After Whom is Herschel Island Named?
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ABSTRACT. Herschel Island (Qikiqtaruk) is a seasonally inhabited island off the western Arctic coast of Canada. It was designated as a Yukon territorial park under the Inuvialuit Final Agreement (1987) in recognition of its physical and cultural significance. The island was named by Captain John Franklin of the Royal Navy on 15 July 1826, during his second voyage of Arctic exploration. Unlike entries for other features named by Franklin along this coast, the journal record of this event does not indicate the specific person after whom he named the island. Franklin’s journal and his published account state only that he wished to honour the name Herschel, borne most prominently by Sir William Herschel, who discovered the planet Uranus, Sir William’s sister Caroline Herschel, who discovered eight comets, and Sir William’s son Sir John Herschel, the brilliant polymath; in other words, he wished to honour this preeminent late Georgian scientific family.

Key words: Herschel Island, William Herschel, Caroline Herschel, John Herschel, John Franklin, Yukon Territory

INTRODUCTION

Herschel Island has an area of about 100 km$^2$ and lies in the southern Beaufort Sea, just north of the Yukon mainland (Fig. 1). The island is dominantly composed of perennially frozen marine sediments, which were glacially upthrust from the coastal plain to the east (Mackay, 1959). Workboat Passage, which separates the island from the mainland, is generally 5 to 6 km wide, but it narrows to between 1 and 2 km at its eastern end between Osborn and Catton (or Calton) points (NTS sheet 117 D; Nautical Chart 7661). The island was excavated from Herschel Basin, a depression of similar volume in the Yukon Coastal Plain, probably about 30 000 years ago during the Wisconsinan glaciation, when the Laurentide Ice Sheet reached its farthest westerly extent (Mackay, 1959; Duk-Rodkin and Lemmen, 2000). The people of the area were called Nuvuraqmiut (“people of the Point”) while there was a connection to the mainland, and Qikiqtaaruqmiut (“people of the Island”) after the connection was severed (Jean Tardiff from Roland Saruaq, in Nagy, 1994:29). The depth of water in Workboat Passage is just over 2 m (Nautical Chart 7661). Using the sea-level curve for the SE Beaufort Sea presented by Hill et al. (1985) and modified by Campeau et al. (2000), we may estimate that Herschel Island most likely became an island within the last 1600 $^{14}$C years, and perhaps as recently as 650 years ago.

Herschel Island bears the Inuvialuktun name Kikiak-taryuak, meaning “island” (Chipman and Cox, 1924:42B), now transliterated as Qikiqtaruk (Yukon Government, 2007), and is a territorial park established in 1987 under the Inuvialuit Final Agreement. Pauline Cove, on the east side of the island, is one of the few natural harbours along the Yukon coast (Mackay, 1960). Captain John Franklin of the Royal Navy landed on Herschel Island on 17 July and 26 August 1826, during his second Arctic expedition (1825–27), and met people who were camped there (Franklin, 1828:129–131, 172; Davis, 1998:225–226). There is no doubt that Franklin named the island “Herschel” (Franklin, 1828; Davis, 1998), but there are conflicting interpretations of whom he named it for. For instance:

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The only major island on the Arctic coast of the Yukon Territory. The most northerly place in the Yukon, this historic island was first sighted and named by Sir John Franklin, RN, in 1826 (he did not land there). He gave it the name of Sir William Herschel (1738 – 1822), the famous English astronomer. (Coutts, 2003:140)

On 17 July 1826 Franklin sighted a low island just off the coast and named it after the well-known British chemist and astronomer Sir John Herschel, son of the even more famous Sir William Herschel, who had discovered the planet Uranus and was astronomer royal to King George III. (Coates and Morrison, 2005:123)

These two quotations are both awkward in detail (for example, William Herschel was not the Astronomer Royal, a post then held by Nevil Maskelyne) and vary directly in identifying the person honoured through the name of Herschel Island. Other sources similarly take sides: e.g., White (1911) and Morrison (1999) for the father, and Holland (1981), Yukon Territorial Government (2001), and Pollard (2005) for the son. Davis (1998:221) suggests that Franklin might have intended to honour both. In 1826, John Herschel was not yet a knight, but in 1813 at age 21 he had been elected a Fellow of the Royal Society (FRS) for mathematical research (Herschel, 1813), shortly after his graduation from St. John’s College, Cambridge, as Senior Wrangler and First Smith’s prizeman (Crowe, 2004). Similarly, Franklin was yet to receive a knighthood, but had been elected a FRS in 1823. Sadly, Sir William Herschel died two and a half years before Franklin left England on his second Arctic journey. The purpose of this short paper is to discuss the identity of the person (or persons) after whom Franklin named Herschel Island.

