

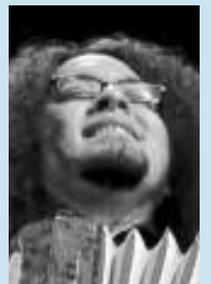
Number Crunching

A sheep's tale

Gordon knew he was the cleverest sheep to have ever lived. Strangely, he was also the smallest to be found in any of the twenty-two flocks on his farm. The other sheep in neighbouring paddocks had always resented him for both these facts and with good reason too. In the realm of sheep, your size is what made you important. Making plenty of wool for the knitters and meat for the butchers was deemed by the sheepish majority as the two most important things to achieve in life. Therefore, Gordon was a shame to sheepdom. However, to one tiny minority of sheep — the flock of nine other miniature sheep that kept him company in his paddock — he was a hero.

Other sheep would chide him if he ever ate too close to his surrounding fences. Luckily, because he was the oldest and wisest sheep on the farm, he could choose not to listen to the snide bleating remarks that would often come from the other snooty flocks. He and his own flock knew full well that for what he shamefully lacked in size, he made up for ten-fold in brains. There wasn't another sheep in the entire district of Lawnsdon that knew how many sheep it would take to equal the weight of their farmer's tractor, or how many blades of grass there were growing on average per square metre of ground in any given paddock in the district. Most sheep in the world would never have given Gordon any praise for being good with numbers; but in his own small flock, his mastery of numbers had meant he had been the

new VOICES



CHRIS LAM SAM

has written an
allegorical tale with
a message for
teachers of mathematics.

reason that year after year all of them had failed to take the generally much sought after ride to the Lawnsdon Abattoir, and for that, as unheard of as it was in the realm of sheep, they outwardly worshipped him.

During the last flock AGM, Gordon had once again been inducted as the resident genius in charge of keeping them alive and teaching the younger sheep that his flock had produced the highly important skills he had developed for surviving farm-life as they had done so for the last six years. It had always happened just as Gordon had planned it. Each year their farmer, fittingly labelled by them as 'The Bossy' due to his seemingly unquenchable desire to continue 'bossing' them around the farm, would boss every sheep into stock-trailers attached to trucks and proceed to transport them to one of the bi-annual farmer's auction days held at Lawnsdon's giant stock-yard. Thanks to Gordon, he and his flock had always been the only unpurchased animals left in any of the one hundred auction pens. Meat workers from the abattoir who attended the auction days in hope of purchasing the perfect bargain-beast to take home would jest between the downing of their Lion Reds remarking, 'Those sheep would waste good meat-hook space on any abattoir chain!' The disgruntled Bossy would always simply boss Gordon's flock back into their trailer, bring them home and put them in paddock 'A' again — just the way they were.

Gordon's famous equation that

had always meant his flock's survival had been devised in his first year at the farm. It was simple in concept, but difficult to execute in reality. Gordon was the smallest sheep of the tiny ten in his paddock as Gordon had calculated the exact amount of grass any sheep in his fold could eat right down to the last blade, monitoring each sheep's quota ruthlessly. Any sheep caught over-eating was sentenced to two days on half rations. Year after year, Gordon's vigilant oversight of his flocks eating habits had kept them alive.

Sadly, the Bossy had a plan of his own this year.

Exactly one week before the farmer's auction, the Bossy executed the plan that Gordon the number genius hadn't counted on. He and his flock awoke to the sight and sound of ten brand new sheep playing a game in their paddock they called 'kick your own poo'. To make things worse these were no ordinary sheep, as Gordon and his fellow sheep realised at first sight of the mammoths: these were the Bossy's GE sheep — genetically engineered to suit the growing demands of the larger families in Lawnsdon's closest metropolis city, Pavington. The Bossy had added them to Gordon's flock with the hope of making them sell quickly at the fast approaching auction day. Gordon panicked.

'My flock!' he shouted, 'Gather!' His flock rallied to him as fast as their tiny lamb-shanks could carry them. The GE sheep paused to look over at Gordon, whose voice had suddenly broken the jovial atmosphere of their early rough-n-tumble romp. Gordon paused, looking into the fearful eyes of his faithful nine, thinking carefully about what to say to his friends. He spoke with wisdom befitting the moment. 'We're all going to die,' he announced. The sheep in neighbouring paddocks that were crowding the fence-lines watching the drama unfold erupted in a fit of rapturous 'baas', stamping their feet in victory.

'I'D BE VERY PROUD OF THAT IF I WERE EWE!' bellowed the largest of the GE sheep while eyeing up one of the tiny ewes gathered near Gordon. The raucous neighbouring audience instantly fell silent. Another GE sheep spoke loudly: 'IT'S NOT OFTEN THAT OFF-CUTS LIKE YOU WOULD GET TO SEE THE ABATTOIR WITH THE LIKES OF US!'

