Anita Mehta was elected as India's second woman Rhodes Scholar in 1978 and after taking a master's degree she stayed on in Oxford to complete her doctorate. A physicist, Anita is a professor at the S.N. Bose National Centre where she specializes in complexity in natural and intelligent systems. She lives in Calcutta with her daughter, Tanya.

Of Diaries and Dreams in Red and Black

Dr. Anita Mehta

My memories of childhood involve two diaries — I wrote poetry in the red diary and outlined inventions in the black diary. Each diary, to my six-year-old mind, involved entries where both precision and imagination were essential — I saw no difference between the musings of science and art. My "inventions" were often poetical in their whimsy — automatic bookreaders, for example, were machines that when attached to any book, would read its conversations aloud in different voices. My "poetry" was almost always based on the natural world around me — the smell of wet earth during the monsoons, the swivelling dust-storms of a *kalbaisakhi*.

As I grew older, I became aware that choices would have to be made; how was I to choose between my love of writing and music, on the one hand, which allowed me to dream, and mathematics on the other, whose beautiful logic once learnt, didn't need to be memorized to produce the miracle of the perfect answer every time? When I chose the science stream at school, it was with a childlike belief in infinite time: science needed to be learnt in order to be practiced, while writing and music could always be pleasures indulged in "on the side."

This state of creative indecision continued, at least in my subconscious, while I was an undergraduate at Calcutta's elite Presidency College; consciously, I was aware only of the process of falling deeply in love with the ground realities of my native city, now that I was free to explore it. I rejoiced in the alleyways of North Calcutta, whose shabbiness I romanticized as being symbolic of a rich decadence; I rejoiced also in the diversity of my friendships across social classes, which Presidency's meritocratic environment made possible. I recall long walks with my friends, under skies of the deepest blue in Calcutta's magical and all-too-brief season of *sharat* (autumn): from the labyrinthine lanes of Baghbazar in the north which would suddenly and mysteriously open to a beckoning Hooghly, to the airy spaciousness of Jodhpur Park in the south, which was like Delhi in its green expanses, unperturbed by concrete. This city was ours, we thought confidently; we had, after all, walked on and appropriated every inch of it.

It was this Calcutta that I was deeply nostalgic for when I was suddenly transplanted to Oxford in my early twenties, on a Rhodes Scholarship — confronted with a deep homesickness (which wasn't helped by the cold and bleak winter of 1978). I sought refuge in mental images of India, of landscapes where the green of Bengal was as much to be expected as the red-and-gold of sandy Rajasthan, where the cadences of different languages were a necessary musical accompaniment to any conversation, where laughter and optimism were, it seemed to me, unrestrained by grey skies and dark interiors.

It wasn't until the following summer that Oxford revealed itself as the Elysium that friends had promised — I began slowly to fall in love with its cobbled passages, the unexpected vistas that hurtled into one's line of sight as a seemingly innocuous corner was turned, the light gold of its buildings as they deepened into bronze under early evening skies. In the nomadic years that followed – full of degrees and theses, conferences and papers — when I studied and worked in the West, I continued to add new and disparate loves to the repertoire of my homesickness, without ever really losing my homesickness for India. It was to India that I turned in 1995, when, as the divorced mother of a disabled daughter born in a Birmingham hospital, I desperately needed the refuge that only home could provide, and sought the welcome that would, I hoped, heal some terrible scars.

My early years in scientific research also hadn't been easy; I had tried, against the odds as a young scientist, to create the field of granular physics. I was frequently referred to as "that sandpile woman," where the emphasis was as often on the word "woman" as on the words "sandpile," and it was sometimes hard to tell which was the more derisive. The creative challenge of leaving footprints in the sand, so to speak, as well as the encouragement of scientific luminaries such as the late Nobel Prize winner Pierre-Gilles de Gennes, and my own no less eminent supervisor in Cambridge, Sir Sam Edwards, helped me persevere; I was soon recognized as a pioneer in what is now a well-established field. At the time of my return to India, I was at a career peak; and although neither the position nor the salary I had been offered by a research institute in Calcutta were in any way commensurate with my resumé, I had no choice but to accept it, rather than more tempting offers elsewhere where my daughter would be less well looked after while I worked to support her — I needed, in every sense, to come home.

