

## Tales of the Unexpected: Roald Dahl's Neurological Contributions

Roald Dahl (1916-1990) is best known as an author of children's books, although his oeuvre also extends to other works, including screenplays, ghost tales and novels. It may therefore seem surprising at first sight that he might have made any contributions to neurology. However, in the second volume of his autobiography, *Going solo* (1986), he declares "All my life I have taken an intense and inquisitive interest in every form of medicine", perhaps in part because of the head injury he suffered as a pilot in World War 2. Recovering in Alexandria, he was blind for some time, and reports "Both my senses of smell and of hearing had become very acute since my blindness, and I had developed an instinctive habit of translating sounds and scents into a coloured mental picture".<sup>1</sup> This account suggests the phenomenon of hyperpilaphesie, but not of true ("strong") synaesthesia.

Dahl's book *George's marvellous medicine* (1981) contains the epigraph (in the hardback edition, but not in subsequent paperback editions) "This book is for doctors everywhere". This bold statement is not further elaborated upon, but certainly the book may be read as a salutary lesson about the grave consequences of unregulated experimentation in clinical pharmacology. The author advises readers not to try the recipes reported in the book.

It has been suggested elsewhere (reference 2, case 3) that in his first volume of autobiography, *Boy: tales of childhood* (1984), Dahl portrays a schoolmaster, "Captain Hardcastle", who may have suffered from Tourette syndrome since he seems to manifest both vocal and motor tics. This teacher was almost certainly the inspiration for "Captain Lancaster", also a teacher, who appears in the book *Danny the champion of the world* (1975): "I could hear him snorting and snuffling through his nose like a dog outside a rabbit hole." In the film version, Captain Lancaster (as portrayed by Ronald Pickup) has a larger role than in the book but neither snorting nor snuffling are in evidence. Why Dahl should have recalled this particular teacher is not certain, but of possible note is the fact that Dahl himself had some characteristics which might be suggestive of the obsessive-compulsive spectrum, for example when writing in his famous shed he had to have a particular type of paper (yellow American Legal), and both a particular brand and a specific number (6) of pencils.<sup>3</sup>

These descriptions may hardly be termed "contributions", but two personal tragedies certainly did lead to developments of clinical import. Whilst living in New York in 1960, Dahl's son Theo, aged 3-4 months, was involved in a road traffic accident which caused some brain damage and secondary hydrocephalus, the latter requiring shunting. Problems with blocked shunts occurred. The family returned to England and Theo came under the care of Kenneth Till, a neurosurgeon at Great Ormond Street Hospital (1956-80). Prompted by Dahl, and in collaboration with Stanley Wade, an hydraulic engineer, a new type of shunt valve was designed. Reported in the *Lancet* by Kenneth Till, under the rubric of "New Inventions", the special characteristics were reported to be "low resistance, ease of sterilisation, no reflux, robust construction, and negligible risk of blockage". The author acknowledged that the valve was

"designed by Mr Stanley C. Wade ... with the assistance of Mr Roald Dahl and myself".<sup>4</sup> The Wade-Dahl-Till (or WDT) valve became widely used.

Kenneth Till subsequently wrote a preface for a new edition of Valerie Eaton Griffith's book entitled *A stroke in the family*, a manual of home therapy ([www.stroke-scheme.ie/articles/reviews/family.htm](http://www.stroke-scheme.ie/articles/reviews/family.htm)), wherein lies another Dahl connection. In 1965, Dahl's first wife, the American actress Patricia Neal, suffered a stroke due to a ruptured intracranial aneurysm, one of the consequences of which was marked aphasia, a potential career-ending misfortune for an actress (her illness and recovery are recorded in a book by Barry Farrell<sup>5</sup>). Dahl appealed to Valerie Eaton Griffith, who lived in the same village, for help. With Dahl, she devised a rota of volunteer carers to engage the patient in conversation and hence to stimulate language recovery. This approach, different from formal

speech therapy, was documented in Griffith's book (initially published in 1970, with an introduction by Roald Dahl<sup>6</sup>). It earned the approbation, as "treatment of a surreptitious character", of no less a neurological figure than Macdonald Critchley,<sup>7</sup> and still has advocates today.<sup>8</sup> It has been suggested that Patricia Neal's aphasia may have influenced Dahl's creative processes, for example in the neologisms of *The BFG* (1982).<sup>9</sup>

The Roald Dahl Foundation ([www.roalddahlfoundation.org](http://www.roalddahlfoundation.org)) continues to provide charitable grants for neurological conditions affecting young people including epilepsy; acquired brain injury due to benign brain tumour, encephalitis, head injury, hydrocephalus, meningitis, and stroke; and neurodegenerative conditions causing progressive intellectual or neurological deterioration.

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