John Snow MD (1813–1858). Part I: A Yorkshire childhood and family life

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John Snow’s work in the specialties of anaesthesia and epidemiology has been well documented, and current interest in his medical practice and research is strong\(^1\). Despite this, little attempt has been made by writers to examine his childhood and family life in the city of York in any depth. As a result, there is imperfect knowledge and understanding of this important part of his life, and inaccurate biographical details are still being published\(^2\).

John Snow (Figure 1) was the eldest of nine children born to William and Frances (Fanny) Snow. He spent his first 14 years with his family in York before moving to Newcastle upon Tyne to take up a medical apprenticeship. On Snow’s baptism records, William’s occupation is stated simply as labourer, yet his children achieved notable success in their lives, entering industry, teaching, the clergy and medicine. High intelligence is perhaps not remarkable in a working-class family of this period, but the motivation and commitment shown by the Snow children are striking. This paper provides a useful view of early influences on Snow through a consideration of housing, schooling, and the family’s finances and moral framework. The lives of his siblings also offer important insights into familial characteristics of self-motivation and attainment.

Early years in North Street

Snow was born in North Street, York, on 15 March 1813; for many years, confusion surrounded the exact date and place of his birth\(^3\). North Street was in the parish of All Saints, an area south of York Minster and the Castle and within the Roman city walls. The street ran alongside the River Ouse and was a particularly busy and crowded area during Snow’s childhood, as Ouse Bridge and its approaches were rebuilt between 1810 and 1820\(^4\) (Figure 2). As a small child, Snow (and his siblings) would have watched the arrival of new stone by water to the jetty on North Street. North Street had been a great trading centre since the tenth century, when it was lined with prosperous merchants’ warehouses. By the beginning of the nineteenth century, trade had declined but the river was still used to transport coal and other goods to warehouses in North Street. The housing in North Street varied between ancient half-timbered cottages, more recent dwellings around courts and alleys, and occasional newly built houses. It was among the poorer areas of York, was always at risk of flooding from the Ouse, and was one of the worst-drained areas in the city\(^5\).

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Figure 1. Portrait of John Snow MD (1813–1858).
Between 1801 and 1851, York's population increased by 112%, a comparatively low rate compared with Bradford (700%), Leeds (225%) and Huddersfield (343%)9. Nonetheless, such an increase was enough to bring to York all the public health problems related to overcrowding and inadequate housing. The city suffered during the 1832 cholera outbreak and, in view of Snow's later work on cholera, it is interesting to note that during this epidemic North Street was among the first areas to succumb to the disease.

North Street had been home to the Snow family over several generations, and William and Fanny moved there after their marriage in 1812. The couple had married in Huntingdon, a small village about eight miles north of York, and the witnesses to the marriage included George Snow, William's brother, John Empson, Fanny's father, and Charles Empson, his son. The relationship between the Snow family and the Empson family has been misinterpreted by even the most recent writers7,8. Fanny was the illegitimate daughter of Mary Askham and John Empson, and was born in 1789. Mary and John married when Fanny was almost three years old, and it was their son, Charles Empson, who enjoyed such a strong relationship with John Snow9. John Empson acknowledged Fanny as his "natural daughter" in his will of 185010.

During the first five or six years of Snow's life, William still worked as a labourer. North Street offered plenty of opportunities for those seeking such work. Steam flour mills and a flour warehouse had been established in the area at the end of the seventeenth century, and labourers were always needed to distribute the goods arriving by boat at the staithes on the River Ouse. William and Charles, the second and third sons, were born at the North Street home. At around the time of the birth of Robert, the fourth boy, William changed his occupation from labourer to driver of a horse-drawn vehicle.

Between the arrival of Thomas, the fifth son, in 1821, and Mary, the first girl, in 1823, the family moved to Wellington Row, a few streets away from North Street. And around the time Hannah, the second daughter, was born, in March 1825, William purchased a house in Queen Street. Queen Street was further away from the river and therefore at less risk of flooding. The purchase of this house is the first indication that the family might have had access to more finance than a labourer or driver could provide. William owned the Queen Street house for five years and Sarah and George, the last two children, were born there. Snow lived in Queen Street with his family for only two years before taking up his apprenticeship.

By 1832, a poll of the city of York records William's occupation as farmer in Queen Street. In 1841, William and Fanny moved out of the centre of York to a farm at Rawcliffe, a small village on the outskirts of the city. William continued to live at Rawcliffe until his death, in June 1846. Fanny outlived her son, John Snow, and she died in 1860 from bronchitis. Both William and Fanny were buried at All Saints, North Street.

