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Helen Bayly and Catherine Disney as influences in the life of Sir William Rowan Hamilton

ANNE VAN WEERDEN

Abstract. In the 1880s Robert Graves published a biography about Sir William Rowan Hamilton (1805-1865), to which in a 1980 biography Thomas Hankins added further information. From these biographies a picture emerged of a man who was unhappily married because he had lost the love of his life, which raised the question how such an unhappy man could produce so much beautiful mathematics. In this article it is stated that a main cause for the unhappy picture is that Graves ignored the influence on one another of Hamilton and his wife Helen Bayly, and Hankins that of Hamilton and his first and lost love Catherine Disney. It is then shown that if these influences are taken into account a very different view on Hamilton's private life arises, in which he was happily married to a wife who enabled him to work as he needed to.

1. Introduction

In this article a largely ignored aspect of the private life of Sir William Rowan Hamilton (1805-1865) will be discussed, namely the influence on one another of Hamilton and the two most important women in his life, his first love Catherine Disney and his wife Helen Bayly. These two women have usually been described very statically; Catherine as Hamilton's only love, and Helen as a woman who simply was not strong enough for the marriage she was in. It led to a likewise static picture of Hamilton as a hopeless romantic for whom only his own feelings were guiding; an actually lonely man in an unhappy marriage because he had lost the love of his life.

It was wondered often how on earth such a man could produce so much beautiful mathematics and write so many kind and cordial letters to his correspondents. It was assumed to be due to his deeply religious feelings and his love for his mathematics, but it should have been a signal that something was wrong. The story of a life cannot

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be told while leaving out the influence of the people closest to the subject. It will be shown hereafter that taking this influence into account the picture of Hamilton becomes much more vivid, making it obvious that he led a life with ups and downs, as most people do.

The ideas in this article are based on the ideas developed in the essay *A Victorian Marriage : Sir William Rowan Hamilton* [3], and summarized in the first part of the article 'A most gossiped about genius: Sir William Rowan Hamilton' [4]. These ideas were in turn based on the enormous, three-volumed biography which was published in the 1880s, about twenty years after Hamilton's death, by Robert Graves [1], who mainly focused on Hamilton's private life. A second biography was published in 1980 by Thomas Hankins [2], who mainly focused on Hamilton's mathematics and metaphysics, but also gave parts of Hamilton's private life not given by Graves, especially concerning Catherine Disney.

Hamilton's private life will be discussed here while including the facts which somehow could be verified, but without the gossipy parts which were added in the course of years, as was shown in [4]. Hamilton lived most of his adult life in a time in which temperance was an important issue, and the original Dublin gossip might have been friendlier if Hamilton had stopped drinking alcohol.[1] Yet he did not want to stop; he liked drinking wine at dinners, and apparently took his reputation in that respect not very seriously.[2] Because his way of drinking alcohol as looked at from our times shows nothing out of the ordinary, anything related to the alcohol will be left out; it was extensively discussed in [3].

[1]Apart from the alcohol, the main view in the gossip seems to have been that Hamilton was a totally unworldly genius. That was a widespread idea, which became part of the later caricatural view on Hamilton. For instance, Hamilton once joked about baking bread from sawdust and so surviving being snowed in. That story has been used as an example of how unworldly he was, see for instance p. 88 of O'Donnell (1983), *William Rowan Hamilton: portrait of a prodigy.* Dublin: Boole Press. But it was something John Herschel had actually written about, see *The Cabinet Cyclopædia*, 1831, p 65. https://archive.org/details/preliminary disco00hers_0. That it was a joke can be seen easily; Hamilton continued about baking pancakes of snow and then imagining that every day would be Shrove Tuesday, or Pancake Day.

[2]As regards his reputation as a mathematician that was almost the opposite: Hamilton took very much trouble to make sure that he was not plagiarizing, and to credit everyone who could be entitled to it.

Deviations from Graves' and Hankins' biographies will be given without further comments, and therefore also referencing will be omitted; all following statements can easily be found in the aforementioned sources. However, reading original letters, many of which are kept in the Library of Trinity College Dublin, or other original sources, may still throw another light on this matter. If it would be discovered that original sources indicate actual errors in the sources used here, then these errors will also be found in this article.

