BOOK REVIEW

"Surely You're Joking, Mr Feynman!" - Adventures of a Curious Character

By Richard P Feynman Vintage Books, London (1992): 350 pages

A Review by Neeraja Raghavan



Wouldn't you expect a budding scientist to do more than fry potatoes in his lab? Here is a book that promises to give you many more such surprises. I have read this book at least three times and enjoyed it as much, if not more, at each reading.

For one thing, it shakes the stereotypical image of an absent minded (and boring) scientist, pottering about his dingy laboratory, full of strange mutterings. Indeed, it makes one wonder if there are many who could be more sparkling and irresistible in their overflowing wit, intelligence and verve for living!

Feynman's former student Albert R Hibbs captures the essence of the book in his pithy introduction: "...he talked to us about physics, his diagrams and equations helping us to share his understanding. It was no secret joke that brought the smile and sparkle in his eye, it was physics. The joy of physics! The joy was contagious. We are fortunate who caught that infection. Now here is your opportunity to be exposed to the joy of life in the style of Feynman."

Yes, the joy of life, too, is as contagious when one reads this book. I have risen from my desk bubbling with energy, each time I have sat down to read this book.

As a boy, the most remarkable facet of this future Nobel Laureate is his interest in many things around him and his incessant energy to investigate most of them. For instance, he loved falling off to sleep listening to the radio, and that spurred him to start building his own. One day, he discovered (to his amazement) that he could tune into a radio channel that was being broadcast from Schenectady an hour before it was broadcast in New York (where he lived). So this

mischievous lad pretended to his friends that he had some predictive powers, as they lolled about listening

to a radio play and he 'uncannily' guessed the next scene! Well, one thing led to another (and this happens all the time in this delightful book) and Feynman became the neighbourhood radio handyman even though he was still just a boy. People constantly called him

"When I was about eleven or twelve I set up a lab in my house. It consisted of an old wooden packing box that I put shelves in. I had a heater, and I'd put in fat and cook French-fried potatoes all the time."

- Richard Feynman

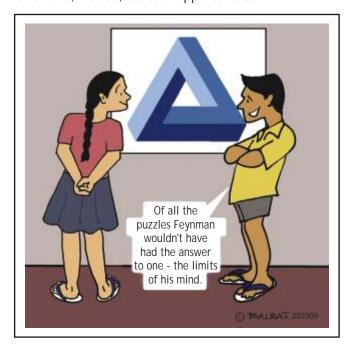
up to fix their radios and were amazed at how he did it 'by thinking'.

In his own words: "Once I get on a puzzle, I can't get off." Feynman calls it his 'puzzle drive'. He couldn't resist cracking any sort of puzzle: be it Mayan hieroglyphics, or trying to open safes or solving a geometry puzzle (which a senior boy brought him from the advanced Math class)!

"During high school every puzzle that was known to man must have come to me. Every damn, crazy conundrum that people had invented, I knew."

If you can hear a mind tick, while reading a book, then this is that book. Whirring away like the wings of a helicopter, his mind buzzes from one problem to another, descends gracefully on one that appeals to him, hovers around it until it is solved, and then takes off to the next one: however unrelated it may be.

To come into such close contact with genius such as this: rare, indeed, are such opportunities!



When faced with a time-bound problem that could not possibly be conventionally solved in the limited time allotted, Feynman would ask himself: "Is there a way to see it?" I was particularly struck by this question. The leap that it makes out of the typical 'thinking in a box' framework stems both from the self-confidence as well as the utter enjoyment that this boy experienced in cracking puzzles. Most ordinary folk would simply be so crippled by the impossibility of solving it in a straightforward manner in so short a time, that they would hardly be in a position to think of anything else.

Is this, then, the line between a genius's mind and an ordinary one, one wonders?

Cutting string beans, chopping potatoes, answering the telephone as a desk clerk: Feynman attempted innovating at each of these odd jobs to make them more efficient. Brilliant as his ideas were, he admits: "I learned here that innovation is a very difficult thing in the real world." Obviously, though, he didn't stop trying! When Feynman was a boy, his father and he would watch the birds together. The manner in which he

was gently led to observe keenly - rather than merely

'See that bird?' my Dad would say. 'It's a Spencer's warbler. (I knew he didn't know the real name.) 'Well, in Italian, it's a Chutto Lapittida. In Portuguese, it's a Bom da Peida. In Chinese it's a Chung-long-tah, and in Japanese it's a Katano Takeda. You can know the name of the bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird. You'll only know about humans in different places, and what they call the bird. So let's look at the birds and see what it's doing - that's what counts!

- Richard Feynman, about how his father and he would watch birds together.

name the bird and dash off - is extremely revealing. [The relevant portion has been captured above in the box.]

About the most beautiful extract in the book is his description of an experiment that he conducted with ants, while in his dormitory at Princeton University. Not only does it make for fascinating reading, it delineates (perhaps like no other story in the book does) how scientific method, when applied to a simple everyday problem can help solve it!

It may well be said that you are

- most fortunate if you have attended Feynman's Lectures in Physics,
- somewhat less fortunate if you have read Feynman's Lectures in Physics,
- rather unfortunate if you have only read his memoirs and
- singularly unfortunate if you haven't even read his memoirs!

So why wait? Just grab a copy and start!

Neeraja Raghavan is Consultant, Academics and Pedagogy, Azim Premji Foundation, Bangalore. She can be contacted at neeraja@azimpremjifoundation.org