Research in inscriptional palaeography (RIP). Tombstone lettering in Dumfries and Galloway

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ABSTRACT

A comprehensive and detailed survey was made of lettering on all accessible tombstone inscriptions in Dumfries and Galloway. Using statistical and other analytical techniques, a large amount of data was extracted. From this, comparisons were made with data from the author's previous study of inscriptional lettering throughout Scotland. The distributions of a number of letterform attributes were mapped, in some instances revealing clear geographical trends. The interesting subregional groupings in Dumfries and Galloway identified in the initial national survey were confirmed when the comprehensive data were used, though the distinctions were not so clear-cut. The rise of three more or less distinct area profiles identified using 42 letterform attributes is likened to the development of a dialect or accent, not learned by imitation, but subconsciously acquired as a consequence of living in local divergent communities.

INTRODUCTION

Lettering on tombstones of the late and post-medieval period is a subject that has been largely ignored until recently. The author undertook a survey of gravestone lettering throughout Scotland based on a sample of 132 mainland burial sites (Thomson 2001a). This work established a number of principles for future research, in particular the categorization of lettering styles, the selection of letterform attributes (variables) for use in analysis and a range of univariate and multivariate statistical techniques that can be used to investigate temporal changes and geographical variation (Thomson 2001b). One of the main outcomes of this preliminary research was a range of baseline data with which future studies can be compared.

Tombstone sculpture represents an important and accessible collection of folk art. Commemoration is principally recorded through lettering that represents an invaluable resource for the study of local communities, traditions and tastes. Moreover, it can be used as a cultural marker. This can be established through a detailed investigation of specific lettering styles (Thomson 2002) or by statistical analysis of data extracted from a range of seemingly abstruse attributes. The analysis of data based on 42 attributes from a sample of 20 sites in Dumfries and Galloway indicated that inscriptional lettering in the region diverged into three fairly distinct groups: south-eastern Dumfriesshire, the rest of Dumfriesshire together with all but the west of the Stewartry of Kirkcudbright and the western part of the Stewartry with Wigtownshire. Without the use of multivariate statistical methods, the differences between the inscriptions in these areas are not immediately apparent. It was suggested that these groupings were a tangible expression of 'cultural embedment', which is not fully explained simply by suggesting that masons were copying styles in the same or adjacent graveyards.

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TABLE 1

List of sites surveyed with site reference number, community name, site name, National Grid coordinates and sample size

Site reference no	Community	Site name	NGR	Sample size
27	Annan	Annan Old Cemetery	NY 192 666	287
20	Annan	Annan Old Parish Kirkyard	NY 196 666	272
91	Anwoth	Anwoth	NX 583 562	165
3	Applegarth	Applegarth Kirkyard	NY 103 848	161
82	Balmaclellan	Balmaclellan Kirkyard	NX 652 790	108
76	Balmaghie	Balmaghie Kirkyard	NX 723 663	180
59	Bankend	Caerlaverock Kirkyard	NY 025 692	421
2	Beattock	Beattock Kirkyard	NT 082 011	141
37a	Beattock	Drumgree Graveyard	NY 061 967	8
36a	Bentpath	Westerkirk Graveyard	NY 313 903	211
32b	Boreland	Hutton and Corrie Kirkyard	NY 170 908	104
87b	Borgue	Borgue Kirkyard	NX 629 483	153
21a	Brydekirk	Brydekirk Kirkyard	NY 183 704	26
16a	Canonbie	Canonbie (St Martin's) Kirkyard	NY 395 764	138
93b	Carsluith	Kirkdale	NX 512 541	30
93a	Carsluith	Kirkmabreck	NX 493 565	111
80	Carsphairn	Carsphairn Kirkyard	NX 562 931	133
72b	Castle Douglas	Kelton Kirkyard	NX 761 602	362
30	Castle Kennedy	Lochinch Kirkyard	NX 103 609	224
16b	Chapelknowe	Half-Morton Kirkyard	NY 333 750	44
64	Closeburn	Closeburn Kirkyard	NX 904 923	152
78b	Colvend	Colvend Kirkyard	NX 862 541	176
33b	Corrie	Corrie Cemetery	NY 197 843	62
92	Creetown	Kirkmabreck (Creetown)	NX 476 585	76
75	Crossmichael	Crossmichael Kirkyard	NX 730 670	180
22	Cummertrees	Cummertrees Kirkyard	NY 140 664	243
21c	Cummertrees	Trailrow Graveyard	NY 155 722	100
70	Dalbeattie	Buittle Kirkyard	NX 808 598	232
14a	Dalton	Dalton Kirkyard	NY 089 747	42
14b	Dalton	Little Dalton Kirkyard	NY 089 746	11
31	Dalton	St Mungo Kirkyard	NY 127 757	174
23	Dornock	Dornock Kirkyard	NY 230 660	292
102	Drummore	Kirkmaiden Kirkyard	NX 125 368	216
56b	Dumfries	Lincluden Collegiate Church	NX 967 779	2
54	Dumfries	Dumfries St Mary's Kirkyard	NX 976 763	261
38	Dumfries	Dumfries St Michael's Kirkyard	NX 977 757	629
53	Dumfries	Troqueer Kirkyard	NX 975 750	381
15	Dundrennan	Dundrennan Abbey and Burial Ground	NX 751 474	37
83	Dundrennan	Rerrick	NX 760 467	185
61	Dunscore	Dunscore Kirkyard	NX 887 843	164
67b	Durisdeer	Durisdeer Kirkyard	NS 894 038	160
67a	Durisdeer	Kirkbride Kirkyard	NS 855 057	16
10	Eaglesfield	Kirkconnel Lea Kirkyard, Springkell	NY 252 754	115
13	Ecclefechan	Ecclefechan (St Feachan's) Kirkyard	NY 191 743	106
8	Ecclefechan	Hoddom Kirkyard	NY 185 735	145
43	Ecclefechan	Pennersaughs Kirkyard	NY 267 744	82
19b	Eskdalemuir	Eskdalemuir Cemetery	NY 253 979	51
19a	Eskdalemuir	Watcarrick Burial Ground	NY 257 967	154
25b	Ewes	Unthank Kirkyard	NY 387 947	29
72a	Gelston	Gelston Kirkyard	NX 779 573	26
89	Girthon	Girthon Old Kirkyard	NX 605 534	153
100b	Glasserton	Glasserton Kirkyard	NX 421 381	122
50a	Glenluce	Glenluce Kirkyard	NX 196 574	112

List of sites surveyed with site reference number, community name, site name, National Grid coordinates and sample size (*cont*)

