LANGUAGE MAINTENANCE, BILINGUALISM
AND RELIGION IN GASPÉ EAST[1]

Though the main purpose of our study was to examine the extent
to which the English and French of Gaspé Peninsula have retained their
mother tongue, bilingualism is at the centre of the study. On the one
hand we analyse the effect of certain factors on the number of bilinguals.
On the other, we analyze the combined effect of these factors and
bilingualism on the retention of mother tongue. The orientation is
natural because bilingualism logically precedes a change in language.
If people change one language for another, there must have been a time
when a large proportion of them spoke both.

We base our study upon census returns for the area. Such returns
have frequently been studied by demographers (see Maheu, 1970, and
Lieberson, 1970, for example). We have, however, carried out a
regression analysis of the date which yields some interesting extra
information.

Our study is of Gaspé East, one of the Gaspé Peninsula's five
counties. For census purposes the county is divided into small districts
with an average of about two hundred persons per district. The commu-
nities which inhabit the districts were for a long time sufficiently
isolated from one another to warrant their being taken as separate
units. From the census returns we took the following figures for each

of fifty-two districts : (1) number of native French speakers ; (2)
number of native English speakers ; (3) number of bilinguals (French-
English) among native French speakers ; (4) number of bilinguals among
native English speakers ; (5) number of catholics and number of protes-
tants in each linguistic group ; (6) number of persons of French-speaking
ethnic background and number of persons of English-speaking ethnic
background.   Three separate regression analyses were run on these data.
We will first set out the findings of the analyses and then, in the
discussion section, give our interpretation.

SURVEY I

The first analysis is aimed at discovering some factors which
are related to the proportion of bilinguals among the native French
speakers in the fifty-two districts. Two predictors were chosen : one
is the ratio of native French speakers to active English speakers per
district ; the other is the ratio of native French speakers to native
English speakers among catholics. There was independent evidence
(Mougeon, 1973) that native French speakers were more likely to have
frequent contact with catholic than with protestant English speakers.

The regression, which was stepwise, was carried out on data
which had been converted to standard measures. That is, each measure's
deviation from the mean of those measures was divided by the standard
deviation of those measures. The effect of this is to yield regression
coefficients which range from -1 to 1 and which are comparable with
one another. The means, and standard deviations of raw measures are
presented in Table 1.

The regression analysis yielded only one significant coefficient.
The regression of the proportion of bilinguals among the native French
speakers on the ratio of native French speakers to native English speakers
in a district is 0,80, and of course the multiple R is the same. With
1 and 50 degrees of freedom, this yields an F = 85,75 which is highly
significant. The finding is, the higher the ratio of French speakers

TABLE 1

*Means and standard deviations of raw measures
associated with analysis 1*

	Mean	Standard deviation
Bilinguals among French	25,1	22,3
Proportion French in district	78	28,8
Proportion French among catholics	84	23,2

to English speakers to lower the number of bilinguals among French speakers.

This does not mean that the proportion of bilinguals is unrelated to the ratio of French speakers to English speakers among catholics. The simple regression coefficient (which expresses the relationship between the two variables on their own) is -0,78 which is only slightly lower than the coefficient just reported. What the regression analysis shows is that the two predictor variables are so related that nearly all the predictive power of the two resides is one alone, and of the overall ratio of French speakers to English speakers is the more powerful.

SURVEY II

The second analysis deals with the proportion of bilinguals among native English speakers. Three predictor variables were selected : the ratio of native English speakers to native French speakers ; the ratio of catholics to protestants among native English speakers ; the ratio of native English speakers to native French speakers among catholics. The second of these was included because there was considerable variation in the ratio of catholics to protestants among English speakers. All French speakers were catholics so there was no room for such a variable in the first analysis. The means and standard deviations of the raw data are presented in Table 2.

TABLE 2

Means and standard deviations of raw measures
associated with analysis 2

	Mean	Standard deviation
Bilinguals among English	55,6	32,5
Proportion of English in district	23,5	29,5
Proportion of catholics among English	66,7	30
Proportion of English among catholics	18,3	24,1

The analysis yielded two significant coefficients. That for the
ratio of English speakers to French speakers among catholics is -0,54 ;
F with 2 and 49 degrees of freedom is 19,65, which is highly significant.
The interpretation is, the higher the proportion of English speakers
among catholics the lower the proportion of bilinguals among native
English speakers. The second significant coefficient is for the ratio
of catholics to protestants among native speakers of English, which
has a value of 0,53 ; F with 2 and 49 degrees is 30,15 which is also
highly significant. The interpretation is, the higher the proportion
of catholics, the higher the proportion of bilinguals among native
English speakers. Multiple R for this analysis is 0,68. The coeffi-
cient for the overall ratio of English speakers to French speakers
fell below the significance level. This is unlike what was found in
the first analysis where the corresponding coefficient was the only
significant one. Once again we note that the analysis does not show
that the overall ratio of English speakers to French speakers is unre-
lated to the proportion of bilinguals among English speakers. The
simple regression coefficient (which expresses the relationship between
the two variables on their own) is -0,44. It does mean, however, that
this variable adds very little to the other two in predicting the pro-
portion of bilinguals among native speakers of English.

