

## CAMPHOR, CABBAGE LEAVES AND VACCINATION: THE CAREER OF JOHNIE 'NOTIONS' WILLIAMSON, OF HAMNAVOE, ESHANESS, SHETLAND

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In the summer of the year 1700, a young man came home to Shetland from the mainland of Scotland. He touched at Fair Isle on his voyage.<sup>1</sup> He was suffering from smallpox.

Smallpox was a new disease in Shetland, and Shetlanders had no immunity to it. It spread like wildfire. The Fair Isle people whom the young man had met, and people who had met them, young and old, began to sicken. Two-thirds of them died, and eventually there was nobody left to manage the island's fishing boats.<sup>2</sup> Later there was havoc in Lerwick; one Sunday, the congregation of the kirk there prayed for 90 souls.<sup>3</sup> Gradually the smallpox was disseminated throughout the islands. By September, the Presbytery of Shetland could not carry out its commitments in the parishes because its clergy were too busy ministering to the dying.<sup>4</sup> 'The dead in everie corner', said the minister of Tingwall in December, 'were so many that the liveing and whole could scarsely be able to bury them'.<sup>5</sup>

What was taking place in Shetland in 1700 was not unprecedented. Because Shetland was so isolated, new diseases often had catastrophic results. As a visitor to Shetland said, 'when in Holy Providence any Sickness cometh upon or breaketh up in the Country, it useth to go through them like a Plague'.<sup>6</sup> But smallpox and its ghastly effects were qualitatively different and more frightening. Shetlanders henceforth referred to the 1700 visitation as the 'Mortal Pox', and in later years old people calculated their ages from this or that year before or after it.<sup>7</sup> The Presbytery, fumbling for words, could only call it an 'outrajious' disease.<sup>8</sup>

Elsewhere it was more usual for smallpox to attack infants and children, but in Shetland in 1700 it attacked breadwinners as well. In Fetlar, for instance, more than 90 islanders died, 'most of them married people'.<sup>9</sup> Shetland was unusual, perhaps unique, in its comprehensive experience of smallpox in the early eighteenth century.

What was the solution? In Shetland in 1700 there was none. As we shall see, there would be three more catastrophes, in 1720, 1740 and 1760. For the Presbytery the catastrophe was 'God's just judgement by reason of our sin'.<sup>10</sup> All the minister of Tingwall could offer was 'fasting and prayer, that the Lord's wrath may be appeased'.<sup>11</sup> The bodies piled up; the survivors, pock-marked, sometimes blind, waited for the next visitation on their children and their children's children.

### THE ORIGINS OF JOHN WILLIAMSON

One of those children was John Williamson, who appears to have been born in Shetland - his exact place of birth is unknown - around 1730. We do not know who his mother was; his father seems to have been called Andrew Williamson. If he was, it is interesting and almost unprecedented that Johnie Williamson received his father's surname. Shetlanders of that date whose surname ended in '-daughter' or '-son' normally had their father's christian name as part of that surname. Around 1755, Johnie

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Williamson's own eldest son, Andrew, took his father's surname:<sup>12</sup> this is an occurrence almost unknown in an isolated Shetland parish at that date.<sup>13</sup> This practice suggests that the Williamsons were 'modern' and progressive, and Johnie Williamson's unusual career confirms that tendency.

Shetland in the first half of the eighteenth century was a society which depended solely on fishing. It was a very poor community. In the mid-eighteenth century, when Johnie Williamson came to manhood, Shetland's 15,000 or so inhabitants lived on about 10,000 acres of poor arable land, under the thumb of sundry merchant lairds. They paid their rents in fish.

From the late 1740s, perhaps much earlier, the Williamsons lived at Hamnavoe, in Eshaness in Northmavine, in the extreme north-west of the Shetland mainland. Tenants of Thomas Gifford of Busta, the most prosperous merchant-laird in the islands, they had a large farm by Shetland standards: ten merks of land, or about ten acres of arable. Hamnavoe was also conveniently situated for the deep-sea fishing grounds to the west of the islands.

Shetland's population was rising, but by then it was constantly under attrition from disease, especially smallpox, and sometimes famine. In 1720 there was a second visitation of smallpox and once again it was catastrophic. In the small island of Foula, as at Tingwall in 1700, there were hardly enough people left to bury the dead.<sup>14</sup> In Fetlar, less isolated than Foula, there were signs that the older inhabitants had developed some immunity in the 1700 epidemic: the 80 people who died there in 1720 were in general younger than 20 years.<sup>15</sup> But such epidemics put a severe strain on the local community and prevented sustained population growth.

Johnie Williamson was about ten years old in 1740. He probably caught smallpox during a third epidemic that arguably was even more severe than its predecessors. In the years around 1740 the countries of northern Europe experienced famine and sharp frosts:<sup>16</sup> perfect conditions for epidemics. The people in John Williamson's parish were reduced to eating whale meat, something they or their ancestors normally never dreamed of doing.<sup>17</sup> In December the Earl of Morton's representative in Shetland reported that:<sup>18</sup>

the fever and small pox have raged in the country for several months, and several hundreds of men, women and children have died, one half of them for want of the necessaries of life rather than the malignancy of these distempers.