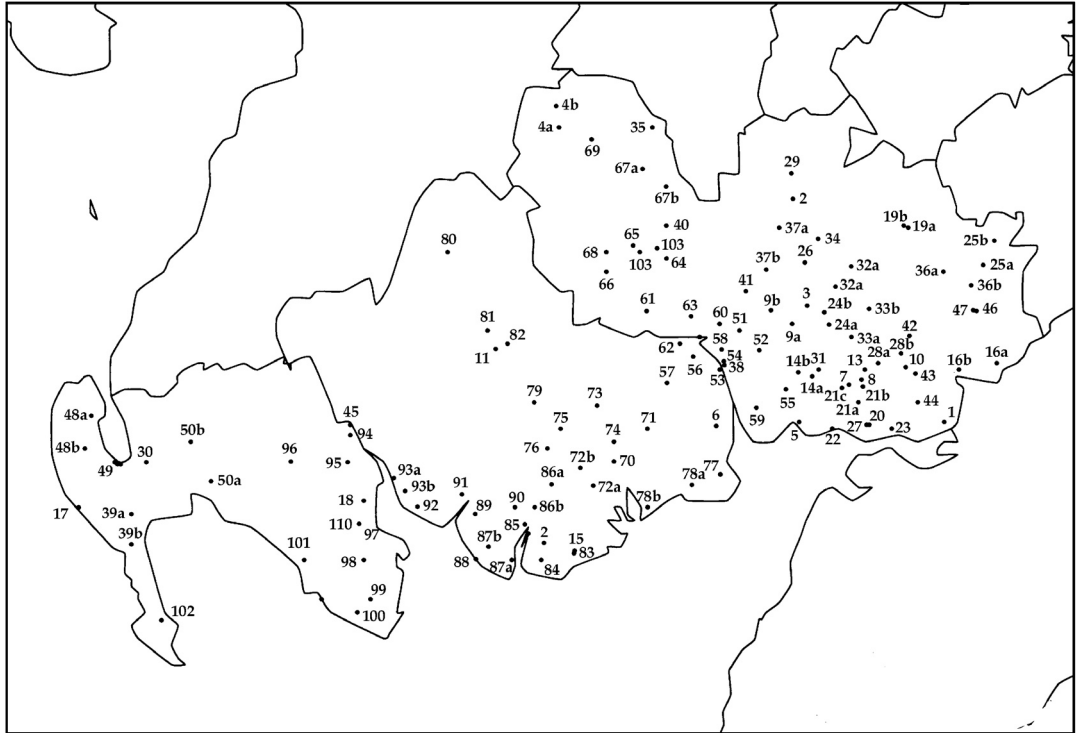| Site reference no	Community	Site name	NGR	Sample size
1	Gretna	Gretna Old Parish Kirkyard	NY 317 682	140
74	Haugh of Urr	Urr Kirkyard	NX 817 655	225
21b	Hoddom	Luce Kirkyard	NY 187 724	15
7	Hoddom	St Kentigern's Burial Ground	NY 166 727	71
58	Holywood	Holywood Kirkyard	NX 955 797	185
62	Irongray	Kirkpatrick Irongray	NX 915 796	179
26	Johnstonbridge	Johnstonbridge Kirkyard	NY 100 914	214
65b	Keir	Keir Old Kirkyard	NX 863 931	60
88	Kirkandrews	Kirkandrews Kirkyard	NX 601 461	106
77	Kirkbean	Kirkbean Kirkyard	NX 980 592	248
48a	Kirkcolm	Kirkcolm Kirkyard	NX 027 687	46
4a	Kirkconnel	Kirkconnel (St Conal's) Kirkyard	NS 729 123	16
4b	Kirkconnel	Old Kirkconnel (Old St Conal's) Burial Ground	NS 726 153	16
96	Kirkcowan	Kirkcowan Kirkyard	NX 330 606	22
84a	Kirkcudbright	Dunrod	NX 700 460	49
84b	Kirkcudbright	Galtway Kirkyard	NX 704 486	24
86a	Kirkcudbright	Kirkcormack Kirkyard	NX 716 575	21
12	Kirkcudbright	Kirkcudbright Cemetery	NX 693 511	153
87a	Kirkcudbright	Senwick Kirkyard	NX 655 460	69
71	Kirkgunzeon	Kirkgunzeon Kirkyard	NX 866 668	144
97	Kirkinner	St Kennera Kirkyard	NX 423 515	127
73	Kirkpatrick Durham	Kirkpatrick Durham Kirkyard	NX 785 695	252
44	Kirkpatrick Fleming	Kirkpatrick Fleming Kirkyard	NY 276 701	306
60	Kirkton	Kirkmahoe Kirkyard	NX 975 815	415
25a	Langholm	Ewes Kirkyard	NY 369 908	115
46	Langholm	Langholm Old Kirkyard	NY 365 846	226
36b	Langholm	Staplegordon Cemetery	NY 352 879	31
47	Langholm	Wauchope Kirkyard	NY 355 841	204
48b	Leswalt	Leswalt Kirkyard	NX 016 639	116
24b	Lockerbie	Dryfebridge Graveyard	NY 129 838	12
24a	Lockerbie	Dryfesdale Kirkyard	NY 136 815	362
9a	Lochmaben	Lochmaben Kirkyard	NY 083 823	264
9b	Lochmaben	Trailflat Burial Ground	NY 048 841	36
57	Lochrutton	Lochrutton Kirkyard	NX 912 736	147
42	Middlebie	Carruthers Cemetery	NY 258 802	82
28a	Middlebie	Middlebie Kirkyard	NY 214 762	78
45	Minigaff	Minigaff Kirkyard	NX 410 666	219
101	Mochrum	Mochrum Kirkyard	NX 347 463	152
29	Moffat	Moffat Old Kirkyard	NT 086 052	421
66	Moniaive	Glencairn Kirkyard	NX 810 904	237
100a	Monreith	Kirkmaiden Chapel Graveyard	NX 366 400	22
55	Mouswald	Mouswald Kirkayrd	NY 065 727	274
6	New Abbey	Sweetheart Abbey and Burial Ground	NX 964 664	135
50b	New Luce	New Luce Kirkyard	NX 175 645	37
95	Newton Stewart	Clachan of Penninghame Old Kirkyard	NX 406 609	115
11	Newton Stewart	Kells Kirkyard	NX 632 782	83
94	Newton Stewart	Newton Stewart Old Kirkyard	NX 410 653	154
41	Parkgate	Kirkmichael Kirkyard	NY 005 884	145
79	Parton	Parton Kirkyard	NX 697 699	86
65a	Penpont	Penpont Kirkyard	NX 849 944	215
17	Portpatrick	Portpatrick (St Andrew's) Kirkyard	NX 002 543	215
63	Portrack	Dunscore Old Graveyard	NX 927 832	138

Table 1

List of sites surveyed with site reference number, community name, site name, National Grid coordinates and sample size (*cont*)

Site reference no	Community	Site name	NGR	Sample size
5	Ruthwell	Ruthwell (St Cuthbert's) Kirkyard	NY 101 684	103
39b	Sandhead	Kirkmadrine Kirkyard	NX 080 484	32
69	Sanquhar	Sanquhar (St Brides) Kirkyard	NS 779 102	351
32a	Sibbaldbie	Sibbaldbie Kirkyard	NY 146 877	66
98	Sorbie	Sorbie Old Kirk Graveyard	NX 439 467	183
78a	Southwick	Southwick Kirkyard	NX 927 574	65
37b	St Anns	Garrel Kirkyard	NY 041 903	78
81	St John's Town of Dalry	Dalry Kirkyard	NX 618 812	169
85	Stell	Stell	NX 675 514	74
39a	Stoneykirk	Stoneykirk Kirkyard	NX 089 532	177
49a	Stranraer	Stranraer High Kirkyard, Sheuchan	NX 055 609	9
49b	Stranraer	Stranraer Old Parish Kirkyard Church Street	NX 059 606	52
49c	Stranraer	Stranraer St Andrews Kirkyard	NX 064 606	39
56a	Terregles	Terregles Kirkyard	NX 931 770	222
103	Thornhill	Dalgarnock Kirkyard	NX 876 936	188
40	Thornhill	Greenhead	NX 890 970	25
51	Tinwald	Tinwald Kirkyard	NY 003 816	263
86b	Tongland	Tongland Kirkyard	NX 698 539	133
52	Torthorwald	Torthorwald Kirkyard	NY 036 782	257
33a	Tundergarth	Tundergarth Kirkyard	NY 175 808	98
90	Twynholm	Twynholm Kirkyard	NX 664 542	137
68	Tynron	Tynron Kirkyard	NX 806 930	84
34	Wamphray	Wamphray Kirkyard	NY 131 965	124
35	Wanlockhead	Wanlockhead	NS 865 136	111
28b	Waterbeck	Waterbeck (burial site)	NY 245 775	5
99	Whithorn	Whithorn Priory Kirkyard	NX 444 403	215
18	Wigtown	Wigtown (St Machutus') Kirkyard	NX 436 555	226

This interesting situation merited further research and a comprehensive study was made of every legible inscription, dated 1855 or before, on accessible tombstones in Dumfries and Galloway (Table 1). Gaining entrance to graveyards was rarely a problem, although this sometimes involved a considerable walk, occasionally in inhospitable territory. A greater problem was with tombstones that are either more or less buried, or overgrown with ivy, moss or lichen, the disturbance of which could easily damage the memorials and perhaps even incur infringement of the law! In these circumstances the gravestones were excluded from this study. We are fortunate in having a comprehensive annotated list of all 190 burial grounds in the care of Dumfries and Galloway Council, a copy of which is located in the Ewart Library, Dumfries. Careful examination of maps, exploration and enquiries revealed only a further four sites – Dundrennan Abbey in the Stewartry, and Lincluden Collegiate Church, Little Dalton and Waterbeck in Dumfriesshire. The local authority list includes more recent cemeteries with memorials dated after 1855 and a burial site at Southwick Kirk with no gravestone markers. Some 19,245 inscriptions from the 132 remaining graveyards and other burial sites were recorded and analysed (illus 1); this includes independent recording of primary and secondary inscriptions, a comparison of which frequently gives an insight into changing tastes over a period of time.

