The twenty places in Hamilton's Ireland

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Anne van Weerden
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Adare. Edwin Wyndham-Quin, Lord Adare, was the 3rd Earl of Dunraven and godfather of William Edwin, Hamilton's eldest son. To be educated in astronomy, he lived at the Observatory from February 1830, when he was seventeen years of age, until November 1831. In the summer of 1831 Hamilton visited Adare's parents, the Dunravens, and they became friends. Hamilton had a very good time in Adare, and it was there that he fell in love with Ellen de Vere, his second love, who lived in Curragh Chase. When in December 1831 she rejected him Hamilton was devastated, and he wrote to his friend Lady Pamela Campbell that his love for Ellen de Vere had been as deep as that for Catherine Disney, his first love. To his sister Eliza he wrote how he had won something from the "wreck"; the friendship with Ellen's younger brother Aubrey, "a very uncommon person." Coming to terms with his feelings of loss of Catherine had taken him six years, and this time it took him until the summer 1832 to recover, but then he discovered how to handle his feelings in such situations. That discovery changed his life; he was never again so melancholic for such a long time.

Armagh. When Hamilton just was installed as Royal Astronomer, he went to Armagh Observatory to be instructed by the astronomer Thomas Romney Robinson. In 1830 he repeated that visit, now in company of Lord Adare, then his pupil. In 1824 he had fallen deeply in love with Catherine Disney, and in 1825 he heard very unexpectedly that she was going to marry the reverend William Barlow. By the time of this 1830 visit to Armagh Observatory he had not yet completely come to terms with his feelings of loss. Hamilton decided to visit Catherine who then lived with her husband and two children in Edenderry which is not far from Armagh, and her brother Edward, who had been a very good friend of Hamilton when they attended college.

During the visit Hamilton noticed that Catherine was not happy, as he had assumed, and returning to Armagh he was very distressed. Catherine visited him back at Armagh Observatory and although they were together in the dome, he could not be open to her because she was married, and in the Victorian era even speaking about a marriage was almost forbidden. When he tried to show her the telescope he broke the wires in the eye-piece. Lady Pamela Campbell, whom he had met at Armagh and who would become a very good friend, recognized his feelings and was able to save him from "giving way to morbid despondency."

Blackrock. After her husband had died, Hamilton's long-time friend Lady Pamela Campbell moved to Blackrock to live with her daughters. In 1851 Hamilton mentioned in a letter to his friend Augustus De Morgan, that "Lady Hamilton and I have [...] visited Lady Campbell, and some of her charming children, who live now more than ten miles away from us."

Broom Bridge. Late in September 1843 Hamilton started a new attempt to extend the system of imaginary numbers to a third dimension. He was so immersed in his search that every morning in the early part of October, on his coming down to breakfast, his children asked, "Well, Papa, can you multiply triplets?" On the 16th of that month, while walking with his wife along the Royal Canal, he found the quaternions. He wrote the equations in a notebook which was given to him by his wife in 1840, and then could not "resist the impulse – unphilosophical as it may have been – to cut with a knife on a stone of Brougham Bridge, as we passed it, the fundamental formula." His sons later called it the Quaternion Bridge.

Carlingford. In 1848 Catherine and her family lived in the Vicarage in Carlingford. Having had a six-week correspondence with Hamilton, she had confessed to her husband that she had contacted Hamilton, which he had forbidden. Deeply unhappy, she made an attempt at suicide by taking
laudanum. She survived but never completely recovered, and thereafter she lived with family. Later their house became known as the Haunted Rectory, although no connection with Catherine was made. That is not too surprising; because suicide was cursed in those days, people will only have talked about it secretly, which may have led to the ghost stories. In 1852, four years after Catherine left Carlingford also her husband William Barlow left, he became rector of Creggan.