In Lerwick the Kirk Session had to extend the kirkyard by 50 feet, and announced restrictions on paupers' rights to coffins and winding sheets.<sup>19</sup> In the smallish island of Fetlar 120 people died - more than in 1700.<sup>20</sup> Later there was a tradition that the Fetlar kirkyard was filled in every corner, except in the spot reserved for suicides and drowned men. To make things worse, the frost was so severe in the winter of 1740-41 that for six weeks the Fetlar people could not dig the earth to bury their dead.<sup>21</sup> Years later, a factor in Unst reckoned that about a third of the population of the island died in what he called the 'very Mortal Small Pox' of that winter. 'I think the Tenants did not increase before 1749 or thereby', he calculated.<sup>22</sup>

Nothing brings home the pain and loss of smallpox more vividly than Thomas Gifford's diary. Gifford was the Williamsons' landlord: a bluff, confident man. In 1740 two of his children, Betty and Frankie, contemporaries of Johnie Williamson, died from smallpox, and another three died during its aftermath. This is how Gifford described those fatal days:<sup>23</sup>

5. Wednesday - Poor Betty and Frankie took the bed yesterday morning.
10. Munday - The Pox wt. Bety and Fra[n]cie very bad - the pox riseth very slow.
12. Wednesday - The Bairns are worss, this day is the 9th with them.
13. Thursday - the Bairns very bad all day, being the 11 of the pox - feverish and weak.
14. Friday - they wer a little easer, but extream weak - pox begin to fall.
15. Saturday - 13 days wt. the Bairns, the pox begin to dry.
16. Sunday - the Bairns very weak and sore, but some hope.
18. Tuesday - my dear Betty dyed about 7 at night, in a very calm maner; Robie ley all that day.
19. Wednesday - poor Fra[n]kie died about 7 at night, very calm.

There seemed to be no cure for, and no prevention against, the Mortal Pox. After the 1740 outbreak life went on much as before, for landlords and tenants alike. At the end of the decade Andrew Williamson was becoming an old man, and he prepared to hand over the lease of his farm at Hamnavoe to Johnie. For a year or so in the early 1750s they shared the farm, and in 1752 John entered a new lease with Thomas Gifford, for the long period of 19 years.<sup>24</sup> His rent and tax alone was £27 6s. Scots. Gifford stipulated that Johnie should 'keep half a six oar boat to the sea' as part of his lease. Shetland landlords of that era habitually made fishing compulsory for their tenants, as a way of securing their rent in one form or another; but this arrangement suggests that Johnie was responsible for organising half a boat's crew. Gifford probably reckoned that he had an energetic and potentially successful young man in his hands.

Johnie Williamson prospered as much as was possible for a Shetlander of his generation. Around the time of his lease with Gifford he married Christian Nicolson. Children began to arrive: Andrew, named after his grandfather; James; Christian, named after her mother; George; Barbara. They were born between about 1753 and 1763.<sup>25</sup> Some of them probably caught smallpox in 1760; some of them may have died. Because the fourth outbreak of the Mortal Pox was about to strike, with its usual chronological precision.

#### VACCINATION IN SHETLAND

This time, however, a solution was at hand. There had been rumours of such a solution, no doubt unreported in Shetland, for almost as long as smallpox had wreaked havoc in the far north. In February of 1701 Dr Clopton Havers had described to the Royal Society the Chinese method of variolation or inoculation: the introduction of smallpox into men and women to give them a mild version of the disease - to provide immunity. For the next 20 years, travellers and doctors discussed the Chinese, Indian and Turkish variants of the method. But it was all still discussion with no action. Meanwhile, the best that English and Scottish doctors could do was isolate victims, and either sweat them or give them plenty of fresh air: the so-called 'hot' and 'cold' methods of smallpox treatment.<sup>26</sup>

In April 1721 Dr Charles Maitland inoculated an infant in London. The experiment was a success. During the following months he inoculated condemned prisoners in Newgate, making deeper and more enthusiastic incisions with his lancet.<sup>27</sup> As a result of these events, there were ambiguous reactions to inoculation in England from the outset. Some people, all of them rich people, grasped it as a panacea; others shrank away from it as brutal and irreligious.

We know exactly when inoculation came to Shetland: in the early summer of 1758 (a year later than in Orkney).<sup>28</sup> A few cases of smallpox appeared in Shetland that year, and a local gentleman wrote to William Edmondston for advice. The latter, a Shetlander,

was a surgeon in Leith with a strong patriotic streak. He took Shetland lairds' sons as apprentices,<sup>29</sup> and on this occasion gladly gave his Shetland correspondent advice.<sup>30</sup> 'It gives me great concern to hear that the smal pox have reached Zetland', he wrote. 'I heartily pity those who have not had that disease.' He went on: 'The operation is extreemly simple and easy, and the success universally good.'

