Chapter 1

Early life; family background and influences

John Walter Gregory, always known as Jack in the family, was born into a ‘middle class’ family at 18 Gainsborough Road, Mile End (now demolished), in the east of London, on 27 January 1864. He was the middle child between Anne Jane (1862–1944), born 4 July 1862, and a younger sister Eleanor (1865–1956), born 6 December 1865. His father, John James Gregory (1828–1876) was a wool salesman who came from Burton in the Wirral, and his mother, Jane Gregory (1822–1894), née Lewis, was born in Raglan, Monmouthshire on 28 September 1822.

Gregory was an intellectual, a polymath and workaholic geologist. His diverse interests and skills all stemmed from his love of geology and included exploration; he had an insatiable appetite for travel. He was also a geographer, geomorphologist, zoologist, archaeologist, anthropologist, political commentator, educationalist and teacher, as well as a journalist. In his early professional life in London, he was a palaeonotologist with the Natural History Museum. During an expedition to East Africa he coined the phrase ‘African Rift Valley’. His work took him to Spitzbergen, the Caribbean and elsewhere, before he obtained the Chair of Geology at the University of Melbourne in 1900 at the age of 36. There he focused on mining geology, and simultaneously put the Geological Survey of Victoria back on its feet as its Director. Gregory even flirted with past climates, although he was a proponent of constant past global climate. In 1904, he returned to the UK to the Chair of Geology at Glasgow University, a role for which he is probably best remembered, in a move driven by his wife Audrey’s poor health. He saw parts of all the continents, except Antarctica, and remained in Glasgow until 1929, when he retired ‘early’ aged 65. His copious output of papers, books and monographs actually increased in pace in retirement, but his broad brush anti-drift global science theory aided the early British rejection of continental drift. Tragically he died in a canoeing accident during an expedition to Peru at the age of 68.

Most of what follows is derived from an unusually full and detailed account of the family life and history, and of Gregory’s early years, compiled by his sister, Anne (Nicholson 1932) in September 1932, after Gregory’s death. It has not been independently checked by the present author. According to this account, Gregory’s father was descended from a long line of distinguished Scotsmen traceable back to the great-great-grandfather of a David Gregory of Aberdeen, born in 1625. David was a merchant in Holland where he spent the greater part of his life. He returned to Scotland in his later years and married twice, his first wife bearing 15 children and his second 14. David lived to be 93 and had the singular fortune of seeing three of his sons become Professors of Medicine in the University of Aberdeen and a grandson was Regius Professor of Modern History at Oxford. John, the eldest son of David’s second family migrated to Cheshire, probably as a yeoman farmer, and settled on the Wirral, at Burton on the Dee, where many Gregories are buried.

John Walter Gregory’s paternal grandfather, William Gregory, a farmer, was the only son and died of consumption, aged 35. His son, John James Gregory, was also the only son, as were John Walter Gregory and his son Christopher John Gregory (1900–1977). John James Gregory was educated at Burton Grammar School and the Liverpool Academy. He wanted to be a civil engineer, but actually left school and went straight into the sample room of a well-known firm of wool merchants in Liverpool. At that time, prior to the advent of synthetic materials, wool and cotton were the basis of most clothing and large fortunes could be made or lost in the wool and cotton industries. He became renowned as an expert judge of wool and could unravel a piece of cloth and say where each strand came from. On occasions, he was engaged as an expert witness and acted as an arbitrator in disputes about wool. When he arrived at wool sales in England or France, the news would often be telegraphed to manufacturers and salesmen from far afield. He moved to London to manage the wool department of a firm of general merchants, whose principals were friends of the composer Felix Mendelssohn (1809–1847), and John James Gregory heard him play at parties in their homes.

Unfortunately John James’ success led him to entrust a substantial sum to the highly respectable bankers, Overend, Gurney and Co., which collapsed in 1866 (the last British bank to become insolvent before the 2008 debacle, causing general financial panic in London, and the demise of over 200 companies); John James lost his investment. Later, his continuing business acumen resulted in him being offered a partnership in the firm which he accepted, although his wife was not in favour of the proposal. She was ill with typhoid fever in December 1871, as was the Prince of Wales, and the family regarded the subsequent Thanksgiving Service, in St Paul’s Cathedral, as being as much for her recovery as for that of the Prince of Wales. The firm later got into severe financial difficulties on the general merchandise (not the wool) side, as it had not been well run; for example, a large cargo of tinned mutton from Australia had been purchased to victual the besieged Paris in the Prussian–Franco war of 1870–71; it arrived too late and could not be sold. All John James’ capital was lost, but one of the banks, which had a Director who knew John James, and respected his ability, lent him the capital, without any security, to take over the wool business. This was remarkable as John James was in very poor health and insurance companies refused to insure his life. Gregory & Prentis, with wool warehouses in Bermondsey, Sissingburne, Ashford, Rye and other places, was formed in 1874, and was trading profitably when, less than two years later, John James died in September 1876 at the age of only 48. His son was 12 years old.