Gordon scoffed at the grotesquely overdeveloped gorgon. He calmly sidled up to the leader of the GE

sheep, stopping well before sight of him would have been obscured by giant's triple chin. 'There is no glory in a death that discredits the lengths me and my brethren have gone to in order to survive the past six years! We would sooner live than die at the side of ill-informed monsters like you!' he stated, obviously put out by the lack of respect the newcomers were showing.

The leader of the GE sheep snorted with disdain.

'My command of all things numerical has been the one thing that has kept us alive, and now my next chance to prove my greatness has been snuffed out by the arrival of you cretins!' Gordon concluded, and with that he sidled back to his flock while the GE sheep laughed in their throaty bleating guffaws and returned to their game.

Gordon comforted his flock. 'We need to be strong brothers and sisters. It is time to teach the children how to survive as we have.'

With a baa of unison, Gordon and his flock solemnly approached the northern fence line and called to the lambs that were dozing obliviously in the weaning-paddock. It was the Bossy's liking to separate young lambs into the centre paddock that was surrounded by all the other paddocks a month before an auction day. The lambs wearily gathered near the fence line.

'My children,' Gordon began, 'I have grave news as—'

'We're not all your children are we?' interrupted a confused lamb.

'Well — no, no you're not. I was speaking figuratively. Now listen, I have important things to tell yo—'

'Mark's got dreads, Mum! Look!' piped up another unattentive lamb, as he pushed his brother hard up against the fence line for the mother to see.

Gordon's frustration peaked.

'Look, will every one of you just sit down and shut-up? If you don't listen to me you're all gunna die, ok?'

The lambs quickly sat on the ground quivering, looking at their parents through the wire for reassurance that it was alright for Gordon to be talking to them like this. 'Right, that's better,' Gordon said, taking a deep breath to further suppress his annoyance.

'I need to tell you about something important called mathematics. It's the reason you were able to be

born, it's kept your parents and I alive for six years. It's a world record boys and girls!' Gordon said as he quietly chuckled to himself. Nobody else joined him in smiling. He cleared his throat in the awkwardness.

'Mathematics is a powerful thing. I used numbers to work out how many blades of grass we were each allowed to eat every six months so that we'd stay small. I'm going to teach you that without mathematics, you'll suffer the same fate as thousands of Lawnsdon sheep before us have. Now firstly, let us discuss the type of soil we have here. You will find tha—'

'And what if we don't want to learn about your poxy numbers?' a particularly popular young lamb suddenly asked. Gordon choked with surprise. 'Perhaps we already think the way you teach your numbers is boring and that every sheep on this farm is right in thinking you're a total weirdo for being so into your "blade-budgeting". Our parents have never enjoyed your imperialistic number crunching. It's from a totally different planet! I'm tired of hearing my parent's complain about your boring lectures on phosphate and clover types! Get a life, dude!' With that, one by one the younger sheep stood and followed their leader away from the fence line.

Gordon was cut to the heart. After six years he had never met so much opposition before, especially not from a generation that existed solely due to his vigilant watch over the diet of their

parents. He looked at his flock, who were avoiding eye contact with him, all the more confirming the young lamb's words. Even they thought he was mad. His eyes began to fill with tears as he realised that all his work with numbers had been in vain. He stormed off to the far corner of the paddock and sat there alone for the rest of the day.

That night, Gordon had a visitor in his sleep: his furry-god-farmer, Ramsey.

'Why so glum, chum?' Ramsey asked.

'Oh, it's you,' Gordon droned. 'Fat lot of good your "blessing me with talent" did! Shove off. I'm trying to die here.'

Ramsey frowned. 'Come now, Gordy, that's not like you! I blessed you with talent because you had a dream! You wanted to do something different from every other sheep I consult; you didn't want a golden fleece like all the others did you? No! You wanted to be the most influential flock teacher in Lawnsdon, "teaching the ignorant doomed to be free of their adopted oppression"! I remember the passion you had! What happened?'