Around the time Barlow left Carlingford, Catherine's brother Thomas sold Rock Lodge, the house of their father, under the Encumbered Estates Act. He came to live in Carlingford, together with his wife Dora, who was from Rostrevor. Hamilton visited them twice, and he then received news about Catherine from Thomas and Dora. Hamilton loved Carlingford; in 1852 he wrote to his friend Augustus De Morgan, "The morning before I left the Observatory for Belfast, some of my children asked me at breakfast, as they had often done before, how the Quaternions were getting on. To which my answer was, Hang the Quaternions! (I assure you I had so much propriety left as not to say D—them!) But now, after some pretty complete diversion of thought, for a while, from a subject which had occupied me, perhaps too much, I am beginning to feel an interest in it again; and to-day, before and after a sail of three or four hours on the lovely bay (of Carlingford) which, when I raise my head, I see, I quite enjoyed reading some of my own articles on definite integrals in quaternions, while walking in an old friend's garden here – the friend whose guest I am."

**Castleknock.** The Observatory was in the parish of Castleknock, and Hamilton and his family usually attended church there. Hamilton wrote in 1838 that his wife and he "went together to the Church of Castleknock, a place known to the readers of Swift; and there enjoyed what I fear Swift never knew, as it ought to be and may be known, the pleasure of joining, with thankful hearts and minds, in the commemoration of that Last Supper upon earth of Him who gave for us His body and His blood, and who has appointed to us a way whereby we may feed on them for ever." In 1840 their daughter Helen Eliza was baptized in Castleknock, and that will also have held for their sons, William Edwin and Archibald. In one of the few insights Hamilton's 1880s biographer Graves gave in Hamilton's local, private life, he mentioned that at some time Hamilton gave lectures to the girls of Mercer's School in Castleknock.

**Cork.** In November 1831 Hamilton became a member of the British Association for the Advancement of Science, which was founded earlier that year. He attended the annual meetings almost every year and was a very active member, especially in the early years. He contributed many valuable papers - at Oxford in 1832 on his system of optics; at Cambridge in the following year, on his discovery of conical refraction. In Edinburgh in 1834 he contributed a description of his "General Method in Dynamics," in 1835 he delivered, as its secretary, the annual address, and received the honour of knighthood. Hamilton was often called upon to speech, which he always seems to have done, and he thus contributed heavily to the early success of the Association. By the 1840s these meetings had become famous; there is a description of the meeting in Cork in 1843, showing how enormous these meetings were. "A great influx of members took place on Wednesday morning, on the arrival of the Bristol, Liverpool, Dublin, and Glasgow steamers, and the strangers were, on their arrival at the reception room, met by a committee consisting of the Mayor, Archdeacon Kyle, General Austin, Sir Thomas Deane, Sir James Pitcairn, and other leading citizens, who took it in turns to be in attendance at the room." The report mentions "the spirit of excitement which generally exists during the week in the towns where the meetings are held" and shows how proud cities were when allowed to organize the meetings, "It is but fair to acknowledge that the citizens of Cork have proved themselves worthy of the [...] preference [of Cork over York], by the liberal scale upon which preparations were made for the reception of the association."

**Donnybrook.** In 1853 Catherine Disney, Hamilton's first love, died in Donnybrook, in the house of her brother Robert Anthony and his wife Caroline. In the weeks before her death Hamilton visited her twice, and it was there that, after twenty-eight years, Catherine could finally tell him that she had been forced by her family to marry the reverend William Barlow. It must have been devastating for Hamilton to hear that she had never wanted to marry Barlow as he had assumed for a long time, but had wanted to marry him.

Hamilton wrote about these interviews, "While she lay, languid and strengthless, but interested and attentive and happy on a sofa to which she had been carried that she might meet me: – kneeling, I offered to her the Book [Lectures on Quaternions] which represented the scientific labours of my life.
Rising, I received, or took, as my reward, all that she could lawfully give – a kiss, nay many kisses: – for the known and near approach of death made such communion holy. It could not be, indeed, without agitation on both sides, that for the first time in our lives, our lips then met. ... Yet dare I to affirm that our affectionate transport, in those few permitted moments, was pure as that of those who in the resurrection neither marry nor are given in marriage, but are as the Angels of God in Heaven."

