Idéologie linguistique et aménagement de la langue dans un contexte multilingue

Language ideology and language planning in a multilingual setting

https://doi.org/10.1017/S000841310000013X Published online by Cambridge University Press

Canadian Journal of Linguistics/Revue canadienne de linguistique 59(1): 3–23, 2014

Evaluational reactions to spoken French and English in Montreal: Does mother tongue really matter?

ELKE LAUR
Montreal, Canada

1. EVALUATIONS IN 1960 AND 2004

Montreal became famous in socio-psychological and sociolinguistic circles half a century ago, when a group of researchers — Lambert, Hodgson, Gardner, and Fillenbaum (1960) — invented a new methodology to measure speech evaluations and linguistic attitudes *in*directly. They came up with the idea of taping bilinguals in both their languages, French and English in this case, in order to measure Anglophone and Francophone Montrealers' evaluations of those voices. This was the first time a method allowed researchers to gather data on speech associations within a minimal stimulus design that allowed evaluational differences to be analysed solely on the basis of language. This ingenious and innovative technique, called *matched guise*, allows researchers to access subjects' reactions without asking for their opinions directly or doing extensive field work. Notwithstanding the originality of this seminal work, this initial research presented serious limitations. First, and most importantly, it was based on the implicit premise that evaluational differences can be explained solely by the evaluators' belonging to one linguistic community rather than another. Second, the interpretations of the results were generalized to two linguistic communities without representative samples. Third, one of the exclusions of the minimal stimulus design concerned sex differences in linguistic attitudes.

In 2004, another matched guise study of the evaluational reactions of Montrealers added new aspects to the original methodological design in order to evaluate some of its limits (Laur 2008c). One of the innovations was to include a female voice into the minimal stimulus design, which allowed to address the third limit mentioned above. The fundamental methodological difference, though, was to include members of different language groups in a representative sample of the population of Montreal so that multivariate analysis could determine the extent to which belonging to a specific linguistic group actually accounts for reactions to spoken language. Thus, it became possible to analyse the widely and often implicitly accepted (under)statement that mother tongue is the most important (or sole) characteristic to explain variation in linguistic evaluations.

The focus of this article is to explore the outcomes of those methodological variations and their consequences on conceptualisations of the matched-guise technique as well as to explore the scope of interpretations of the results. In section 2, some methodological aspects are detailed, before describing the original work by Lambert et al. and the snowball effect of their interpretations in section 3. Section 4 describes and analyses the methodological innovations adopted in the 2004 study and the results they produced: the rather important impact of gender on evaluations, and the surprisingly little account of variation that mother tongue (or other language or social caracteristics) of the Montrealers accounted for in regression analysis. Those results indicate that the minimal stimulus design of the matched-guise technique could artificially create differences in evaluational reactions simply by juxtaposing linguistic stimuli or groups of respondents solely chosen for their linguistic differences. Section 5 concludes the article.

2. METHODOLOGICAL CONSIDERATIONS

Perception is fundamental to assessing reality: every day, our five senses enable us to orient ourselves and make decisions. Since all these decisions and perceptions — linguistic perceptions in particular — take place in the mind, they are not easy to analyse. Perceptions of others can only be inferred by using a measurable variable: behaviour (Herrman 1988). Examples of methodologies that allow the description and analysis of behaviours that reveal perceptions in Montreal include discourse analysis (Daoust 1983), ethnomethodology (Heller et al. 1982, Laur 2008a) and surveys (Bourhis 1983, Landry and Allard 1990, Laur 2001). What was so innovative about the original matched guise test was that it enabled researchers to access perceptions indirectly. In other words, participants in the study did not realize that their behaviour (that is, their evaluations) revealed a linguistic perception. Moreover, the method works: since people really do confuse language with the person speaking it (as shown by Calvet 1994), linguistic judgments can be isolated.

The impact of the matched guise method has been enormous; it continues to be used around the world with increasingly diverse linguistic pairs. Even though the original study and the methodology have come under criticism over the years — for being a pencil-and-paper study, for providing an acontextual linguistic evaluation, or for different statistics-related reasons (Gaies and Beebe 1991, Laur 2002) — the technique is still an ingenious method to minimize the bias of direct questions. Some methodological rules and improvements nevertheless need to be applied and explored.

In 2004, the study was reproduced with certain modifications. The methodological aspects that had been changed in comparison to those of Lambert and his colleagues concerned the two elements that had undergone the most variation in subsequent studies based on the same method: voices and judges. So, instead of using exclusively male voices, the voices of both a bilingual woman and man were recorded in order to test the influence of gender on the evaluation.[1] As in the original

[1]The voice recordings consisted of a bilingual man and woman reading a short excerpt from a Montreal literary work in French and another excerpt in English. The authenticity of the bilingualism of the recordings was pre-tested.

study, Likert-type[2] scales were used to evaluate 12 character traits:[3] likeable, sociable, intelligent, distinguished, warm, dynamic, educated, dependable, having the qualities of a leader, having a sense of humour, having character, and having ambition.[4] Participants were offered the choice of an English or French version of the questionnaire.

More importantly, however, the number of judges had not only been increased to 610, but the participants were also chosen at random so that the sample was representative of the population of the Island of Montreal[5] and, as such, included people of all age groups, of both genders, and from various neighbourhoods. Such a probability sample is based on the assumption[6] that every member of the target population has a measurable chance of being selected into the sample. This is the premise of generalisations to the target population.

These modifications seem important: an examination of a compilation of scientific summaries from over 2,000 journals in the field of linguistics and language behaviour[7] showed that the matched guise technique has always been administered to small groups of people, often consisting solely of students. New information technologies allow pre-recorded voices to be heard by a large number of people using a telephone survey technique, so it was possible to expand the normally little convenience samples to a broader random sample. Although generally used to elicit direct evaluations, these new technological survey techniques are also beginning to be applied to the field of dialectology (Labov et al. 2004).

Since this seems to be the first study to apply the matched guise technique by using a telephone survey with a representative sample, the eventual impact of this administration mode on the evaluations cannot be assessed. Another disadvantage of this administration mode is that the voice recordings had to be brief so that only four versions (two in English and two in French) could be used (see also section 4.2). Nevertheless, the utility and value of an expanded random sample lies in the

[2]We used a 4-point scale: *Very*, *Somewhat*, *Not very*, and *Not at all* in English, and *Très*, *Assez*, *Peu*, and *Pas du tout* in French.

[3]The characteristics were chosen and translated based on the original (Lambert et al. 1960) and subsequent studies (Genesee and Holobow 1989, for example) but are not exactly the same. Laur (2001) gives a more complete comparison of traits used in different studies.

