'By Death Divided. Scottish and English approaches to death certification in the nineteenth century'

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Anne Cameron has noted that the Scots were slower than the English to make compulsory the collection of the country's vital statistics. One consequence of the 18year delay between the two systems of registration was that interested in parties in Scotland were able to consider the workings of the English system, and to suggest 'improvements'. They were, as Anne has shown, constrained by features of the Scottish economy and administration which led to a more diffuse and cut-price system, particularly in the retention of the parish as the basis for administration, since Scotland had no Poor Law unions.

A noticeable feature of the Scottish system was the degree of medical intervention in the framing of the Act. Although, as Eddy Higgs has shown for England, legal considerations were an important motive behind registration, the Royal Colleges and incorporations in Scotland also lobbied regularly for it, and the most prestigious of them, the Royal College of Physicians in Edinburgh, took a particular interest in the matter. The influence they could wield on the political structure was limited but significant, and its main influence was in the presentation of the Scottish death statistics, and the theories underpinning them. By the time the Act was passed, this subject was dominated in England by a medical man, the Registrar General's Superintendent of Statistics, William Farr, who by time of the passing of the Scottish Act, was the main force behind the English statistics, and had an international reputation in the statistical movement.

The Scottish Act, attempting to keep cut staff to the barebones to appease its critics, made no mention of a superintendent of statistics; no Farr was written into it. It was

tacitly assumed that the clerical staff could compile Scotland's statistics by following the guidelines laid down by Farr, and so giving the English Registrar control over the presentation of Scotland's vital records. The Registrar General for Scotland, Pitt Dundas, was not prepared to accept this, probably because of the lobbying by the Royal College, but also, perhaps, because he did not relish writing the annual report himself. His approach to his office was less interventionist than that of his English counterpart, Major George Graham. Once in office, Dundas immediately contacted Graham to find out exactly what Farr's duties were, noting 'I think it likely that an appointment analogous to that held by Mr Farr will be made here, I do not imagine that the Medical public will rest satisfied without it, & there are perhaps good reasons why they should not.¹ Using Farr's international reputation as a proof of the value of a medical statistician, Dundas then urged the need for a similar appointment on the Treasury.

Dundas was already mentioning the name of James Stark MD, an Edinburgh practitioner with a record of interest in Scottish vital statistics. Stark, in his early forties, was a Fellow of the Royal College of Physicians of Edinburgh, and a member of the Statistical Society of London.² He undoubtedly had the support of the College, where he had been active in committees pressing for Scottish registration, but he was also well-connected through his father-in-law, Adam Black, the publisher, former provost, and prospective MP for Edinburgh.³ Unlike Farr, the agricultural labourer's son who made his own way with some philanthropic support, Stark had an established position in Edinburgh, though he took a government post to boost his income. As a sop to the Treasury, Dundas was prepared to accept a part-time superintendent of statistics. Stark earned £500 a year and kept some private medical practice. Dundas reassured Graham that he would not give in to medical pressures for a separate Scottish nosology (classification of diseases), 'even tho' the Doctors should make out that a more perfect one could be framed. Mutual improvements are a totally different thing.'4

¹ NAS GRO1/465 p. 14, Pitt Dundas to George Graham, 23 Oct 1854.

² James Stark, 'Contribution to the vital statistics of Scotland', Journal of the Statistical Society of London 14 (1851), pp. 48-87.

³ Pitt Dundas and Adam Black were on opposing sides of the political spectrum, but by this stage of Scottish politics, being well-connected in Edinburgh society was more important way of advancing a career than actual political affiliation. ⁴ NAS GRO1/465, p. 28 Pitt Dundas to George Graham, 3 Nov 1854

This leads to a second major theme in our study: the creation of the Scottish death certificate, and the differences between Scottish and English approaches to the causes of death. Several sections of the Scottish Registration Act attempted to improve on the English system. In the case of death registration, this was due to criticism from the medical and legal professions; but it was also a tacit recognition that Scottish registration, especially in the rural districts, could not rely on ill-paid parochial registrars to seek out information, since they had their own businesses to attend to (usually as parish schoolmaster), and in the Highlands the parish could cover a large area. Lack of compulsion in the English system, especially in notification of births, led to considerable under-registration.⁵ More pressure was to be applied to force the Scottish population to report their vital events. Whereas in England the registrars sometimes had to undertake personal investigations in private houses to gain information of a birth or death, the Scottish people were required to come to the registrar, and there was more compulsion on the medical profession to participate in the compiling of statistics.