2. An ideal and a bystander

In Graves' biography Hamilton is described as having had a good control over the work-related and public part of his life; according to Graves he was, for instance, a very good public speaker and lecturer, and effective in many presidencies, including that of the Royal Irish Academy. But Graves' opinion was completely different as regards Hamilton's private life.

Hamilton fell in love with Catherine Disney when he was nineteen years old. But she married the reverend Barlow instead, and it took Hamilton years of trying to cope with this "wound of his affections," as Graves called it. At first glance, Graves is very complimentary about Catherine, in the few sentences he writes about her mentioning that she was "of singular beauty, amiable, sensitive, and pious;" the ideal Victorian woman.

But love and marriage could not be discussed openly in Victorian times and when Graves relates that, shortly before Catherine died, Hamilton was allowed to speak with her twice, he is very cautious, Hamilton then was, after all, a married man. Graves takes care not to reveal her identity and not to say anything about her directly, he only vaguely indicates that the "interviews" contained "explanations" by "the departing Christian." Thus by describing Catherine as beautiful and pious yet telling hardly anything about herself, Graves diminished her into a romantic ideal.

This ideal image of Catherine was further enhanced by Graves' negative view on Helen Bayly. Also about her he could not be very open because of the times they lived in, but he did not abstain from relating his very critical feelings for her. Graves was of the opinion that Helen should have forced her husband to live an orderly life, instead of allowing him to work through the night and skip meals when some mathematical investigation was too interesting to stop,

or sip beer in order to stay awake when he became tired yet wanted to finish something. This irregular lifestyle and the regularity of sipping beer was, according to Graves, the very cause of everything that went wrong as regards Hamilton's bad Dublin reputation.[3]

In Graves' eyes Helen had been a weak wife; weak of body because she was very often ill, and weak of mind because she had not been able to keep her husband under control. Although Graves sometimes has to remark that she was a good woman, for instance because other people said she was, he immediately drenches these notions in criticisms, as if afraid that the reader would not understand well enough that Hamilton's bad reputation was due to her shortcomings. Yet in this way portraying Hamilton as someone who could not take care of himself and had to be controlled by his wife, while calling him a "simple, zealous great man," Graves diminished Hamilton into a genius without self-insight or full personal relationships.

In the biography Graves introduces Helen with the remark that when in the summer of 1832 she had been very ill, Hamilton's 'anxiousness for her recovery,' "coming at a time when he had felt obliged to suppress his former passion,[4] prepared the way for tenderer and warmer feelings." Nothing is left of Hamilton's love for her, even though he was very open about it in his poems. But what is worse, because Graves hardly gives information about Helen as a person by which the reader would have been able to learn to know her, it can be concluded from the biography that Helen had remained "a shadowy figure in Hamilton's life" as Hankins expressed it,[5] diminishing her into a bystander in her own marriage.

Graves' biography consists of letters by Hamilton and correspondents, commented on by Graves. His goal was to restore Hamilton's bad reputation, but because of this constant focus his descriptions became static. In his biography people do not develop; in the forty-one years between Hamilton's meeting Catherine and his death, and the thirty-two years of the Hamilton marriage, not anything changes as a result of what happens between these people. But Graves does not seem to have recognised this very strange picture; he was trying mightily to show how wonderful Hamilton's character had been, something he repeats throughout the biography.

[3] See for the details the article 'A most gossiped about genius' [4].

[4] Graves alludes here to Ellen de Vere, see p. 96.

[5] [2, 114]. Next to discussing Catherine, Hankins also added information about Helen. However, it was not enough to form a good picture of them.

3. Three loves

Through his letters much is known about Hamilton, but because so little is known about Catherine Disney and Helen Bayly, the influence they had on each other can only be shown by retelling and reinterpreting what happened, while leaving out Graves' comments. It appears that Helen Bayly was not just a weak woman Hamilton happened to marry; Hamilton loved her and trusted her because she was very truthful. And Catherine was not simply Hamilton's only love as Hankins concluded; while being happily married he felt deeply for her when over the years he slowly discovered how extremely unhappy her marriage was.

