## The Scots in the United States

## By NATHANIEL WEYL

Of the present United States population of about 180,000,000, approximately 60 million are of English and Welsh, approximately 19 million of Irish, and approximately 11.5 of Scottish origin.<sup>1</sup> The Scottish immigration consists primarily of old settlers; it was not driven by hunger, as were the Irish, and it has made distinguished contributions to the American élite in all areas which we have examined.

It is sometimes assumed that this immigration was positively selected in the sense that those who left Scotland for America were, on the average, more gifted than those who stayed at home. An examination of the pertinent name-frequency statistics suggests that this hypothesis is wide of the mark and that the Scottish stay-at-homes were much more impressive leadership material than those who emigrated to the United States.

We have reached this conclusion by computing weighted average performance coefficients in *Who's Who in America* 1955-57 for the 15 preponderantly Scottish names most common on 1956 U.S. Social Security rolls (BOASI) and on the Scottish Register of Births, Marriages and Deaths for 1936-40. This comparison reveals the astonishing fact that the average performance coefficient of the descendants of the emigrant Scots is 135 as against an average of 167 for those who stayed at home.<sup>2</sup>

Accordingly, Scots are an outstanding component of the American élite despite the fact that the emigrants come from stock which, on the whole, is considerably less gifted than the Scottish population of Scotland.

<sup>1</sup> These are merely forward projections of the detailed estimates made by U.S. Government immigration experts of the 1920 population of the U.S. by national stock. The 1920 table is reprinted in *The Immigration and Naturalization Systems of the United States*, U. S. Senate, Committee on the Judiciary, 31st Cong., 2nd Sess., Report No. 1515, 1950, p. 886.

<sup>2</sup> The BOASI names in order of frequency (using the Social Security sixletter coding system) are: CAMPBEII, STEWARt, ROSS, WALLACe, HAMILTon, MURRAY, ALEXANder, CRAWFOrd, GORDON, FER-GUSon, CUNNINgham, MONTGOmery, DOUGLAS, DAVIDSon, McMILLan. The Scottish Register list is: MacDonald, Campbell, Stewart, Murray, Mackenzie, Mackay, Ross, McLean, Fraser, MacLeod, Ferguson, Davidson, Hamilton, Cameron and Macmillan. Rather than submit the detailed tables as part of this article, I have sent them to the Editor so that they will be available to anyone with a specialized interest in the matter.

#### **Regional Differences in Achievement**

Sixty-five preponderantly Scottish names with an aggregate representation on U.S. Social Security rolls of 2.3 million were examined to determine whether or not significant regional differences in performance coefficients exist. All of these names are analyzed in Guppy's 1890 study of the homes of English family names and almost all are primarily Scottish in the opinion of Smith.<sup>3</sup>

### TABLE I

Regional Differences in the Performance Coefficients of American Bearers of Scottish Surnames in WHO'S WHO IN AMERICA 1955-57 (Performance Coefficient of SMITH equals 94).

		NO. OF NAMES	BOASI FREQ. (thsds)	WWA FREQ.	P.C.S
1.	Names widely dis-	-			
	tributed throughout				
	Scotland	13	601	350	137
2.	Border Counties	3	82	63	182
3.	Lowlands <sup>1</sup>	21	578	329	135
4.	Mid-Scotland <sup>2</sup>	13	528	294	133
5.	Highlands <sup>3</sup>	15	556	326	139
TOTALS AND AVERAGE		65	2,345	1,362	137

<sup>1</sup>Below the Firth of Forth and the Clyde.

 $^{2}$  Including the shires of Fife, Forfar, Perth, Stirling, Argyll and Dumbarton.

<sup>3</sup> North of the shires of Forfar, Perth and Argyll.

The data in this table suggest that no statistically significant differences in the abilities of the populations of the various regions of Scotland exist as measured by P.C.'s in *Who's Who in America*. The apparent exception to this conclusion (the Border Counties) is based on a small sample and may be due to random chance.

#### **Class Differences in Achievement**

In a previous article,<sup>4</sup> I showed that the bearers of English surnames of clerical and scholarly origin are markedly superior

<sup>3</sup> Elsdon C. Smith, *Dictionary of American Family Names*, Harper & Brothers, New York, 1956. In a very few cases, I have not accepted Smith's judgment on this matter, but have preferred my own.

<sup>4</sup> "Ethnic and National Characteristics of the U.S. Elite," THE MANKIND QUARTERLY, Vol. I, No. 4, April 1961, pp. 242-7.

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to the bearers of English names in general in all rosters of eminence studied. This difference occurs despite the fact that surnames were assumed in England approximately  $6\frac{1}{2}$  centuries ago. The explanation offered for this consistent superiority in creative abilities, intelligence, scholarship, executive ability and professional leadership was selective mating, a process which presumably occurred without diminution during those centuries when such surnames as CLARK(E) connoted no difference in social status from the generality of Anglo-Saxon names.

In this article, I shall examine the performance coefficients of bearers of Scottish names in the U.S. to see whether or not significant differences in achievement are associated with the original class origin of the surnames. The Scottish names used are drawn from those which comprise the previous Table.

## TABLE II

Class Differences in the Performance Coefficients of American Bearers of Scottish Surnames in WHO'S WHO IN AMERICA 1955-57. (Performance Coefficients standardized so that the P.C. for SMITH equals 94).