[4]In French, the following characteristics were used: *sympathique, sociable, intelligent, distingué(e), chaleureux(se), dynamique, instruit(e), fiable, qualités d'un leader, sens de l'humour, caractère, ambition.*

[5]We conducted a telephone survey of 610 respondents who were representative of the entire population of the Island of Montreal. The survey base was created from a random sample of phone numbers generated by software. Respondents were selected using the Kish selection table, with a response rate of 51.3%. Interviews were conducted from June 17 to July 4, 2004. The sample was weighted with disproportionate linguistic stratification.

[6]The essential point is that a random sample is based on an objective mechanism to choose participants and that eventually occurring bias can be calculated in order to measure the accuracy of every inference applied to the underlying population.

[7]Those summaries are from: LLBA, *Linguistics and Language Behaviour Abstracts*, available at ccat.sas.upenn.edu/~haroldfs/bibliogs/MACHGUIS.HTM.

possibility to apply a multivariate analysis. Such a sample allows statistical inferences on the target population and the influence of several of the judges' characteristics — their mother tongue, for example — can be measured and analysed.

3. THE EVALUATIONAL REACTIONS OF HALF A CENTURY AGO

Before considering how the characteristics of both the judges and the voices could have affected evaluations, the seminal work of Lambert and his colleagues needs to be introduced.

3.1 A minimal pair: English and French

A two-and-a-half minute passage of prose read by four bilingual men was recorded and administered to two samples of students, divided into "English speakers" and "French speakers" with the following characteristics:

> The English-speaking sample comprised 64 students taking the first course in Psychology at McGill University, who volunteered to participate. The average age for the group was 18.8 years and both sexes were approximately equally represented. [...] All [subjects] used English as their school and primary social language, and all but nine who were born in Europe learned English as their first language.
>
> The French speaking sample was made up of 66 male students in their final year at a classical French collège in Montreal who were at approximately the same educational level as the English sample, with an average age for the group of 18.2 years. [...] All but one of these [subjects] were born in Canada and all but four in the province of Quebec. All used French as their home, school, and primary social language. The faculty and students speak grammatically correct French, of course, but in general they have a distinctive French Canadian accent. (Lambert et al. 1960:45)

The minimal English-French pair was thus not restricted to the voices of bilingual men; the judges as well were divided based on the same linguistic criterion:

> [...] it was predicted that the differences in the favourableness of any [subject's] evaluations of the French and English guises of speakers would reflect his attitude toward members of his own and members of the other language group. (Lambert et al. 1960:44)

Right away, it appears that students were divided into two linguistic groups to reflect the authors' motivations, as set out in the above quotation. It appears also, however, that the groups were far from equal: the English-speaking group was more varied, not only in that it included both genders, but also in terms of ethnic characteristics. English was not the first language of all the participants, some of whom were of European origin and had different religious affiliations, as the authors also wanted to analyse the effect of religion on the evaluations (see Lambert et al. 1960:45, fn. 5). The French-speaking group, on the other hand, was comparatively homogeneous: the mother tongue of all the students was French and, as indicated in the last sentence of the quotation describing the French-speaking participants, they all seemed to be firmly anchored in the language and culture of French Quebec.

Nonetheless, for the study, these two groups of students were considered to be representative of two communities whose relationship the authors described as follows:

> The study was carried out with [subjects] living in Montreal, a community whose history centers largely on a French-English schism which is perhaps as socially significant for residents of the Province of Quebec as that between the North and the South is for Southerners in the United States. (Lambert et al. 1960:44)

It is this linguistic "schism" that the authors wanted to test by asking those two groups of students to evaluate the two languages that were seen as the basis for the opposition between their two communities.

It is important to view this situation in the historic, social and political context of the 1950s: the data-collection of this study took place just a year or two before the so-called "Quiet Revolution", which induced major changes in every aspect of society in Quebec. It also means that the conceptualisation of the study and the interpretations of the results were done before the core of linguistic legislation became a reality in Quebec and Canada, and before sociolinguistics came to exist as a discipline.

3.2 French: A minority?

Foremost, at the time of the 1961 census, 62% of the inhabitants of the Island of Montreal gave "French" as their ethnic origin, 18% said "British Isles", and 20% said they were of "other" origins. At that time, therefore, there were more people who claimed to be of "other" origins than in the group of what could be called "Anglophones". Moreover, 37.7% indicated that they spoke both official languages, 37% spoke only French and 22.8%, only English. Regarding the mother tongue, 24% said their first language was English, 62.7% said it was French, and 13.3%, another language. So, it is clear that in 1961, there was already a gap between the "two solitudes"[8] in Montreal that was being filled by a group of people who would eventually be called "Allophones".[9] As will be seen later, taking the evaluations of the latter group into account was to be significant, but there was no mention of this fact in the original study (actually, the article mentions that nine students in the Anglophone group had another mother tongue than English — but the analysis didn't account for that fact).

Nevertheless, the results of the study are described as follows:

> [...] English [subjects] evaluate the English guises more favourably on most traits. French [subjects] not only evaluate the English guises more favourably than French guises, but their evaluations of French guises are reliably less favourable than those of English

[8] *Two Solitudes* is the title of the 1945 novel written by the Montreal author Hugh MacLennan that relates a character's struggles to reconcile the differences between his English and French Canadian identities. The title has come to be a sort of shorthand reference to the "schism" referred to by Lambert and his colleagues.

[9] In Quebec, "Allophones" are people whose mother tongue is neither French nor English. Most Allophones are immigrants or the descendants of those who arrived in Montreal during one of the waves of immigration during the 1960s (McNicoll 1994).

> [subjects]. This finding is interpreted as evidence for a minority group reaction on the part of the French sample. (Lambert et al. 1960:50–51)

The interpretation of these results as the reaction of a minority group is problematic. First of all, in order to have the reaction of a minority, the Francophones would have had to *be* a minority — that is, a smaller demographic group than another group in Montreal — which was not the case in the 1950s or 1960s. The fact that they were not a demographic minority leads to believe that the authors confuse different forms of what the term "minority status" could refer to: a demographic, symbolic, economic or political minority. Their confusion probably lies in the definitions of "minority" (a group demographically smaller in number than another group) and "dominant" (a materially, symbolically or sociologically stronger group, regardless of its actual size). As the Francophones, in the 1950s, could actually be considered as living in a socio-economically and symbolically dominated situation,[10] the supposition that the researchers used the word "minority" in a social and not a demographic sense seems reasonable.