In England, the fail-safe approach to death registration, if no information came directly to the registrar, was to fine undertakers or sextons heavily if they buried a body without following legal procedure. If he was not given a death certificate by the burial party, the undertaker had to inform the registrar, who could then investigate the situation. The Scottish Act was more specific in its requirements than the English, setting out a strict order of responsibility for reporting a death, including elaborate arrangements for reporting deaths that did not occur in houses. Relatives present at the death, or, failing these, the occupier (usually the landlord or chief tenant) of the house where the death took place, then the inmates of the house, then anyone discovering the death, had a legal duty to report it personally to the registrar within a fortnight, or face a fine of fourteen shillings.⁶ At first, any medical man who had attended on the deceased was also obliged to certify the cause of death within a fortnight under threat of same penalty, but in 1860 the Registration Act was amended so that the penalty applied only if the doctor refused to respond to the registrar's request for a death certificate. In neither country was the doctor required to have

⁵ M. S. Teitelbaum, 'Birth under-registration in the constituent counties of England and Wales, 1841-1910', *Pop Stud* 28 (1974), pp. 329-343.

⁶ 17 & 18 Vict c. 80 s. 38.

attended the deathbed or even to have viewed the body. If he had seen the deceased in any recent period, he could write a death certificate.

Because medical men were not paid for these certificates, the system worked largely on *noblesse oblige*, to which the profession responded fitfully, and sometimes resentfully. The Scots law seemed to have more power of enforcement over the medical profession, but in 1871, an emissary from England's General Register Office who visited Scotland with the specific intention of comparing the two systems, reported that compulsion of the medical profession was virtually unheard of, and that weeks or months might pass before the doctor got round to giving information about the cause of death – which played havoc with the quarterly statistical returns and cast doubt on the accuracy of the doctor's diagnosis. The GRO representative saw no reason to support similar compulsion in England, for it 'would be simply to make all practitioners do by compulsion, that which most of the more respectable already do voluntarily'.⁷ He did, however, greatly approve the Scottish ordering of responsibility for reporting deaths to the registrar, and this was introduced into English law in 1874. The problem of casual reportage of a death in England was, incidentally, not confined to the poor. The superior classes, it was said, objected to visiting registrars' offices in the local workhouse, and sent a servant to provide information, though in these cases, a doctor was more likely to be involved.⁸ In Scotland, the problem of certification was not confined to the rural areas. Particularly in the outlying areas of growing towns, where administration did not keep up with population, infant deaths were rarely certified by a medical man. Bridgeton was a particularly bad example, as the Examiner, Dr Bell, wrote:

This district is a purely manufacturing one, the amount of illegitimacy is great, and the mortality of infants considerable. I have indicated that there is a lack of certification by medical men & undertakers, in reference to many of these deaths, and I have not found that it is in the power of the Registrar to remedy this evil.⁹

Although the Scottish system was intended to put more obligation on the people to report their vital events, early reports from the Scottish Examiners indicated

⁷ GROS library, Edward Whitaker, '1871Report on Registration in Scotland', p. 34. Typescript copy 1922.

⁸ Muriel Nissel, *People Count. A History of the General Register Office* (London: HMSO, 1987), p. 16.

⁹ NAS GRO 1/3 Examiners notes, A. Nicolson, 19-24 April 1855, n.p.

very great difficulties in enforcing this at first. The examiners frequently reported their suspicions that loopholes in registration were a cover for criminal acts- they seemed particularly suspicious of the Highland populations, whose very low levels of homicide reflected the problems of accurate reporting, rather than the reality. The Examiner from the northern counties reflected on how easy it was to commit a murder, especially given the lax attitudes of both registrars and fiscals (the prosecuting officers); while everywhere, the high level of mortality amongst illegitimate infants raised fears of undetected infanticide. Like the English, the Scots could fine gravediggers or Kirk officials if they buried a body without a death certificate, but in remoter areas, where no undertakers existed, there was no paid gravedigger and the Minister was at a distance, crofters took a proprietorial view of the local graveyard. The Disruption also left a legacy of disputes about rights over burial places. One examiner reported from the north-east:

Unfortunately it often happens that there are no Church Officers; and even when there are, parties frequently break open the gate, dig the grave, and bury the dead, in spite of all opposition.¹⁰

In his first annual report, James Stark confessed that ten per cent of all deaths had no causes assigned to them.¹¹ This proportion fell as the medical profession became more co-operative, and registrars more forceful, but certification without a medical attendant remained a serious problem in several parts of Scotland, as revealed by a Parliamentary Select Committee, in 1893. The Committee leaned heavily on Scottish evidence for some of its argument, particularly on fears concerning infanticide, for only Scotland was a child's illegitimacy recorded on the death certificate.¹² By this stage, the urban registrars had an ally in the local medical officer of health, and in Edinburgh Henry Littlejohn used his dual position as MOH and police surgeon to threaten the public with a visit from the police in all cases of uncertified death. This rapidly brought down the level of uncertified deaths in Edinburgh. The vigorous actions of J.B. Russell, the MOH in Glasgow, reduced uncertified deaths to three per cent by 1891; but in the Highlands the problems of certification continued, with 42 percent of deaths in Inverness being uncertified.¹³

¹⁰ NAS GRO 1/1 Examiners notes, A. Liszt. Note Q. M.B. No.2. Page 42.

¹¹ First Detailed Ann. Rep. RGS 1861, p. xxxii

¹² First and Second Reports from the Select committee on Death Certification, PP 1893-4 (c. 402) xi, p. iv. ¹³ Ibid., p. vii.

If hard information about causes of death was difficult to obtain, providing a comparable set of causes of death for England and Scotland was a further obstacle to a unified national record. For more than a decade before the passing of Scottish registration, there had been a polite but implacable dispute between William Farr and the Royal College of Physicians of Edinburgh. This is part of a complex history of the public health movement, which has been charted by Brenda White, Sheonagh Martin and Christopher Hamlin. The doyen of the Royal College, William Pulteney Alison, Professor of the Practice of Medicine at Edinburgh, had been one of the prime movers for a more humane reform of the Scottish poor law in 1845, but was a strong opponent of Edwin Chadwick in both poor law and public health policy. Where Chadwick emphasized drains and sanitation to improve the health of the poor, while subjecting them to rigorous and humiliating procedures if they claimed poor relief; Alison believed that more generous poor relief, combined with better medical services, were the essential bases of public health. In addition, there was a complex difference of opinion over the cause of epidemic disease. To simplify mightily: Farr and Chadwick stressed the evils of overcrowding and bad drainage, and took a 'miasmatic' approach to public health, while the Edinburgh school emphasized contagion rather than miasma. Alison, while certainly not resisting sanitary measures, stressed the effects of poverty- cold, hunger, and poor housing, which made the poor susceptible to both epidemic and sporadic diseases. Stark was closely connected with Alison in attacks on Farr's nosology in the early 1840s, beginning a war which was carried on by Stark and Farr until the end of their careers in the early 1880s. Stark, influenced by Alison, believed that it was impossible under Scottish conditions to collect entirely accurate causes of death, and recommended a somewhat unwieldy system in which each disease should be classified according to its 'seat' or position in the body. Hence pneumonia should be classified under diseases of the chest, which any layman could do, and a doctor, if there one were available, could provide an additional, more detailed description. One of the Edinburgh group's main objections to Farr's classification was that it tended to emphasize the immediate cause, rather than the underlying cause of death; hence complications of pregnancy and childbirth might be classified under (say) haemorrhage or peritonitis. Stark argued that Scotland's apparently higher rate of maternal mortality compared with England was entirely due to statistical inaccuracy in England, and this was borne out by the actions of Farr's successor, William Ogle, who began a system of correspondence with

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medical practitioners over doubtful entries, and discovered that a quarter of deaths attributed to peritonitis were in fact due to puerperal fever.¹⁴ This is not to say that the Edinburgh approach was necessarily more effective than Farr's. Both were cumbersome, and, in the absence of more sophisticated bacteriology, gave rise to endless arguments about the nature of various diseases (for example- whether hydrophobia was 'zymotic', due to a poison, or an act of violence). Stark was also accused, not without justification, of favouring a more streamlined nosology simply to reduce the cost of printing his statistics, for his office was less well resourced that Farr's, and there was often a long delay between collecting the statistics and publishing them.