JOHN FRANKLIN’S WORDS

Franklin’s journal entry for 15 July 1826 includes the sentence “To an island the Centre of which bears about 15
Miles distant I have given the distinguished name of Herschell” (Davis, 1998:221). In the published account of the expedition, Franklin first mentions Herschel Island, in passing, in the entry for Saturday 15 July (p. 126), and the entry for 17 July, after mentioning the island twice, includes the text: “this island, which has been distinguished by the name of Herschel” (Franklin, 1828:131). Other physiographic features that Franklin named along the Yukon coast have some identification of the person or persons so honoured, either in the journal (Davis, 1998) or in his published narrative (Franklin, 1828). For instance, Sabine Point and King Point are said to be named after “my friends Captains Sabine and P.P. King” (Franklin, 1828:122); Kay Point, after “some much esteemed relatives” (Franklin, 1828:125); and Stokes Point, “in testimony of my regard to Charles Stokes Esquire” (Davis, 1998:222). He provides similar identification for persons after whom he named rivers, bays, and mountains viewed from this portion of the western Arctic coast, even echoing the formula for Herschel Island: “The Chain of Rocky Mountains...I have distinguished by the Name of Buckland after the eminent Professor of Geology at Oxford” (Davis, 1998:222). Clearly, Franklin did not think he needed to identify the specific Herschel he honoured, or he intended to commemorate several members of the family.

Although most of the features named by Franklin were specifically identified with an individual, some, like Kay Point, were named for more than one person. The vast majority of the people honoured by Franklin were alive, but Flaxman Island, Alaska, was named “in honour of the late eminent sculptor” (Franklin, 1828:151), although John Flaxman (1755 – 1826) was alive when Franklin started his journey, and Franklin’s journal refers to Flaxman as his friend (Davis, 1998:253).

Franklin’s election to the Royal Society recognized the contribution to geographical science of his first Arctic journey. Unlike many fellows of the time, he was not elected on the basis of his rank or social connections. The Royal Society had 659 Fellows in 1830, but only 213 had been elected as scientists (Lyons, 1939), and of these just 106 had published their work in the *Philosophical Transactions of the Royal Society of London* (H.G.L., 1938). During his journey along the Yukon coast, Franklin named several features after scientists of his generation. In addition to Herschel Island, these included Sabine Point, the Babbage River, the Buckland Mountains, and Mounts Fitton, Sedgwick, Conybeare, and Davies Gilbert (Fig. 1).

**WILLIAM HERSCHEL (1738 – 1822)**

Frederick William Herschel—pronounced “Urshall” (Upton, 1963:106)—came to England from Hanover in 1757 to work as a musician (Fig. 2). He held posts in Halifax and Bath as an organist, and composed music, producing several symphonies. Some of his compositions remain in the modern repertoire. He was also skilled at grinding glass and making mirrors and telescopes, even building a reflecting instrument with a focal length of 40 feet, the largest then in the world (Hoskin, 2004a). His telescopes were the best available and were sought after throughout Europe (Hoskin, 2007). Unencumbered by formal training in astronomy, he began in the early 1770s to investigate the large-scale structure of the universe, in contrast with the prevailing focus on the solar system. In doing so, he changed the nature of the science (Hoskin, 2007:141 – 154). On 13 March 1781, he located a new planet, later called Uranus. The Royal Society awarded him the Copley Medal for his discovery in November 1781 and elected him a Fellow in the following month. William called his planet *Georgium Sidus* (“George’s Star”), in honour of the King. In return, George III granted him a pension of £200 per annum in 1782, with the only requirements being to live near Windsor and to show the Royal Family the heavens at their pleasure (Hoskin, 2005). The rest of his life was devoted to astronomical matters, and he catalogued the nebulae observed in the Northern Hemisphere, studied double stars, proposed the name “asteroid,” and was a pioneer in the study of infrared radiation. His preeminence as an astronomer was facilitated by his threefold skill in telescope construction, observation, and theoretical matters (Hoskin, 2004a). He was ably assisted by his sister, Caroline Herschel (Millman, 1980a), and in construction of telescopes by his brother Alexander (Hoskin, 2007:86 – 91). He received a knighthood in 1816, and died on 25 August 1822, having been the first president of the Astronomical Society of London for a year and a half before his death.
CAROLINE HERSHEY (1750 – 1848)