The manner of doing it is as follows [he continued]: viz. to make a small incision with a lance...so as some blood comes away in that part of the arm or leg...then to put in about the bigness of a barley corn or little more of cutton...in which the poxy matter (which must be good and perfectly ripe) has well aborbed, above this a small pledgeht of cadise, then a sticking plaster and afterwards a compress and bandage. The poxy matter must be kepted into the wound for 24 hours at least (I commonly keep it in for two or three days).

That was the basic method of inoculation although, as we shall see, there were variants and improvements. Edmondston gave detailed advice about the care of the patient after the procedure: he recommended a strict diet, 'by abstaining from all flesh and fish and strong liquors of every kind,' and eating

barley meal bread and milk, roots and greens and such like food. I suppose I need not inform you [he concluded] that after the opperation is performd the person must be kept moderatly warm within doors and not go abroad.

This was treatment for rich men and women. No ordinary Shetlander could afford such an operation, or give up their precious time for recuperation afterwards. So when the Mortal Pox arrived in force again, in 1760, there was not much inoculation in Shetland. A grand-nephew of Edmondston, writing in 1809,<sup>31</sup> said that it was confined entirely to the higher ranks, or such as could afford to pay the operator for his time and attendance. 'Not more than 10 or 12 persons were inoculated at this time.'

Around these fortunate people the disease raged as usual. Ninety souls died in Fetlar.<sup>32</sup> Most doctors, or quacks, in Shetland had only the most traditional methods for dealing with smallpox victims. They recommended the so-called hot treatment: a blazing fire, multiple blankets and as little fresh air as possible - a 'murderous' method, as Robert Cowie recalled one hundred years later.<sup>33</sup> And local ministers still thought a pungent sermon was the way to deal with the virus. The minister of Dunrossness, John Mill, put it in his inimitable Christian way:<sup>34</sup>

though a pestilential fever that began in 1758 raged for several years, which, together with the Smallpox in 1761, carried off upwards of 200 young and old; yet alas made but little impression...whereby the inhabitants were generally brought to great straits, as a just judgment for abuse of plentiful seasons by gluttony and drunkenness, which oft broke out in scandalous uncleanness of all sorts.

But inoculation had come to Shetland to stay. In 1768 John Bruce of Sumburgh, another landlord, was writing to a doctor in the south for smallpox matter for his children.<sup>35</sup> And when a minor epidemic began in 1769, another Laurence Edmondston, nephew and erstwhile pupil of the other, was practising in Lerwick. He took firm action, and deserves to be known as the first popular inoculator in the islands. He inoculated several hundred people, especially poor people, and poured scorn on the hot method of treatment. He advised victims to throw away their blankets and take big breaths of fresh air.<sup>36</sup>

There were already signs that smallpox was beginning to falter, so to speak, in Shetland. The fact that an epidemic had broken out in 1769, only eight or nine years after its predecessor, was - paradoxically - good news. Greater frequency of infection allowed more Shetlanders to build up immunity to smallpox. And the source of that greater frequency was the diversification of the Shetland economy from the mid-eighteenth century onwards: a greater incidence of visitors there, and a new tendency among Shetlanders, especially male Shetlanders, to travel out of the islands.<sup>37</sup>

As a result, the Shetlanders, who had previously been plunged in gloom and apathy by a disease which seemed unconquerable, suddenly became optimists. Laurence Edmondston told his son that:<sup>38</sup>

the people of the lower classes were soon convinced of the great advantages... and, resigning every prejudice to the voice of reason, both young and old presented themselves for inoculation, and experienced its benefits.

This is a slight exaggeration. In Sandsting it seems to have been an epidemic as late as 1791 that finally persuaded people to succumb to inoculation.<sup>39</sup> In 1797, the minister of Waas recalled that there had been prejudice against inoculation among his older parishioners, and that younger people had avoided it 'lest they communicate the contagion to their friends in advanced life'. By that date he could report, approvingly, that such prejudices were breaking down.<sup>40</sup>

#### A CONTRAST WITH VACCINATION IN MAINLAND SCOTLAND

The contrast with the situation in the urban parts of Scotland is remarkable. In Glasgow and Edinburgh, and even in Aberdeen and further north, there was massive opposition to inoculation. People railed against doctors who, they reckoned, were tempting faith, and reason, by using dangerous smallpox matter.<sup>41</sup>

Why did the Shetlanders take to it with such alacrity? First, the Shetlanders had had a worse experience of smallpox than almost anyone else. It is interesting to contrast the situation in Shetland with that in Orkney. There were no major smallpox epidemics in Orkney, probably because those islands were far less isolated than Shetland, and doctors and ministers there never regarded the disease as cataclysmic, in the way their counterparts farther north did. Nearly every Shetland minister referred to smallpox in their contributions to Sir John Sinclair's *Old Statistical Account*, some of them at length; only a handful of Orcadian ministers bothered to mention it.