The researchers did, in fact, consider the possibility of a socio-economic interpretation of their results, but then rejected the hypothesis that certain differences in perception could be socio-economically or symbolically motivated because of the results of a complementary task the students had to do. This task was to assign job categories (professional or non-professional) to the English and French voices. On average, all of the students evaluated the English voices as being more professional but, since the French students did so less than their English-speaking McGill University counterparts, the authors decided that this result "argue[d] against an interpretation in terms of differences in perceived status of the two groups" (Lambert et al. 1960:49).

Consequently, the supposition of an implicit socio-economic reference of the term "minority status" was invalidated by the authors themselves. But if the minority status refers neither to a demographic fact nor to a socio-economic dominance, what does the term refer to? It is impossible to trace the exact sense of "minority" the researchers had in mind by writing this interpretation. There seem to be two possibilities, based on the historic context of the 1950s. The first hypothesis could be that they simply considered symbolic and socioeconomic dominance as being an inherent part of the term "minority" without the need of a solid proof, since the sociological distinction did not yet exist at that time. The second hypothesis is based on the demographic fact that if Francophones are not a minority in Quebec, they are in Canada. Actually, it is only since the federal linguistic legislation in Canada was adopted in 1963 (and, more clearly since the modifications in 1988) that the very concept of a Francophone majority started to exist. Lambert and his colleagues could have referred to the Canadian Francophone minority after all.

[10] At the time when the original study was published, Tajfel (1959) made a reference to the socio-economic aspect which is lacking in the interpretations of Lambert and his colleagues: "the fact is established that the classification onto French and English is correlated with socio-economic status, both objectively and subjectively" (1959:88).

Today, it seems clear that, then even more than now, the two languages, which were still both official languages in Quebec in the sixties, had very different connotations in terms of prestige and socio-economic appeal. The fact that Lambert and his colleagues decided that their result was the reaction of a "minority" seems to illustrate the difference in status very clearly, even if they do not consider this interpretation. Even today, the evaluation of English in Montreal is the evaluation of a language that is not only the official language of the country of which Quebec is a province, but also a language that is used as a common means of communication around the world. In Quebec, the language also has a 300-year-old association with the British conquest of the territory — first military, then socio-economic (Dickinson and Young 1995, Blair 2005). It is hardly surprising that English is perceived as more prestigious. The results obtained by Lambert and his colleagues — or rather, the supposed non-economic sense of their "minority" interpretation of those results — have nonetheless been quoted virtually all over the world since then.

3.3 A snowball effect

Thirty years later, a student at Montreal's McGill University decided to repeat the same study in Montreal for her doctoral thesis (without, however, blindly copying all the aspects of the first study). Her results, published in Genesee and Holobow (1989:27), were more or less identical to those of the original study:

> A comparison of these results with Lambert et al.'s (1960) results reveals that there is very little difference between our Francophone respondents' ratings and Lambert's Francophone respondents' ratings on the status traits — both groups of respondents evaluated the Canadian English guises more favourably than the Quebec French guises on all status traits.

The results, therefore, remained unchanged: the English voices were evaluated more favourably on status traits by both linguistic groups. The interpretation of a psychological reaction to a dominant group seems to be confirmed by Genesee and Holobow, but they go further in their reading of the same data, saying that, "The status results are interpreted in terms of a generalized psychological stereotype of French Canadians that is relatively immune to objective evidence" (1989:17).

Although the authors do not specify the nature of the "objective evidence" that appears to be unknown to Francophones, this "minority reaction without objective evidence" was later called "a form of self-hate" (Bourhis and Lepicq 1993:362). Thus, the interpretations of the same socioeconomic and symbolic dominance started in the sixties with the famous statement of a "minority reaction" (Lambert et al. 1960), developped thirty years later into a "generalized psychological stereotype" that is "immune to objective evidence" (Genesee and Holobow 1989) and ended up as "a form of self-hate" (Bourhis and Lepicq 1993) or as "self-denigration" (Evans 2002). This interpretive one-upmanship is often accompanied by a generalization to all Francophones. Extending the reactions of a few students to an entire population is a fairly delicate operation, to say the least, especially when the original sample was not selected at random (in the statistical sense of the term). The social connotation and generalization are clearly shown in the following quotation: "This pattern

of results was interpreted as a reflection of a communitywide stereotype of FC's [French Canadians] as relatively second-rate people" (Lambert, Frankel, and Tucker 1966:307).

In summary, there was a limited choice of subjects, a non-representative sample, and an over-interpretation of results. Furthermore, the research design appeared to be based on several implicit presumptions:[11]

i. the language of the respondents is the sole reason for their different evaluations,

ii. the subjects represent the entire population, divided into Anglophones and Francophones, and

iii. male voices alone were sufficient to obtain these general evaluations.

Further on in the present article (section 4.3), the first presupposition of the original study will be questioned by examining results based on a randomly selected and representative sample of the population of Montreal which should allow an examination of other potential determinants of perception. As for the second premise, it seems clear that statistics based on a non-representative sample lend themselves to neither generalizations regarding a given population nor analyses using inferential statistics (based on parameter-estimation of a sample, hence generalization). Moreover, the selection method of the students in the original sample clearly presented a certain bias (in addition to the unique age group they belong to): the fairly homogeneous backgrounds of the French-speakers has already been mentioned, but the same critique has not been applied to the English-speakers, nor has the single age group been discussed. It can also be assumed that the McGill University students, like the French *collège* students, came from fairly wealthy social backgrounds, especially at that time. The study, therefore, has limitations in terms of the diversity of respondents: they are neither representative of the linguistic diversity of Montreal students nor the manifold variety of the population of Montreal or Quebec. As for the last point — using male voices only — the results obtained by using female voices will be briefly described in section 4.2.

4. Evaluational reactions in 2004

In the 2004 study of a representative sample of the Montreal population (Laur 2008c), respondents generally continued to confuse the language being spoken with the person speaking it. Montrealers had no difficulty assigning a rating to the voices they heard and evaluating the characteristics of those voices. They also had fairly definite opinions about the voices, using all the points on the evaluation scale provided.[12] Their linguistic perceptions therefore varied significantly in terms of their assessment and appreciation of the various recorded voices. The analysis started by looking

[11] These are indeed presumptions, not hypotheses. All of the points mentioned are implicit in the study and were not tested or analyzed.

[12] Variance of scores is situated between 0.34 and 0.94 points, while the mean varies from 2.2 to 3.2 ("Not very" and "Somewhat"), and standard deviation varies between 0.61 and 0.97.

to see if variations in evaluations could be grouped together in any significant way, since most earlier studies had divided their results by factors.