Caroline Lucretia Herschel (Fig. 3) was brought from Hanover to England by William in 1772. She hoped to escape life as a drudge beneath an overbearing, widowed mother, to assist her brother domestically and with his musical productions, and to develop a career as a soprano (Hoskin, 2004b, 2005). Like William, Caroline had an undisclosed talent for mathematics and astronomy, and her brother pressed her into the service of astronomy, as she performed many of the mathematical analyses needed to record his observations (Millman, 1980a). This is particularly remarkable because, at the insistence of her mother, she had received little education while growing up. She scanned the heavens independently of her brother, discovering eight comets between 1786 and 1797, gaining international fame and publicity in the popular press (Hoskin, 2005), and receiving lavish praise from leading European astronomers (Hoskin, 2003:131; Brock, 2007:2). Friendships with several members of the royal family developed as a result of her work (Hoskin, 2003:131). She was formally appointed as assistant to William in 1787, with an independent stipend from the Crown of £50 per annum, thereby becoming the first woman to be a professional astronomer (Hoskin, 2005; Brock, 2007:2). In the same year, she became the first woman to publish a scientific paper in the Philosophical Transactions (Herschel, 1787). (Three communications from women had been published earlier in the Philosophical Transactions, but these did not report scientific investigations.) Caroline’s domestic arrangements were unsettled after William’s marriage to Mary Pitt (1788), but relations with Mrs. Herschel improved over time, and Caroline helped with the early education of John Herschel, to whom she remained close throughout the rest of her life. Her achievements, particularly in systematically cataloguing the nebulae in a format useful to other observers (a task urged by John), were recognized with the Gold Medal of the Astronomical Society in 1828, although this particular catalogue was not published. The Medal was next awarded to another woman, Vera Rubin, in 1996. Caroline was also considered by the Royal Society for one of its Royal Medals in 1828, but the rules were strict (Herschel, 1879:227; Hall, 1984). Too much time had elapsed since 1798, when the Royal Society had published her revisions to John Flamsteed’s catalogue of stars, in which she had found hundreds of errors and to which she added 561 stars, bringing the total to over 3500 (Herschel, 1798; Hoskin, 2003:102). Therefore, by February 1825, when Franklin left England, Caroline was recognized as a brilliant astronomer in her own right.

JOHN HERSHEY (1792 – 1871)

John Frederick William Herschel was the only child of William and Mary Herschel (Fig. 4). His scientific abilities were among the best of his generation, and he became the leading figure of science in Britain (Crowe, 2004). In 1842, a letter from Germany reached him with the simple address “London” (Hoskin, 1987). However, the diversity of his contributions and his convoluted prose perhaps reduced his impact on any one field (Hoskin, 1987; Crowe, 2004). John was a brilliant mathematician, better than Charles Babbage, his friend and contemporary at Cambridge, in the latter’s estimation (O’Connor and Robertson, 1999). It is fitting that the Babbage River, named by Franklin for Charles Babbage, flows into the Beaufort Sea only 50 km from Herschel Island. In 1815, John Herschel narrowly lost the election to the Chair of Chemistry at Cambridge, and instead taught mathematics, having been elected a Fellow of St. John’s College in April 1813. He did not enjoy teaching, and in 1816 was persuaded to return to Windsor and assist with his father’s observations of the night sky (Crowe, 2004). In 1819, he made the first of several contributions to photochemistry, when he discovered a method of fixing images formed when silver salts are exposed to light (Crowe, 1998:1). He won the Copley Medal of the Royal Society in 1821 for papers he had published in the Philosophical Transactions (e.g., Herschel, 1816). (At the same time, a Copley Medal was also given to Captain Edward Sabine for geomagnetic work in the Arctic between 1818 and 1820. In 1822, the Copley Medal was awarded to William Buckland.) By 1824, John Herschel was secretary of the Royal Society, and some of his investigations of double stars, which led to the first of his Gold Medals from the Astronomical Society in 1826, were in publication (Millman, 1980b). Through the 1820s, he developed into Britain’s first modern physical scientist.
owing to his command of mathematics and experimental techniques in several subfields of physics and chemistry (Crowe, 2004). His *Preliminary Discourse on the Study of Natural Philosophy* (1830), a broad synthesis of empirical science, critically influenced several prominent scientists, including Charles Darwin (Herbert, 2005:30–32). John Herschel was knighted in 1831, before he left for four years in South Africa, where he mapped the southern sky, loyally completing his father’s observations of nebulae (Hoskin, 1987). Sir John and Lady Franklin, en route to Tasmania, visited the Herschels in South Africa on 20 and 27 November 1836 (Evans et al., 1969). Upon his death in 1871, John Herschel was buried in Westminster Abbey next to Sir Isaac Newton, indicating the outstanding esteem in which he was held (Crowe, 2004). Charles Darwin was later laid to rest between them.