Next to Catherine and Helen, Hamilton also fell in love with Ellen de Vere, yet that was different; although Ellen did influence Hamilton's life it was indirectly, and he did not evidently influence hers. Moreover, a few years later she married happily, and there thus was no reason for Hamilton to become worried about her and actively bring her back into his life, as he did with Catherine.

Catherine Disney and Ellen de Vere. Hamilton saw Catherine for the first time in August 1824 when he visited Summerhill with his uncle, and he immediately fell in love with her. He had befriended some of her brothers who were, like him, attending Trinity College, and for some months Hamilton and Catherine seem to have seen each other often. Surrounded by her close family they talked, and she played the harp while he listened intensely. Until, on a terrible day in February 1825, her mother told him that Catherine was going to marry in May.

Catherine was forced by her family to marry the reverend Barlow, but from his poems it is clear that Hamilton did not know that. Feeling devastated he did not attend the wedding; had he done so he might have seen her utter unhappiness. He wished her a very happy life in a poem he did not send to her and tried to get on with his life while "maintaining a philosophical calm." That worked partially, in the sense that he was able to work on his mathematics, but it did not help to come to terms with his loss.

Having become Astronomer Royal in 1827, Hamilton moved into Dunsink Observatory. In 1830 he visited Armagh Observatory, and because Catherine lived with her family in the neighbourhood he decided to visit her, obviously expecting a happy family. During

the visit Hamilton saw, as he wrote in a poem, a "meek and tender sorrow" in Catherine's eyes, and he realized that the marriage which had "threw a gloom" over his "once bright way" had not made her as happy as he had expected. After the visit Hamilton became 'morbidly despondent,' and he had to be comforted by his friend Lady Pamela Campbell. But because marriages were sacred and revered then, there was nothing he could do for Catherine.

Towards the end of 1831, when visiting the parents of his pupil Lord Adare, Hamilton fell in love with Ellen de Vere. But just before he could ask her she rejected him. Hamilton later wrote to Lady Campbell, "I have had another affliction of the same kind and indeed of the same degree, except that my mind had been a little better disciplined to receive it."

Nevertheless, he became very melancholic for some months, until in the summer of 1832 he made a remarkable psychological discovery. He finally understood that having been for "nearly eight years in a state of mental suffering, with lucid intervals indeed," had yielded him a "passion-wasted life." He wrote to his friend Aubrey de Vere, one of Ellen's brothers, "I determined that I would vigilantly and resolutely exclude all voluntary recollection of your sister, and refuse, so far as in me lay, to indulge myself by dwelling on involuntary remembrance. The determination was well fulfilled: and this vigilant and resolute self-denial, combined with ardent and persevering exertion during some months in abstract science, had its effect in restoring my tone of mind and even my health of body, which had begun to suffer sensibly. The power of hope revived." Only a few weeks thereafter Hamilton discovered conical refraction for which he would be knighted, and fell in love with Helen Bayly.

Helen Bayly. Hamilton learned to know Helen Bayly during visits she made to two of her elder sisters. She came from a very large family, and although she was born in Nenagh, Tipperary, many of her relatives lived in Dublin. The two sisters lived with their families in the townland of Scribblestown, and both their houses were located within a ten-minute walk from Dunsink Observatory. After having moved into the observatory Hamilton soon befriended them, apparently especially the family at Scripplestown House. He became impressed by Helen's truthful character because, for instance, she said to him that she preferred his sister's poetry over his, which then was not a very common thing to do.

They seem to have met each other regularly, and Helen will have seen how Hamilton tried to cope with the loss of his first love, Catherine Disney. It is known from Hamilton's poems that in 1831 she saw him fall in love with Ellen de Vere, and early in 1832 how difficult it was for him to come to terms with her rejection. Hamilton indeed never kept silent about these feelings, sending the poems about how he felt to many people.