John Walter Gregory’s mother, Jane, was a remarkable woman. Her father, James Lewis, was a yeoman farmer and landowner at Raglan, Monmouthshire, who had spoken only Welsh until he went to school. Her mother, Dorothy Lees, was of the Lees family of Brockton Hall in Staffordshire and a cousin of her father. The Lees had remained Roman Catholic, whereas James Lewis was an Anglican, a church warden and a player of the violoncello in the string quartets which led the hymns in the parish church on Sundays. Dorothy’s will power and common sense ensured the mixed marriage was a success with great tolerance on both sides. The two sons went to the parish church with their father. They were educated at Monmouth Grammar School, whereas the two girls had lessons from the Catholic priest at Llanarth until they went to the Castle School in Monmouth. When the Raglan land was sold, due to financial difficulties, the family moved to Brook Green, Hammersmith, opposite the mansion of the Marquis of Bute, which at that time was surrounded by an extensive deer park. Jane Lewis enrolled at the Home and Colonial College, a teacher training college that was open to women. There, she grew to know members of the Society of Friends (Quakers) and would have joined them but she met John James Gregory in London who was an Anglican. Since the
Quakers did not favour mixed marriages, she abandoned becoming a friend. But to her death she remained a most unusual amalgam of Roman Catholicism and Quakerism; the one accepting the authority of the Pope; the other of no one but one’s own conscience. Clearly, the religious tolerance shown by both parents had been deeply impressed on her and was a significant influence on the way her children were brought up.

John and Jane Gregory compromised by attending a Congregational Chapel, first at Shadwell, then a pleasant residential suburb beside the Thames, where the minister was Mr Bailey, who John James had known in Liverpool. They then went to the Stepney Meeting House, where the scholarly Dr John Kennedy used to preach long theological discourses. Hence John Walter Gregory and his sisters were brought up in an atmosphere of learned evangelicalism. They attended five services every Sunday and living in Bow walked over a mile each way to Stepney. Using the horse would have broken the Sabbath; on Sundays, the young groom Edward, only came to feed the horse. Sunday School or a prayer meeting started the routine followed by morning service which lasted at least an hour and a half, during which the children were allowed pencils and paper. They went home for a quick Sunday dinner followed by a return for morning service and then home for tea, after which they attended mission church nearer home that was not so ‘high-brow’ as the Stepney Chapel. This was followed by another prayer meeting, finally returning home for an evening meal after 9 pm. No wonder that Gregory became such a fine walker with religious exercises being literally an unavoidable part of each Sunday.

Bow in those days was a pleasant residential district with one of the early London boulevards. The houses stood in large gardens. About 2 km from Gainsborough Road is Victoria Park and it was on the lakes in this park that the Gregory children learnt to row and swim. Although the Stepney Meeting had no choir or any musical instrument (an organ would have been considered ‘ritualistic’) other than a tuning fork, choral society singing in local halls was common and John James Gregory sometimes sang baritone solos. He also painted flowers in a precise way – a skill his son must have been improved by this early training. Although he was generally a fairly quiet boy, sometimes absent-minded, for example putting his clothes on inside out or two socks on one foot, he larked about like any normal boy, and one day he and a friend accidentally broke a shop window. Gregory bravely walked into the shop, said he was sorry and asked what replacing the pane would cost. The woman shop-keeper said she would have called the police, but ‘as you have been so honest as to come and tell me, I will trust you to fetch the money.’ He was remembered by his sister Anne as being much ‘the same gentle, resolute, philosophical, laborious, ironical, concentrated person’ when young as he was later in life.

Jane Gregory strongly discouraged her children’s familiarity with anyone she considered inferior, fearing they would acquire bad habits. She carefully fostered courtesy in the home and some of the children’s friends laughed at the politeness of the Gregory children to each other, but this politeness became deepened into Gregory and was a characteristic of his adult behaviour, particularly apparent when he disagreed with someone’s interpretation. He also had the advantage of siblings close enough in age and the give and take of family life ensured that, although he was the only son, he was not spoilt (Fig. 1.1). He seems to have had an early interest in past events as when only a small child, playing with his elder sister with toy animals, she said about ‘The flood’, to be asked by Gregory, ‘Which one? There are not two of them. What does it mean?’ Gregory seemed not to have heard the story before and was much put out at the question, ‘You mean Noah’s’.