Photographic and recording techniques, together with the analytical methods used, were as described in Thomson (2001a), except that the

ILLUS 1   Location of sample sites

simpler principal components analysis (PCA) was used instead of principal axis factoring. The ordinal plots from these two methods differ little in substance. Additionally, mapping of the occurrence of attributes was undertaken using *Genmap* version 2.01 (Archer Software, Dartford). As in Thomson (2001a), Covenanters' memorials were excluded as many were made or recut long after the date recorded on the stones (Love 1989, 101).

RESULTS

DATING

It was to be expected in a more comprehensive study that earlier dates for specific attributes would be found than in the regional sample of the previous survey. Seven such inscriptions were discovered in Dumfries and Galloway. Of these, three were the earliest recorded throughout

Scotland (Table 2). The use of mixed styles in 1648 at Rerrick preceded the earlier published date by some 45 years and brought it closer to the earliest date of 1592 for the attribute for the entire country. An inscription dated 1636 using the form of the capital A with the v-shaped cross bar (A_v_line) was found at Kirkbride, predating the earliest date recorded in the region by 44 years. The earliest date for script lettering in a Scottish tombstone has to be revised downwards to 1669 with the discovery of an inscription at Penpont. The earliest recorded Scottish inscription using block lettering is now 1759. The form of the minuscule n in which the arch of the letter branches from the initial vertical at a distance from it (lcn_sep) was found in a 1640 inscription at Dalgarnock, 20 years before the previously recorded date for that attribute.

Several authors have noted the rapid increase in graveyard commemoration by permanent external memorials in the second half of the

TABLE 2
Letterform attributes – earliest dates

Attribute	Scotland	SW	D&G	Site
Mixed	1592	1693	1648*	Rerrick
Not mixed	1250	1273	1273	Dundrennan
Gothic	1380	1440	1440	Dundrennan
Versal	1250	1273	1273	Dundrennan
Roman	1476	1565	1565	Kirkconnel Lea
Roman caps	1476	1565	1565	Kirkconnel Lea
Roman caps and lc	1626	1660	1640*	Dalgarnock
Italic	1649	1760	1724*	Torthorwald
Script	1683	1699	1669†	Penpont
Sans	1648	1746	1741*	Kirkpatrick Fleming
Block	1763	1778	1759†	Moffat
Other	1644	1660	1660	Hoddom
Raised	1301	1440	1440	Dundrennan
Incised	1250	1273	1273	Dundrennan
Caps	1250	1273	1273	Dundrennan
Caps and lower case	1380	1440	1440	Dundrennan
Ligs	1500	1593	1593	Canonbie
No ligs	1250	1273	1273	Dundrennan
Height>width	1250	1273	1273	Dundrennan
Height=width	1350	1607	1607	Dundrennan
Height<width	1751	1751	1751	Beattock
Thin	1250	1347	1347	Dundrennan
Mid	1273	1273	1273	Dundrennan
Thick	1301	1440	1400	Dundrennan
Cap>2Xlc	1672	1698	1698	St Kentigern's
Cap=2Xlc	1647	1660	1660	Hoddom
Cap<2Xlc	1380	1440	1440	Dundrennan
A_norm	1565	1565	1565	Kirkconnel Lea
A_v_line	1476	1680	1636*	Kirkbride
A_v_bar	1500	1607	1607	Dundrennan
B_in	1476	1593	1560*	Trailrow
B_not_in	1603	1644	1644	Kirkcudbright
E_out	1500	1607	1607	Dundrennan
E_in	1524	1593	1593	Canonbie
M_v_long	1613	1660	1660	Ruthwell
M_v_short	1476	1593	1593	Canonbie
R_straight	1476	1614	1612*	Anwoth
R_curved	1593	1593	1593	Canonbie
W_norm	1627	1660	1660	Ruthwell
W_2_vs	1500	1593	1593	Canonbie
lcn_joined	1626	1660	1660	Hoddom
lcn_sep	1660	1660	1640†	Dalgarnock

* Earlier than recorded in preliminary study.
† Earliest recorded in Scotland.

18th century (Burgess 1963; Willsher 1985). The proportionally larger number of tombstones in the period from 1750 until the cut-off date of 1855 for this study effectively weights the average dates for the recorded attributes towards the present (Table 3). Most average dates are between 10 and 20 years later than the sample-based data previously reported, the date over all attributes being 1814 compared with 1803. Some attributes show a significant shift, notably raised lettering (+70 years) and other styles (+32 years). The average date for the use of versal is 127 years later than earlier reported, although this is based on a small number of inscriptions (n=28). A few more recent 'versal revival' examples severely biased the data towards more recent times. The occurrence of ligatures is the only case where an attribute has an earlier average date in this comprehensive study, by only two years, than in the sample.

TABLE 3
Average dates for the occurrence of letterform attributes

Attribute	All	SW	D&G
Mixed	1824	1821	1825
Not mixed	1786	1777	1790
Gothic	1822	1819	1825
Versal	1654	1643	1770* n=28
Roman	1797	1798	1810
Roman caps	1775	1766	1789
Roman caps and lc	1815	1811	1816
Italic	1823	1821	1823
Script	1787	1776	1778
Sans	1840	1840	1841
Block	1839	1835	1837
Other	1822	1792	1824*
Raised	1720	1689	1759*
Incised	1810	1806	1815
Caps	1799	1797	1816
Caps and lower case	1813	1807	1813
Ligs	1726	1723	1721†
No ligs	1811	1809	1816
Height>width	1799	1795	1812
Height=width	1819	1813	1821
Height<width	1833	1835	1836
Thin	1785	1780	1793
Mid	1819	1815	1819
Thick	1821	1818	1832
Cap>2Xlc	1813	1801	1807
Cap=2Xlc	1812	1807	1814
Cap<2Xlc	1814	1812	1819
A_norm	1812	1806	1818
A_v_line	1745	1744	1754
A_v_bar	1692	1707	1714
B_in	1805	1803	1817
B_not_in	1815	1811	1818
E_out	1762	1752	1790
E_in	1810	1808	1818
M_v_long	1825	1821	1824
M_v_short	1751	1746	1765
R_straight	1795	1782	1805
R_curved	1818	1815	1823
W_norm	1825	1820	1823
W_2_vs	1750	1741	1743
lcn_joined	1811	1805	1810
lcn_sep	1814	1808	1818
All attributes	1807	1803	1814

* Earlier than recorded in preliminary study.
† Earliest recorded in Scotland.

This is probably due to the relatively uncommon use of ligatures after 1750, weighting the data towards the earlier period.