When early in November Hamilton asked Helen to marry him, she was very hesitant. It had nothing to do with whether or not she thought him loveable enough, and she will doubtlessly have noticed how Hamilton changed after his psychological discovery; she seems to have been insecure about her weak health. Helen was very often ill and sometimes her illnesses could not be diagnosed, which means that she may have suffered from some chronic illness, or perhaps from allergies, of which nothing was known then. As mentioned, in the summer of 1832 she had fallen dangerously ill. She then was staying at Scripplestown and Hamilton had been very worried about her; he was completely aware of her weak health.

Trying to convince her to marry him Hamilton assured her that he did not think her weak health would be a reason for them not to become happy together, but at that time he was becoming more famous by the day. Helen obviously realized what a household for such a man would mean for her, and she knew that having to receive and organize visits to very many important people would be far too strenuous for her.[6] She apparently decided only to accept if Hamilton would promise her that they would live a retired life at the observatory. Hamilton made this promise, and that was the marriage they agreed upon.

The retiredness concerned official dinners, balls, and Victorian high-society life; it had nothing to do with visiting and being visited by friends and family, connections they had in abundance. It is known that Helen frequently received guests or made visits to family members and friends, such visits often taking multiple days. Hamilton's uncle wrote about Helen that she had ""won golden opinions" from her extensive circle of acquaintance," and even Graves wrote that she won the "good opinion of [Hamilton's] friends." But as they had agreed upon, his eminent friends hardly knew her.

[6]Many of these people brought staff and servants with them; organizing such visits must have been enormous undertakings.

4. Marriage

They married in April 1833, and the first years of the marriage were very happy indeed. One of the things which apparently made the marriage a success was that Helen understood what Hamilton needed to be able to work so hard. Already before the marriage Hamilton had told her about how he worked, writing that he "was up almost the whole of Monday night, in the pains or pleasures of thought-birth, mathematical views springing up in almost oppressive variety: so that even when I went to bed I could scarcely sleep, and was greatly exhausted the next morning." When he was in one of his "mathematical trances" she did not force him to come to dinner or to bed, she instead took care that some food was brought into his study if he did not react to the dinner bell.

But with Hamilton's growing fame he befriended more and more members of the higher classes, and on a beautiful day in September 1838 he asked her to accompany him on a three-week visit to Lord Northampton at Castle Ashby in England, to which she agreed. Already a few days later, on the same day a party of scientific men visited the observatory, she fell ill again, and she must have felt terrible being reminded of her weak health so soon after having agreed to such a high-class visit.

The visit took place, and at the castle Hamilton enjoyed himself greatly. Thereafter he started to fantasize about many more of such enjoyable visits with her at his side; he was clearly forgetting his ante-nuptial promise. Towards the end of 1839, being pregnant with their third child, Helen fell ill again, and was diagnosed with her first nervous illness. Pregnancies having been outright dangerous then she apparently felt very vulnerable, and because of the unrest in the country she became afraid of staying at such a remote place as the observatory. They took lodgings for her in Dublin.

She came back in August 1840 to give birth to their youngest child, then stayed at Scripplestown for some months, presumably to breastfeed her baby, and then went to England to stay with a sister. Hamilton missed her terribly, and in May 1841 he wrote to a friend, "As to scientific work [...] I have done very little, for a whole year past, that is, since Lady Hamilton's health obliged her to leave the Observatory." When in the summer Helen also became physically very ill Hamilton hurried to England to be with her. Towards the end of the year she finally regained her health,

and in January 1842 Hamilton went to England to bring her home again.[7] According to Graves, "with renewed cheerfulness" Hamilton "resumed his mathematical studies."

