired. I have time to merge my love of teaching, my love of science and my love of creative writing into a new career, that of a novelist. This all follows quite logically from decades of writing academic papers, from giving presentations and talks at meetings and

conferences on five continents. I enjoyed that work, but the academic world only touches such a narrow sliver of the population. Even more, I've learned that *homo sapiens* think more with their guts than their heads, make decisions more on what they feel than what they think.

Australian journalist Waleed Aly recently pointed out that in a post-truth world, "...facts are just irrelevant. All that matters is the narrative and how you feel about it." Though I have difficulty buying the 'post-truth world' as permanent, I repeat my assertion that we humans make decisions more with our guts than our heads. That notion supports my belief that the best vehicle available to me for communicating science is through a narrative, through stories.

I could easily make this point by pulling out the whiteboard now, do a lesson on calculating the force of gravity between two objects, and watching a sea of blank faces in front of me. Better still, I think it's possible to reach a much wider audience by reminding you of a young Isaac Newton in 1666, sitting under a tree in Lincolnshire, England. When he watched that apple drop to the ground, he wondered why it always falls DOWN, not up or sideways or any other way. That's SCIENCE! The STORY of Newton reaches a much wider audience than mathematics alone.

Or – again using my whiteboard – I could go through the whole idea of how mathematically, density is an intensive property all matter possesses and that it is calculated by dividing the object's mass by its volume. I could go on and explain how difficult it is to measure the volume of irregularly shaped objects. But once more, the use of a STORY may have a much more significant impact. Consider Archimedes, a third-century BC scientist who lived in Sicily. He was assigned the task of confirming that the king's crown was made of gold and not silver, a problem about which he thought long and hard. One afternoon Archimedes filled his bathtub to the brim and, as he climbed in and watched the water overflow, he realised that his body displaced a volume of water equal to his own volume. What a vivid picture so many of us have of a naked Archimedes running through the streets of Syracuse shouting "Eureka, Eureka" – I found it, I found it! That's SCIENCE!

Let me give you one more example of communicating science in story form from much closer to home that is not based on European culture. The Indigenous Australians were keen observers of the night sky and created legends about many of the asterisms in our southern sky. The emu held special meaning to many Aboriginal people as creator spirits that soared through the sky. Terrestrial emus provided food in the form of meat and eggs. The great 'Emu in the Sky' was the long interstellar dust clouds that blocked the light of the Milky Way and for generations was taught in story form to countless generations. In one of the earliest examples of practising sustainability of a natural resource, Aboriginal people knew the time to hunt the big bird or collect its eggs by observing the annual shifting of orientation between a running or sitting 'Emu in the Sky'. That's thousands of years of SCIENCE!

I hope I've given you some insight into my source of inspiration and my approach to researching a story here. I emphasise that there is no right or wrong way to do this and that anyone who ever creates a poem, a story, a painting or a song employs that which is unique unto themselves. In that respect, we all must create our own narratives, tell our own stories.

Similarly, I believe that all of this applies to presentations and speech writing as well. Be true to yourself and let 'who you are' guide your approach to communicating ideas, no matter who your audience. So, it doesn't matter whether you are conveying ideas to your students, selling yourself at a job interview, explaining a treatment plan to your patients, presenting a product to potential customers or communicating strategies to your employees. In the truest

sense of the word, we are ALL teachers because when we communicate ideas with others, we simply share that about which we are most passionate.

I'll finish up with a quick plug for my most recent novels. All sure include science, but my intention in each is to entertain. In that respect, my stories are old fashioned mystery/thrillers that have much of their plots set here in Australia.

*FEVER* is a mystery that confronts several terrorist events that befall Australia, one of which is the first murder-by-Ebola crime ever committed. The tale that plays out in Melbourne, Townsville and Fremantle and highlights the problems we humans face when we try to outsmart mother nature.

*DREAMS* follows a series of suspicious deaths of older people in retirement communities that seem to occur at random from Washington through the UK, Singapore and Australia. The novel explores societal attitudes towards our young people, and our elders as a cross-generational cast of characters interact in ways not often considered. The suspense builds when a young Fremantle ED doctor discovers that her elderly grandfather may be in great danger.

*EIGHT* explores the curiosity of the human spirit and the interactions of *homo sapiens* with our environment. The narrative features the world's first trillionaire establishing the first Mars colony where the explorers find evidence of a microbial lifeform. Back on Earth, technology 'advances' to the point where our mobile phones are now embedded in tiny microchips implanted in a skin flap on our hands. Could an epidemic of teen suicide somehow be connected to these chips?

My most recent release is *RAINBOW*, a technothriller that focuses on a new experimental community, Civitas, built inland an hour or two drive inland from Geraldton. The aim of Civitas is to somehow lessen the political polarisation causing such instability around the globe. How? By using the latest artificial intelligence in the form of a supercomputer system comprised of three independent systems – AI Red, AI Blue and AI Green, moderated by a fourth computer, White Light. An American journalist visits Civitas to do a documentary on the experiment, and she is overwhelmed with how well everything works... until it doesn't.

But that's enough of me promoting my books to you. You can learn more about all of them on my website. If you enjoy reading, all are available either electronically or in paperback from Amazon.com.au. I have some flyers that can point you in the right direction.

Thank you for listening. Are there any questions or comments?

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