The mean dates for all inscriptions at all sites are later as we go westwards through the region, although this is a general trend rather than one that applies to all graveyards. Many of the attributes measured do not reflect this cline; the mean and earliest dates covering roughly the same ranges in the three counties. The mean dates for script and mixed inscriptions are significantly earlier in the east as are, to a lesser extent, the mean dates for gothic and the earliest dates for gothic, script and italic.
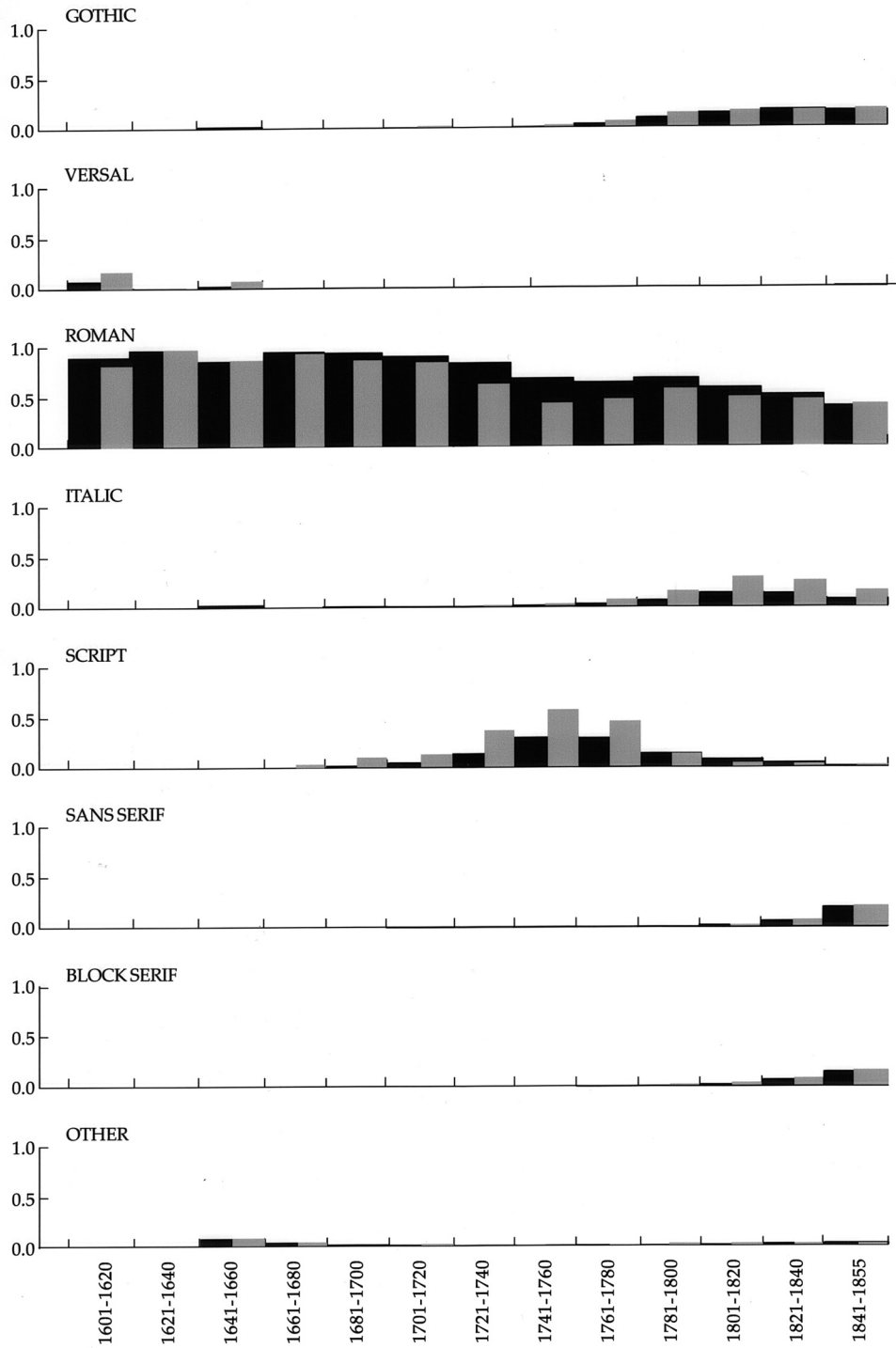
FREQUENCIES

With only relatively insignificant differences, the frequencies of the different lettering styles over the study period of 1241 to 1855 corresponded closely with those for the whole of Scotland. The only difference worth noting is the first appearance of roman – 1565 at Kirkconnel Lea compared with 1476 elsewhere in the country – although there are relatively few memorials for this early period and the data for the period up to 1600 have been omitted (illus 2).

GEOGRAPHIC DISTRIBUTION

The geographical distribution of individual attributes was examined graphically by plotting the occurrence of attributes on maps of the region (not shown). These illustrated relative frequencies within each attribute and were based on actual numbers of observations of each attribute at each burial site. The occurrence of some attributes differed little throughout the three historic counties, while others displayed dramatic variation.

The occurrence of different styles in each site by county is given in Table 4. Adjacent sites with small numbers of inscriptions have been pooled. Gothic lettering is more frequently encountered in the south-east and south-west of the region and less so in central and northern parts. The seemingly apparent dominance of versal inscriptions in the far south of the Stewartry is misleading and largely due to a number of medieval memorials at Dundrennan Abbey. There appears to be a gradual increase in the

ILLUS 2   Style frequencies 1601–1855 in Scotland (black) and Dumfries and Galloway (grey)

TABLE 4
The occurrence of different styles at each site by county (adjacent sites with small numbers of inscriptions have been pooled)

	Gothic	Versal	Roman	Italic	Script	Sans	Block	Other	Caps	Ligs	Ht_Less	Thick
Dumfriesshire												
Annan Old Cemetery	92	1	145	14	8	10	3	0	57	7	0	50
Annan Old Parish	106	1	123	17	2	28	7	0	95	3	2	96
Applegarth+Sibbaldbie	27	0	123	32	41	1	3	0	51	8	2	16
Beattock+Luce+Trailrow	24	0	158	46	17	1	11	0	73	14	0	43
Brydekirk	9	0	11	1	1	4	0	0	14	0	0	21
Caerlaverock	26	0	216	108	10	17	44	0	141	3	0	127
Canonbie	28	0	96	1	10	1	2	0	54	19	5	19
Carruthers	21	0	48	2	9	1	1	0	24	4	0	19
Closeburn	14	0	69	18	17	9	8	2	56	2	0	44
Cummertrees	54	1	131	31	14	9	2	0	75	9	0	51
Dalgarnock	13	1	88	18	35	3	8	2	58	4	0	58
Dalton+Little Dalton	3	0	25	7	19	0	0	2	15	4	2	5
Dornock	91	0	154	12	4	25	6	0	92	6	2	95
Drumgree+Garrel	7	0	45	12	19	2	1	0	27	4	0	19
Dryfesdale+Dryfebridge	54	2	185	81	26	17	7	0	134	7	0	124
Dumfries St Mary's	70	0	76	19	7	25	61	0	83	0	0	147
Dumfries St Michael's	92	2	299	130	40	13	53	0	231	13	3	157
Dunscore	7	0	96	33	9	3	12	0	39	1	0	18
Dunscore Old	9	0	83	24	9	1	11	0	33	5	0	22
Ecclefechachan	18	0	79	8	1	0	0	0	42	19	5	15
Ewes	27	0	74	8	2	2	2	0	46	5	0	22
Glencairn	11	0	125	46	13	11	23	1	67	2	0	68
Greenhead	2	0	12	3	3	1	2	1	9	0	0	7
Gretna	28	0	105	0	6	0	1	0	57	32	2	30
Half-Morton	11	0	21	2	0	10	0	0	35	0	0	27
Hoddom	37	0	89	13	5	0	0	0	27	2	6	23
Holywood	16	0	93	48	8	7	11	0	47	0	0	50
Hutton and Corrie	18	0	50	16	15	2	3	0	40	6	1	21
Johnstonbridge	15	1	110	64	6	9	9	0	87	0	0	78
Keir	3	2	33	11	0	0	9	0	16	0	0	21
Kirkbride+Durisdeer	7	0	90	14	44	6	7	2	47	4	0	34
Kirkconnel+Old St Conal's	1	0	20	5	5	0	1	0	19	7	1	2
Kirkconnel Lea	16	0	81	0	18	0	0	0	42	25	0	7
Kirkmahoe	39	0	235	82	25	2	31	0	107	3	0	92
Kirkmichael	11	0	77	36	11	4	7	0	51	2	0	48
Kirkpatrick Fleming	92	0	178	2	4	25	4	0	143	18	3	107