Secondly, and this is equally important, Shetland smallpox had carried away young and old, rich and poor. In Glasgow it was a disease of bairns, often poor bairns: harrowing enough, but not likely to stop the local society from functioning. In Shetland, on the other hand, the huge mortality - perhaps a sixth of the population on each occasion - must have caused chaos while the disease was raging. It is difficult to imagine how communities like Foula and Fair Isle could have bounced back from the Mortal Pox without planned immigration.

A third and most complex reason is the Shetlanders' attitude to innovation. Shetlanders have often been fatalistic throughout their history; they have often had good reason to be so. But there have been many occasions when they have taken up new opportunities with alacrity. At the same time, one has to build into the picture the eighteenth century Shetlander's habit of doing exactly what her or his landlord, or minister, prescribed. There is plenty of evidence that Shetlanders of that period were, as Jonathan Wills once said, 'as miserable, as downtrodden, as craven a bunch of starving serfs as ever subsisted'.<sup>42</sup>

There can be little doubt that part of the Shetlanders' appetite for inoculation from the 1770s onwards had much to do with the enlightened attitudes of local clergymen and landlords. Landlords seem to have co-operated with the inoculation movement: in 1783, for instance, John Mitchell of Westshore tried to organise a mass inoculation of children in Fetlar, and attacked a factor there who inoculated his own children and ignored the rest.<sup>43</sup> The ministers were even more excited. William Mitchell, minister of Tingwall, inoculated 950 of his parishioners, free of charge, from 1774 until he died in the early 1790s.<sup>44</sup> Even the minister of North Yell and Fetlar, a cross sort of man, could write in the nineties that:<sup>45</sup>

within these 20 years by-past, the great Giver of every good and perfect gift to mankind, has been pleased to vouch-safe this poor land one of the most merciful discoveries ever bestowed upon sinful mortals (the sending of a Saviour excepted), I mean inoculation, which is here practised with very great success.

In Glasgow the attitudes of ordinary people, and some of their superiors as well, could not have been more different from those of the Shetlanders. In the cities there was far less abject surrender by ordinary people to their superiors, and thus far more scepticism and hostility, much of it foolish, towards inoculation. On this occasion the Shetlanders did the right thing.

#### WILLIAMSON THE INOCULATOR

Meanwhile, what of Johnie Williamson? By the 1770s he was turning away from the sea to new interests. Over the next 20 years he seems to have had remarkable success in a whole series of occupations: he was, said an observer, 'a tailor, a joiner, a clock and watch-mender, a blacksmith, and a physician'.<sup>46</sup> The minister of Birsay in Orkney, visiting Northmavine in 1774, discovered that there were:<sup>47</sup>

several remarkable geniuses here; I heard of one Williamson, a common fisherman, who has a remarkable mechanical turn, especially for imitation. I saw in the booth of Hilswick a model of a very complex mill, performing bleaching work, which he is said to have made after viewing the original once, and that but a short time. The model performed every operation of the original, is turned with a winch, the whole about 2 feet square. In a word, this man is remarkable for many mechanical performances, but is under great disadvantages, never having it in his power to improve his genius as he might elsewhere.

Sometime after Low's visit Johnie Williamson began to dabble in inoculation. No record exists of when he first took up his scalpel. Shetland's age of popular inoculation was the period from about 1770 to 1800, the years when Johnie Williamson passed from early middle age to old age. Contemporary documents indicate that Williamson was inoculating in the late eighties and early nineties, but there can be little doubt that he had begun his trade long before that. By the 1790s, he had acquired a remarkable reputation in Shetland: he was the nonpareil of the local inoculators. He was, of course, a different kind of inoculator from Laurence Edmondston, or the Rev. Mitchell of Tingwall: he was, as George Low said, a 'common fisherman' with a 'remarkable mechanical turn'. He was not the only plebeian non-medical inoculator in Shetland,<sup>48</sup> but he is the only one we hear about by name. Some of the commentators adopt a faintly patronising tone when they speak about him. Cowie spoke about 'this poor unlettered empiric' in the 1870s.<sup>49</sup> A contemporary minister reminds us that Johnie

Williamson was 'unassisted by education, and unfettered by the rules of art.'<sup>50</sup>

His contemporaries called him Johnie 'Notions': a very problematical nickname.<sup>51</sup> A mere suggestion of derision lurks in it: an oral tradition tells us it was bestowed on him by a member of the Gifford family. According to this story, Williamson was at Gifford's house, presumably on business, and the landlord asked him to rid his house of 'checks', small noisy wood-boring beetles. Williamson looked behind the clock and cleared away a mass of creepy crawlies. 'You hear no more checks now,' he said. Gifford replied, fatuously, 'What a notions!' The story is peculiar, but it was recorded in 1889 from Williamson's own great grand-daughter.<sup>52</sup> Certainly Williamson had a long association with the Gifford family, as one variety of servant or another, from the 1750s until his death; and, among his accounts with Andrew Gifford of Ollaberry in 1791, there is on record a payment for mending the Gifford clock.<sup>53</sup>