	NO. OF NAMES	BOASI FREQ. (thsds)	WWA FREQ.	P.C.S
1.	Names of Royal			
	Origin or Association 7	359	257	169
2.	Anglo-Norman Names 6	271	166	145
3.	Other Place Names 24	721	413	133
4.	Christian Names 7	296	166	133
5.	"Macs" and "Mcs" 13	302	145	114

<sup>1</sup>The names of Royal Origin are: BRUCE, CUMMINgs, DOUGLAS, GUNN, MACDONald, STEWARt and STUART. The Anglo-Norman names are: BOSWELI, CRAWFOrd, CUNNINgham, GORDON, LIND-SAy and SINCLAir. The place names are: FRASER, RAMSEY, BARR, BLAIR, BUCHANan, CARMIChael, DUNLAP, FORSYTh, FULTON, LIVINGstone, LOGAN, POLK, POLLOCk, WADDELI, GALLOWay, GUTHRIE, STERLING, WALLACE, FORBES, LESLIE, MONROE, MUR-RAY, ROSS and SUTHERland. The Christian names are: ALEXANder, BEATTY, DAVIDSon, DONALDSon, FERGUSOn, MATHISon and RITCHIE. Finally, the names beginning with Mc or Mac are: McCUL-Loch, McFARLand, McINTOsh, McINTYre, McLEAN, McMILLan, McNEILI, MacINT(osh or yre), McKAY, MACKEY, McKENZie, McLEOD and McPHERSon.

The class differences, as contrasted with the regional ones, are marked and appear to be closely associated with original social status. The bearers of royal names exceed the descendants of the Anglo-Norman aristocracy by 24 points on the average; the latter

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average 12 points higher than the names borne by the majority of the people (non-aristocratic place names and modifications of Christian names). The Celtic names, excluding the royal MacDonald and as represented by the prefixes MAC and MC, are, on the average, 19 points below the third and fourth groups. Writers on surname origins have advanced the theory that the least skilled groups in the population, and specifically the vast mass of the peasantry, were usually named in accordance with their patronymics or distinguishing characteristics, whereas the more highly skilled minority took names from its occupations and crafts. If significant differences in ability existed, they have, in the case of Scottish Americans at least, been obliterated by time.

While the average P.C.'s of these class categories reveal large and significant differences, there is little homogeneity within them. This does not invalidate our findings, but rather points to the probable presence of various other causal processes in the situation. The degree of intra-batch diversity can be shown by a few examples. Among Royal Names, STUART ranks highest with a P.C. of 450; GUNN and STEWARt lowest with P.C.'s of 123. In the Anglo-Norman artistocratic group, the high name is LINDSAy (218); the low name is CUNNINgham (116). In the name group with Mc or Mac prefixes, McLEAN is high (218), whereas MACKEY is lowest (59).

The clerical names of Scotland do not follow the English pattern. McPherson (son of the parson) has a performance coefficient of only 95—astonishing when one considers the traditional Scottish pre-occupation with theology and the intellectual and community leadership exercised by the clergy.<sup>5\*</sup> On the other hand, Buchanan, meaning seat of the Canon, has a P.C. of 166 and McLean (son of the servant of St John) has a P.C. of 218.

In conclusion, three findings seem important. (1) The Scottish immigration to the United States was much less gifted (in terms of *Who's Who in America* performance coefficients) than the Scots who stayed at home. (2) No statistically significant differences in achievement were found between the different regions of Scotland. (3) There is a marked positive association between the class origin of groups of surnames and their performance coefficients.

<sup>5</sup> The explanation may be simply that the Scottish clergy at large was not intellectually distinguished at the time surnames were adopted.

\* The probable explanation here is that the early Celtic clergy were appointed on a tribal basis and their offices were hereditary. Consequently, the aptitude for scholarship was, in many instances, a much less important factor than to whom they were related.—EDITOR.

# The Provenance of Scientists\*

## BY NATHANIEL WEYL

The subject of this article is the shifting geography and ethnology of scientific genius from the Middle Ages to the present. For the first fourteen centuries of the Christian era, the outstanding source is the three volumes of his monumental *An Introduction* to the History of Science which Professor George Sarton of Harvard managed to complete before his untimely death. The geography of scientific achievement in specific disciplines has been explored by Professor Harvey C. Lehman. In addition, I have made various calculations of my own.

By 1100 A.D., world scientific leadership had passed decisively from Islam to Christendom. Of the 1404 scientists listed by Sarton for 1100 to 1400 A.D., 97, or 56.8%, were Christians. In the 12th century, France produced more outstanding minds than any other European country, but in the 13th century leadership passed to Italy and by the 14th century Italian genius was twice as plentiful as French. The British Isles ranked third, followed after a substantial lag by Germany, Christian Spain and the Lowlands. During this period the Oriental civilizations in aggregate produced about as many eminent scientists and scholars as the Jews. China accounted for half of them and ranked with the British Isles.

When we attempt to equate the distribution of intellectual eminence in Europe during 1100-1400 A.D. with population, we run into a major difficulty. The first even tolerably reliable estimates of European population by countries are those of Beloch for 1600 and Riccioli for 1661. Assuming that no significant changes in the *relative* distribution of European population occurred between the medieval and the post-Renaissance periods, we can arrive at a rough index of national scientific productivity by using Sarton's figures for scientists and Beloch's for population.

\* Taken in part from a forthcoming book, *The Geography of Intellect*, by Nathaniel Weyl and Stefan T. Possony.