TABLE 4
The occurrence of different styles at each site by county (adjacent sites with small numbers of inscriptions have been pooled) (cont)

	Gothic	Versal	Roman	Italic	Script	Sans	Block	Other	Caps	Ligs	Ht_Less	Thick
Langholm	62	0	135	22	1	4	2	0	87	5	1	55
Lochmaben + Trailflat	35	1	166	66	22	7	2	0	116	13	14	106
Middlebie + Waterbeck	20	0	50	0	6	2	0	0	32	6	0	17
Moffat	35	1	205	72	72	9	25	0	96	2	0	93
Mouswald	29	0	140	75	15	8	6	0	95	3	0	35
Pennershaugh's	29	0	46	2	0	3	2	0	21	5	0	17
Penpont	16	0	117	21	12	13	22	1	73	2	0	72
Ruthwell	12	0	61	21	5	1	2	0	37	5	3	13
Sanquhar	11	0	195	123	10	4	3	0	179	2	0	13
St Kentigern's	9	0	50	4	8	0	0	0	27	13	2	6
St Mungo	28	2	100	31	7	2	4	0	76	18	1	41
Tinwald	19	1	153	68	10	3	8	0	90	2	0	68
Torthorwald	30	0	140	68	10	7	2	0	87	0	0	54
Tundergarth + Corrie	32	0	93	10	19	3	3	0	58	22	0	35
Tynron	9	0	43	10	8	3	8	1	27	2	0	25
Unthank	9	0	19	0	0	1	0	0	11	2	0	1
Wamphrey	14	0	64	25	14	1	5	0	33	0	0	42
Wanlockhead	10	0	54	32	9	3	1	0	55	1	0	11
Watcarrick + Eskdalemuir	56	0	122	19	4	2	2	0	53	8	0	27
Wauchope	62	0	110	19	4	2	7	0	76	10	0	47
Westerkirk + Staplegordon	58	0	142	24	10	2	6	0	81	10	0	39
Stewartry												
Anwoth	12	0	84	25	26	5	8	0	79	5	1	12
Balmaclellan	9	0	41	23	21	0	14	0	31	3	0	26
Balmaghie	16	0	99	40	19	2	4	0	46	0	0	21
Buittle	29	0	110	53	26	3	10	0	77	4	0	54
Carsphairn	24	0	64	11	14	10	9	0	67	6	0	18
Crossmichael	25	0	82	47	12	2	12	0	65	0	0	56
Dalry	13	1	67	32	33	4	15	0	51	2	0	49
Dundrennan	4	2	20	3	3	4	1	0	13	3	2	7
Dunrod + Galtway	3	1	35	12	12	6	4	0	24	1	0	11
Gelston + Kelton	63	0	173	107	24	3	15	0	152	4	0	111
Girthon	16	0	79	22	29	3	4	0	54	0	1	14
Kells	10	0	40	6	21	1	5	0	35	8	2	13
Kirkandrews	11	0	51	11	29	1	2	0	22	0	0	12
Kirkbean	35	0	103	53	17	9	28	0	65	4	0	74
Kirkcormack	2	0	9	5	4	0	1	0	6	0	0	5
Kirkcudbright	9	1	97	1	22	4	18	0	27	6	1	24

TABLE 4
The occurrence of different styles at each site by county (adjacent sites with small numbers of inscriptions have been pooled) (*cont*)

	Gothic	Versal	Roman	Italic	Script	Sans	Block	Other	Caps	Ligs	Ht_Less	Thick
Kirkgunzeon	13	0	64	40	14	3	10	0	50	0	0	28
Kirkmabreck (Creetown)	9	0	36	12	1	17	1	0	48	0	0	13
Kirkmabreck+Kirkdale	14	0	70	26	19	6	5	0	30	0	0	10
Kirkpatrick Durham	36	0	110	57	18	15	12	0	84	1	0	38
Kirkpatrick Irongray	13	0	109	39	11	2	4	0	53	0	0	25
Lochrutton	8	0	80	38	10	9	2	0	45	0	0	16
Minigaff	16	0	100	21	41	28	14	0	73	2	1	44
Parton	5	0	39	24	16	0	2	0	27	3	0	16
Rerrick	18	0	83	42	19	6	14	0	70	4	0	35
Senwick+Borgue	26	1	92	40	21	12	28	0	90	2	1	59
Southwick+Colvend	27	0	108	57	157	7	23	0	80	4	0	47
Stell	3	0	38	12	14	1	6	0	26	0	0	16
Sweetheart	9	1	76	34	7	3	5	0	54	2	6	10
Terregles+Lincluden*	26	0	97	60	6	6	28	0	75	0	0	33
Tongland	18	0	65	23	16	6	5	0	42	0	0	17
Troqueer	44	0	178	81	16	22	32	0	120	1	0	104
Twynholm	17	0	61	24	19	6	8	0	57	0	0	27
Urr	35	0	97	46	21	9	16	0	66	3	0	59
Wigtownshire												
Clachan of Penninghame	20	0	52	11	24	7	1	0	25	2	0	0
Glasserton	21	0	47	16	19	7	4	1	52	0	0	18
Glenluce+New Luce	23	0	60	18	25	13	8	0	52	1	0	23
Kirkcolm+Leswalt	20	1	63	20	25	20	9	0	61	0	0	23
Kirkcowan	3	0	9	2	5	3	1	0	8	1	0	4
Kirkmaiden (Drummore)	38	0	81	35	37	10	12	0	89	2	0	26
Kirkmaiden (Monreith)	5	0	10	1	5	0	1	0	11	0	0	3
Lochinch	26	0	98	34	38	13	11	0	68	3	0	18
Mochrum	44	0	63	7	20	7	8	0	67	2	0	37
Newton Stewart	29	1	69	21	8	13	13	0	59	0	0	27
Portpatrick	29	0	122	24	17	6	14	0	74	2	0	26
Sorbie	40	0	66	19	24	4	18	1	60	0	0	23
St Kennera	22	0	53	14	13	13	3	1	50	0	0	20
Stoneykirk+Kirkmadrine	26	0	96	33	25	12	12	0	62	0	1	27
Stranraer (all sites)	18	0	44	7	14	12	3	0	37	2	0	11
Whithorn	33	0	90	22	31	18	16	0	105	1	1	34
Wigtown	29	3	116	17	24	25	9	0	77	0	5	54

* Dumfriesshire

frequency of roman and italic lettering eastwards but the relative frequency differences are small. Block lettering has a similar distribution but is uncommon in southern Dumfriesshire. Script styles have a curious distribution: in the east of the region it is common in some places and rare in others, even when these are adjacent. Elsewhere, the frequency of its occurrence has an even distribution. The group of lettering styles classified as 'other' has been used far more in southern Wigtownshire and northern Dumfriesshire than elsewhere. Sans serif forms show a dramatic increase in frequency in Wigtownshire compared with the rest of the region. Of the other attributes recorded, four show a distinct pattern of geographical variation in frequency. Least marked are inscriptions entirely in capitals. These are somewhat more frequent in Dumfriesshire, southern Wigtownshire and the south-west of the Stewartry. Lettering analogous to the typographic variant 'bold', and referred to here as 'thick', increases in abundance to the east of the region. There is a marked increase in the number of burial sites in the eastern half of the region where the inscriptions are in a letterform where the height is less than the width, but in other sites there the form is relatively uncommon.

