Numerical analysts are tasked with solving these too, and scientists and engineers use our methods all the time.

Newton, Euler, and Gauss were outstanding numerical analysts back in an era when it was self-evident that part of the business of mathematicians was to calculate things. But the landscape has changed since then, with other branches of mathematics appearing and flourishing to a degree unimaginable in those days. Nowadays, most leading mathematicians have little interest in calculation, which they avoid by habit and may disdain as unimportant in principle. They work on other things, and no paper by a researcher like me would appear in a top journal like *Annals of Mathematics*. Meanwhile numerical analysis thrives separately, and of course, we have plenty of journals of our own. Demographically we are big, accounting for perhaps 5% of academic mathematicians, and in impact on science and technology we are enormous.

My personal good fortune has been remarkable. I hold what is arguably the most visible chair in my field in the world, the Professorship of Numerical Analysis at the University of Oxford. This big mathematics department lists 100 professors on the web site and is generally rated in the top group along with Harvard, MIT, Stanford, Berkeley, Cambridge, and Princeton. None of those other universities has a chair in Numerical Analysis, but Oxford does, and since 1997, the Professor of Numerical Analysis has been me. Our Numerical Analysis Group has been a leader in the subject in Britain since its founding in the 1960s and is well known around the world. I personally am well known, too, author of widely read textbooks and technical papers, Fellow of the Royal Society, former President of the Society for Industrial and Applied Mathematics (SIAM), winner of big prizes and honorary degrees. I am a fellow of Balliol College, founded in the days of Kublai Khan.

Obviously this is a success story, and indeed, it could hardly be better. It doesn't sound like the profile of one who feels disconnected from his discipline. So what is going on?

2. Mathematics in Childhood and High School

The love of the subject begins when you're a kid. I grew up in Lexington, Massachusetts, and like most future mathematicians, I found it easy to get the right answers in school—to do "sums", as we say in England, though as an American I still find that expression foreign. I remember exercise sheets with empty boxes in them, like $5 + \square = 12$, and you had to figure out the missing number. That was easy, and it was funny that some of my classmates had trouble with it. Most mathematicians have memories like these.

Traveling around the world with my parents and sister at age 9 for my father's sabbatical year 1964-5, I missed fourth grade at Shady Hill School, but after 28 days crossing the Pacific on a freighter with just 11 passengers, I enrolled at Seaforth Primary School in Sydney, Australia, where again the math came easy. To keep us at the level of our friends back home, it was arranged that my mother would teach me and Gwyned extra English and my father would teach us extra math. This wasn't hard for him, since he was a professor of mechanical engineering at Tufts University, and in fact, during these months in Sydney, he led a team that for the first time in the Southern Hemisphere drained a "bathtub" under carefully enough controlled conditions to observe the Coriolis effect. In my recollection, mathematics lessons with my father amounted to leisurely afternoons at his side in the lounge of the passenger ship *Ellinis* we took from Brisbane to Athens in May 1965. (We passed through the Suez Canal, two years before it was closed in the 1967 war.) The subject of our study was negative numbers, which were explained with the help of bugs on a number line. For example, suppose a bug is at position −5, facing to the left, and it hops backwards three units. Where does it end up? At −2, of course. This explains why $-5 - (-3) = -2$, and I found this kind of thing easy and fun. After returning to Shady Hill at age 10, I had the odd sense that simply knowing how to add, subtract, multiply, and divide negative numbers put me about three years ahead of the rest of the class.