GEORGE BACK’S WORDS

Cdr. George Back (1796–1878) was Franklin’s second-in-command on the western party of the expedition. Their boats, HMS *Lion* and HMS *Reliance*, do not seem to have been separated for any significant portion of the voyage along the Yukon coast. Back’s rough original and fair copy journals are held by the Scott Polar Research Institute. A microfilm of the fair copy is held by the National Archives in Ottawa. Back’s fair copy is flawlessly handwritten and recognizes his promotion to Commander on 30 December 1825 (Holland, 1972), news of which reached the expedition a year later. Franklin and Back may not have discussed their journals in detail, because Franklin states that Workboat Passage is “not wider in its Narrowest part than four or five miles” (Davis, 1998:224), while Back observed that it is “not more than three miles broad.” Similarly, their accounts of events on 17 July 1826 diverge in detail regarding whether, before they crossed over to Herschel Island, they picked up their translator Augustus from Calton Point (Back), the point on the mainland at the eastern entrance to Workboat Passage, or whether Augustus walked to the point, inspected the ice conditions, and returned along the coast to inform the party about the navigability of the passage (Franklin).

Back’s journal entry for 15 July 1826 is pertinent to the naming of Herschel Island. First, Back follows Franklin in his respectful designation of the mountains to be distinguished by the name “Buckland.” Second, he is more straightforward with regard to “an island to seaward after Mr Herschell.” The latter has been taken by Warner (1973) and the late Clive Holland (1981) to imply that the Island was named for John Herschel, who was not yet a knight. Back’s account diverges curiously from Franklin’s in precisely identifying the member of the family being honoured, but does so rather flatly, in contrast to the distinction emphasized by Franklin, which applies to several members of the family. Holland (1981) also points out that in November 1824, four months before Franklin left England, John Herschel moved into 56 Devonshire Street, London, and that at the time Franklin lived next door at number 55! (These addresses are now incorporated into an apartment building at 54–57 Devonshire Street.) Given their connection through the Royal Society and the proximity of their residences, it is inconceivable they did not know each other in 1825. This makes Franklin’s ambiguity more puzzling, unless he had the family in mind.

Finally, Dr. Garry Tee (pers. comm. 2008) has pointed out that in 1841, John Herschel was informed by Captain George Grey, the governor of South Australia, that Grey had named a mountain range in Western Australia after him. In his reply, Herschel wrote: “I am quite proud of my range of mountains as it is, I think, the first time I have figured in a map of the world” (Herschel, 1841). While it is possible that Herschel was being diplomatic and modest, it is also possible that John Herschel thought Herschel Island was named for his family or for his father. (In 1840, Captain James Clark Ross named Mount Herschel in Victoria Land, Antarctica, after John Herschel (Tee, 2007), but Herschel would not have known this when he wrote to George Grey.)

CONCLUSION

The name Herschel was well known in European scientific circles of the mid 1820s. William was only recently deceased; Caroline’s achievements and abilities were well known to royalty; and John was recognized as a prodigy.
William and Caroline were internationally and popularly renowned as astronomer and comet finder, respectively, and John was Franklin’s next-door neighbour. At that time there were relatively few scientists, and the Herschels were highly distinguished members of this community. If Franklin had wished to single out any member of this accomplished family, he would have done so, as he did while naming other features, but he chose instead to honour the family name. In our time, we should celebrate the talents and accomplishments of Caroline as well as the contributions of the Herschel men.

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