Probably the most dramatic geographical trend is that of the frequency of the use of ligatures. Ligatures are more common in the eastern part of the three counties than in the west, but the most marked change is in southern Dumfriesshire where they were used far more often in inscriptions than elsewhere. The commonest ligatures in Dumfries and Galloway are HE and THE. Some headstones exhibit exceptional creativity in the way letters are merged into a single character. One such example is a magnificent inscription in Annan Old Cemetery in archaic roman capitals in which numerous letters are ligatured: in the word NOVEMBER, VE are joined, as well as a very unusual ligature MB where a capital P has been cut as part of the first vertical of the M. It is possible that the mason began to cut the
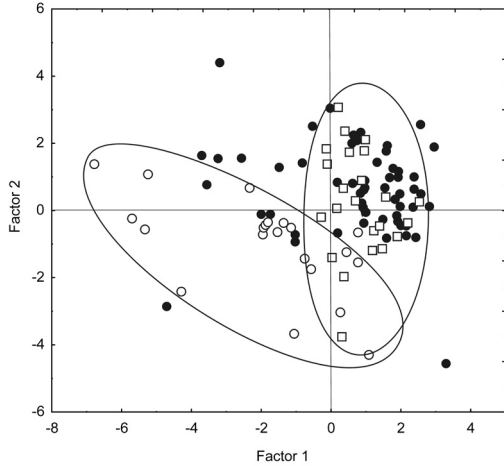
letter B but, on recognizing his mistake, left the additional shape.

Wigtownshire and a small part of the south-western Stewartry are noted for the abundance of headstones with inscriptions that mix lettering in roman, gothic and either script of italic.
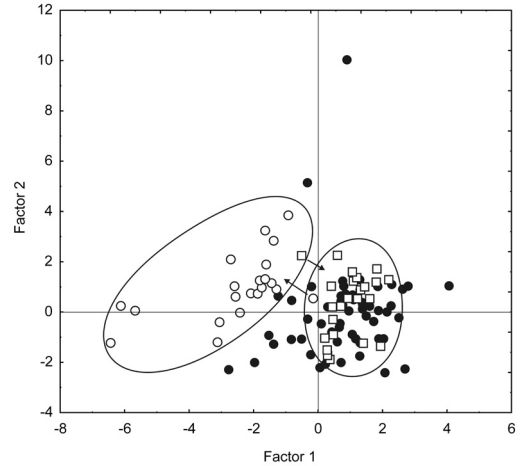
INSCRIPTIONAL GROUPINGS

One of the main aims of this regional study was to investigate further the interesting geographical groupings based on inscriptional attributes that had been identified through multivariate statistical analysis. The validity and accuracy of the sample-based conclusions was tested using the entire dataset from the comprehensive survey. Perhaps not surprisingly, the results of the analysis of such a large dataset were far more complex than those obtained using a much smaller sample. While some of the output of the analysis was perplexing, and in some cases ambiguous, in general terms it confirmed the earlier conclusions. Although the results were not nearly so clear-cut, detailed study of the ordinations revealed yet more on the distribution of graveyard profiles in the region. Based on the earlier study (Thomson 2001a), the sites were coded as belonging to one of three areas. South-east Dumfriesshire, referred to here as 'south-east', is the area east of a line running from Cross Hill on the Dumfriesshire/Selkirkshire border to the west of Cummertrees on the Solway Firth. West Stewartry and Wigtownshire (referred to here as 'west') is west of a line from Merrick in the north of the Stewartry to east of Kirkcudbright. The third area lies between these two regions (referred to here as 'central').
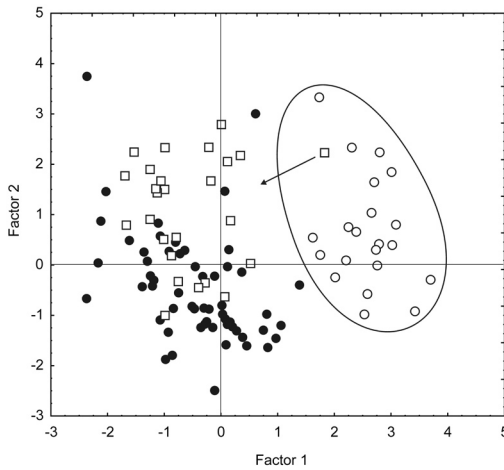
The data were categorized into two date classes: all dates and 1761–1855. These were further subdivided into data utilizing all attribute variables and data including style variables only (ie versal, roman, gothic, script, italic, block, sans serif and other). The greatest contribution of any variable to the differentiation of sites was by gothic, followed by ligatures, mixed styles and script.
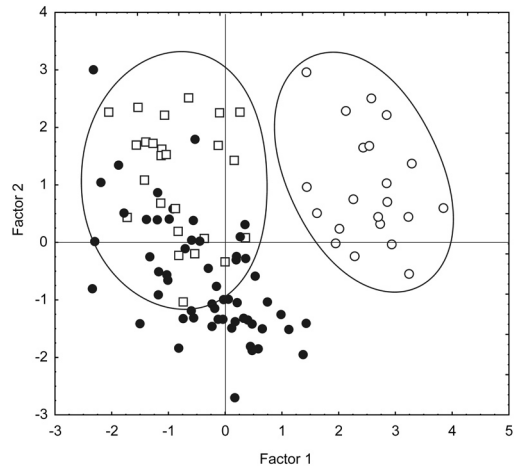
ILLUS 3 Plot of factor loadings from principal components analysis 1241–1855, using all variables. The envelopes enclose burial sites in the eastern area (open circles) and the western area (open squares)
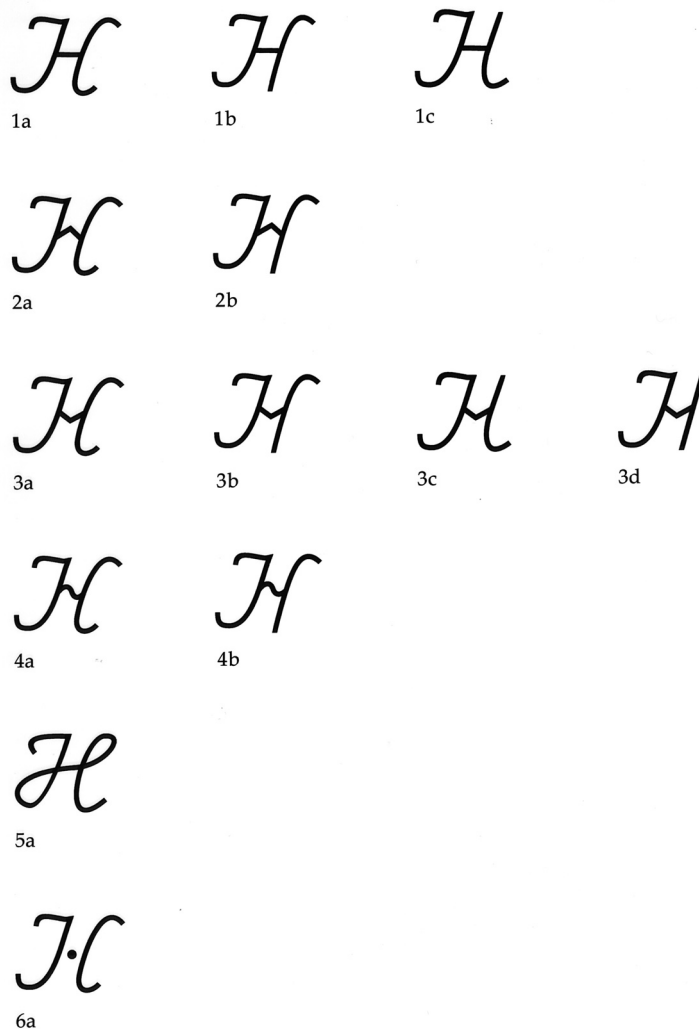

ILLUS 4 Plot of factor loading from principal components analysis 1761–1855, using all variables. The envelopes enclose burial sites in the eastern area (open circles) and the western area (open squares)

ILLUS 5 Plot of factor loadings from principal components analysis 1241–1855, using style variables only. The envelope encloses burial sites in the eastern area (open circles) and the western area (open squares)

ILLUS 6 Plot of factor loading from principal components analysis 1761–1855, using style variables only. The envelopes enclose burial sites in the eastern area (open circles) and the western area (open squares)