4.1 Perceptions of linguistic status

In order to determine how the evaluations could be categorized, an exploratory factor analysis of all data obtained was conducted. Two underlying factors accounted for 63% of the variance in the evaluation of character traits (see Table 1).

Table 1: Factor scores of character traits

Factors	Traits	Scores	α by Cronbach
1	sociable	.879	.8705
	warm	.856	
	likeable	.806	
	sense of humour	.522	
	distinguished	.438	
	dynamic	.400	
2	ambition	.884	.8685
	educated	.706	
	qualities of a leader	.696	
	intelligent	.593	
	dependable	.555	
	character	.548	

Factor analysis with "alpha" extraction; orthogonal OBLIMIN rotation, Kaiser-Meyer-Olkin (KMO) = .923; Eigenvalue > 1.0

The two factors in question closely resemble the *status* and *solidarity* dimensions described in other studies (for example, in Giles and Ryan 1982; Zahn and Hopper 1985; Genesee and Holobow 1989; Dixon, Mahoney, and Cocks 2002). The *status* dimension reflects the relative social status or power of a group of speakers. The *solidarity* dimension refers to intragroup solidarity and linguistic loyalty — in other words, intra-community social attraction. The fact that all of the voices (speaking both English and French) were differentiated based on these dimensions shows that they underlie the perception of languages in general (the two in question, at least). The factors identified are composed, on the one hand, of character traits associated with status (having *ambition*, *character*, *qualities of a leader*, being *educated*, *intelligent*, and *dependable*) and, on the other hand, traits associated with solidarity (being *likeable*, *sociable*, *warm*, *distinguished*, *dynamic*, and having a *sense of humour*). The factor scores are different, but they are reliable, as shown by the test of Cronbach's alpha (see Table 1).

If, however, the sample is divided based on the language of the recorded excerpts, the result of the factor analysis is no longer the same. Since Osgood (1964), it is commonly known that the grouping, or overall ranking, of character traits is culturally variable. Studies using the matched guise technique are constantly adjusted

to reflect a certain difference in the composition of these dimensions, depending on the languages used (Genessee and Holobow 1989, for English and French; Dixon, Mahoney, and Cocks 2002, for English and Portuguese). A similar difference in the grouping of character traits for each of the languages being evaluated was also found in the data analyzed. Underlying factors vary in the data, depending on the language heard by respondents — or, rather, it is the traits that make up the *status* and *solidarity* factors that vary: English was perceived in two dimensions,[13] while the perception of French could be broken down into three factors.[14] Perception of the two languages shows a different number of underlying factors depending on the voice being heard.

The *solidarity* and *status* factors are, therefore, made up of different character traits depending on the sub-sample being considered: English, French, or both. A comparison of the results for these three sub-groups based on underlying factors reveals the following: if first looking at the *status* factor, only the traits *dependable*, *intelligent*, and *educated* contribute to the same factor for all three data groups. For the English voices alone and for the English and the French voices combined, six variables (*intelligent*, *educated*, *dependable*, *qualities of a leader*, *character*, and *ambition*) make up the *status* factor, while the evaluation of French voices is made up of two distinct factors for these traits: one that could be called "cultural status," consisting of *intelligent*, *educated*, *dependable*, and *distinguished*, and another, based more on the values of "success status", consisting of *character*, *leadership*, *ambition*, and *dynamism*, that could be called "competence".

Another difference between the sub-samples has to do with the extent to which these factors account for variance: for English, the *status* factor accounted for 47% of the variance, while evaluations of French reflected primarily the *competence* factor (46%). The traits included in the *solidarity* factor, however, seemed to co-vary more for all the voices as well as for English and French voices separately, as four traits appeared in all three analyses: *likeable*, *sociable*, *warm*, and *sense of humour*. The *solidarity* factor accounted for about 10% of the variance in all three groups.

It can, therefore, be stated that evaluations of French and English reveal different underlying factors, and that this difference applies to all Montrealers — irrespective

[13]The two factors for English voices (KMO .907) were:

i. 47% of variance explained and .8480 α by Cronbach included *intelligent*, *educated*, *dependable*, *qualities of a leader*, *character*, *ambition*, *dynamic*;

ii. 10% of explained variance, .8336 α by Cronbach: *warm*, *sociable*, *likeable*, *sense of humour*, *distinguished*. The factor analysis was made with "alpha" extraction and orthogonal OBLIMIN rotation.

[14]The three factors for French voices (KMO .908) were:

i. with 46% of variance explained and a .7961 α Cronbach included the traits *ambition*, *character*, *qualities of a leader*, and *dynamic*;

ii. 11% explained, .8492 α of Cronbach with *warm*, *sociable*, *likeable*, and *sense of humour*;

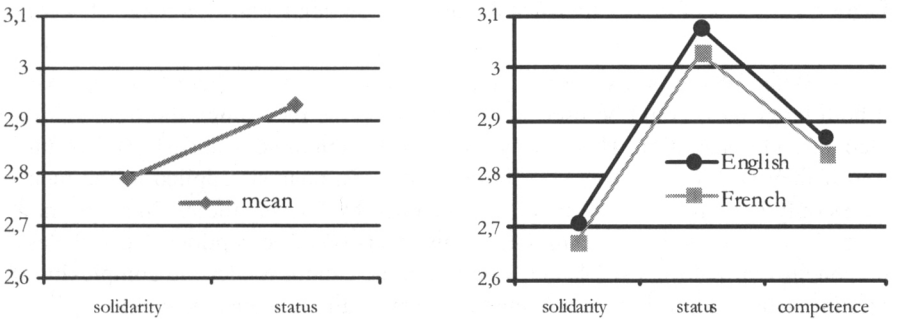
iii. 9% of explained variance, .8050 α of Cronbach, *intelligent*, *educated*, *dependable*, and *distinguished*.

The factor analysis was made with "alpha" extraction and orthogonal OBLIMIN rotation.

of their social or linguistic group. French is judged according to the three categories identified earlier — *status*, *solidarity*, and *competence* — while English is evaluated based only on the first two. It is clear that linguistic perception is coloured by associations shared by all Montrealers: associations based on combinations of qualifiers that are different for each language.

In terms of evaluation, the factors obtained do not have the same means — neither for both the factors obtained from all the evaluations (Table 1, illustrated in Figure 1a) nor for the factors obtained based on the breakdown described earlier for voices speaking French and English (shown in Figure 1b). In general, the *status* factor (made up of *intelligent*, *educated*, and *dependable*) obtained a higher mean than either the *solidarity* factor (*likeable*, *sociable*, *warm*, and *sense of humour*) or the *competence* factor (*dynamic*, *qualities of a leader*, *character*, and *ambition*).