Fortunately a detailed account of Johnie Williamson's inoculation technique was written down by the minister of Mid and South Yell.<sup>54</sup> The first concern of any inoculator was to get a good supply of smallpox matter. That could involve travelling long distances to find a promising subject, perhaps a child. One Orkney surgeon, whose diary has survived, spent days on his quest for such pus, and bargained with parents and subject with alcohol and sweets, for the precious matter.<sup>55</sup>

#### MODIFICATIONS OF THE TECHNIQUE

Many inoculators used their inoculating matter right away, but Johnie Williamson had come up with the idea - another of his notions - that it would be less dangerous if he prepared it carefully before use. 'To lessen its virulence', as the minister puts it, he dried it in peat smoke, and then buried it with camphor. Camphor was anti-bacterial, and would have prevented the matter from putrefying.<sup>56</sup> A local tradition in Northmavine suggests that he put the pus between sheets of glass before burying it.<sup>57</sup> He seems to have collected large amounts of matter, because there is evidence that on some occasions he buried it for seven or eight years, and thus did without the benefit of it for long periods. 'This self-taught practioner', explains the minister, 'finds from experience, that it always proves milder to the patient, when it has lost a considerable degree of its strength'.

The next step was the inoculation itself. Williamson, the handyman, rejected a lancet, and made his own knife. With it he made the smallest possible incision in the outer skin of his patient's arm, without releasing blood, and inserted therein a tiny amount of matter. He immediately replaced the skin and, said the minister, 'the only plaister he uses, for healing the wound, is a bit of cabbage leaf'. Observers noted that the infection always took effect at the due time, exactly as in any system of inoculation.

John Williamson was using a variant of the Suttonian method,<sup>58</sup> practised at that time in Essex by his almost exact contemporary Daniel Sutton. Sutton's father had perfected a method of inoculation which dispensed with dangerous bloody incisions.<sup>59</sup> It is impossible to say now how Johnie Williamson heard about such methods, although there were large numbers of newspaper and book-length accounts of inoculation available in his day which may have filtered through to Scotland. Williamson, if he could read - and he probably could - might have read about such Suttonian methods. Alternatively, he may have discussed them with another local practitioner, perhaps a minister.

It is not easy to pinpoint why one particular system of inoculation worked better than another. It may be that Johnie Williamson's deployment of peat smoke and

camphor, and his elaborate burial of the pus, was less important than the lightness of his incision. Derrick Baxby suggested 15 years ago that:<sup>60</sup>

smallpox virus could be sporadically modified by intradermal inoculation so as to produce a milder effect in the individual.... Possibly...the key factor was the growth of virus in the very superficial layers of the skin. The attenuation was probably due to the interaction between virus and host, and not due to any genetic change in the virus.

In whichever way he did it, Johnie Williamson was a successful inoculator. The minister of Mid and South Yell reported that Williamson had inoculated several thousand people, and that he had not lost a single patient. Dr Arthur Edmondston, the son of Shetland's pioneer inoculator, an extremely prickly and not over-generous man, gave Williamson an accolade.<sup>61</sup> Williamson 'met with such unexampled success in his practice,' said Edmondston, 'that were I not able to bear testimony to its truth, I should myself be disposed to be sceptical on the subject'. He went on to say that:

the operative part of Williamson's process appears to have been in strict conformity to the most approved plan which surgery has yet introduced. The most extraordinary part of the proceeding is, the purification of the matter, which, under his management, seems to resist the influence of powers which destroy the very contagion itself. Had every practitioner been as uniformly successful in the disease as he was, the small-pox might have been banished from the face of the earth.

In retrospect, an assessment of these accounts is difficult to achieve. There can be little doubt that John Williamson made a stir in Shetland in the late eighteenth century. But not enough evidence survives to enable us to state what secondary infections his treatment might have provoked.<sup>62</sup> Inoculation was always potentially dangerous.<sup>63</sup> Several Shetlanders were known to be blinded after inoculation: Lowrie Tulloch of Burravoe in Yell, for instance, and James Park, a Fetlar man.<sup>64</sup> But there can be no doubt at all that John Williamson and his fellow inoculators saved far, far more lives than they blighted or lost.

Without accepting some of the more exaggerated accounts, it can be stated with certainty that Williamson and his colleagues altered Shetland's demographic history. Historians who claim that the introduction of inoculation in 1770 had already affected the islands' labour supply by the 1780s are not being sensible.<sup>65</sup> But it is clear that the regular smallpox epidemics of the first two-thirds of the century had put brakes on what might have been a steady rise in the population of Shetland. When inoculation came on the scene, the population could grow faster and the economy could burgeon, with all the new opportunities and complications that implied.

By the 1790s Johnie Williamson was describing himself, modestly enough, as a 'wright': a joiner-carpenter. An account exchanged between him and Andrew Gifford of Ollaberry, whose shop he frequented, survives.<sup>66</sup> Gifford was supplying Williamson with large amounts of cloth for his tailor-work, and other unspecified items imported from Edinburgh. In part return, Williamson seems to have worked for Gifford for a large proportion of the year. Gifford paid him more than £70 Scots for more than 100 days work in 1791, and part of that work was, Gifford said, 'inoculation to sundrie of my tenants'. This suggests that John Williamson and Gifford had a contract, formal or informal, for the upkeep of Gifford's tenantry.

