A certain chemistry

Neurologist Oliver Sacks recounts a childhood love affair.

Uncle Tungsten: Memories of a Chemical Boyhood
by Oliver Sacks
Picador/Knopf: 2001. 340 pp. £17.99/$25

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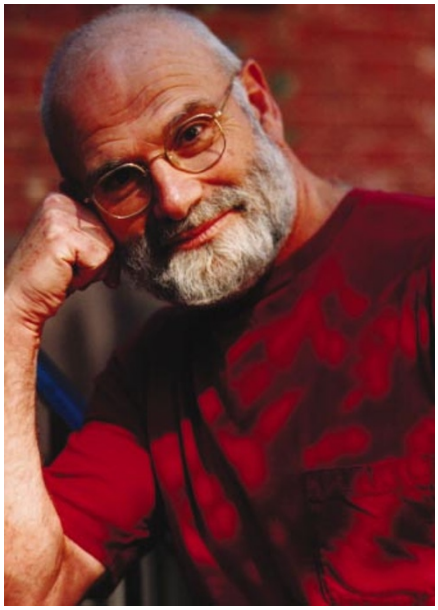
How odd. Why should Oliver Sacks, a world-renowned neurologist, and author of many influential and popular books, such as *The Man Who Mistook His Wife for a Hat*, write a book about chemistry? The reason is that he fell in love with the subject as a boy, and by embracing it he could find refuge from the storms of life that raged around him.

My first reaction to *Uncle Tungsten* was to see parallels with Primo Levi's *The Periodic Table*, in which Levi recounted life in Auschwitz, and where his love of chemistry also sheltered him — and ensured his survival, for his chemical training was useful to the Nazi war effort. Both books cover the same period of history, although they tell of very different lives. And through them both runs a passion for a science that has now become unpopular. When Sacks was young, chemistry delivered a cornucopia of benefits that changed our homes, our health, our food supply, our leisure, and even the way we looked and smelt. No wonder that he, like many of his contemporaries, was eager to explore the world of the test tube.

Sacks was born in London in 1933, and this book is an autobiography of his schoolboy years. His Jewish parents, who were busy doctors, encouraged his hobby of chemistry, but it was his Uncle Dave who demonstrated its practical use at first hand. He ran Tungstalite, a firm that made the tungsten filaments for electric light bulbs, and he is the uncle of *Uncle Tungsten*. Sacks's parents provided space for their son to equip a home laboratory and, although he was only a boy, they let him sally forth to local suppliers of chemicals and purchase anything that he needed for his experiments. Today it seems unimaginable that highly flammable solvents, corrosive acids, toxic salts and potentially explosive materials could be bought so easily.



Sacks's schoolboy infatuation with chemistry shielded him during turbulent times.

However, *Uncle Tungsten* is not about the simple experiments Sacks was able to carry out, but is a scholarly work about chemistry itself. He delves into the history of the subject, the personalities of the early chemists, such as Lavoisier, Dalton and Davy, the nineteenth-century developments that led to the periodic table of Mendeleev, and thence on to radioactivity, the nature of the atom and the development of modern theories. The chapter on Mendeleev is a particular delight, confirming that Sacks has not only read about the great Russian chemist's achievements but has researched those of Mendeleev's contemporaries who came near to discovering the periodic table as well.

Running through the book we have the equally fascinating story of a young Jewish boy who was evacuated from London to escape the Blitz. Indeed, Sacks's life might well have ended early when a large bomb fell in the garden next door; luckily, it failed to explode. Sacks and his older brother Michael were packed off to the apparent safety of boarding-school in the Midlands. But what protected them from the dangers of war exposed them to an emotional blitz of bullying. Indeed, so searing was the experience that Michael became mentally ill.

Sacks returned to London in 1943. But that city's tribulations were far from over. During the next 18 months it experienced the baby-blitz, the flying bombs and the V2 rockets. However, Sacks barely mentions them, and this gives us some idea of the intensity of his love affair with chemistry. The hardships and deprivations of life, and the goings-on of his eccentric family, could be ignored, as long as young Sacks could retreat into his chemical world in Cricklewood.

One of the hardest tribulations he faced as a boy is described in the chapter "Ma". There, he tells how his mother tried to encourage him to take up a medical career by having him carry out an autopsy. The young 14-year-old Sacks was given the body of a 14-year-old girl to dissect! How welcome, then, must have been the emotional safety of his preferred science. But within a year or two, his love affair with chemistry was ending. Yet, clearly, it was never completely over. For another 50 years Sacks continued to carry a candle for his old flame, and now we can enjoy a tale that fuses autobiography and chemistry, to cast a spell that kept me turning the pages of one of the most enjoyable books I have read for many years. ■

The young Sacks, seen here as a baby with his family, was encouraged in his hobby by his parents, but it was his Uncle Dave (inset) who demonstrated its practical use.

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