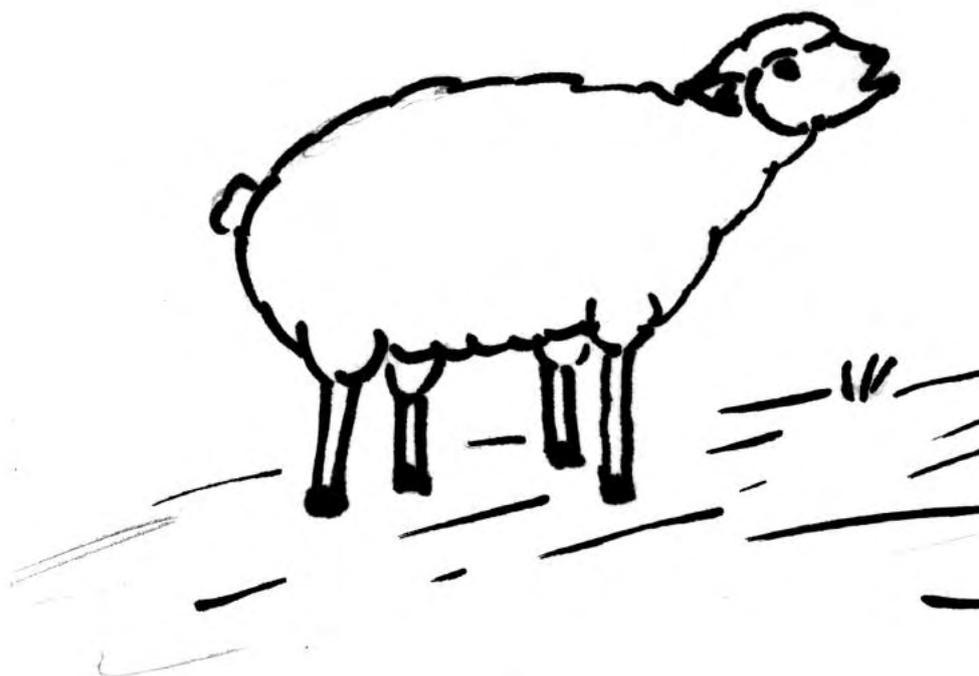
'I used the talent Ramsey. I just obviously didn't know how to use it well,' Gordon concluded glumly.

'There's still time to make your talent work for you Gordy! You just need to share your mathematics in a way that the other sheep will like. You need to teach them in ways they will find practical and fun! There's no point in sharing the old theories if they use words and ideas that today's sheep

will find irrelevant. It's good that you talk about things they all know like blades of grass, but you also need to find ways to include talk about other things like... like.. trees! And daisies! Fence posts and hay-bales! Clouds, birds, not throwing life away! Sheesh, when I was at god-farmer school for thirteen years learning mathematics, we were using long division, carrying the 'one' and all sorts of other old concepts and words like "trigonometry" which are complete mysteries to me now. It really didn't matter how much I tried, there was always an un-crossable rift between what was coming out of the lecturing god-farmer's mouth, and what I understood in my head. Nobody ever made it fun Gordy. Nobody ever told me why we learned what we learned: we just did what we were told to do.'

Ramsey smiled at the silent Gordon in front of him. 'Listen to me ramble on. I envy you and your gift with numbers. Just try again tomorrow Gordy. You can do it!' Ramsey took Gordon's silence to be a deep and meaningful spell of thought, and vanished again in the same fuzz of magic that he had first appeared in.

Perhaps if Gordon's silence had meant that he was thinking deep inspiring thoughts about how to teach his flock the relevant use of numbers, perhaps if he hadn't drifted into another dream about being flayed in the abattoir while Ramsey was talking to him about



his woes in mathematics, things would have turned out differently. One month later, Gordon, dressed to the nines with vegetables, arrived at the dinner table of one Australian-descended mathematics lecturer, Perry Greensdale, and his family. After having said Grace, Perry addressed his wife and three children while proceeding to share Gordon around the table.

'You know, it's funny we're having lamb for dinner, family. I was talking about sheep with my University students today.'

His family paid him no heed and ate Gordon with wild abandon.

'I said to my students that in New Zealand, sheep are a great thing to talk about when teaching mathematics in rural schools, you know, 'cause there's plenty of sheep out there to count.'

His wife murmured a reply resembling, 'Really?'

'Yeah! I said, at rural schools, take your kids out onto the farm, let 'em chase the sheep around a bit, then settle 'em down, and get them to count sheep in the paddock. I said to them, I guarantee you'll have

thirty different ways of counting sheep in every class. It just makes it meaningful for them because it's something they're familiar with.'

His family had obviously heard it all before.

'Dad, there's hardly any good meat on this thing,' said his son suddenly, as he poked Gordon irreverently.

'Well son, you can't always get what you paid for. It's one of the unteachable laws of life. You know what I say, sometimes some things in this life just d—'

'DON'T ADD UP!' his family blurted in unison.

'—don't add up, that's right, family. Very good,' said Perry, wondering if that should perhaps be the last time he used that line in the presence of those that said they loved him. With that being the last thing said at the table, the story of Gordon the number sheep dissolved in the stomachs of a family who also relied on the manipulation of numbers to keep them alive and secure in their environment.