But Williamson was inoculating, and working at this and that, elsewhere. He inoculated the children of Matthew Ramsay in West Yell in 1787, for four shillings

sterling.<sup>67</sup> This supports the idea that he was an itinerant inoculator. And at some point he sculptured in wood a wig-stretcher for the laird of Tangwick in Eshaness.<sup>68</sup> There is a strong tradition in Shetland that 'Johnie Notions' used as his model for this stretcher an old man from Hillswick whose face was marked with smallpox.<sup>69</sup>

The account between Gifford and Williamson stops abruptly in 1796, possibly because Johnie died then, or had suddenly become too infirm to work. He would have been in his mid- or late-sixties. Ironically enough, 1796 was the year of Jenner's great discovery of vaccination with cowpox. When Johnie Williamson died smallpox was under control in Shetland for the first time. But it was still lurking; still a killer.

#### THE SHETLAND EXPERIENCE AFTER NOTIONS' DEATH

In 1804 someone suffering from confluent smallpox arrived at Lerwick: the usual way that the disease entered the islands. Almost at the same time, Shetland's first consignment of cowpox vaccine arrived. The doctors got to work, and Shetlanders submitted as docilely to this vaccine as they had submitted to inoculation with smallpox itself. Those doctors quickly snuffed out a potential epidemic.

A few years later Arthur Edmondston, musing on the new situation, congratulated the Shetlanders on their willingness to submit to vaccination, but he foresaw problems. Dozens of amateur vaccinators had come forward after the arrival of the new method, attracted by its simplicity. Edmondston feared that some of these quacks were incapable of recognising good cowpox lymph, or evaluating the result of the vaccination itself. 'From an ignorance of these circumstances,' he said,<sup>70</sup>

or a want of a due degree of attention to them, it is to be apprehended that the small-pox may re-appear in the country, and affect some of those who now live in the belief of being secure from its attacks.

His fears were justified. On one occasion a Shetland vaccinator boasted to a local surgeon that he had treated hundreds of Shetlanders without any failures. On investigation his lymph turned out to be the matter of scabies. A few Shetlanders left the islands confident that they had been vaccinated, but caught smallpox and died. 'This threw great discredit on vaccination,' Dr Gilbert Spence recalled 50 years later.<sup>71</sup>

So Shetlanders grew wary of the vaccine. It is not known whether they resorted to inoculation again; I have seen no evidence that they did. A smallpox epidemic in 1830 gave them a major fright, and there was general vaccination again;<sup>72</sup> but the habit did not last. People in Lerwick seem to have paid more attention to it than country folk, no doubt because the Lerwegians saw more smallpox than their rural cousins. Between 1841 and 1863, for instance, there was only one death from smallpox in the populous parishes of Dunrossness, Sandwick and Cunningsburgh.<sup>73</sup> A grotesque tale is recorded from Foula that when a minister came to vaccinate the people there, around 1850, they imagined he had come to castrate the men, and refused to let him ashore.<sup>74</sup>

On the eve of the Vaccination (Scotland) Act of 1863 Spence reckoned that a third of the population of Shetland was unvaccinated.<sup>75</sup> The Act naturally changed things. It is my strong impression that there were next to no prosecutions of defaulters under the Act in Shetland,<sup>76</sup> and in the 1870s Dr Robert Cowie reckoned that vaccination was general throughout the islands.<sup>77</sup>

Fifty years later the situation was entirely different. In 1922 Shetland's Medical Officer of Health reported dolefully to his employers that 'the population here is notoriously unvaccinated .... About 94% of the population is unvaccinated.'<sup>78</sup> In

1931, out of 265 births registered in Shetland a mere 11 were successfully vaccinated.<sup>79</sup> Why was this? Logie Barrow, an expert on anti-vaccination movements, tells me that Shetland's trajectory from eighteenth century clamour for inoculation, via nineteenth century submission combined with forgetfulness about vaccination, to comprehensive twentieth century hatred of vaccination, is unprecedented anywhere.

I shall make two suggestions. First, as time passed by Shetlanders saw less and less smallpox. Eighteenth century Shetlanders, haunted by memories of the Mortal Pox, needed no persuasion to inoculate, to save their skins and their children's skins. In the nineteenth century Shetlanders saw less smallpox; they vaccinated when they remembered about it, and eventually when they were actually forced to do so by law. In the twentieth century, on the other hand, there was no endemic smallpox in Shetland at all. Individual cases of the disease occurred among immigrants - for instance in 1915 - but the victims were hidden in Lerwick's tiny isolation hospital, and people scarcely knew they were there.