The character traits associated with a linguistic *status* generally obtained higher means than those associated with *solidarity*. This statement applies equally to French and English voices, as shown in Figure 1b, even though the English voices obtained higher means for all three factors than the French voices did.



a. Based on Table 1

b. Based on separated analyses of languages

Figure 1: Means of *solidarity*, *status* and *competence* factors

4.2 Can language have a gender?

Before analyzing how voices are perceived based on language, we will look briefly at results based on the gender of the speaker. A complete demonstration of all results obtained by the comparison of evaluations of male and female voices can be found in Laur (2008b). This study clearly shows that the man's and woman's voices used in the 2004 study did not only obtain different results, but that they were evaluated inversely! In other words, male voices were associated more with character traits related to status (what is referred to as "competence" in this article), which mirrors the results of Lambert et al. (1960) and Genesee and Holobow (1989). The women's voices were associated more with traits related to solidarity (see Figure 2).[15] It is

[15] Although several multivariate analyses of variation (MANOVA) were conducted, as well as some t-test analyses (less extreme, as they do not take the interactions between variables into account) in order for the results to be comparable to those of Lambert et al. (1960) and

https://doi.org/10.1017/S000841310000013X Published online by Cambridge University Press

clear that linguistic evaluation is not gender-blind; it varies depending on the sex of the speaker. What is not clear is whether this is due to stereotyping, recognition of the superior international status of English and its status as the language of business, or entrenched ideas about masculine status.

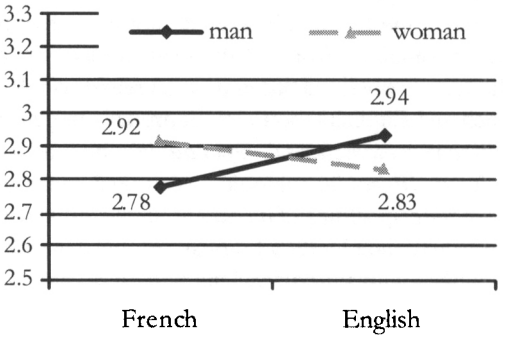


Figure 2: Means of the *competence* factor based on gender and language of voices

As stated before (see section 2), only one voice of each gender (each speaking in both languages) could be used in order to keep the recordings short enough for telephone administration. This clearly should be kept in mind when using the results, even if they are in some way corroborated by t-test analysis applied to the men's voices only in comparison to the results obtained by former studies. In short, more research is needed to better comprehend this inversion of perceptions. Nevertheless, the conclusion that the use of men's voices alone cannot render the complexity of interlinguistic relationships as reflected in the evaluations seems inevitable.

4.3 What are the effects of mother tongue?

Apart from the fact that all respondents evaluated speakers differently for the *status* factor, how did their linguistic group affect their evaluations? To find out more, their responses were deconstructed based on linguistic group (according to the mother tongue given by each respondent during the interview[16]). As shown in Figure 3, although the mother-tongue groups differed somewhat in their evaluations, it was mainly the Anglophone group that seemed to set itself apart from the others. The evaluations of native English-speakers were both generally and on average higher than those of the Allophones, which were themselves higher than those of the native French-speakers, who seemed to be the most moderate in their assessments. The members of the Allophone group, however, showed the greatest variance of all three linguistic groups.

Genesee and Holobow (1989). The results of those t-tests also clearly show the differences between the male and female voices.

[16]The groups at the outset were defined as: Francophone = mother tongue French, Anglophone = mother tongue English, and Allophone = mother tongue other than English or French.

https://doi.org/10.1017/S000841310000013X Published online by Cambridge University Press

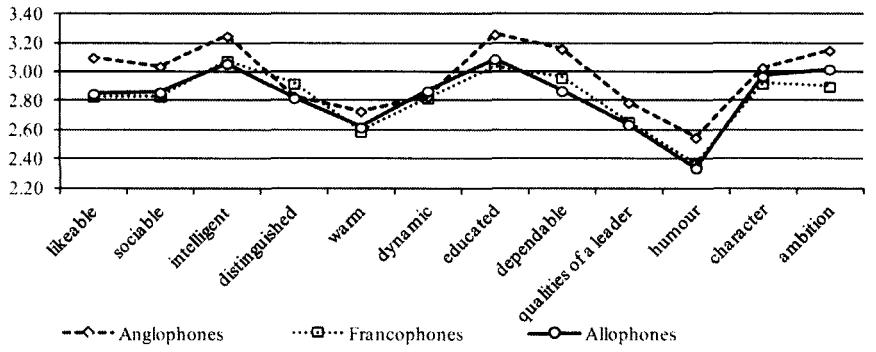


Figure 3: Average scores for all evaluations based on linguistic group (see also Appendix)

Respondents whose mother tongue was English systematically gave all four voices higher scores than respondents in the other two groups. There were only two exceptions to this rule: Francophones preferred the character trait *distinguished*, while Anglophones favoured *dynamic*. The means of Francophone and Allophone evaluations are, on the whole, quite close. Anglophones showed a slight tendency to evaluate what they were hearing more positively, regardless of the speaker's gender or the language he or she was speaking.

MANOVA analyses were conducted to compare these means and determine how much weight could be given to respondents' linguistic groups while respecting the interrelation of repeated measurements. A secondary interaction was found between participants' mother tongue and the two characteristics (language and sex) of the recorded voice for five of the character traits, as well as for the *solidarity* factor (see Table 2).

This significant triple interaction was then deconstructed for the traits *likeable*, *sociable*, *distinguished*, *warm*, and *dependable* and the *solidarity* factor, as well as the simple effects of the other traits. The results may be summarized as follows: for traits whose evaluation showed a triple interaction, the interaction between mother tongue and language used by the speaker is generally significant, but only when the speaker is a woman (for the traits *likeable*, *sociable*, *warm*, and *dependable* and *solidarity* factor; *distinguished* is reserved for the man's voice). This confirms, once again, the result mentioned earlier: for these character traits, it is impossible to consider the linguistic evaluation without taking into account the gender of the speaker, even when the different means of the three linguistic groups are taken into consideration.