Had Gordon lived to see his own fate, he would have been proud to watch himself be eaten by a family who enjoyed mathematics as much as he did. Although in his farmed life Gordon never taught mathematics in the same colourful, relevant, and enjoyable ways that Perry was always suggesting his university students would try, the majority of Gordon's genetic magical talent was passed into Perry, making him even more powerful than he already was.

Here ends a sheep's tale.

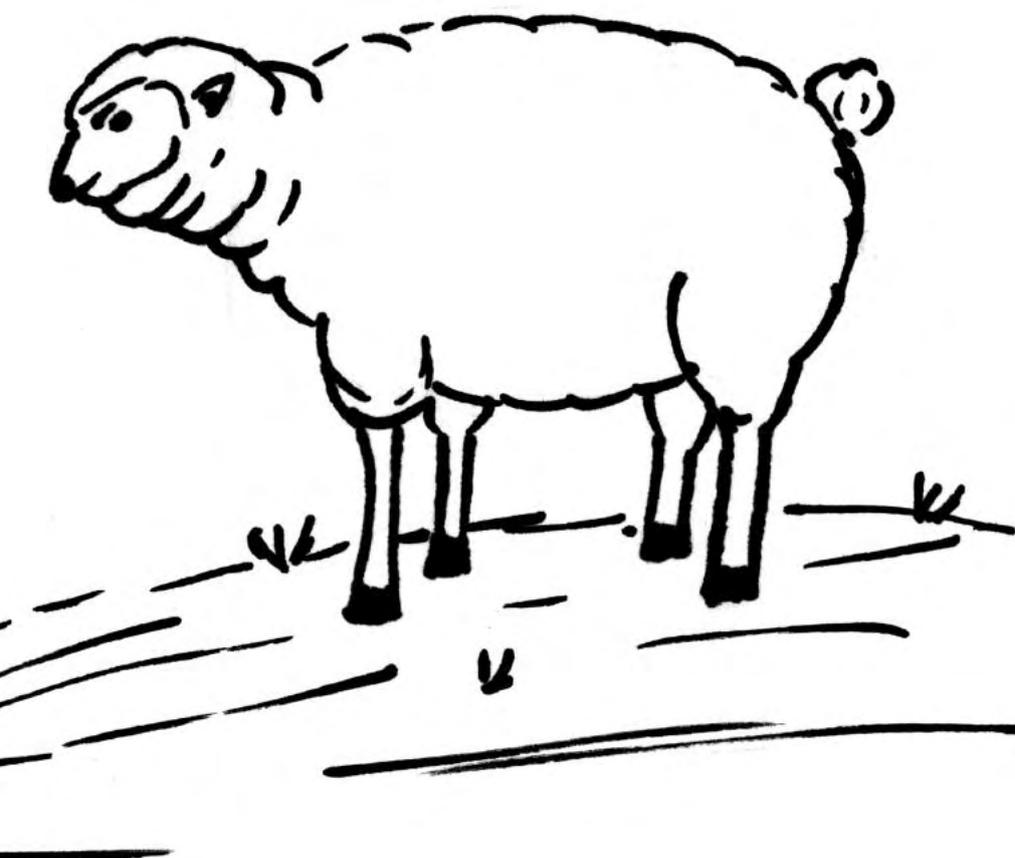


Illustration by David Way (age 14)

A word from the author

This story was written to convey the most significant characteristic of my relationship with mathematics during my primary and secondary education: irrelevancy! If I had a dollar for every time a teacher taught me something that they didn't have time to explain further to a 'minority' like me, I could have lessened my expanding student loan amount considerably by now! However, I currently understand from having started to study teaching mathematics at Waikato University that in order to be an effective teacher of this subject, one must always be prepared to explain concepts repeatedly to any one child — the curriculum demands it of us. While teaching Year 7 and 8s in my second practicum, it gave me the greatest joy to go at the slow pace of the lowest level mathematics group in the class. To see

their eyes light up when things made sense, when they realised they were good at a strategy they viewed as impossible to master at first, was an incredibly rewarding experience. I liken myself to Ramsey in the story: someone who remembers their early life experiences with mathematics as forgettable. The majority of my early teachers were like Gordon, failing most of the time to make me happy about what I was doing, but getting me to a narrow pass mark at the least. I strive to be more like Perry, hoping to find new and interesting ways to share mathematics with children.

I believe now that I am more than ready in my attitude to counter the negative past I had with mathematics by attempting to make it everything I wish it had been as a child. A world of creative and meaningful mathematics awaits my future students.

What type of mathematics awaits your students?

Chris Lam Sam

has recently completed his Bachelor of Music, and Graduate Diploma in Primary Teaching at Waikato University in New Zealand.

Chris has always had a love for writing music and stories which has led him to pursue a career as a children's entertainer.

He prefers chicken over lamb.

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