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HOITY-TOITY TALK AND WOMEN

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ABSTRACT

There is a literature in sociolinguistics which theorizes that women tend to use the speech styles of higher social classes more than men, i.e., to talk hoity-toity. Because the perception of this pattern is consistent with traditional stereotypes of female behavior, we examine the relationship between sex and speech to see if 1) the relationship exists, and 2) if so, why. Findings in sociolinguistics are typically based on small, non-probability samples, or if a probability sample, one of a small area. It is risky to generalize from such data. They also do not permit the kind of multivariate analysis necessary to see if the correlation between sex and speech style is caused by one or more other variables. We make the analogy between learning a prestige style of one's mother-tongue and learning a second language where the second language is that of a wealthy group. The obstacles to the multivariate analysis of sex and the adoption of a prestige speech form are thereby removed. Data on bilingualism in English among French mother-tongue people in Montreal and Spanish mother-tongue people in Puerto Rico are used. The evidence disconfirms the hoity-toity talk and women theory.

HOITY-TOITY TALK AND WOMEN*

A number of recent publications in sociolinguistics have suggested that women tend to adopt, before men, a speech style characteristic of educated, well-to-do people, the "correct" or "prestige" style taught by the schools as the standard which everyone should imitate, i.e., talking "hoity-toity" (cf. Shuy, 1969a, 1969b; Trudgill, 1974: chap. 4; and Key, 1975:103-105). This paper reviews the sociolinguistics literature on the subject and puts the generalization to a test.

Sociolinguists have observed a correlation between a person's sex and his or her tendency to imitate the speech styles of certain socio-economic classes. A direct causal relationship between gender and speech style tends to be assumed or implied. Multivariate analysis may show, however, that this relationship is more plausibly explained by other variables, and is, in fact, not a causal relationship. However, multivariate analysis of the relationship of gender and speech styles is not possible on sociolinguistic survey data. Samples are small, often non-random, of small geographic areas, with little information on social background, and complex information on speech behavior. We make the analogy between learning the prestige style of a language and learning a second language where the second language learned is that of a wealthy, privileged group. All of

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these obstacles to the multivariate analysis of this relationship are thereby removed. There are large data sets including a variable on bilingualism, which permit detailed multivariate analysis of the question of whether sex makes any difference in the adoption of a prestige language. We use public use samples of the 1971 Census of Population in Montreal and the 1970 Census of Population in Puerto Rico, both bilingual societies, to see whether women have any intrinsic propensity to adopt a prestige speech form.

Review of the Literature

The researcher who perhaps more than any other sparked the recent wave of findings that women adopt prestige speech forms before men is William Labov. Labov (1966: 312, 495,496; 1972a:243) found in the now classic study. The Social Stratification of English in New York City that there was an on-going process of diffusion of standard American English forms down through each socio-economic stratum, replacing indigenous forms, known as "Brooklynese," and that at each socio-economic level, except the lowest, women tended to adopt the new prestige forms before men.

Simultaneous to or following Labov's work in New York, a number of other sociolinguists found the same pattern. Levine and Crockett (1966) found that women in a North Carolina city tend to adopt prestige speech forms before men. Wolfram (1969:78,215) found in a study of black, inner city speech in Detroit that the speech of women is closer to standard American English, i.e., that of the

white middle class, than that of men, and concluded that women show a "greater sensitivity to socially evaluative linguistic features" than men. Grillet (1974:199) reports that in rural villages in southern France "women appear to be more sensitive than men to the idea of status and upward social mobility" and consequently preferred the higher prestige speech form of standard French to the local romance dialect, Gascon. Key (1975:104) and Trudgill (1974:99) report similar cases of women preferring the standard or urban speech forms associated with higher social classes in Germany and Norway respectively. Cedergren (1973:19) in studies of the Spanish spoken in Puerto Rico and Panama also found that women's speech tended to be closer to the local standard than that of most men.

By 1969 Shuy (1969a) saw a pattern in the sociolinguistics literature. He reviewed a number of studies, many predating Labov (1966). He cited the study by Fischer (1958) in a New England village which showed that girls use the formal, school-correct 'ing' ending, as in "running and jumping" more often than boys, who tend to use the more informal 'in' ending as in "runnin' and jumpin'." This particular example of sex differentiation in the frequency of use of standard/non-standard forms evokes the confrontation between the untamed boyishness of a Huck Finn and prim submissiveness of the girls of Hannibal, Missouri. The assertion that women adopt prestige speech forms before men is closely related to emotionally strong, widely held

stereotypes about male/female behavior. Another of Shuy's (1969a) references is a chapter devoted to the speech of women in Otto Jespersen's Language, Its Nature, Development and Origin (1922). Jespersen (1946:56) also comments on women's speech in a later book. According to him, young women tend to come away from high schools in Copenhagen, speaking standard Danish more often than young men.