Religion

Religion was a central part of family life. The Snow family had attended All Saints Church of England parish church for many years (Figure 3) and the
baptism of each of the nine children was carried out there. It is very likely the children attended the Sunday school in North Street, which was taken by the vicar of All Saints from the 1820s. William was appointed churchwarden of All Saints on 1 September 1836 and was presented with a Bible to mark the occasion. William and Fanny both requested to be buried at All Saints, North Street, even though they were living outside York by this time.

Schooling

In the light of the achievements of the Snow children, it is necessary to conclude that they must have all received a basic education. Richardson's original memoir described Snow's school as a "private" institution, a term which has led later writers on the subject to draw erroneous conclusions.

During the early decades of the nineteenth century, the majority of schools were private, with the exception of those which were run on behalf of the state, such as the Poor Law schools or the factory schools. The description "private" would also have covered many endowed schools which existed, as, almost invariably, there was a financial need for a school to take private fee-paying pupils as well as the charity children it had been established to educate.

York, in contrast to other cities in the country, was well provided for with schools in the early nineteenth century, and this was due to local influences such as the particularly large number of charities in York, and the city's strong ecclesiastical tradition. The first publicly provided education in the city came in the shape of the York Church of England National Schools, which opened in 1813. Other denominations were active in the education field, such as the Wesleyans, who opened their first infant school in 1823, and the Quakers, who opened schools in 1828.

Recent writers on Snow have mistakenly concluded that he attended one of the Quaker schools in York. The first Quaker School for Boys did not open in York until 1828, by which time Snow was a medical apprentice in Newcastle upon Tyne. In 1823, there were at least 45 private schools operating in York, four of which catered for boys and were situated close to the North Street family home. Searches at the main private and grammar schools of York have not revealed the particular school Snow and his siblings attended. It has to be assumed therefore that they were educated at one of the charity or private schools, at a cost of around 6d per week per child. William's weekly income at this time would not have been more than 15s, so family finances would have been stretched to the limit to feed, clothe and educate the children. It is no surprise that during these years William took any opportunity he could to earn extra by undertaking work for the parish, delivering coal to the poor, clearing rubbish from the streets and making new drains. In addition, Snow learnt Latin and Greek, and William would have paid extra for these subjects or perhaps arranged private tuition with the vicar of All Saints.

Snow's parents must both have been educated to some degree, as they signed the marriage register, an indication that they were among the most literate of the working classes. The precedence which they put on education at a time when the majority of working-class families in York relied on child labour to supplement the family income is notable. The Snow children were also at an advantage living in York because the lack of manufacturing industry gave rise to fewer opportunities for child labour, and there was therefore less pressure to precipitate the removal of children from school.

A sound preliminary education was required for entry into medical apprenticeship and the majority of medical trainees were educated at the grammar schools. Snow's achievement of a passable preliminary education which included basic Latin and Greek stands as testimony to his own and his parents' ambition. It was this ambition which, when combined with the patchy educational opportunities on offer in York, facilitated Snow's entry into medicine.

Living standards

William's labour history and upward mobility through occupational status describes a pattern of achievement which was far from common among the working class at this time. It provides a useful indication of the role model Snow would have had during his formative years.

The first reference (that in the marriage register) to William's occupation ("labourer") is from 1812. The change of occupation to driver (probably of a cart) occurred around 1819. It was a logical progression, given the location and local labour demands within York. He could have been employed as a carter, either delivering goods that arrived by river, or distributing supplies to the various warehouses in the area.

As stated above, the next change of occupation was recorded in 1832, when William was a farmer in Queen Street, where he apparently remained until 1841, when he moved to Rawcliffe. The only land available for farming in Queen Street was bought by the York and North Midland Railway in 1840. One explanation for William's ability to finance the move to Rawcliffe could be that he achieved it through the compulsory sale of this land to the Railway Board. The farm at Rawcliffe would have been a smallish-sized family unit with a mixture of arable and pasture land.

The change in occupation from labourer to farmer is notable in two respects: the increase in social status, and the fact that William entered the
farming profession. During this period, farming was an occupation which tended to remain within the farming community and be passed from father to son\textsuperscript{17}. Moreover, agricultural distress was prevalent during the early 1830s and many farmers were forced, through economic pressures, to leave the land.

It is not known whether any generous benefactor contributed to the Snow family's finances but the fact that William bought a house in Queen Street in 1825 provides strong evidence that this was the case. William was obviously a shrewd businessman and during the 1830s he purchased another four houses and a yard in Queen Street, which he rented out to tenants\textsuperscript{18}.

The logistics behind William's upward mobility which led him into farming and property-owning will never be known. What is self-evident, and important in the context of his son's life, is how rare an individual William was, in both his desire for occupational advancement and his ability to achieve it.