Drumcondra. When he was very young, it is not exactly known when, Hamilton stayed in Drumcondra. Hamilton's 1880s biographer Graves wrote, "[Hamilton] speaks of his spending the earliest hours of a summer morning in reading Shakespeare and playing with two kittens whom he had taken to bed with him, and his sister [Sydney] writes, "He was always fond of cats, and might often be seen writing some mathematical paper with a kitten or favourite cat on his shoulder playfully trying to catch the pen.""

After Hamilton's death, Lady Hamilton had to leave the Observatory. Those times were difficult times for women; they owned nothing. Fortunately, she was allowed to keep Hamilton's pension, to be shared with her daughter Helen Eliza, the pension "placed them in a position of comfort we could not otherwise have hoped for." In a short letter she thanked the Lord Lieutenant for the pension, and in the header of the letter she gave her address: Allendale Cottage, Drumcondra.

Dunsink. In 1827, when he was only twenty-two years old, Hamilton became Royal Astronomer of Ireland, which meant that he came to live at Dunsink Observatory. Hamilton really loved the observatory; having visited it in 1823, shortly before he entered college, on his way back to Trim Hamilton wrote, "it was not without emotion that I felt myself residing from the spires and mountains of Dublin; and I watched the dome of the Observatory, till I could see it no longer. En passant, I should like to have a house which combined the most perfect domestic privacy with a situation that enabled me to see my home from a distance." Dunsink observatory having been built on a remote, elevated and very dark place, ideal for studying the heavens, that wish clearly was fulfilled. When Hamilton was nominated to become Royal Astronomer, his predecessor Dr. Brinkley expressed worries about the low income he would receive, and suggested that Hamilton should perhaps choose to be a Fellow which would gradually gain him "standing at least, if not income." Hamilton answered that "so decidedly did I prefer the Observatory to Fellowship in point of liking, that I would have accepted it if it had been offered to me without money at all."

In 1827 having climbed the mountain Helvellyn in England, Hamilton wrote to his sister Eliza, "I wish I could give you some idea of the novel and beautiful spectacle which we witnessed in our ascent [...]. [There was] one rill [which] looked so very beautiful that I quite wished to live there by its side (provided I could have brought the Observatory along with me)."

And while being at Adare in 1831 he missed it, "I must go out now while it is fine, and take a walk among these beautiful grounds, which however, after all, I do not prefer to the fields near the Observatory. Whenever I see a very gently swelling distant hill, with trees on its top, I imagine it is the Observatory, and I look for the little iron gate, and sometimes fancy that I see it too, for a moment."

Edgeworthstown. Uncle James Hamilton, the elder brother of Hamilton's father Archibald, was curate in Trim. The rector, Richard Butler, was married to Harriet Edgeworth, a half sister of the famous writer Maria Edgeworth. The first time Hamilton visited Edgeworthstown was in 1824, and he became good friends with Maria Edgeworth. Hamilton would visit Edgeworthstown more often; in January 1825, in his second college year, he wrote to his uncle James, "However completely College business may appear to most persons to engross my time, you know that it has never been sufficient to occupy it. There has always been a surplus, which according to circumstances has been devoted, at one period to an occultation, at another to Caustics, at another to wandering about the world, through Dublin, Trim, Bellevue, and Edgeworthstown. All these things (with perhaps the exception of my wandering visits) the Provost and you are pleased to designate as extravagating – a word which Mr. Butler seems to think coined for the occasion." And after presenting his plans for the next years, including the "splendid enterprise of reading for both Gold Medals," for Science and the Classics, Hamilton asked, "what season remains, except the present year, for indulging in my darling "extravagance"?"
Finglas. In 1855 Catherine's brother and Hamilton's friend Thomas Disney and his wife Dora had a son, Henry Robert Evans, to whom Hamilton became godfather. Around that time Thomas and Dora were in serious financial trouble, and Hamilton helped Thomas to find work. In a letter to his friend Augustus De Morgan Hamilton mentioned that "they are all at present residing in the North of Ireland (Carlingford), though likely to come soon to live within a walk of this place." Indeed, shortly thereafter the Disneys moved from Carlingford to Finglas.