SURVEY III

The third analysis is based on a statistic proposed by Lieberson (1970), retention rate. We have chosen to work with the retention rate of English speakers, which is calculated according to the following formula :

$$\frac{\text{Number of English speakers}}{\text{Number of English-speaking origin}} \times 100.$$

English speaking origin is interpreted liberally to include Irish, Scots, and Welsh as well as Englishmen. If the retention rate is higher than 100, the English-speaking community has assimilated some non-English speakers. If it is less than 100, the French-speaking community has assimilated some English speakers. If it is 100, then each community has held its own. The situation is somewhat complicated by the fact that besides English and French, there were other immigrants, notably Channel Islanders and Swedes. Because retention rates formed a highly skewed distribution with several very large values, for purpose of the analysis we replaced each by its log to the base ten.

Four predictor variables were chosen : overall proportion of English speakers to native French speakers ; the ratio of catholics to protestants among native English speakers : overall ratio of protestants to catholics ; and ratio of bilinguals to unilinguals among native English methods. - The fourth variable was included because bilingualism is thought to precede assimilation. We could not include a similar variable giving the proportion of bilinguals among native French speakers, because this information could be inferred from the four variables we included. The means and standard deviations of the untransformed measures are shown in Table 3.

TABLE 3

Means and standard deviations of raw measures
associated with analysis 3 : based on data from 47 districts

	Mean	Standard deviation
Assimilation rate of English by French	136,8	156,5
Proportion English in district	23,5	29,5
Proportion catholic among English	66,7	30
Proportion of protestants in district	12,5	20
Proportion bilingual among English	55,6	32,5

The interesting finding is that none of the four predictor variables is significantly related to assimilation rate. Moreover, all four taken together do not yield a significant prediction of assimilation rate : multiple $\underline{R}$ = 0,28 ; $\underline{F}$ with 4 and 42 degrees of freedom is 0,91. The most satisfactory interpretation which we can derive from these findings is that there has been very little assimilation in Gaspé East. By and large the two linguistic groups have either held their own or emigrated. They have not changed language in significant numbers.

DISCUSSION

First to summarize the findings about bilingualism. The best predictor of bilingualism among native speakers of French is overall ratio of native French speakers to native English speakers. Bilingualism among native speakers of English is different ; it is best predicted by a combination of (i) the ratio of native English speakers to native French speakers among catholics and (ii) the ratio of catholics to protestants among native English speakers.

The findings for native speakers of French support Lieberson (1970). He considers that the overall ratio of French speakers to English speakers is the most important factor related to number of bilinguals. Our findings suggest, however, that at least in some areas there are more powerful factors influencing certain sectors of the community. Both in the present study and in Mougeon (1973) it is evident that religion can be a very important factor bearing upon the number of bilinguals among English speakers. The English speakers who tend to be bilingual are the catholics. This merely reflects the fact that religion brings English-speaking catholics into contact with French-speaking ones. In some areas the two groups shared schools and churches, while in all areas marriage was more likely to take place across language boundaries than across religious ones (see Mougeon, 1973). What our second finding seems to indicate is that where English-speaking catholics are a small proportion of all English speakers, they are thrown more upon their French-speaking coreligionists. Where they are a larger proportion of all English speakers they are more self contained.

The final point relates to language maintenance. We have not shown that the factors which are conducive to bilingualism, and bilingualism itself, are unrelated to language changes. All we have found is that in Gaspé East there has probably been rather little linguistic assimilation of French by English or English by French. We cannot conclude that the same holds elsewhere in Quebec or Canada. Perhaps one of the keys to the situation in Gaspé East is the county's preponderance of French speakers. English speakers are a minority locally, but in Canada as a whole (and in North America) they are a majority. Perhaps the minority at the local level is counterbalanced by the majority in the larger area to yield the equilibrium which we seem to observe. Moreover, until recent times the English speakers controlled the economy of the area, and that too might have counterbalanced the

fact that they were a minority. We can, however, add our voice to
those who advise against jumping to the conclusion that bilingualism,
either for French speakers or English speakers, spells rapid loss of
mother tongue.

Raymond Mougeon
John Macnamara
McGill University