**Brothers and sisters**

Snow and his brothers and sisters each maintained or improved upon the occupational status their father had achieved during his life. Such examples of intergenerational mobility are scarce in nineteenth-century British history. It is reported that less than one in 1000 sons of fathers in social class V made the transition to social class II\textsuperscript{19}, Table 1 illustrates how two of William's sons achieved this remarkable transition and how the remaining children maintained the class III level or rose to class II\textsuperscript{20}.

It is possible to trace the history of all of Snow's siblings except Charles, the third son. He was not mentioned in William's nor in Snow's will, and the conclusion therefore is that he either emigrated or died before 1858.

The younger William made a life for himself in York, first running the Commercial Temperance Hotel and then expanding his business to include tailoring. His occupations between 1843 and 1863, which are listed in various York directories, include hotel-keeper, tailor, hatter, shirtmaker, general outfitter, and agent to the Railway Passengers Assurance Company. His working life appears to have been far less influenced and directed by his father than Snow's was. Whether this was due to financial limitations, or a lack of aptitude on his part, is not clear.

Robert eventually became manager of Garforth Colliery, in the West Riding of Yorkshire. He married Ann during the 1850s and had several children. It was to Robert that Snow turned in the 1840s when he was collecting information for his work on the transmission of cholera. Robert provided information about the sanitary conditions experienced by miners during long shifts when no washing facilities were available and when the pit was used as both privy and eating place.

Thomas was the only member of the family to enter the clergy. He had, presumably, been given the same schooling as his brothers. He held teaching posts before entering St Aidan's Theological College in 1854, at the age of 33. The increased demand for clergy during the nineteenth century led to the training of non-graduates for ordination. Thomas was one of St Aidan's most successful scholars and after his ordination, in 1857, he worked in the parish of Greetland, near Halifax, for several years, before becoming chaplain to Halifax Gaol. He married twice (his first wife died) and eventually became vicar of Underbarrow in Westmorland, where he remained until his death in 1893. Thomas's achievement in putting himself through clerical training after spending his first working years in teaching demonstrates persistence and the same desire for self-improvement shown by his father. Like his brother John, Thomas vigorously supported the temperance movement, and they attended many meetings and rallies together.

Of the three daughters, only one, Sarah married. She married Matthew Collier of Osbaldwick, a farmer, and bore six children. For no known reason, her second daughter, Sarah, was brought up by her two maiden aunts, Hannah and Mary.

Hannah and Mary were both schoolteachers and eventually ran a school together in York. The sisters had various properties, including several in the Mount, a prestigious York address, and they remained in teaching until their retirement to Harrogate in the 1870s.

Snow's siblings were as much products of the opportunities and influences of the nineteenth century as he was. Each of the children shared the characteristics which had enabled their father to achieve success, and it would appear that Snow enjoyed the advantage of being the eldest son and having money spent on establishing him in a profession at an early age.

**Conclusions**

The Snow family were unusual in the range and scope of their achievements. William had the ability to maximize any opportunities that were

**Table 1. Occupational classifications of William Snow's children**

<table>
<thead>
<tr>
<th>Child</th>
<th>Occupation</th>
<th>Social class</th>
</tr>
</thead>
<tbody>
<tr>
<td>John</td>
<td>Doctor</td>
<td>I</td>
</tr>
<tr>
<td>William</td>
<td>Hotel-keeper/hatter</td>
<td>II/III</td>
</tr>
<tr>
<td>Robert</td>
<td>Colliery secretary</td>
<td>II</td>
</tr>
<tr>
<td>Thomas</td>
<td>Vicar</td>
<td>I</td>
</tr>
<tr>
<td>Mary</td>
<td>Teacher</td>
<td>II</td>
</tr>
<tr>
<td>Hannah</td>
<td>Teacher</td>
<td>II</td>
</tr>
<tr>
<td>Sarah</td>
<td>Married farmer</td>
<td>II/III</td>
</tr>
</tbody>
</table>

*No trace can be found of Charles's history, and George, the youngest son, died in infancy.*
available to him and, by using this skill effectively, he achieved a remarkable, and rare, upward mobility. Through a combination of ambition and local opportunities in York, William and Fanny endowed their children with the two things that proved to be of most value to them in later life: an education, and an increase in William's occupational status. The lives of their children reflect the familial characteristics of hard work, motivation and skill but, of all the children, John Snow appeared to benefit most in terms of career opportunity. His medical apprenticeship provided a lever into the professional classes. It was an opportunity which he maximized to the full during his working life and which rewarded him with a permanent place in the histories of anaesthesia and epidemiology.

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References and notes
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20 Armstrong WA. The use of information about occupation. In: Wrigley EA, ed. Nineteenth Century Society. Cambridge: Cambridge University Press, 1972. Appendix A contains a list of occupational terms encountered in samples drawn from the York enumerator’s books in 1841 and 1851 which have been classified according to the Registrar General’s 1951 social classification system. The children’s occupations have been classified on the basis of this list.