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The Girl Who Loved Mathematics

She was tall and thin like the irreducible first digit, unless you reduced it to fractions, those fey incomprehensible hieroglyphics that reminded me of freckles. I was only good at language and algebra, which was mathematics disguised, letters doing the adding for numerals or concealing themselves in a brake of brackets. We had a teacher that year who didn't like Keats but it was always considered superior to be good at maths.

As for geometry, it was and has remained, as incomprehensible to me as some branches of modern art: Cezanne perhaps, leading the way with his square lightly dappled boulders and trees barely held in shape, as though they stayed that way only for human perception and might otherwise fly apart into the atoms they desired to be. Any angle formed a little tent with a guy rope and the possibility of a storm: I loved Keats but wanted the world he inhabited to be flat.

But Gilberte, I'll call her that, though it's not her real name, loved mathematics with a passion. Her father was some high official who presumably dealt with estimates and figures; it was thought she inherited her talent from him. She had three brothers with no noticeable gifts at all, except riding motorbikes and drinking, and her mother was a frail doll-like woman who seemed to hang on her husband's every word.

Gilberte was good at science too and it was she who expertly made up .1 molar solutions: tap-water first and then a pipette at the end, and understood them: the rest of the class couldn't see why we needed the pipette at all. We were obviously destined to be mothers, wiping the sides of plates clean of gravy stains while she was designed for stars and nebulae.

It was Gilberte who sensed something was wrong one day when the class was engaged in making a gas, sulphur dioxide I think it was. The teacher, who had been called away for quarter of an hour - it was safe to leave the class in Gilberte's hands and the instructions listed on the blackboard - came running up the stairs. Gilberte led us out on to the

patch of grass near the Art Block where we lay on the grass for the rest of the period.

The periodic table of atoms - again I misunderstood it because my mind instantly darted into a medieval world of monastic severities and humanism, if there was such a thing in the Middle Ages. Though the atoms in their separate squares seemed severe and complete, like a chain of Carthusians, they obviously possessed the desire to join and colonize. Among these valencies and outstretched arms Gilberte moved with her own grace.

We were a motley class, except for Gilberte. It wasn't long before she outstripped her teachers, in science and maths, and there was talk of allowing her to cycle to the Boys' High School for the competition. But somehow this proposal, which might have had unforeseen benefits, was not taken up. It got so by the third term, when the teacher absented herself more and more, that Gilberte took the class. She stood on the dais and wrote the instructions for experiments on the board, each step numbered. The teacher's instructions were unfailingly vague - she had been at Cambridge as a young woman which surely promised something better than teaching us - but Gilberte wrote each minute step carefully as though we were a cooking class.

Afterwards, as we had on the day of the gas, we filed out decorously and sat in the sun. (Even on the day of the gas there had been no rush: either we had not understood the seriousness or, more likely, we were remembering *The Girls of Slender Means*, which was a class book). There was a sheltered lawn behind the old library and close to the road where none of the juniors went; though they were scornful of school it seemed they only felt safe in its centre. Whereas we, who in a few months would escape to the outside world, had instinctively chosen a place near the road.

It was sunny and quiet on the lawn and the trees were old and gnarled with soft sparse rings of grass under them. We sat on our satchels or blazers or stretched out Roman-fashion, though how the Romans ate oysters from Brittany lying on their sides was incomprehensible to me. I didn't doubt the oysters would go down but it hardly seemed comfortable.

'I expect it was so they could sprint for a feather. You know, the vomitorium,' Chrissy said.

'Easier to get up off your side,' she went on, when I looked puzzled. 'A kind of rolling start. Like a western roll.' That was the latest kind of high jump and only one of the class, Faith, had mastered it. We

were not very athletic either. Still we had produced Gilberte.

'How do you know, silly?'

'I tried it one night when I was necking. At least I imagined it. I imagined I was Arria reclining with Pactus.'

'I can't imagine you and spotty Jeff committing suicide one after the other.'

'At least acne is a sign of puberty.'

'Post-puberty I should have thought you meant. Unless Jeff is rather backward . . .'

'No, he's not backward. I should think Jeff could teach the Romans a thing or two.'

Chrissy had got up and flounced off.

Gilberte was lying on her stomach with *The Mathematical Theory of Relativity* in front of her. She gave no indication of listening. She had the concentration of a blinkered horse, or the serenity, once she had pushed off, of the Lady of Shalott.

'*On either side the river lie, Long fields of barley and of rye, That clothe the wold and meet the sky.*' I said under my breath and she looked up. 'I'm sorry, I didn't mean to interrupt.'

'It's all right,' she said. 'I'm just killing time before I have to go and see the headmistress.'

'I always think those are the best lines, don't you? The beginning. Even better than the mirror, the scenery she floats through.'

'Except at that stage she hasn't seen it, it's like a tapestry.'

'I hadn't thought of that. Do you mind if I use it in an essay?'

'Go ahead. I'm not doing it anyway.'

I looked at her admiringly, because she gave me a chase in English too.

'This interview with the headmistress. If you want to talk about it . . .'