Due to a range of circumstances and events, Dora Disney then became involved in a quarrel made by Lady Hamilton with Hamilton. Some months thereafter Lady Hamilton became very ill, and Hamilton took care for her for months. After she recovered their marriage appears to have again been more stable than before, as also had happened after her first so-called nervous illness. There is much reason to assume that both the quarrel and these two illnesses were directly connected to the extremely limited control married Victorian women had over their own lives, and therefore the complete dependence on their husbands.

Giant's Causeway. In a letter to his friend Augustus De Morgan Hamilton wrote that in the summer of 1817 he travelled with his father. "He must have had an English and foreign connexion, for I remember well my going with him [...] almost "en prince" in a luxurious post-chaise, or what then appeared to me such, scattering half-pence or "bawbees" to poor people (a very unwise thing, as I have since come to think), to the north of Ireland – Derry, Newtown-Limavady, etc.; connected with each of which places, as also with the Giants' Causeway, which we then visited, I have this day a set of uneffaced although childish remembrances; and I know that it was as agent to the Fishmongers' Company of London, that he then visited officially certain of their estates; the Giants' Causeway being probably thrown in to amuse, or gratify, or instruct me."

Glasnevin. In one of his letters to his friend Augustus De Morgan Hamilton wrote that in 1817, when he was 12, his father had taken for the summer a house at Glasnevin. He recollected "some daring and forbidden explorations; mounting on tables and chairs, to reach a sort of angle in the roof, whence I contrived to drop into a locked-up lumber-room, where I only found some old dials and things of no importance. But the chamber had the charm of prohibition, having probably been reserved by Dr. Walsh, before [...] he set the house [...] to my father. Be that as it may, Dr. Walsh quite forgave me, and laughed at the story when I told it to him, after (say) twenty or twenty-five years; but at the time I must have been embarrassed to emerge. [...] Some ladder I think was put down for me, and I got, of course, a very good scolding."

Nenagh. Helena Maria Bayly was born in Nenagh as one of the younger children of a family with, as has been said, 23 children. Two of her elder sisters lived with their families in Scripplestown and Dunsinea, two houses in the vicinity of the Observatory. Helen Bayly was a frequent guest, which is how Hamilton learned to know his future wife. Having discovered how to handle his melancholic feelings in the summer of 1832, in October he discovered conical refraction for which he would be knighted, and fell in love with Helen Bayly. They married in April 1833, in Ballynaclogh, close to Nenagh. Hamilton was very fond of his mother-in-law Mrs. Bayly, who was widowed, and lived at Bayly Farm in Nenagh. By then Mrs. Bayly did not have a strong health any more, and for two periods of time, in 1834 and in 1836, lasting for nine and ten months respectively, Lady Hamilton went to Nenagh with the children to take care of her ailing mother. Hamilton missed them terribly, and whenever his Dublin duties allowed him he went to the south to be with them. He loved to be there, for weeks or even some months; and in October 1834 he wrote in a letter to his friend Humphrey Lloyd, "I have been here about ten days, at Mrs. Bayly's house [...]. The visits had been pretty well exchanged before I came, so that I have enjoyed a most luxurious quiet, far greater than any I have ever had at home." He felt very much at home there, and when he once had found an enormous, empty book, he "filled about one hundred pages of it, or more, with [my] private exercitations, which I describe to Mrs. Bayly as the milk-pan set in the dairy, for the cream to gather on them by degrees, and afterwards to be skimmed at leisure. But the cream that I propose to set out in the market-place next is to be a separate work."