Despite my attachments in, and to, other parts of the world, I remember the delight I felt as, after many years, I walked the streets of Calcutta not as a non-resident Indian, but as

someone who belonged there again; professionally, I looked forward to being part of what I fondly hoped would be "my" scientific community. This enthusiasm was of course tempered with time; there were many hurdles, several misunderstandings and some deliberate obstacles put in my way by people who thought that my "foreign-returned" status would threaten their way of being. I tried to assuage such fears as best as I could, typically by not responding to provocation and by reassuring people that I was an Indian, first and foremost, who was home to stay.

Years passed, and administrations changed — a newly appointed supremo at my institution promised to take it "into the twenty-first century," which he did in ways that can only be described as post-modern. While agreeing with the need to modernize facilities and attitudes, I was less than happy with a certain consumerism in institutional, and laissez-faire in personal, mores that seemed to be creeping in under cover of this apparent modernization. Soon (and, in hindsight, predictably), I found myself at the receiving end of certain extremely unwelcome and invasive personal advances, which would have been inconceivable in the institution as it was when I had joined it.

My lack of acquiescence in these advances was to cost me dearly — the three years that followed were the years of the Measures. First came the one that my scientific colleagues all over the world found hardest to understand — the award of an academic black mark (in a confidential report written by a far less productive junior); next came the harassment regarding leave and reimbursement for a medical emergency. The last of the Measures tipped the balance with its sheer illegality - my salary was cut, and I was given a summary break in service (which would affect my accrued employment benefits drastically), because of my participation at a UNESCO conference to which I had (and — incidentally — my harasser had not) been invited with full funding. Even those of my friends who'd so far cautioned me to be quiet, to tolerate injustices a l'Indienne in the hope that they would die down, said it was now time to react publicly; a close friend in the upper echelons of the police said, memorably, "Light and speaking out make bullies retreat — they thrive under the dual covers of silence and darkness." In 2004, I filed a complaint to the highest echelons of the scientific bureaucracy, detailing the harassment to which I'd been submitted; my complaints were met with an entirely predictable silence that would have lasted forever, had the West Bengal State Women's Commission not intervened formally, asking for the formation of a gender harassment committee approved by the Supreme Court to investigate my grievances.

The language needed to file my complaint in this forum was troublesome, needing the use of words such as "sexual harassment." Of course mine was a classic case of sexual harassment, as a relevant NGO had pointed out; because of my refusal to accept unwelcome advances, I'd been subjected to measures that were as illegal as they were otherwise inexplicable. But the use of this word, especially in the conservative Indian context, was problematic; I usually had to explain to people that my complaints didn't contain sordid details of sexual advances, but were in fact thick files of correspondence, full of my written complaints against the Measures and related responses. In another country, or in another time, I'd only have needed to say: sexual harassment isn't about sex, it's about power.

Ten years after coming back to India, I dreamt in red and black; my red dreams brought me an invisible and loving mother, her breath and proximity a tangible caress as I strove desperately for her unconditional love. My black nightmares brought me a jealous other, who penalized my every success, rejecting me in direct proportion to appreciation found elsewhere, whose scornful rebukes slammed doors on my expectant, returning face. Those around me told me that there was a word which could explain this Janus face, a word that I refused to hear or believe even when it was whispered everywhere by the wind; the word was "stepmother."

Fast forward — after a struggle that took over five years of my life, years which were among its loneliest, as well as its most authentic, in the sense that I recognized who my real friends were — to an ending that I still find a bit incredible. A ministerial committee was hastily formed in the face of what was allegedly a violation of the relevant Supreme Court ruling at the institutional level; and the perpetrator of my harassment stepped down within days of its verdict being delivered. All deaths are, however (and reassuringly so at least for the corpses concerned), only temporary in Indian philosophy; and in this case too, after a decent year or two of oblivion, there was a transmigration of souls, which resulted in his reincarnation to another, and equally illustrious, position in the Indian scientific establishment.

To this day, most of my grievances have yet to be redressed, and I was only very recently appointed to a Professorship after many denials, nine long years after I had been recommended for one by internationally renowned physicists, including Nobel Laureates. These actions were only to be expected; the great and the good in Indian science have never forgiven me for what was really only a moral victory against one of their own, and even less for having been awarded international honors such as a Radcliffe Fellowship to Harvard, or a Fellowship of the American Physical Society, in the years that followed. No matter. My year of bliss at Radcliffe has allowed

me to do new science, to publish a monograph and to write a darkly comic novel on the workings of the scientific world. It has put me back in touch with the person I really am; and it has also shown me what I can never put up with again.