Perfectly WEIRD, Perfectly YOU

A SCIENTIFIC GUIDE TO GROWING UP

CAMILLA PANG

ILLUSTRATED BY LAURÈNE BOGLIO

wren & rook



FOR TIGER RAMSEY, LILLY PANG,
AGATHA PANG

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INTRODUCTION

My name is Dr Camilla Pang.
But you can call me Millie.

I want to start by telling you something important about me. I have always been a bit weird. Actually, quite a lot **WEIRD**.

I was the one in class who always put up their hand, but used to get flustered if a teacher picked me out to ask a question.

I always had my nose in a book, but I'd also get bored during lessons and be told off for staring out of the window.

And I always tried to be polite, but quite often ended up saying something a bit rude by accident.

I'm still pretty weird today.



I get massively **EXCITED** about things, to the point where I can't stop my body from shaking or I make little squeaking noises.

But sometimes I get so scared that I have to hide under my duvet cover or sit under my desk until I feel safe again. (I am twenty-eight years old.)

There's a lot about me that doesn't really make sense. In fact, these are probably my favourite parts of myself. We are all human beings, not robots, and we are all different – weird in our special, sometimes illogical way.

But, as I discovered when I was eight years old, I was different from most people in one particular way. This is when I was diagnosed with autism spectrum disorder, ASD for short.

Autism can be difficult to explain, because everyone on the autistic spectrum experiences it in a different way.

But I'll have a go anyway (with apologies to my fellow ASD crew who may not recognise these things in their own lives).

In *general*, autism can mean:

- Having very **STRONG** feelings that you struggle to explain to other people.

- Feeling **OVERWHELMED** by the five senses. Bright colours, nasty smells, strange textures,

unfamiliar tastes and loud noises can scare or unsettle you so much that they send your whole body and brain into meltdown.

- Finding it **DIFFICULT** to understand people's body language and tone of voice (e.g. when someone raises their eyebrows or speaks in a sarcastic or angry way, you might not 'get' the message).

- Having very specific **ROUTINES** to live by, to stop yourself from doing everything in the wrong order (like leaving the house before getting dressed properly, or trying to eat a meal you haven't cooked yet).

- Relying on little quirks of **BEHAVIOUR** (called tics) to feel safe and calm, most of which are about soothing the senses. These might include repeating the same words over and over, following a routine very closely or making sudden, jerky movements with your head and hands. The repetition of words or movements like this is known as 'stimming' (self-stimulation).

These are just a few of the ways people with autism may behave differently, and they are based on my experience (which may not reflect or represent anyone else's).

For some people with ASD, autism will define and sometimes limit their lives in a major way. For others, it will not make too much difference.

I'm somewhere in between. My ASD meant that I was often confused and scared while growing up. I had to work harder than most people to understand the world and find my place in it. Because lots of people doubted me, I had to learn to stand up for myself and to believe in who I was and what I had to offer the world.

I'd spend so long looking at how people moved their hands when talking, hoping it would give me a clue about my place in the conversation, that I sometimes forgot to listen to what they were saying.

And I had lots of people looking at me strangely and calling me a weirdo for making my strange noises or saying things that didn't really make sense.

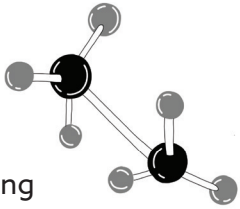
That makes my childhood sound difficult, and sometimes it was.

But I don't regret having ASD, not even a little bit.

In fact, I think of it as my **SUPERPOWER**.
And I'm grateful for it.

Because, while I might struggle to do things many people find easy (like making plans at the last minute, or talking to someone I've never met before), I can also do things they can't.

My ASD makes me **BRAVE** in ways that lots of people aren't. When I see something strange or wrong, I will point it out before I've thought about whether this might be rude or 'impolite'. That *can* lead to some difficult situations, but it also means I'm more likely to say the thing that needs saying, when other people are too embarrassed to mention it.



It also makes me a bit obsessive about things, which is incredibly useful for learning. When I get interested in something, I will drop everything and spend all my time reading about it, sometimes for several days in a row. This was how I got interested in science in the first place, and it's how I still am today.

And most importantly, my ASD makes me **CURIOUS**.
I've had to learn almost everything about living in this world the same way everyone else learns to swim or memorises the names of capital cities.

I didn't just 'pick up' the ability to make friends, say the right thing or read other people's body language. I've had to **STUDY** all these things, really thinking about how they work and devising my own formulas and shortcuts.

Put another way, I've had to be a scientist my whole life. I've been studying people, watching their behaviour and making notes – all to help me work out how *I* could belong in a place that has often felt like another planet.

And now, aged twenty-eight and with some cool letters before and after my name that mean I'm now a doctor, I'm here to share with you what I learned – and why I think it might help you too.



SCIEN-TASTIC

I already told you one important thing about me. There's a second too. I love science. **LOVE** science.

Aged ten, I saw a copy of *New Scientist* magazine in a newsagent while shopping with my mum. I started reading an article about a serious medical problem – the sort of thing that would normally have terrified me for the rest of the day.

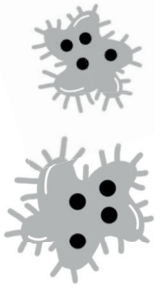
But then I realised that the story was about what scientists were doing to *solve* this problem. And I knew right then that I always wanted to be the first to know how science could make the world better and safer. I scraped together my pocket money to start buying the magazine, and I've loved it ever since. Now instead of worrying about something that makes me afraid, I always ask myself: can I do something about it? That has been science's gift to me.

When other kids my age had posters of pop stars or footballers on their walls, I clung to my favourite book by Stephen Hawking (one of the most legendary scientists of the last century – look him up!).