Although Helen was used to speaking her mind, she apparently could not speak easily about her own needs in the marriage. That may have had to do with the then large inequality between men and women, in which a woman's reputation, socially and as a Christian, solely depended on being a good and obedient wife and mother. Having been very pious and wanting to be a good wife she may have tried to grant Hamilton the pleasure of her company on his visits to high-classed friends, but such visits often lasting a week or more, and the journeys taking days and having been very exhausting, it is easy to imagine that she had become afraid of falling ill during a journey or a visit; she could fall ill within a few hours. It seems very well possible that only in England, or on the long way home, she could finally remind her husband of his promise about their retired life. After they came home he never asked that of her again.[8]

5. Renewed contact with Catherine

When in 1847 Catherine's eldest son received his bachelor's degree, he decided to compete for a fellowship. Hamilton tutored him in mathematics, and in July 1848 Catherine wrote to him to thank him for it. It led to a correspondence which lasted for six weeks, according to Graves the only time Hamilton really interrupted his work. The correspondence was distressing for both of them, and apparently having assumed that her marriage had started well but had become unhappy, Hamilton then learned that Catherine's marriage had been unhappy from the start.

After six weeks Catherine confessed to Barlow that she had been corresponding with Hamilton, something he had forbidden in 1830, when after Hamilton's visit in Armagh she had asked him whether she could keep contact with Hamilton. Having vowed obedience at

[7]To see these events in context, it must not be forgotten that hardly anything was known about psychology; not about nervous breakdowns and not about the importance of bonds between parents and children. In their circles the children were usually taken care of by personnel, a very common thing to do; also during the three-week visit to Castle Ashby the children seem to have stayed in Dublin.

[8]In 1853 Hamilton successfully persuaded her to come with him to meet the Queen. But the invitation had come earlier on the same day; she may simply have felt well that day.

the altar she seems to have considered her secret correspondence as unforgivable; her heartbreaking last line to Hamilton was, "To the mercy of God in Christ I look alone, for pardon for all my sins."

Catherine decided to commit suicide, and wanted Hamilton to play a part in it. Early in October 1848 she sent him a letter, containing a letter she had written to her husband, a stamped envelope, and instructions to send the letter in the stamped envelope to her husband, who would then receive it after her death. But Hamilton did not send her suicide letter to Barlow. He believed that she had mentally broken down, and called the letter, which was written in "open defiance of her husband," her "last rational letter." Catherine survived, but thereafter lived mainly with family.

Through her brother Thomas and his wife Dora every now and then Catherine and Hamilton sent each other gifts, and in October 1853 she sent him a gift through which he knew she was dying. He went to visit her, and was allowed to speak with her twice. Only during these interviews she could finally tell him that her family had forced her to marry Barlow, that she had loved Hamilton and had wanted to marry him. It is easy to understand what impact that had on Hamilton; he had not just lost her, something he had to learn to cope with for years, but he had lost a marriage they both had wanted.

It took him quite some time to come to terms with such devastating knowledge, yet it had nothing to do with not having been married happily. Catherine had been forced into a marriage by the family she trusted, and Barlow had insisted on marrying Catherine although she did not want him; these realizations must have made it even more difficult for Hamilton, who suffered when people close to him were unwell, and was known for respecting people more than was usual for a man in his position.[9]

6. Difficult memories and quiet last years

After Catherine's death in November 1853, Hamilton wrote very many letters trying to cope with his feelings. Early in 1854 he calmed down again, and life finally seemed to become a bit easier,

[9]As an example of his respect for every human being, Hamilton's friend Augustus De Morgan wrote: "When some housebreakers were caught on the premises, and detained until they could be carried before a magistrate, [Hamilton directed] that the felons should be asked whether they preferred tea or milk for breakfast."

making Helen openly happy and satisfied with her husband. She proudly declared that her husband had "grown quite a good boy of late – so sociable and neighbourly," although she feared that "it was too good a thing to last." But then, in 1855, the reading of old letters his deceased sister Eliza had left him triggered Hamilton to dwell on the past again and open up to his friend Aubrey de Vere about all that had happened with Catherine, and that whole summer they corresponded intensely.

Most likely not having been able to talk about it with his "local friends" because marriages were an almost forbidden subject, Hamilton started more correspondences about Catherine, for instance with Catherine's sister-in-law Dora Disney. Helen had always accepted that Hamilton had also loved Catherine and Ellen; he had never withheld that from her. Neither had it been a problem that he had correspondences and close friendships with women. But somehow this was different, and when in June 1855 Helen found one of Dora's letters in her husband's pocket she became jealous and made a row.