'No. It's too complicated. It's a family matter really. But thanks.'

'Are you going to the school dance?'

'I expect so.'

I was trying to get my mother to let me wear one of my dancing costumes, an Hungarian skirt with a dark navy border. She was doubtful but it seemed to me ideal for a barn dance. At any moment I might resort to the first movement of an Hungarian czardas: a hauteur so amazing a passing peasant would be frozen in his tracks or wish to be eaten by a bear.

What happened with the headmistress I never heard, because we were preoccupied with the barn dance, but I gathered it was one of several interviews. The headmistress was working on Gilberte's father to let her go to university; this was common knowledge but not why Gilberte should be cloistered in the office with its imposing traffic symbols: STOP, WAIT, COME IN. I'm not even sure now if those were the messages: Stop may have meant It's Useless Today and Wait may have implied the headmistress would be available in ten minutes. It was a modern invention and it went with the new school assembly hall we had clambered over with the headmistress. Hadn't she said on the one occasion she taught us, that we were the *crème de la crème* because we took Latin.

The week before the barn dance I had worked with Faith on a spider's web of string to hang over the bar. I was so preoccupied with boys, whether one would approach me in my Hungarian skirt, that the cobweb was soon over-ornate and well on the way to being lace. It brought gusts of laughter from the others but I couldn't stop myself weaving.

The attitude of Gilberte's father seemed to be that boys went to university if they were so inclined and girls were homemakers and married. The fact that one of his sons had had a motorbike accident that week and the other had left school without any qualifications made no difference. If they had wished to go The headmistress, whose own father had been doting, was at a loss. A meeting, an impromptu visit, perhaps at some hour designed to show her superiority - this would be a little unfair on Gilberte's mother who might be caught peeling potatoes.

'Is there a family history of illness, any debility?' the headmistress had asked as she chain-smoked. 'Anything that might make an academic career a necessary protection?'

But Gilberte couldn't think of anything. She sat, not unlike her mother, with her hands in her lap and her fair head downcast; she was not even thinking of the dance since she was, besides the brightest girl in class, also the tallest. Statistics were against there being many tall boys.

'You *would* like to go, Gilberte?' the headmistress asked. 'To spend the next three years studying maths or science?'

'Pure mathematics. I should like to study pure mathematics.'

'I took Greats,' the headmistress said, fitting a fresh cigarette into her ebony holder. Girls had been expelled from the bushes for less.

'Punting - of course there are no punts in Auckland, or wherever it is you would be going. We must find the best professor. Perhaps I could write to him. It is the final school that produces the best days of your life.'

When Gilberte still said nothing and continued to look at her hands the headmistress said 'I'll write to your father and ask him to call one evening.'

Adamantine, the headmistress thought. That is what Gilberte's father is. But how to deal with him? His love of figures; the genetic brilliance that had skipped his sons and alighted on the head of his daughter; the scandal of a talent gone to waste. She foresaw it would be useless to pick the wrong option; it was like a lucky dip. She must have a word to the science mistress about genetics. There was a rumour that one of the sons was up before the magistrate.

I managed to get my Hungarian skirt out of my mother and there were enough short boys for partners so I disowned the cobweb. A large black spider was fastened in the centre of it. There was one very tall boy for Gilberte and between dances we sat out on haybales beneath the parallel bars. There was a line between her brows and she seemed, who was adept at every combination of atoms, to be concentrating on the M.C.

The next day Gilberte was called out of the double period of science and when she returned her eyes were red. The barn dance had given me an insight into valencies: the inept and hesitant way male and female hands joined - some of the boys should wear gloves, Chrissy had complained, and others held your hand like a wet fish - made me think that elements too knew an initial hesitancy which was only overcome at the last moment, possibly by an external director. But the boldest atoms seized their partners round the waist and swept them into an embrace.

We were sitting under the library trees again, discussing boys. There was Beatrice knitting a complex sweater for her boyfriend - they were so committed they seemed almost married: her tall hairy-legged boyfriend need only don long trousers, sweater and a pipe and I saw them settled for life. At the end-of-year senior ball the headmistress and senior mistresses sat on the stage in rows, wearing their academic gowns. 'A last warning what we have missed,' Chrissy would say.

Whether the headmistress wore her gown at her interviews with Gilberte's father, I am not sure. There were several interviews.

Sometimes Gilberte's mother came too, though she probably added very little. Gilberte herself, apart from stating her love of mathematics, probably said little as well; perhaps the headmistress was hoping for an impassioned plea, a little Marie Curie. But the father remained adamant. Gilberte's gifts were of course a compliment to his own bent for figures, a gift which nature had not bestowed on his sons. But he believed it should be regarded as nothing more than a fluke. Here the headmistress must have resisted the desire to press the STOP button under her desk or to catapult him from his chair, a device that was not yet installed. 'She has the heart and soul of her mother,' she thought. The father's success was beginning to seem very conditional.