Secondly, and I am being more speculative here, it was not until the very end of the nineteenth century that Shetlanders finally threw off the influence of their landlords, and of other persons in authority. The Crofters Act of 1886, and the Scottish Education Act of 1872, were important parts of that liberating process. In 1907 a new Vaccination (Scotland) Act ended compulsion to vaccinate, and Shetlanders became conscientious objectors overnight. The size of Shetland's unvaccinated population in the twenties and thirties proves that Shetlanders thought strongly - very strongly - about the subject. No-one seems to have written down precisely why he or she objected, but I suspect that Shetland's anti-vaccination feeling was an amalgam of repulsion from cowpox, perhaps some religious scruple, and, most important, attentiveness to individuals' - particularly children's - rights.<sup>80</sup>

For the past 20 years there has been no smallpox in the world. As a result, and I am sure that this was already the case among Shetlanders in the 1920s, the nightmare that it was has been forgotten. It is very easy to overlook, or misunderstand, or even embellish the work of the people who fought against it. I sometimes have a feeling that Shetlanders today regard Johnie Williamson as part of 'heritage', rather than as a nimble-minded eighteenth century Shetlander who was on the side of life rather than death. There is still no sensible memorial to him or to his fellow inoculators and vaccinators in Shetland.<sup>81</sup> Johnie Notions and his colleagues changed things. They turned the tide of history in their native islands; they deserve our respect and study and love.

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## REFERENCES AND NOTES

- <sup>1</sup> Brand J. *A new description of Orkney, Shetland, Pightland-Firth and Caithness* Edinburgh: 1703, 72-3.
- <sup>2</sup> Brand 84-5.
- <sup>3</sup> Brand 72.
- <sup>4</sup> Shetland Archives (SA), CH.2/1071/1 p.24.
- <sup>5</sup> SA, CH.2/1078/1, folio 51v.
- <sup>6</sup> Brand 72.
- <sup>7</sup> Rev. William Jack, minister of Northmavine, in D.J. Withrington and I.R. Grant eds., *The statistical account of Scotland vol. xix, Orkney and Shetland (OSA)*, Wakefield: 1978, 469.
- <sup>8</sup> SA, CH2/1071/1, pp.29-30.
- <sup>9</sup> Low G. *A tour through the islands of Orkney and Shetland* [in 1774] Kirkwall: 1879, 175.
- <sup>10</sup> SA, CH.2/1071/1, p.29.
- <sup>11</sup> SA, CH.2/1078/1, folio 51v.
- <sup>12</sup> Personal communication from Mary Helen Odie who kindly shared with me her research, and that of the late Robert Johnson, on John Williamson's descendants.
- <sup>13</sup> It is even worth asking if Andrew Williamson was a Shetlander.
- <sup>14</sup> Edmondston A. *A view of the ancient and present state of the Shetland islands, ii* Edinburgh: 1809, 85. This is the most famous statement about Shetland smallpox, and it is a pity there is no contemporary reference to the event. David Thomson referred to it in 1797 (*OSA*, p.521,) without specifying a year.
- <sup>15</sup> Andrew Bruce of Urie, cited in Low 175.
- <sup>16</sup> Flinn M. *Scottish population history from the 17th century to the 1930s* Cambridge: 1977, 216-17.
- <sup>17</sup> Rev. William Jack in *OSA*, pp.468-9n.
- <sup>18</sup> SA, GD.150/[2566B/129].
- <sup>19</sup> SA, CH.2/1072/12, pp.203-4, 206.
- <sup>20</sup> Andrew Bruce in Low 175.
- <sup>21</sup> Spence GW. The history of smallpox in Shetland. *Shetland Advertiser* 19 January 1863.
- <sup>22</sup> Gardie Papers, Bressay: no. 838.
- <sup>23</sup> The original document is not known to exist. The passage above is extracted in the Printed State of Proof, etc for Arthur Gifford, Esq. of Busta against Arthur Gifford, purser, RN., 1833: copy in SA, D.1/136/2/1.
- <sup>24</sup> SA, D.11/193, pp.238, 273.
- <sup>25</sup> SA, CH.2/286/2 pp.6, 28, 40.
- <sup>26</sup> Smith JR. *The speckled monster: smallpox in England, 1670-1970, with particular reference to Essex Chelmsford: 1987*, 30.
- <sup>27</sup> Smith 32-3.
- <sup>28</sup> Liddell, minister of Orkney, in *OSA* p. 156.
- <sup>29</sup> SA, GD.144/92/12, GD.144/237154, D.6/131/9/5.
- <sup>30</sup> SA, GD.144/141/41.
- <sup>31</sup> Edmondston 86.
- <sup>32</sup> Andrew Bruce in Low 175.
- <sup>33</sup> Cowie R. *Shetland descriptive and historical* Edinburgh and Glasgow: 1874, 76.
- <sup>34</sup> Goudie G. *The diary of the Reverend John Mill* Edinburgh: Scottish History Society; 1889, 24.
- <sup>35</sup> SA, D.8/82/5.
- <sup>36</sup> Edmondston 87. Arthur Edmondston does not say, in so many words, that his father was the pioneer inoculator. Given the scarcity of surgeons in Shetland at the time, however, it is difficult to imagine who else he meant.
- <sup>37</sup> Arthur Edmondston made this connection: Edmondston 86.
- <sup>38</sup> Edmondston 87.
- <sup>39</sup> Patrick Barclay in *OSA*, p.389.
- <sup>40</sup> David Thomson in *OSA*, pp.521-2.
- <sup>41</sup> Smout TC. *A history of the Scottish people, 1560-1830* London: 1972, 255.
- <sup>42</sup> Wills J. Quilk is a desert place *New Shetlander* no. 93, 1970; 24.
- <sup>43</sup> SA, D.8/232.
- <sup>44</sup> William Mitchell in *OSA*, p.480.
- <sup>45</sup> James Gordon in *OSA*, p.552.
- <sup>46</sup> Dishington in *OSA*, p.543.
- <sup>47</sup> Low 141.
- <sup>48</sup> Edmondston 87, and Barclay and Dishington in *OSA*, pp.389 and 542, state that there were native