Labov (1970, 1972a) has commented on the sex pattern in socio-economic speech styles since the appearance of Shuy's (1969a, 1969b) papers. Labov (1972a:301-303) recalls the work of Louis Gauchat, an early 20th century French dialectologist, who studied the borrowing of features from standard French, a prestige language, into the speech of villagers in romance-speaking Switzerland. Women led the way in adopting the prestige features. As a counter-example to the generalization that women adopt language innovations before men, Labov (1972a:303) offers the case of a sound change on Martha's Vineyard in which men led the way in the more salient use of a dialectical peculiarity of the island. This case, however, is not a counter-example to the generalization that women adopt correct or prestige speech forms before men, since the innovation the men adopted was non-standard.

Counter-Examples to the Hoity-Toity Talk and Women Theory

There are true counter-examples to the hoity-toity talk and women theory. Labov (1970:27) notes that in the poorest socio-economic stratum in New York City, the women

may have less awareness of what standard speech is than men, and tend to conform less often to it. He attributes this reversal of sex pattern in speech styles to social isolation rather than any psychological differences from wealthier women. Other writers provide similar examples of women lagging behind men in adopting prestige speech forms. All of these examples involve bilingualism and most, situations of poverty, whether the shared poverty of a developing region or country or the relative poverty of being poor in an industrialized country. Jespersen (1922:241) cites a number of societies where a non-indigenous language has become the language of work in industry, trade, or government, and men are more frequently bilingual in this language of work than women.

G. Lewis (1972:11) in a study of language in the Soviet Union found that men tended to become bilingual in the school-taught languages, such as Russian, before women. There can be little doubt that Russian in the Soviet Union has more prestige than nearly every other language spoken there. He thinks that the tendency of men to become bilingual in the national language, and therefore, prestige language, before women, is a common pattern in developing countries. He attributes the difference between the sexes, like Labov (1970:27) for the poor in New York City, to the social isolation of women in such countries. Social isolation can be construed as meaning less education, less opportunity for labor force participation, and a traditional orientation toward concerning themselves with matters of home and family.

O. Lewis (1968:188) finds much the same thing among Puerto Rican women in New York City. The women tend to restrict their lives to home and neighborhood and have less occasion to learn and use English. Key (1975:136) notes a similar pattern among Spanish speaking Chicano women in the Southwest.

Nevertheless, if the theory that women are differentially attracted to prestige speech forms is true, one would expect a tendency of women to be more bilingual net of the factors which help men to become bilingual, such as amount of education or labor force participation. One recent sociolinguistic study of bilingualism in Spanish among Indians in Bolivia (Albó, 1970:85-89) found that while bilingualism in Spanish was definitely more frequent for men than women among the poorest and most rural people, in the more affluent classes, women were as frequently bilingual in Spanish as men. Given equality of education women would possibly be more bilingual than men.

Explanations of the Sex Pattern in Language

What accounts for the observed sex pattern in speech and the counter-examples to this pattern? There are several plausible explanations, each deriving from common sense or social science conceptions of the nature and importance of gender roles. None of these, however, is much more than conjecture.

The simplest explanation of the sex pattern in adopting prestige speech styles is that there is something

inherent in the gender role of being a woman which induces women to prefer prestige speech, i.e., gender role has a direct effect. Trudgill (1972:182) has set forth the proposition that women are inherently more status-conscious than men and that is why they imitate the speech of higher social classes more readily. Cedergren (1973:19) explains the tendency of the women she studied to use correct forms by Tudor (1971) who found that girls perceive status differences better than boys. The assertion in Wolfram (1969:78) that women are more sensitive than men to "social evaluation" is apparently a similar explanation, as is Grillet's (1974:199) statement that "women appear to be more sensitive than men to the idea of status and upward social mobility."

In this view, women are more narcissistic than men, and the adoption of prestige speech forms is just another way of expressing a sex-role related need for self-adornment. Being able to speak a prestige speech form may be viewed as part of personal adornment in a woman, like the cultivation of physical attractiveness, chic in dress, poise, and good manners, and rewarded in the same way: by personal prestige and advantage in the marriage and/or labor markets. Lakoff (1973) and Thorne and Henley (1976) suggest that women's speech is an extension of gender role with women taking a submissive role, part of which is enhancing themselves as a valued object by sounding good. This is a conventional view of feminine behavior (cf. Scully and Bart, 1973:1048). The symmetrically parallel view of men is that they are stout, happy, honest, unaffected fellows, somewhat put off with the

narcissism and status-climbing of women. How does that song from My Fair Lady go? "Men are so honest, so historically fair..." Misogynist, Henry Higgins, was, after all, a sociolinguist. There may be more than just an undercurrent of some old-timey stereotypes in the sociolinguistics literature.