Respondents whose mother tongue was English gave the woman's voice a higher score for the traits *sociable* and *dependable* and the *solidarity* factor — regardless of whether she was speaking English or French. English respondents also gave the voices strong scores for *likeable* and *warm*, but only when the speaker was speaking English. Figure 4 uses the example of *likeable* to illustrate this tendency. The results for *likeable* are essentially the same as those for *warm*. In the case of *sociable* and

Table 2: Interaction between mother tongue of respondents and the language and gender of voices

Attributes	Interaction			Experimental effect (η^2)
Traits:				
likeable	$F = 3.49$	df = 2/595	$p < .031$	.021
sociable	$F = 8.12$	df = 2/599	$p < .000$	.026
intelligent	$F = 1.25$	df = 2/590	$p < .286$ ns	.004
distinguished	$F = 3.06$	df = 2/589	$p < .048$	.010
warm	$F = 4.49$	df = 2/595	$p < .012$	.015
dynamic	$F = 1.27$	df = 2/595	$p < .282$ ns	.004
educated	$F = 0.68$	df = 2/589	$p < .508$ ns	.002
dependable	$F = 7.66$	df = 2/585	$p < .001$	.026
qualities of a leader	$F = 2.77$	df = 2/589	$p < .063$ ns	.009
sense of humour	$F = 1.60$	df = 2/588	$p > .203$ ns	.005
character	$F = 0.78$	df = 2/587	$p < .459$ ns	.003
ambition	$F = 0.37$	df = 2/585	$p < .692$ ns	.001
Factors:				
status	$F = 2.05$	df = 2/570	$p < .130$ ns	.007
solidarity	$F = 4.76$	df = 2/580	$p < .009$	.016
competence	$F = 0.41$	df = 2/568	$p < .665$ ns	.001

ns = not significant

dependable and the *solidarity* factor, this difference in evaluating the woman's voice applied equally to both French and English recordings.

In the case of the male voice, all three linguistic groups displayed the same tendency to rate the man's voice higher when he spoke English rather than French. In comparison with Francophones and Allophones, respondents whose mother tongue was English always evaluated the man's voice significantly higher, regardless of the language he was speaking.

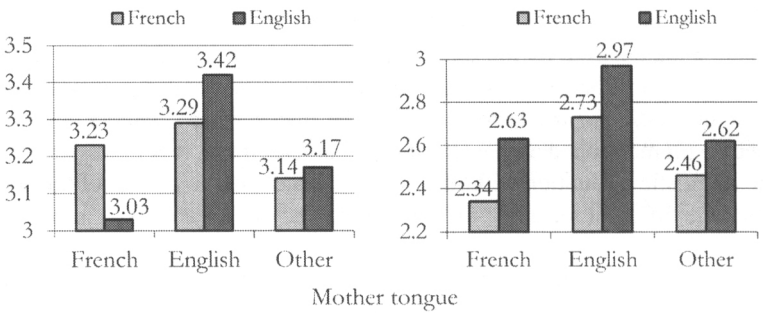


Figure 4: Interaction of respondents' mother tongue with language based on gender of voices for the characteristic *likeable*

https://doi.org/10.1017/S000841310000013X Published online by Cambridge University Press

In cases where there was no triple interaction between the respondent's mother tongue and the speaker's language and gender, the Anglophone evaluations were also significantly higher. The only exception is the trait *dynamic*, the evaluation of which is not influenced by the respondent's mother tongue. For the other traits, only the French voices (for *qualities of a leader* and the *competence* factor) or both English and French voices (*intelligent, educated*, and *ambition* and the *status* factor) were given a higher score by Anglophone respondents. They also ranked all of the voices higher for *sense of humour* (English or French, male or female) and *character* (women's voices only).

In summary, it can be concluded that whenever the evaluations of the linguistic groups are significantly different (at various levels of analysis), it is the respondents whose mother tongue is English who tend to "over-evaluate", as compared to their counterparts in the other two groups. The only exception to this rule is the character trait *distinguished*, for which Francophone respondents give significantly higher scores to the two women's voices (see Table 3 for a summary of significant differences).

Social psychology has recognized that there is an important interindividual variation in the "need to evaluate" (Blair, Jarvis, and Petty 1996). It is possible that cultural characteristics could lead people belonging to different linguistic communities to evaluate similar stimuli in different ways. It would take many more studies to confirm that this type of phenomenon is at play in this particular case. For the moment, it can safely be said that Francophones and Allophones are generally somewhat more moderate in their comparative linguistic evaluations (regardless of the gender of the speaker or the language being spoken). In the field of research on perceptual dialectology, it is acknowledged that people evaluate their own linguistic variety very highly when they come from "linguistically secure areas (areas where people believe the [language] they speak is quite 'correct')" (McKinnie and Dailey-O'Cain 2002:278). The results presented here, however, concern evaluations of French as well as English voices, which show a more generalized evaluative behaviour.

Since this tendency on the part of the Anglophones to "over-evaluate" was observed for all voices, how does mother tongue help to explain this perceptive variance? Is the evaluators' appreciation of French or English influenced by their mother tongue? A hierarchical regression analysis was used to determine to what extent mother tongue accounted for perceptive variance. When mother tongues alone were applied to the model, only a maximum of 3% variation was accounted for by both character traits and factors. Then, other explanatory variables were introduced into the analysis model (language spoken at home and language used at work). Even in the best case (*status* factor), the variables accounted for no more than 10%; the rate was even lower for traits considered in isolation as dependent variables. This means that 90% of variance was not predicted by mother tongue, language spoken at home, or language used at work. When the explanatory ability of other variables was tested, such as knowledge of languages, education, level of income and age (see Table 4), no more than 12% of variation could be predicted for the *status* factor.[17]

[17]Results of these stepwise regression models are detailed in Laur (2008:175–177).

Table 3: Survey of MANOVA results: significant differences in means of linguistic groups

Traits	Man's voices		Woman's voices	
	French	English	French	English
likeable	2.34 < *2.46* < **2.73**	*2.62* < 2.63 < **2.97**	ns	3.03 < *3.17* < **3.42**
sociable	2.48 < *2.58* < **2.74**	*2.63* < 2.71 < **2.92**	*3.07* < 3.19 < **3.29**	*2.58* < 2.90 < **3.25**
distinguished	ns	ns	**2.88** < *2.89* < 3.10	**2.84** < *3.00* < 3.06
warm	ns	ns	ns	2.77 < *2.93* < **3.07**
dependable	*2.69* < 2.70 < **3.02**	*2.75* < 2.92 < **3.02**	*2.92* < 3.15 < **3.31**	3.06 < *3.12* < **3.28**
solidarity	2.3 < *2.34* < **2.56**	*2.46* < 2.48 < **2.71**	2.79 < *2.96* < **3.10**	*2.90* < 3.00 < **3.12**

	Voices in French	Voices in English
intelligent	*3.06* < 3.08 < **3.27**	3.08 < *3.14* < **3.26**
dynamic	ns	ns
educated	*3.01* < 3.03 < **3.27**	3.06 < *3.16* < **3.26**
qualities of a leader	*2.59* < 2.61 < **2.85**	ns
ambition	2.89 < *2.95* < **3.22**	2.92 < *3.06* < **3.09**
status	*2.95* < 3.01 < **3.25**	3.04 < *3.08* < **3.23**
competence	2.80 < *2.85* < **3.01**	ns

	Man's voices	Woman's voices
character	ns	2.88 < *3.01* < **3.14**

	Voices
sense of humour	*2.35* < 2.37 < **2.55**

Means of respondents whose mother tongue is French is underlined.
Means of respondents whose mother tongue is English is **bold**.
Means of respondents whose mother tongue another language is in *italics*.