The battle between Farr and Stark was conducted very vigorously in the annual reports of the Registrars General, sometimes openly, sometimes by innuendo. Stark accepted Farr's general categories, though with his own variations in detail, but was greatly irritated to find that, in the time lag between his first annual report, containing the figures for 1855, and its publication in 1861, Farr had decided to alter the English nosology into even more complex groupings, including a section for miasmatic diseases. This was regarded as an extreme provocation, and Stark's reports poured scorn on Farr's obsession with miasma and overcrowding. Stark's main evidence in rebuttal was the conditions of the highland crofters, living in overcrowded huts on earth floors amidst the worst possible miasma of human and animal ordure, but somehow maintaining a higher standard of health than the city dwellers. Stark made a public attack on the English system:

...a *Statistical Classification* has to deal with facts, and not with theories, and as the Statistical Tables must exhibit the whole Deaths in the Registers, else they are of no use, and all these Deaths must, as far as practicable, be arranged under their proper head, *it requires to make additions to almost every class of diseases, in order that all those Deaths, whose definitions are given too imperfectly in the Registers to enable them to be assigned to their exact species, may at all events be tabulated under their proper class'. ¹⁵*

¹⁴ Anne Hardy, "Death is the cure of all diseases": using the General Register Office Cause of Death Statistics for 1837-1920', *SHM* 7 (1994), 476.

¹⁵ James Stark, 'Dr Stark's proposed new classification of diseases for statistical purposes', *GMJ* 12 (1865), p. 244. The italics are Stark's. For some further history of these disputes, see A.H.T. Robb-Smith, 'A history of the College's Nomenclature of Diseases: its reception', *JRoy CollPhyscns Lond* 4 (1969), pp. 5-26; and A H T Robb-Smith, 'A history of the College's Nomenclature of Diseases: its preparation', *Journal of the Royal College of Physicians of London* 3 (1969-70), pp. 341-358.

Stark refused to accept Farr's revised nosology, and the two reports proceeded on different lines throughout the 1860s and 1870s until their successors began to use systems related to the nomenclature of diseases produced by the Royal College of Physicians of London, which after a shaky start, invited Edinburgh. representatives to join their deliberations. By the early twentieth century, greater understanding of disease causation, and pressure for an internationally accepted list of the causes of death drew them closer together.

In another areas Stark's medical interests went considerably further than Alison's- his strong interest in the weather as a factor in disease. This was, of course, an extremely ancient interest of his profession, but given an extra boost in Scotland in the 18th century by William Cullen's famous classification of diseases, in which heat and cold, as 'exciting causes' played an important part. Alison and Stark were the heirs of Cullen, and one outcome is the heavy amount of emphasis in the Scottish annual reports, until after the First World War, on meteorology. Stark was secretary of the new Scottish Meteorological Society, founded soon after the GROS, and plainly believed that if only Scotland were covered by a complete system of weather stations (the RCPE agreed to put one on its roof), both public health and the agricultural economy would greatly benefit from a more sophisticated appreciation of the effects of weather on both health and the economy. Farr, too, paid conventional respect to the influence of climate, but was chiefly interested in wind speeds, since the wind was beneficial in dispersing poisonous miasma. Where Stark stressed temperature, Farr stressed overcrowding.¹⁶ The ways in which the two presented their findings reflects this: whereas Farr famously emphasized his 'healthy towns' in order to shame the rest, Stark divided Scotland into 'Three Great Divisions, the Insular, the Mainland, and the Town District.' This served some of the purposes of Farr's healthy towns, but Stark also believed that these divisions reflected not only economic, but climatic conditions in Scotland.

The two classification systems present problems for the historian. There is the basic difficulty of consistency in the statistics, as the example of puerperal fever shows, but also in the way in which the special interests of the two medical statisticians affected the social interpretations of disease. In a short paper of this kind, it is impossible to follow through all the implications of the long debate between

¹⁶ Stark throws down the gauntlet in the First Ann. Rep. Of RG for Scotland (1861), pp. li-lvi.

Scotland and England on how to record the nation's deaths; but the argument itself is evidence, once again, of the way in which such apparently solid statistics are socially constructed.