The Gregory children did not go to school until they were six years old, but by that time they could both read and write, speak a little French, tell the time and recognize ordinary trees, birds and flowers. Jane Gregory considered the Italians were leading the way in education through the teachings of Pestalozzi, as they did later with the methods of Madame Montessori, and she found a school for Gregory conducted on the Pestalozzian system. This preparatory school was too far away for daily travel so he became a weekly boarder at the early age of six, much to the regret of his parents and siblings. His fellow scholars included the children of General Booth of the Salvation Army. It is hard to assess the effect this must have had on Gregory, for boarding was much more common than now and weekly boarding less traumatic than term was. Nevertheless, this must have been a significant influence on his self-reliance and there is good evidence that the teaching methods used later influenced his own university teaching methods. The family rejoiced when he was old enough to go to the Stepney Grammar School, which was in Bow, and
having been derived from his mother's training and influence. A great deal of Gregory's subsequent success can be identified as being taught to think'. She candidly answered, 'Oh! I did not do the boys who come to me have learned to read, but Gregory has visited by this eminent head of a large boy's school. 'Most of her teaching methods were. It was a proud day for her to be visited the mistress of the Pestalozzian School to find out what answers, that he asked where Gregory had been taught, and then Ayrton Chaplin (1842–1930), was so impressed by his exam so he could live at home. He sat and passed the entrance exam- ination for Stepney Grammar School. The headmaster, the Rev. Ayton Chaplin (1842–1930), was so impressed by his exam answers, that he asked where Gregory had been taught, and then visited the mistress of the Pestalozzian School to find out what her teaching methods were. It was a proud day for her to be visited by this eminent head of a large boy's school. ‘Most of the boys who come to me have learned to read, but Gregory has been taught to think’. She candidly answered, ‘Oh! I did not do that, he had learned to think before he came to me’. Clearly, a great deal of Gregory's subsequent success can be identified as having been derived from his mother’s training and influence.

Gregory was not a timorous child and the stately headmaster did not overawe him. Many years later, when Gregory went to visit his old headmaster, then in Gloucestershire, Mrs Chaplin remembered him and said ‘Gregory? Oh yes, I remember him, a little boy who used to come after school armed with huge red volumes of the Encyclopaedia Britannica to refute you.’ This is particularly illuminating because it not only shows Gregory as an interested, inquisitive learner who went and consulted other information than that given in class, as the best students do, but it showed an important Gregory characteristic that he was himself later to emphasize, namely do not uncritically accept what an authority says, or most people accept, as necessarily true. Later in life, Gregory joined the Rationalist Society and even became a Vice President, as he veered away from his religious upbringing and gave pre-eminance to critical thought. Gregory enjoyed school. He played cricket, football and fives, swam and learned to shoot well, carried off prizes and became Head boy, but the school was not strong in teaching science. He was very good at badminton, played from home, not school.

However the Gregory children had an overshadowed childhood. Their father's health was a constant worry as he coughed his life away before there was any effective cure for TB. Every winter he was seriously ill, especially during the killer fogs that were so prevalent in London in those days. He left London when fog descended and went to stay in Brighton or Ventnor on the Isle of Wight. The children’s nurse, Ann Russell, was the rock of the household, nursing John James, running the place when Mrs Gregory was away attending to the social services her husband had undertaken but could not carry out, and looking after the children. It was Ann Russell who taught Gregory to sew on the instructions of Mrs Gregory who once said: ‘the girls will be sure to pick up needlework, besides they will probably always be where they can get things mended, but I do not know where my son will be.’ Gregory was always grateful for this training and Lord Conway records, after the first crossing of Spitzbergen, that the other men were envious of Gregory, because he could not only sew on straps and buttons but could use a thimble, a great con- sideration in the intense cold where a prick of the finger was agony. Ann Russell also taught the children a certain amount of cooking, when they could get possession of the kitchen from the cook, who was Mrs Gregory’s old childhood nurse. She always wore a crinoline, long after that fashion was past.