Table 4: Example of results of multiple hierarchical regression analyses (status factor)

Variables	R	R2 adjusted	Delta R	beta
	.386	.149*	.120*	
French mother tongue				.058
English mother tongue				.027
English home language				.048
French home language				.335***
English used at work				−.154**
French used at work				−.051
Knowledge of English				.142**
Knowledge of French				−.021
Gender				.068
Age1				.053
Age3				−.085
Education 1				.119*
Education 2				.012
Income 1				−.032
Income 2				.010
Income 3				124*
Income 4				−.001

* $p < 0.05$ ** $p < 0.005$ *** $p < 0.000$

This result is even more surprising when we consider that even if the mother tongue did not account for as much variation as is commonly supposed, it still would have been highly probable that another socio-demographic variable would explain the evaluational variance shown by the data. It is therefore necessary to look outside the usual schema of sociolinguistic variables in order to identify other possible determinants of differential perception. This result is important, considering the fact that not only is the mother tongue often presumed to be the strongest — if not the only — explanation for linguistic attitudes, but none of the other linguistic variables added to the study managed to provide any more than a fair explanation for the different evaluational behaviour of Montrealers. It is important to note, however, that of those linguistic variables, it was English as language spoken at home and French as language used at work that predicted perceptive variance (albeit very little, but more than mother tongue).

5. Outcomes and perspectives

Our perception of what we hear differs depending on the voices of the speakers, whose vocal characteristics have a significant effect on how we judge them. In Montreal, English is perceived differently from French, and the gender of the speaker can inverse those evaluations. On the whole, Montrealers (regardless of their mother

https://doi.org/10.1017/S000841310000013X Published online by Cambridge University Press

tongue) gave the man's voice a higher score when speaking English, while the woman's voice scored higher in French. Evaluations also varied depending on such isolated factors as *solidarity*, *status*, and *competence*. All three factors received higher scores when a man spoke English rather than French. In the case of the woman, conversely, French won out over English for all three factors. A male voice speaking English, however, obtained the highest mean for the *competence* factor (as compared to the woman's voice speaking either language, or either voice speaking French).

Although Montrealers' evaluations vary depending on their mother tongue, age group and socio-economic group, those characteristics account for only 10% of results. Even if Montrealers whose mother tongue is English tend, on average, to evaluate more positively all the voices, this factor accounts for only 5% of the differences with other linguistic groups.

Even though the characteristics of the respondents provide no more than a very inadequate explanation for the perceptive variation in this study, the possibility that there may be other characteristics that could provide a better explanation than sociolinguistic and sociodemographic data cannot be ruled out. Several studies point to the influence of socialization (Landry and Allard 1990), linguistic identity (Laur 2001), and civic views (Montreuil and Bourhis 2001), to name just a few possibilities. In other words, there may be factors other than linguistic or demographic that are rooted in the respondents' life experience that could explain the variations in how English and French are perceived in Montreal.

The results of this study bring into question the presupposition of prior studies that the mother tongue is a major factor behind attitudinal differences. Instead of concluding that Francophones were suffering from a "minority reaction", the authors of the 1960 study could have interpreted their results from another angle: that of a "cultural over-estimation" on the part of Anglophones, since they evaluated all of the voices more positively. The essential point here is not to simply exchange the "six of one" of the 1960s for the "half dozen of the other" 50 years later, but to stress that two new, crucial elements now make it possible to better balance the earlier interpretation: Allophones' evaluations and the evaluation of women's voices using a representative sample that lends itself to inferential statistics.

Another factor sheds a new light on the results of previous studies: asking respondents to evaluate a woman's voice allowed to question results obtained using male voices only. Since the speaker's gender and the language he or she is speaking are interrelated in Montrealers' evaluations, this addition is an essential one (since the evaluations are reversed) and could challenge the results of earlier studies that have come to be taken for granted.

Two conclusions may be drawn from the above discussion: first, it is important to acknowledge the researcher's point of view, since "reality never speaks unless spoken to"[18] (Bourdieu 1968:62). The researcher's perspective reflects the climate of his or her times; it inevitably infiltrates his or her conceptualizations. The second conclusion concerns the instrument of measurement used. The very nature of the matched

[18]Very free translation of "*Le réel n'a jamais l'initiative puisqu'il ne peut répondre que si on l'interroge*".

guise method — twinning language pairs — contains the possibility of bias through imbalance. A linguistic pair provides information on how the elements of each language compare with the other, but not, as this study shows, on other characteristics that could have a direct effect on results.

Although the matched guise technique remains an ingenious method for the indirect analysis of attitudes and perceptions, it is almost always associated with analyses based on the comparison of means (for two linguistic varieties only) for recorded voices and non-random samples. Two remarks must be made here: first, the comparison of means, even when significant (that is, when they have more chance of occurring than by chance alone), does not necessarily lead to a deduction of a cause-and-effect relationship, even if the interpretation seems plausible. Second, it is a well-known fact that many studies (particularly those using the matched guise technique) are conducted in the context of university courses, using so-called "convenience" samples. Faced with the difficulty of obtaining a random sample and the costs entailed, researchers often use non-random samples to obtain data more easily and less expensively. Since we know that statistical inferences can be made for a given population only by analyzing a random sample, it is obvious that a group of some 100 students selected by virtue of their presence in the researcher's class cannot tell us anything about any population other than the one they make up. Interpretations and deductions can therefore not exceed these limitations without compromising scientific ethics in some way.

References

Blair, Louisa. 2005. *Les Anglos: La face cachée de Québec. Tome I, 1608–1850.* Québec: Commission de la capitale nationale du Québec.

Blair, W.G. Jarvis and Richard E. Petty. 1996. The need to evaluate. *Journal of Personality and Social Psychology* 70:172–194.

Bourdieu, Pierre. 1968. Le métier de sociologue. In *La sociologie de Bourdieu: Textes choisis et commentés*, ed. Alain Accardo and Philippe Corcuff, 157–179. Bordeaux: Le Mascaret.

Bourhis, Richard Y. 1983. Language attitudes and self-reports of French-English language usage in Quebec. *Journal of Multilingual and Multicultural Development* 4:163–180.