It was one of many books that I devoured about the chemistry, physics and biology that make our world tick.

So much of the 'real' world around me didn't make sense: the words that people said, the expressions on their faces or the things they seemed to expect me to do without ever actually asking.

But the scientific world of my beloved books was beautiful and logical. There were *systems* with *rules* that I could learn by heart, which fitted together neatly in my head like LEGO bricks.



I loved reading about the different bits of the body, the way plants generate their own food and how our universe first came into being.

As I grew up, science started to become my guide for a world that felt scary and confusing.

It was easier for me to understand why a plant wanted to move towards the sunlight, than why my sister always turned up the volume when her favourite singer, Peter Andre, came on the radio.

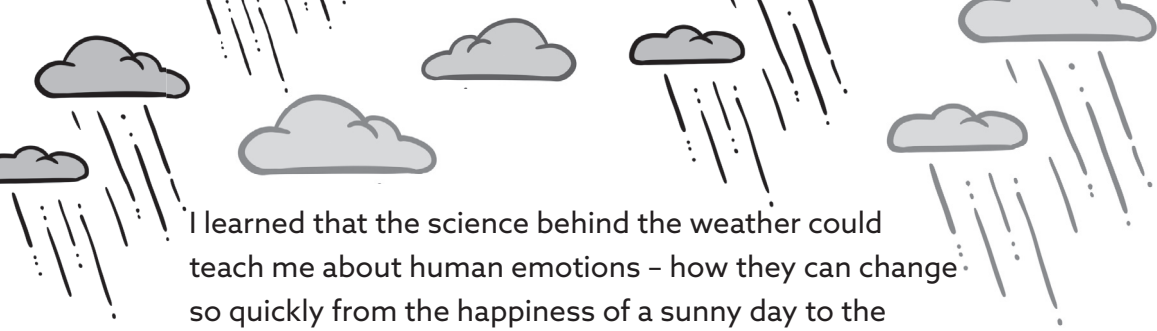


It was easier for me to understand the forces that control our world (like gravity, which makes things fall down, or magnetism, which draws them together), than it was to recognise the forces that sometimes exist between people (like friendship and peer pressure).



And it was easier for me to understand how metals react with the liquids and gases around them, than how humans make friends with some people but not with others.

Gradually, I learned to use the stuff I could understand – the **TANGIBLE, LOGICAL** and **BEAUTIFUL** patterns of science – to help translate everything around me that I *couldn't* understand: the **STRANGE, MESSY** and **CONFUSING** world of humans.



I learned that the science behind the weather could teach me about human emotions – how they can change so quickly from the happiness of a sunny day to the meltdown or temper tantrum of a thunderstorm.

I learned from computers to have confidence in my need to question everything around me – and discovered that doing this can lead to better, more complete answers.

And I learned, from the way our entire body grows out of one single stem cell, that if you want to achieve anything important, then you *really* have to work at it – to keep going and going, just like the body does.

Over time, the science that I discovered became my personal guidebook to life.

And now I'm sharing it with you.

In the chapters that follow, we're going to look at some of the hardest and most important parts of life – from managing emotions to handling disagreements, from pursuing your passions to understanding your relationships with other people.

And we're going to use a different bit of science to explain and explore each of them.

Now, I realise that people can feel *strongly* about science. Maybe, like me, it's your favourite subject at school. Or perhaps it's the one you really **DON'T** look forward to.

Whether you fall into one of these groups, or somewhere in between, I hope you'll follow me on this journey. And I hope I can give you a different way of thinking about science.

Because science doesn't live in the classroom or sleep in the lab. It's all around us, in everything we see, say, think and touch. It's the fabric of our world: a beautiful, fascinating subject that everyone deserves the chance to understand, appreciate and enjoy.

It's incredibly important too: the only way to explain baffling things that otherwise don't make sense.

Science was my guidebook to life, and I want to show how it can give you a new way of looking at yours, too.

BECOMING YOURSELF



My love and need for science was one of the products of my ASD. Another was that I had to work **REALLY** hard to understand myself: the person I wanted to be and the life I wanted to have.

When people are giving you strange looks and calling you nasty names – which unfortunately happened a lot to me – it's easy to lose confidence in yourself. You question the way you behave and the things you enjoy.

Overcoming that doubt has been one of the biggest achievements of my life. It's allowed me to become the person I am, and to be proud of the things that make me different, things which have given me a unique view of the world and helped me to fulfil my dream of a life working in science.

I think it's the same for all of us. It's really **HARD** learning to be yourself: to do the things that interest you, find the friends you really chime with and have the confidence not to change your mind just because other people are trying to make you. But it's also one of the most rewarding things you will ever do.

And it's something that you have to do for yourself; no one else can do it for you. Because we are all different. We all see and experience the world in a slightly different way (and some of us in a *very* different way). We all have our own strange little behaviours, likes and dislikes, and things that make us afraid. We are **ALL** weird, in our own wonderful and unique way.

The hard part of growing up is working this out: learning who you are as a person, having confidence

in your own instincts and understanding what actually makes you happy (as opposed to what other people like or what happens to be popular that week).

It's about having the courage to be yourself and to feel safe standing out from the crowd, as well as finding ways to blend in.

That's what this book is about. I've written it to help you **BELIEVE** in yourself, cope with things that make you afraid, stand up to peer pressure, pursue your passions and find true friends.

It's about all the things you **CAN** do to discover and become your awesome self. The person that only **YOU** can be. And the only person you should ever **WANT** to be.

Growing up isn't easy. But science, which has an explanation for most things, can be our guide. If you've ever wondered why metal can dissolve in water, how we grow our toenails or where polar bears go on their summer holidays, then read on.

We'll learn some things about the world. Even more importantly, we'll learn about **OURSELVES**.

How does that sound?
Ready to get started?