It still took Hamilton some months before he took her seriously and was able to tear himself out of the past again, but by that time it was too late. Apparently frustrated by not being able to reach or comfort him and starting to lose all hope, Helen had slipped into her second 'nervous illness.' Hamilton became very worried about her, and he nursed her for months.

To fall so ill in such a situation is again not as strange as it may seem. Next to fearing that she would lose a loving husband, who took her weak health with good spirits, nursed her when she needed him to and did not ask impossible things from her, if women in their times were abandoned or granted a divorce, they lost everything. With Helen's weak health that would have been even more problematic than it was for other women because she would hardly be able to earn herself an income; she must have felt terrible.

Hamilton in the meantime will have felt very guilty of what he had done; he revered marriage and saw their bond as sacred, yet he had not honoured and kept her, as he had promised at the altar. In the summer of 1856 Helen recovered, and thereafter there were no more letters about Catherine. Except in the summer of 1861, when one of the younger Disney sisters heard about the love story and wanted Hamilton to tell her about it. Hamilton found it difficult again, but now it took him much less time to come back into his own life.

The last decade of the marriage therefore seems to have been generally quiet and trustful, as is often the case when partners have managed to survive heavy crises. The socially very strict time they lived in gave both Hamiltons very little room to move, which in Helen's case meant that she could not easily show that she was becoming unhappy, and in Hamilton's case that he could not openly express his grief about Catherine's unhappiness. But it did not mean at all that they did not love each other; according to Graves, the Hamiltons remained attached to each other until the end.

7. Conclusion

It has been argued here that one of the reasons for the widely accepted view on Hamilton, as having been unhappily married, is that in his two main biographies the influence which Hamilton and the two most important women in his life had on each other was largely ignored, making their descriptions static. For instance, the fact that Helen became ill did not seem to have had anything to do with what happened between her and Hamilton, as if she just was weak and he had unfortunately chosen the wrong wife. And Hamilton's feelings for Catherine did not seem to have had anything to do with her gruesome fate, as if from the day he met her he just loved her no matter what, and the wonderfully loving romantic became unhappy for the rest of his life.

It then was shown, by retelling their story while taking the influences these people had on each other into account this static picture changes, and Hamilton can be seen as a man who was married happily to a loving and understanding wife, and who had a conceivable deep grief about his first love whose life had been made miserable by the people she had trusted.

Various conclusions can be drawn here. In the Victorian era women were subordinate to men, and therefore the readers of Graves' biography were not alarmed at all; it was perfectly accepted that a woman's influence on a man's ideas could be ignored, as if he would have had those ideas regardless of which women surrounded him. But after the Victorian era was over and even intensively studied, the story of Hamilton's life was not adjusted to contemporary knowledge. One conclusion therefore is that many more widely accepted views on people or events may contain flaws because the role played by women was ignored.

Another conclusion is that if a description of a person or an event seems illogical although the facts seem to have been well represented, there will be aspects or nuances which have been misinterpreted or misjudged. In Hamilton's case it was often remarked that who Hamilton was as a mathematician seemed irreconcilable with how he was described as a person. Uneasy feelings were hushed by the notion that Graves had been a friend of Hamilton, and that therefore his description must have been the truth. But what was ignored or overlooked was Graves' motive for the biography; he focused very hard and very constantly on restoring Hamilton's reputation. It caused his truth to become coloured, with Hamilton's unhappy description as a result. Illogicality should be something to react upon, even in biographies.

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Anne van Weerden Works in the Utrecht University Library and also studied physics. After a 2014 seminar about the history of vector analysis she became intrigued with the very unhappy reputation of Sir William Rowan Hamilton. Having become convinced that many claims about his private life could not be true she decided to try to find out where they came from, and show how the information given in his two main biographies can be read very differently.

(Anne van Weerden) Utrecht University Library, P.O.Box 80.124, 3508 TC Utrecht, The Netherlands
E-mail address: a.vanweerden@uu.nl.