The Gregory children were used to travelling which must have made it easier for Gregory to embark on his initial foreign jour- neys, such as his work in the Cottian Alps. Again, this training came at his mother’s deliberate insistence. ‘England was engaged in a race and other nations are bound to catch up. The children had better learn as soon as possible what the rivals are like they will have to contend with some day’. Mrs Gregory took her children to ‘the continent’ while they were still young, their first visit to Paris was shortly after 1870, when they saw the ruins of the Tuileries and Saint Cloud. Later they went to Switzerland and after the Toynbee Travellers Club was formed, they went annually to Italy, Spain or wherever the Club was going under the instructive leadership of Professor Thomas Okey. This travel became possible as the expanding network of railways and cross-channel steamers that gradually replaced stage coaches and sailing ships was far more predictable, safe and affordable.

During the summers before 1877, the children would always spend three months in a (presumably) rented cottage at Warley, Essex, SE of Brentwood and about 23 km ENE of their London home, with Ann Russell in charge. Mrs Gregory, no doubt mindful of her own country upbringing, ‘could not have her young- sters growing up ignorant town children, they must go into the country to enlarge their vision’. They drove from London in an open chaise with huge kites of many kinds, which their father had taught them to make, tied on behind. Indeed they made most of their toys, including a doll’s house and its furniture, marionettes, and invented their own play; the cooperation of three siblings was an education in itself.

In the country they had unusual liberty, even for that time and certainly far beyond what any unneglected child today could contemplate. Their mother told them it was only stupid children who got into trouble and this encouraged a sensible self-reliance, or gumption. Ann Russell cannot have been nervous about them, and no doubt the absence of media hype about isolated incidents encouraged a more realistic assessment of risk than is common today. They would wander off by themselves in the morning and not reappear until the evening, having subsisted all day on blackberries or nuts, reinforced by apples and milk bought at a cottage. They knew every wood and field path for miles around Warley. They often struck up friendships with the officers at the local barracks, and examined the guns, with Gregory crawling inside some of them, as well as the many treasures brought home from India. They followed the soldiers’ route marches and field days with their pony, but curiously, Gregory never became a good rider; to him a horse was never a companion, only a transport robot.

However, he developed his love of walking in Essex. For instance, one summer (1875), the longing to see the sea, which
they had heard was at Maldon, Gregory (11\$\frac{1}{2}) and Eleanor (9\$\frac{1}{2}) set out to find it. They took the train from Brentwood to Chelmsford and walked to Maldon, 19 km away, only to find ‘that the sea was a river and had gone out for the day.’ They went to an inn by the most water they could find and ordered a meal of beef, pickles, bread and cheese and ginger beer, which cost them 9\$\frac{1}{2}d (4p) – the 4\$d being for the pickles. Disappointed at the sea, they walked back by Billericay, (c. 23 km) expecting to get a carrier’s cart from there to Brentwood. They reached Billericay at 10 pm only to learn the carrier’s cart only went once a week and not on that day. Eleanor then sat down and wept but, after recovering, they marched valiantly on, playing on a pocket comb, arriving back at midnight, to find the family for once anxious about them. They must have walked at least 55 km, an unimaginable childhood feat today. Similar persistence and lack of panic paid off years later, in Africa, when Gregory was lost in the dark at night from his camp, without food or water, and having already walked all day and half the night, he found where his bearers had pitched the camp while he explored.

In 1906, when replying to the award of the Bigsby Medal for 1905 from the Geological Society, Gregory (in Marr 1905) said ‘my attention was first directed to geology in order to understand the geography of the districts through which I rambled, and the, often, apparently erratic course of the rivers . . . and to understand local topography’. Later, he was even more specific ‘it was in the hope of finding some interpretation of the apparently anomalous behaviour of the Essex rivers that I first read a textbook of geology. That book gave no direct help, but it indicated that such problems are complex and require a detailed knowledge of the area concerned’ (Gregory 1922). The country rambles and freedom of an otherwise city child were evidently extremely influential. Very surprising and difficult to believe, Nicholson (1932) claimed that ‘when little more than a boy, he said ‘Geology is the fundamental science, it is the basis of all the others, and of climate, race and civilisation’.

Gregory had an unusually good upbringing largely, due to the wisdom of his mother; this must have been partly responsible for his subsequent success. Self-reliance, trust, high moral standards, politeness, and sharp observation, were instilled in him at home and critical thought and freedom to roam engendered at an early age, followed by an initial schooling which fostered, not rote learning, but personal inquiry and development. The emotional stability provided by his parents’ loving, informed, and thoughtful nurturing, gave him invaluable emotional confidence, while the example of his parents being able to hold differing viewpoints without falling out was later reflected in Gregory’s own marriage and his attitude to those who disagreed with his scientific interpretations. Making profitable use of all these advantages required the energy, wide range of interest, ambition, drive and hard work that only Gregory himself could, and did, supply; but it also needed fortunate opportunities to blossom.

References