It can be seen that the PCA classification plots (illus 3–6) do not suggest that inscriptions on tombstones in the central part of the region are consistently distinct from those in the west. However, they do show that the south-eastern group is distinct or very distinct from those in the other two areas. This differentiation is more marked in the 1761–1885 period and when only inscriptional lettering styles are included in the datasets. Indeed, the most distinct clustering is when the date subdivision and lettering styles only are considered, in which case there is a
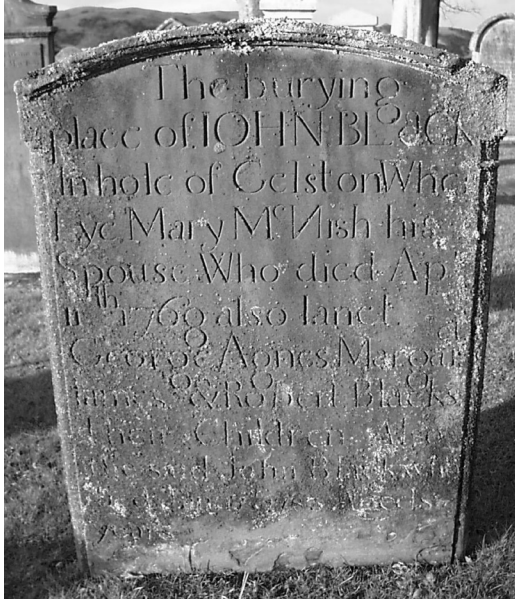
ILLUS 7   The various forms of script initial H found on tombstones in Dumfries and Galloway with their style identifiers

clear separation of the south-eastern group and some evidence of differentiation between the western and central site profiles.
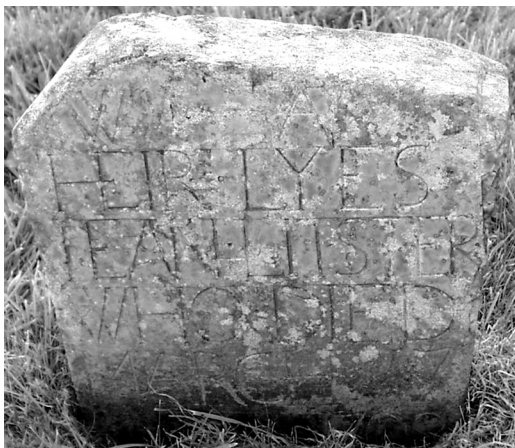
SCRIPT INITIALS

Chater (1976; 1977) and Mytum (2004) noted the use of a script or other decorative initials at the start of an inscription and sometimes at the beginning of each entry on gravestones. This is a common feature on headstones and other memorials in Ireland, Wales and some parts of England, including the Vale of Belvoir (Bartram 1978). However, it is relatively rare in Scotland, the ligatured HE being much preferred. Chatar studied the variation of the form of the script capital H in Cardiganshire, particularly noting the different versions of the crossbar that can take the form of a straight line, a V-shape, an inverted V-shape, a wave form, or a lozenge.

ILLUS 8   Inscription on a headstone at Buittle, the
Stewartry in a lightweight roman letterform and
with s and t of a non-standard form (1768)

An analysis was made of the H used as a script
initial letter in inscriptions and each form given
an identifier (illus 7). In Dumfries and Galloway,
only 33 inscriptions incorporated the decorative
initial script H. The earliest use is at Kells on a
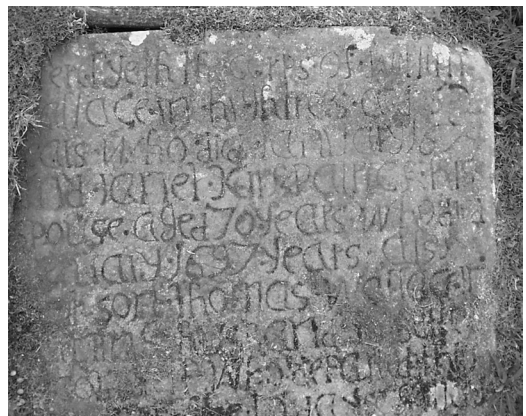headstone dated 1699. This was of form 3c. The

ILLUS 10   A very unusual script form on a headstone at
Carruthers, Dumfriesshire

commonest form is 4a, followed by 1a, 5a, 1b
and 2a. The least common type is form 6a.

OTHER OBSERVATIONS

Some inscriptions are unique in their inter-
pretation of the standard lettering style. At
Buittle, for example (illus 8), an inscription of
1768 has the roman lettering boldly cut but light
in weight with both s and t of a non-standard
form. Another very lightweight and rather

ILLUS 9   A lightweight and elegant roman on a small
headstone dated 1702 at Moffat, Dumfriesshire

ILLUS 11   A very early grave slab at Closeburn,
Dumfriesshire in an extremely primitive script of
an early date, with no distinction between capitals
and lower case (1697)

ILLUS 12 The crude mixing of roman and script on an undated, naïve headstone at Kirkpatrick Durham, the Stewartry
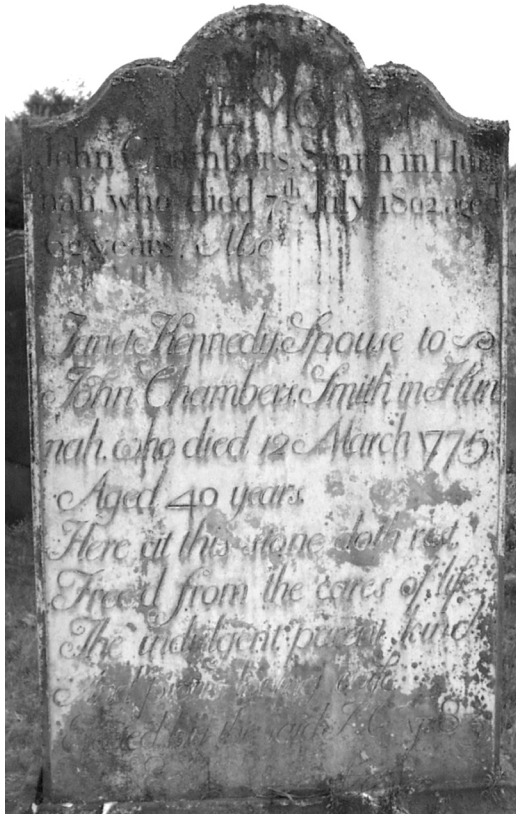

ILLUS 14 A very formal memorial at Glenluce, Wigtownshire, mixing roman with script throughout the inscription, even within words

elegant roman is used on a small headstone dated 1702 at Moffat (illus 9). Similarly, script lettering appears in a very unusual form on a headstone at Carruthers (illus 10). Here some of the characters are very curious indeed, notably the A, F, k, & and W (1753). On a very early grave slab at Closeburn (illus 11) there is an extremely primitive script of an early date (1697), with no distinction between capitals and lower case.

The crude mixing of roman and script can be seen on an undated, naïve headstone at Kirkpatrick Durham (illus 12), as well as on an undated stone at Twynholm (illus 13). A very formal memorial at Glenluce (illus 14) mixes roman with script throughout the inscription, even within words. The roman has primitive features (v line A, short M, 2 V W etc) and the

script is of an early form although the date is 1793. Another Buittle headstone (illus 15) has a very formal inscription in gothic capitals and lower case with roman capitals and lower case (1778) but with the early features of an A with the v-shaped crossbar and W formed of two Vs.