'Gilberte,' she counselled the quiet lank girl, giving up part of her lunch hour and asking that coffee be brought, an unheard-of compliment. She felt as if she might be fighting for the life of a future Nobel Prize winner. In that case a special board would have to be made to go alongside the Dux and Excellence in Work and Sport. 'You must fight, with whatever strength you've got. You are not strong and the sheltered life of the academy, the introductions to young men who would understand your merit, the attentions of professors, after the first anonymous year in a class of five hundred pure mathematicians, would give you the security I fear you need. Your father's idea of security is quite a different thing.'

'Do you see me married to an academic?' Gilberte asked, casting an eye towards Beatrice's knitting and drawing her long legs further under her so she was inside the valency of shade cast by the tree.

'The headmistress seems to think I should. Be grateful, I mean.'

'You haven't had much to compare one with. Have you ever met a professor?'

'I suppose Dr Petrovsky could be an example.'

'I certainly don't fancy Dr Petrovsky. We're all terrified of him.'

'Of course he is no longer engaged in research which may be the cause of his bad temper. And the fact that we don't do our homework. You do, of course.'

'I think she means someone quiet and dreamy who will smile when I mention the pleasure of numbers. Someone in the same field to talk projective geometry with in the evenings. Do you think that is likely?'

'I think she wants to see you protected. Like a rare white albino. Or the class unicorn. Then when you are justly famous she can put your name on a board outside her office, like a stuffed moose.'

She smiled suddenly and I couldn't tell whether it was maths she was

thinking of, or the moose.

The end of the year was nearly on us. Our final exams were over and a few lazy weeks were left. One by one we had trooped to visit the careers advisor and those who were not obviously nurses or teachers, a minority, were advised to supplement their skills with typing classes. I sat in the back of a fourth-form class and mastered the keyboard in the last term. Chrissy was going to be a dental technician; Beatrice put down her knitting long enough to enroll for physiotherapy. 'I suppose you'll treat your patients like wool strung on needles,' Chrissy had called out and for a moment I had a vision of a Heath Robinson contraption and legs in white plaster.

One day I walked with Gilberte around the field above the boarding school. A few sixth formers, those who had not been accredited, were walking about, talking to themselves with books tightly closed, or lying face down on the bleached grass.

'Romantic, isn't it?' I said. 'Though not to the swots.'

'I suppose they've come up here to escape distractions. Those who have passed can be rather cruel.'

'A life passed in study and learned pursuits. Rather nun-like in a way. I suppose they are not allowed to go to dances either.'

'At least if they pass they will have done it on their own merits. Or so the headmistress says.'

I remembered a time I had heard her console a weeping girl who had failed some exam with a terse: 'It's only a year in your life, child. What a fuss over a year!'

One lunch hour I escaped before the bell and walked to a French pastry shop at the corner and filled my capacious black umbrella with meat pies which we ate under the trees. Why in the years at school had I not been more daring, I wondered. I was going to be a librarian and take some extra-mural units. In a few weeks I would be overdressed and sitting surrounded by pots of paste, invisible tape and date slips, with a pile of dog-eared books beside me as I learned 'to mend'.

I would be at the prize-giving but not the last assembly. One more singing of brutal *Gaudeamus*, so much less charitable than Shakespeare's seven stages of man, though Shakespeare tended to overdo senility. A speech about achievement and the headmistress in a stunning sheath over which her cap and gown presided like a presentiment of the mighty wing. She was rumoured to be highly

nervous because of the presence of the Board of Governors.

But Gilberte was not at the prize-giving. Not there to receive her dux's ring and to go up last on the stage where the lower ranks had gone in threes and twos. There was a rumour that her father had taken her away from school and she was going to be his secretary. The headmistress made a little speech of regret which I thought was tinged with anger and her speech was on the wastage of women's abilities, a wastage she had given her life to prevent, though at the same time she set a reassuring example of smoking and drinking gin and tonic. I think that was why we respected her. I've never forgotten the day it was my turn in her office and I found her sitting in her exclusive underwear behind the desk, lighting one cigarette from the stub of another. 'Don't stare, girl,' she said. 'Can't you see I've spilt my coffee. We can carry on as though nothing has happened.'

'What is *your* side of the story?' she used to say to a girl sent out to stand in a corridor and eventually led to her office, like a fly to a spider. But Gilberte had gone and Gilberte's father had lain still and escaped by his superior masculine strength. Her speech had an edge that evening, a pace like Keats composing in top form.

Beatrice told me what had happened. She was a boarder and she had witnessed more of the evening meetings than the rest of us who were day-girls. It seemed the headmistress, though it was a little hard to tell from a distance, had extended her hand in what seemed a gesture of goodwill and further meetings and then at the last moment her hand had struck Gilberte's father's face.

'It sounds like science fiction,' I said disbelievingly, when we were sitting in a coffee bar during my lunch hour. 'Are you sure you were not mistaken?'

But she swore it was true. 'It was like that Ngaio Marsh story where the sky turns black when you've killed a rabbit.'

But I preferred to think that the headmistress had been seized by Gilberte's love of mathematics and her hand had risen in the shape of the first numeral.

All I know of Gilberte is what Chrissy told me. She married the first man she met at a dance, had five children, and ran a fish and chip shop. At least she could add the numbers in her head.