- practitioners.
- <sup>49</sup> Cowie 75.
- <sup>50</sup> Dishington in OSA, p.543.
- <sup>51</sup> His grandson, who lived in Yell from the 1820s, was (and is) also called 'Notions' (SA, D.23/154/612: I am grateful to John Ballantyne for this reference).
- <sup>52</sup> SA, D. 1/259/15 (unpaginated).
- <sup>53</sup> SA, D.1/261 p.122.
- <sup>54</sup> Dishington in OSA, p.543.
- <sup>55</sup> Transcribed in Thomson WPL, ed. *The making of modern Orkney* Aberdeen: 1995, 17-19.
- <sup>56</sup> I owe this point to Derrick Baxby.
- <sup>57</sup> SA, TA125, tape-recording of Rosabell Blance, 17 July 1960.
- <sup>58</sup> WPL Thomson makes this point in 'Population and depopulation', in Withrington DJ, ed., *Shetland and the outside world 1469-1969* Oxford: 1983, 155.
- <sup>59</sup> Smith, *Speckled Monster passim*.
- <sup>60</sup> Baxby D. *Jenner's smallpox vaccine* London: 1981, 36. 'Indeed,' says William Buchan (*Domestic medicine or a treatise on the cure and prevention of diseases* [1786], Manchester: 1822, 239), 'if fresh matter be applied long enough to the skin, there is no occasion for any wound at all.'
- <sup>61</sup> Edmondston 87.
- <sup>62</sup> A point made by R Mitchison in Flinn 292.
- <sup>63</sup> As G. Risse says 'the hazards of acquiring a serious case of smallpox for a healthy individual and even starting an epidemic must have been significant deterrents for the wider employment of inoculation' (*Medicine in the age of enlightenment* in Wear A ed, *Medicine in society* Cambridge: 1992, 189).
- <sup>64</sup> SA, D. 1/259/15 (unpaginated) and D.7/43/1.
- <sup>65</sup> A point made by T.C. Smout in a review of Smith HD. *Shetland life and trade* (1984), in *Northern Scotland*, vii, 1986, 79.
- <sup>66</sup> SA, D.1/261 p.122.
- <sup>67</sup> SA, SC. 12/6/1791/50. I am grateful to John Ballantyne for this reference.
- <sup>68</sup> Now in Shetland Museum
- <sup>69</sup> Graham J. John Williamson - pioneer inoculator *New Shetlander* no. 47, 1958; 15.
- <sup>70</sup> Edmondston 90.
- <sup>71</sup> Spence 2-3.
- <sup>72</sup> Spence 3.
- <sup>73</sup> SA, Minutes of Dunrossness, Sandwick and Cunningsburgh Parochial Board, CO.6/5/30, minute of 30 August 1863.
- <sup>74</sup> Letter by Einar Seim to John Mooney, 23 February 1936, Orkney Archives, /[D.49/216]. Cf. note 77, *infra*.
- <sup>75</sup> Spence 3.
- <sup>76</sup> I can only trace one: SA, SC.12/6/1867/31.
- <sup>77</sup> Cowie 75-6. There were exceptions. In 1883 the registrar of Foula wrote as follows to a prominent anti-vaccinator 'The parish doctor visits us every two years to vaccinate the children, and many of the parents refuse to permit the operation, because we have seen so much damage done to children through vaccination. Many of the children are being destroyed with skin eruptions, and instead of being healthy as formerly, are now sickly and yellow, and some have never had a day's health, and all through vaccination': *North-Western Gazette* 7 June 1884, 5. I am grateful to Logie Barrow for this reference.
- <sup>78</sup> SA, CO.7/5/1922, p.34.
- <sup>79</sup> Steele WR. Local authority involvement in housing and health in Shetland c. 1900-1950, unpub. M.Phil. thesis, University of Strathclyde: 1992, 74.
- <sup>80</sup> For twentieth century adult Shetlanders' attitudes to children see Thompson P. *Living the fishing* London: 1983, 336-40.
- <sup>81</sup> Samuel Hibbert proposed such a monument 175 years ago: *A description of the Shetland Islands* Edinburgh: 1822, 532.