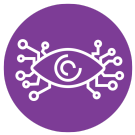


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ENTANGLEMENT

Submitted by Kathryn Aldridge-Morris

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Entanglement

In a week my eighteen-year-old daughter will have left home.

'Tell me about quantum physics,' I say, and tumble onto her beanbag.

She swivels from her screen. 'Really?'

This is what she's going to be spending her days researching, writing, talking about and I know absolutely nothing about any of it. Will this unknowable part of her expand to the point we're strangers?

'It's the physics of quanta,' she says, wriggling her toes in her rainbow socks.

'Right. The physics of quanta. So. What's quanta?' I ask.

'What's quanta?' She inhales. 'Small things.'

'Okay.' Outside a mizzle so fine you wouldn't know it's there but for my drenched neighbour pulling towels from her rotary line. 'Then what's the *physics* of small things?' I recall my daughter's fingers as a baby, so tiny they were, impatient to lift flaps in books, always curious.

'How small things interact with each other. Not small things like children. Like electrons.'

That tiny hand in mine or pushing strawberries into her mouth – her tongue figuring out the seeds.

'And what are electrons?'

'What are *electrons*?' She rolls her eyes.

Will her vowels lengthen down south? I stretch my legs and inhale. Will a new voice speak her mother tongue?

'Electrons are the smallest leptons,' she says. Then, 'You're going to ask me what leptons are, aren't you?'

I nod. 'Particles that don't interact via the strong nuclear force,' she says.

The neighbour has disappeared and the rotary line spins in the wind. My daughter would happily sit with equations for hours, figuring out forces and the speed of the line in the wind. Me? I'd be looking up Scandinavian words for 'wind', searching for the right phrase that captures its ability to knock you off your feet.

'Strong nuclear force,' I repeat. I don't even know how to come back with a question. Since when did she get *this* smart? A tornado of knowledge. As a kid, she never wanted the talking to stop at night. We'd read together on this very beanbag and then it was question after question after question. Ten! I used to tell her. I'm counting to ten and you'd better be up and in bed. Then one day she told me she figured nothing happened after ten. She was going to try it out. She stayed until I counted to ten, then ten point one, ten point two, ten point three her grin widening as her hypothesis was proven right.

She walks me through hadrons and protons with a patience I never knew she had but I guess we know less and less about the inner workings of our kids as they grow.

'...when photons with sufficient energy are incident on the surface of a metal,' she's saying.

'Why do we need to know this stuff?' I ask. She pushes her hair behind her ears. Is that another new piercing?

'Just learning a bit about the universe, Mum. You know, not living in ignorance. Like why do we know about gravity? Even though we don't *actually* know about gravity. It's the fundamental force we know least about.'

How lightly she holds the unknown. I hate dealing with the unknowable.

She flicks through a pile of index cards from her summer revision. I remember hugging her the night before her final exam as she sobbed physics was just too hard. It wasn't for people like her. 'Nobody said this was going to be easy,' I'd said, stroking her hair, adrift with my failure to help. Not having any of the answers.

'Okay, so with the metal thing, you're saying light is made up of stuff.'

'Mum, this isn't even quantum physics. The duality of wave particles is. But. Superposition! Maybe you can get behind this more easily?'

She's right. I can feel the heat of a metaphor excite in my chest.

'You can be in two states at the same time.'

I look at her posters of Green Day, The Smiths, the Periodic table, the stuffed toys, books, the backpack she's already started to fill. It's not even a week. Only six days from now.

'Like happy-sad?'

'Mum. We're talking about particles not people.'

I watch her plait a strand of her fringe and let it flop onto her face. 'Look, if I were a particle, I could be here and I could be there.'

'You know about drink spiking, right?'

'I'm going to be fine.'

'In the story I'm working on, I could have my fictional mother telling the fictional daughter who's moved away, how she wishes they were particles, not people.'

'That fictional mother in your story,' she says, tipping her flashcards into the bin. 'That mother?' She leans across and gives me a bear hug. 'She just needs to calm down a bit.'

ABOUT THE AUTHOR:

Kathryn Aldridge-Morris is a writer from Bristol, UK, whose fiction and creative nonfiction has appeared in a variety of literary journals and anthologies. Her writing has won several prizes including The Forge Literary Magazine's award for Creative Nonfiction, and Manchester Writing School's 'QuietManDave' prize for flash fiction.

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