Powerscourt. Hamilton loved the Wicklow mountains; he often made short excursions and had short holidays there (if about once a year can be called often). According to Hamilton's 1880s biographer
Graves, in 1837 he "had the delightful recreation of a visit at the Observatory from his friend Aubrey de Vere, with whom he enjoyed again walks along the Tolka's side, visited the Botanic Garden at Glasnevin, and renewed his impressions of the charms of the Dargle and the Powerscourt Waterfall."

RIA. In January 1825, in his second college year, Hamilton wrote to uncle James, "Henry Disney has just called on me, along with my old rival and friend [Humphrey] Lloyd. Henry says he has heard a report that I am elected a member of the Royal Irish Academy." In 1832 he there announced the finding of conical refraction for which he would be knighted, in 1837 he was elected president of the RIA, and in 1843 he found the quaternions while walking along the Royal Canal on his way to preside a meeting of the RIA.

In 1845 Hamilton wrote to Lloyd, "It has been for a considerable time my wish to retire from the labours and anxieties of the Presidentship of the Royal Irish Academy, not with a view thereby to indulge in repose, but rather to procure more unbroken time for scientific work, and even with the hope of being more useful to the Academy itself as a contributor, than I can hope to be as a President." His friend and former pupil Adare had given him a strong advice "rather to give up the office than to let it interfere too much with my own personal time, and intellectual duties as an individual man. I allowed this to determine my movements, and wrote [in December 1845] letters which announced my decisive intention."

In 1846, having stepped down, Hamilton wrote in one of his notebooks, "The day has at length arrived when I am to accomplish my desire of retiring from the Chair of the Royal Irish Academy. How joyously, though not without a feeling of solemnity, I received the news of my being elected to the Chair on the 11th of December, 1837! How gladly now I resign it, yet not without a shade of that sadness which belongs to a farewell!"

TCD. Hamilton's years at Trinity College Dublin were one feast of honours; premiums and optimes, both in the Science and in the Classics. He also won prizes for two poems, and his lowest grade was a bene; for many people still a very good grade. Because of his accomplishments, Hamilton was already famous before his graduation. It was also the time of his friendship with the Disney brothers which lasted their whole lives, and his falling in love with Catherine Disney. Of dinners at Summerhill mansion where the Disney family resided, of the evenings he spent there with Catherine playing the harp, of dinners with her brothers in Dublin, and of the terrible shock when in February 1825 he heard from her mother that Catherine was going to marry in May.

Trim. Hamilton's parents recognized very early how exceptionally intelligent Hamilton was. Hamilton's mother Sarah wrote some very loving and proud letters about her son, describing how amazed other people were when they saw what Hamilton could do at very young age. Hamilton's parents were very lucky; Archibald Hamilton's brother James was curate of Trim, and Master of the Diocesan School.

The school had a very good name, it is said that for instance Arthur Wellesley had been educated there (although before uncle James came to Trim in most likely 1802). Moreover, James Hamilton had studied the Classics at Trinity College and had graduated with honors. These circumstances were ideal for a child prodigy to receive his education, and in 1808, when he was almost three years old, Hamilton was sent to Trim to be educated by "uncle James", as he invariably called him in his later letters. Probably because uncle James did not have children yet (he married in 1814), Hamilton's sister Grace, who then was five, came with him to live in Trim. Aunt Sydney, sister of Archibald and James, also lived there, and she helped Hamilton to learn Latin and Hebrew. She wrote many letters to keep the parents informed of Hamilton's progress, and all members of the Hamilton family very regularly saw each other, either in Trim or in Dublin.

Wicklow. Hamilton loved making short excursions to the Wicklow mountains. In fact, the last one he made was in the summer of 1864, a year before his death. He was accompanied by his daughter Helen Eliza, and they had chosen to travel back to back on an outside car. Helen Eliza noted that "in this excursion, while evident tokens appeared of the decline of his muscular strength, his bright companionableness (shown, for example, by discussions with an intelligent Protestant carman on the parable of the Unjust Steward) and his youthful spirit of enjoyment were quite unimpaired."