Bourhis, Richard Y. and Dominique Lepicq. 1993. Québécois French and language issues in Quebec. In *Trends in Romance linguistics and philology*, ed. Rebecca Posner and John N. Green, 345–381. Berlin: Mouton de Gruyter.

Calvet, Louis-Jean. 1994. *Les voix de la ville: Introduction à la sociolinguistique urbaine.* Paris: Hachette.

Daoust, Paul. 1983. Les jugements sur le joual (1959–1975) à la lumière de la linguistique et de la sociolinguistique. Doctoral dissertation, Université de Montréal.

Dickinson, John A. and Brian Young. 1995. *Brève histoire socio-économique du Québec.* 2nd ed. Sillery: Éditions du Septentrion.

Dixon, John A., Berenice Mahoney, and Roger Cocks. 2002. Accents of guilt. Effects of regional accent, race, and crime type on attributions of guilt. *Journal of Language and Social Psychology* 21:162–168.

Evans, Betsy E. 2002. Attitudes of Montreal students towards varieties of French. In *Handbook of perceptual dialectology*, vol. 2, ed. Daniel Long and Dennis R. Preston, 71–93. Amsterdam: John Benjamins.

Gaies, Stephen J. and Jacqueline Beebe. 1991. The matched guise technique for measuring attitudes and their implications for language education: A critical assessment. In *Language acquisition and the second/foreign language classroom*, ed. Eugenius Sadtonio, 156–178. Singapore: SEAMEO Regional Language Centre.

Genesee, Fred and Naomi Holobow. 1989. Change and stability in intergroup perceptions. *Journal of Language and Social Psychology* 8:17–38.

Giles, Howard and Ellen B. Ryan. 1982. Prolegomena for developing a social psychological theory of language attitudes. In *Attitudes towards language variation: Social and applied contexts*, ed. Ellen Bouchard Ryan and Howard Giles, 208–223. London: Edward Arnold.

Heller, Monica, Jean-Paul Bartholomot, Laurette Lévy, and Luc Ostiguy. 1982. *Le processus de francisation dans une entreprise montréalaise: Une analyse sociolinguistique*. Gouvernement du Québec: Office de la langue française.

Herrmann, Theo. 1988. Mentale Repräsentationen: ein erklärungsbedürftiger Begriff. *Sprache und Kognition* 7:162–175.

Labov, William, Sharon Ash, and Charles Boberg. 2004. *Atlas of North American English: Phonetics, phonology and sound change*. Berlin: Mouton de Gruyter.

Lambert, Wallace E., Hannah Frankel, and Richard Tucker. 1966. Judging personality through speech: A French-Canadian example. *Journal of Communication* 16:305–321.

Lambert, Wallace E., Richard C. Hodgson, Robert Gardner, and Stanley Fillenbaum. 1960. Evaluational reactions to spoken languages. *Journal of Abnormal and Social Psychology* 60:44–51.

Landry, Rodrigue and Réal Allard. 1990. Contact des langues et développement bilingue: Un modèle macroscopique. *Canadian Modern Language Review* 46:527–553.

Laur, Elke. 2001. Perceptions linguistiques à Montréal. Doctoral dissertation, Université de Montréal.

Laur, Elke. 2002. La qualité, le statut et la perception du français au Québec. *Revue d'aménagement linguistique* (special issue/hors série):147–165.

Laur, Elke. 2008a. *Comment se conclut un* 'deal' *en français? L'état de la francisation dans cinq grandes entreprises québécoises à l'ère de la multinationalisation économique*. Montréal: Office québécois de la langue française.

Laur, Elke. 2008b. Le statut a-t-il un genre? La perception du français et de l'anglais à Montréal en 1960 et en 2004. In *Congrès mondial de Linguistique Française*, ed. Jacques Durand, Benoît Habert, and Bernard Laks, 2323–2335. Paris: Institut de Linguistique Française.

Laur, Elke. 2008c. *Contribution à l'étude des perceptions linguistiques: La méthodologie des faux-couples revisitée*. Montréal: Office québécois de la langue française.

McNicoll, Claire. 1993. *Montréal: Une société multiculturelle*. Paris: Belin.

McKinnie, Meghan and Jennifer Dailey-O'Cain. 2002. A perceptual dialectology of Anglophone Canada. In *Handbook of perceptual dialectology*, vol. 3, ed. Daniel Long and Dennis R. Preston, 277–294. Amsterdam: John Benjamins.

Montreuil, Annie and Richard Y. Bourhis. 2001. Majority acculturation orientations toward "valued" and "devalued" immigrants. *Journal of Cross-Cultural Psychology* 32:698–719.

Osgood, Charles E. 1964. Semantic differential technique in the comparative study of cultures. *American Anthropologist* 66:171–200.

Tajfel, Henri. 1959. A note on Lambert's "evaluational reactions to spoken languages". *Canadian Journal of Psychology* 13:86–92.

Zahn, Christopher J. and Robert Hopper. 1985. Measuring language attitudes: The speech evaluation instrument. *Journal of Language and Social Psychology* 4:113–123.

APPENDIX

The average scores are the following:

	Mother tongue of respondents											
	French				English				Other			
	$\overline{X}$	n	s	s^2	$\overline{X}$	n	s	s^2	$\overline{X}$	n	s	s^2
likeable	2.83	338	.433	.188	3.10	99	.408	.167	2.85	166	.495	.245
sociable	2.82	338	.441	.195	3.04	103	.398	.158	2.86	166	.490	.240
intelligent	3.08	332	.418	.174	3.25	101	.404	.163	3.06	164	.510	.260
distinguished	2.92	335	.454	.206	2.83	100	.493	.243	2.82	161	.534	.285
warm	2.59	334	.513	.263	2.73	101	.490	.240	2.62	167	.533	.284
dynamic	2.82	336	.489	.239	2.83	100	.497	.247	2.87	167	.551	.304
educated	3.04	331	.395	.156	3.26	101	.397	.158	3.09	164	.495	.245
dependable	2.96	327	.435	.189	3.16	98	.436	.190	2.87	164	.588	.346
qualities of a leader	2.66	331	.539	.290	2.79	102	.533	.285	2.64	164	.582	.339
sense of humour	2.37	326	.524	.275	2.55	102	.499	.249	2.34	167	.558	.312
character	2.92	329	.453	.205	3.03	101	.447	.200	2.97	165	.509	.259
ambition	2.90	327	.470	.221	3.15	100	.478	.229	3.02	165	.522	.272

https://doi.org/10.1017/S000841310000013X Published online by Cambridge University Press