

CENTREFOLD

Alexander Craig Aitken



Alexander Craig Aitken was born on 1 April 1895 in a rented house in Short Street, Dunedin. William, his father, had been born at Maungatua, a small settlement on the Taieri Plain about twenty miles from Dunedin. William's parents were rural Scots, strong, intelligent people and immensely hardworking. They settled on a small farm at Sandymount on the Otago Peninsula, an area which possessed even into recent years an enchanting separateness in which flora, fauna and human individuality could flourish beyond common expectation. William left the farm to take up a position as a grocer's assistant in Dunedin. There he met and later married Elizabeth Towers, the daughter of his landlady. Elizabeth had arrived in New Zealand at the age of 7; little is known about her. The Aitkens' circumstances were straitened even by the standards of the time.

It was nevertheless a loving and harmonious family, infused with a deep but tolerant religious sensibility that derived from William's commitment to Methodism. The qualities for which Aitken later gained a not entirely welcome tabloid fame, his memory and calculating ability, were present from his earliest years. His father possessed similar qualities and the two of them would do the shop's accounts together, one adding up the column, the other down as a check, both working mentally. It was in his later years at Otago Boys' High School that Alec, in his own phrase, "took off" under the influence of W J Martyn, the mathematics master. He began to cultivate mental computation almost as a kind of meditation: his descriptions of it and certain other experiences are frequently expressed in mystical terms. He learned the *Aeneid* by heart, evidence of his passion for literature no less than of his breathtaking memory. The turbulence of adolescent self-discovery, the beginning of a vast and complex inner life, was accentuated by his mother's death in 1910, an event that devastated him. It is notable that Aitken, whose memory was so retentive that he was tormented throughout his life by images he could not discard, should have claimed to have no particular memory of his

mother.

During school holidays Aitken stayed with his grandparents on the Peninsula. He could wander as he wished and the Peninsula became a theatre in which he acquired and played out a transcendent love of the natural world. In his relationship with nature Aitken was a true romantic. At the same time he developed, perhaps according to some classical idea, other elements of his personality of permanent significance. He trained in athletics (he won both the high jump and pole vault at the Otago Championships in 1923) and in his last year at school began to teach himself to play the violin. He was described by Eric Fenby, Delius's amanuensis, as the most accomplished amateur musician he had known.

Aitken entered the University of Otago in 1913, enrolled for Mathematics, French and Latin. He was interested in languages no less than mathematics, and the influence of D J Richards, the Professor of Mathematics who achieved the unlikely pedagogical feat of convincing Aitken that he would never understand integral calculus, tended to push him towards languages. Aitken's studies were interrupted by the outbreak of war. His experiences at Gallipoli and in northern France, where he was wounded in one of the futile engagements that made up the Battle of the Somme, are recounted in his memoir *Gallipoli to the Somme*.

For the rest of his life, at five yearly intervals on "Somme anniversaries", Aitken fell into periods of insomnia and depression. Aitken was invalided home in 1917 and resumed his studies the following year. He was elected President of the Students' Association in 1919, becoming one of its most effective presidents. The same year he published a brief, anonymous version of his war diary. Aitken's final results were disappointing, a consequence of an examination system not yet freed from colonial subservience: first class honours in languages but only a second in mathematics. He determined to have no more to do with mathematics and took himself for a time to a secluded bay in Stewart Island, "Robinson Crusoe'ing it" he said.

In 1920 Aitken married Winnifred Betts, a brilliant student of Botany who became the first female lecturer appointed to the University of Otago. Aitken took a job teaching at Otago Boys' High School. He also tutored at the University and was encouraged by R J T Bell, Richards' successor, to consider study overseas. He was awarded a scholarship to study at Edinburgh under E T Whittaker, which he took up in 1923. His thesis, on the graduation of observational data, was considered to be of such unusual merit that he was awarded a DSc rather than the customary PhD. He was appointed to the staff at Edinburgh in 1925 as Lecturer in Actuarial Mathematics, was elected FRS in 1936, and when Whittaker retired in 1948, was invited to take up the Chair of Pure Mathematics; 'my real line' as he put it. In the late 1950s Aitken wrote: "Just as the first part of my academic career, up to my arrival in Edinburgh, was quite chaotic and unorthodox, so the second half has been conventional, and could easily be reconstructed by anyone with the indications in *Who's Who*". Aitken was never dull but in a sense he was right: at Edinburgh he grew into his reputation.

Aitken died in 1967 after a protracted illness. His achievements in mathematics and statistics and the honours they brought him are described in a long and affectionate obituary in the Edinburgh Mathematical Society Proceedings. Undoubtedly he possessed grandeur-full, sweeping mental power and elegant refinement, but he is remembered no less for his natural grace, his simplicity and humility that place him at the heart of the human condition.

Peter Fenton