ILLUS 13 A mixed roman and script inscription on an undated stone at Twynholm, the Stewartry

ILLUS 15 A very formal inscription at Buittle, the Stewartry, in gothic capitals and lower case with roman capitals and lower case. Early features can be seen in the A, with the v-shaped crossbar and W formed of two Vs (1778)
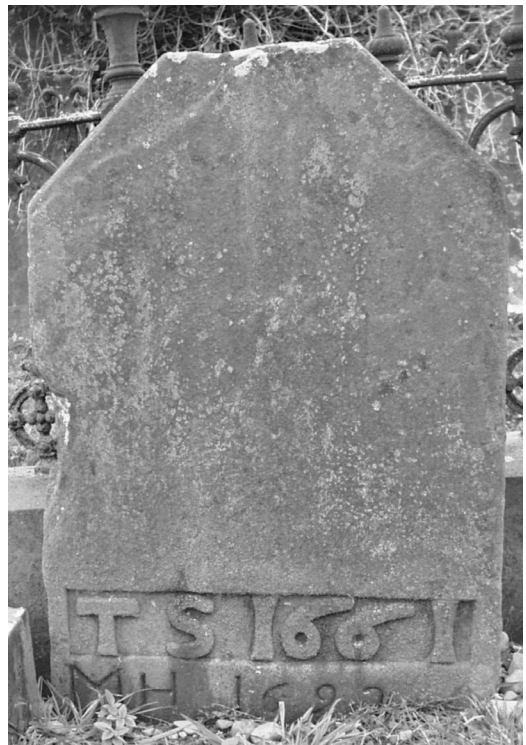
Illus 16 The back-sloping small numeral 1 in dates appears to be characteristic of southern Dumfriesshire. This inscription is on a headstone at at Cummertrees, Dumfriesshire

Illus 17 A unique vertically flipped 4 at Dalgarnock, the Stewartry. Note the misspellings on this grave slab including 'woh' for 'who' (1759)

Illus 18 A partially buried memorial at Dunscore Old Kirkyard, the Stewartry, with two short initial entries in different styles located at the bottom of the stone

The use of a back-sloping, small numeral 1 in dates appears to be characteristic of southern Dumfriesshire. It occurs in several inscriptions at Dryfesdale and Cummertrees (illus 16) during the last quarter of the 18th century. It is rare but not unknown in other parts of Scotland, although the numeral is usually full size, as in a memorial at Carstairs, Lanarkshire, dated 1786.

While horizontally mirrored letters are common, this treatment of numerals is much less so. A unique vertically mirrored 4 was found at Dalgarnock, appearing twice in the inscription (1759). There are several mis-spellings on this grave slab including 'woh' for 'who' (illus 17).
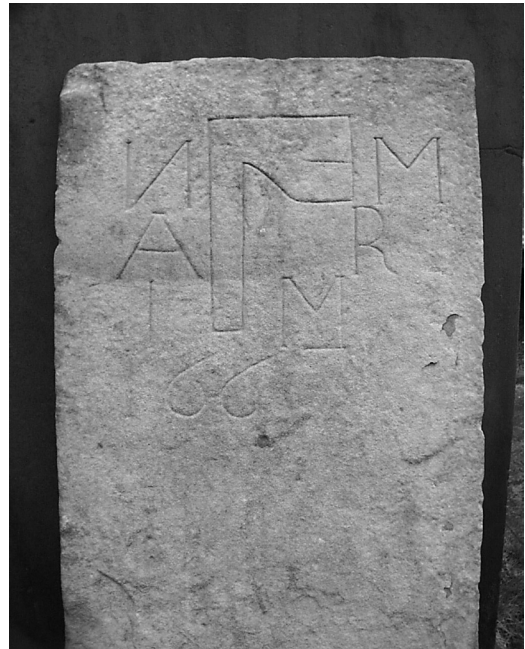
ILLUS 19   An undated memorial with the words
MEMENTO MORI inscribed around one of the
several sculpted death symbols

Some interesting applications of layout and design on tombstone memorials are worth noting here. A partially buried memorial at Dunscore Old (illus 18) has two short initial entries in different styles located at the bottom of the stone: one in primitive archaic raised roman

ILLUS 20   The deceased parents' issue are listed in columnar
fashion on this memorial of an early date from
Garrel, the Stewartry

dated 1661 and another in an almost sans-serif inscribed form of 1692. Another undated memorial (illus 19), which was probably originally a grave slab but is now erected vertically, has the words MEMENTO MORI inscribed around one of several sculpted death symbols. This slab has probably been reused; several symbols and letters have been carved on

ILLUS 21   A superbly designed grave slab at St Brides
Kirkyard, Sanquhar, Dumfriesshire (1667)

what would have been the underside (WH), but these are now almost illegible. Headstones with children listed in columnar fashion are rare in south-west Scotland. One such memorial of an early date was found at Garrel (illus 20). Part of the list unfortunately has been defaced but the layout with large, rather crude script and a small script form used for the issue is unusual. A superb sense of design can be seen on a grave slab at St Brides Kirkyard, Sanquhar (illus 21). This magnificent stone, dated 1667, has the initial letters NM/AR/IM beautifully arranged

around a flesher's axe. The N is horizontally mirrored.

DISCUSSION

The geographical pattern of burial sites with inscriptions that include ligatures is remarkable. Similar distinct 'hotspots' for their use are being identified in New England in a current study by the author. To some extent the mapping of the distribution of attributes gives us an explanation for the statistical clustering produced by PCA. The frequencies of several lettering attributes have a clear spatial configuration in the region, often corresponding with the three-area statistical model. However, it does not take us any closer to an explanation of why there should be such divisions.

Perhaps the three areas are akin to the occurrence of local accents. In most of Scotland we all speak the same language but with both a regional and local dialect and inflection. We do not consciously learn our accent in our childhood but are unknowingly influenced by what we hear around us from our family and other contacts. The degree to which our accent is similar to others in the area where we live depends a great deal on the extent to which we travel and spend time in areas where the accents are different. The majority of masons who cut inscriptions on graveyard memorials up until at least the beginning of the 19th century, arguably with the exception of those who fashioned the pre-Reformation monuments and relatively rare formal memorials, probably travelled little and would not have been exposed to influences other than those around them. There is no evidence whatsoever of the dispersal of masons' skill or their memorials such as has been found in Leicestershire and Nottinghamshire (Barley 1948), Wicklow, Wexford and Carlow (Longfield 1943), or New England (Forbes 1927). They would have followed local traditions, but not by slavishly copying their peers. The creativity

demonstrated in Scottish tombstone memorial inscriptions testifies that. More likely, they would have subconsciously engaged the local culture of the time and place.

The more distinct grouping of burial sites in the later period (1761–1855) may suggest an evolutionary development of a more fully developed local culture. This was a display of regional personality within which we can identify individual creativity – and even eccentricity. The inscriptions represent folk art that was to be destroyed by Victorian taste, developing technologies and the use of lettering samples and copybooks by masons.

ACKNOWLEDGEMENTS

REFERENCES

Barley, M W 1948 'Slate headstones in Nottinghamshire', *Thoroton Society Transactions* 52, 69–86.

Bartram, A 1978 *Tombstone Lettering in the British Isles*. Lund Humphries, London & Watson-Guptill, New York.

Burgess, F 1963 *English Churchyard Memorials*. London.

Chater, A O 1976 'Early Cardiganshire gravestones. Part I', *Archaeologia Cambrensis* 125, 140–61.

Chater, A O 1977 'Early Cardiganshire gravestones. Part II', *Archaeologia Cambrensis* 126, 116–38.

Forbes, H M 1927 *Gravestones of Early New England and the Men who Made Them, 1653–1800*. Houghton Mifflin, Boston.

Longfield, A K 1943 'Some 18th-century Irish tombstones. I. Introduction: Dennis Cullen of Monaseed', *J Roy Soc Antiq Ireland* 73, 29–39.

Love, D 1989 *Scottish Kirkyards*. Robert Hale, London.

Mytum, H 2004 'Local traditions in early 18th-century commemoration: the headstone memorials from Balrothery, Co Dublin, and their place in the evolution of Irish and British commemorative practice', *Proc Roy Irish Acad* 104C(1), 1–35.

Thomson, G 2001a 'Research in inscriptional palaeography (RIP). Scottish tombstone lettering 1241–1855: methodology and preliminary analysis', *Proc Soc Antiq Scot* 131, 349–73.

Thomson, G 2001b 'Old wine in new bottles. "New technology" in historical research: a case study', *The Vallum* 2, 1–8.

Thomson, G 2002 'Script lettering on Scottish tombstones: origins and influences', *Scottish Tradition* 27, 115–25.

Willsher, B 1985 *Understanding Scottish Graveyards. An Interpretative Approach*. Edinburgh.