There are explanations of the sex pattern in SES-related speech styles which involve gender roles indirectly. Shuy (1969a:3) suggests there may be something in the elementary school classroom situation, such as a female teacher, that facilitates the language learning of girls more than boys, producing a sex differential in mastery of the language(s) taught in the school. What Shuy is alluding to is Mead's (1949:chap.7) notion of assymmetry in sex role development: the male child's need for a "second weaning," a transfer of the significant other from mother to father. Sexton (1969) has noted that the predominance of women among school teachers makes a boy's "second weaning" more difficult. Sexton (1969) thinks that the woman school teacher tends to cause boys to reject the teacher, the school, their authority, and what they teach, including the "standard" language. A tendency of boys to pay less attention, to attend school less frequently or to drop out of school sooner than girls could easily produce a sex differential in the use of the school-taught standard language.

Trudgill (1974:101) reports just one such example of differential learning in the West Indies. Young children, boys and girls, started school speaking a common language,

each sex using the same frequency of non-standard forms. After six months of schooling, both boys and girls had learned to use non-standard forms much less frequently. However, the boys retained a higher frequency of non-standard forms in their speech and mimicked in ridicule the better mastery of standard forms by the girls, an indication of some rejection of standard language as too feminine.

Other gender role related factors may also be at work in the school. The tendency of females to be more facile than males in verbal learning is well documented. Maccoby and Jacklin (1974:75) have reviewed dozens of psychological papers documenting this tendency. Bartley (1970) reports a study which shows that girls are more likely than boys to continue with foreign language instruction in American high schools, although it was not ascertained whether this tendency was due to greater facility in verbal learning, a tendency to be more submissive to school authority, a higher tolerance for rote learning, or simply higher motivation to learn. When given a chance for equal schooling with boys, girls may excel in verbal learning. When that chance is denied or discouraged, as among the poor in industrial societies or in economically less developed societies which may insist on a greater differentiation of sex roles, women may lag behind men in adopting prestige speech forms.

Evidence of Bias in the Sociolinguistics Literature

Is there evidence of bias in the perception of sex differences in the recent sociolinguistics literature? It

appears so. Reference group behavior in the speech of women is discussed under the heading of sex differentiation of speech (cf. Labov, 1972a:344). However, Labov, for example, writes at length about reference group behavior in the speech of males without bracketing it under the heading of "sex differentiation" or as "sensitivity to social evaluation." In fact, Labov's (1972b) discussion of the language of black teenage youths in inner city peer groups reveals severe pressure to conform to the speech appropriate in that social context. Failure to conform may be fraught with disgrace (Labov, 1972b:257). It just happens that in this situation the norms which have prestige are defined in opposition to the language of the schools and white people in higher income groups, or in the special sociolinguistic use of the term, the "prestige" or standard language taught in schools.

Males, it turns out, are not all that resistant to fashion. Labov (1966:495) sees a general tendency of men in New York to imitate to some extent the speech styles of lower socio-economic groups in order to appear tough, to enhance their masculinity. In at least some societies, men may lead women in adopting new speech styles. Trudgill (1972) found that the men of Norwich, England were ahead of the women in adopting lower class speech innovations. Trudgill (1972) ascribes this tendency not to sensitivity to social evaluation or prestige but to a sensitivity to "covert prestige," his phrase for an admired working class swagger, which appealed to men for the reasons Labov (1966:495) suggests.

Women in Norwich were shown to speak more "correctly" than the men. Yet Trudgill ignores the symmetry in his data and states (1972:182) that women in our society are more status-conscious than men, generally speaking, and are therefore more aware of the social significance of linguistic variables. The failure to recognize this symmetry in behavior and to put only women down as responsive to reference groups is evidence of bias. The generalization that men tend to borrow the speech styles of lower socio-economic classes is not as well attested as the generalization about the speech reference group behavior of women.

We think there are several reasons to take another look at the generalization that women tend to adopt, before men, speech forms which are "standard" or "correct," which are typical of the wealthy and educated. First, there is the possibility of a simple projection of a male stereotype of women, conceivably as a result of the interview situation (cf. Benney, Riesman, and Star, 1956). Secondly, there is evidence of bias in the literature: the matter of female reference group behavior described as a sensitivity to social evaluation while male reference group behavior in language is not so characterized. Thirdly, there is no explanation of the observed patterns, only speculation. What has been observed is a pairwise relationship between the variables of sex and speech behavior. There may be some causal structure producing both effects. The assumption that sex role causes speech behavior is an imputation of causality to

a correlation, not necessarily warranted. Fourthly, many findings in sociolinguistics are based on small, non-random samples. It is risky to generalize from them to larger populations. Those studies which are based on probability samples (Labov, 1966; Levine and Crockett, 1966) are geographically limited and again it is risky to generalize from them.

Using Census Data on Bilingualism to Test the Hoity-Toity Talk and Women Theory

The Canadian Census of 1971 collected information on the mother-tongue and current language abilities of people. The 1970 Census of Population in Puerto Rico collected information on whether people were able to speak English. By restricting the population under study to native born Puerto Ricans with at least one native born Puerto Rican parent, Spanish mother-tongue can be virtually guaranteed in every case (Angle, 1976a:292, 1976b:chap.3). Public use samples of individual records are available from both censuses providing a large number of cases to analyze. Detailed multivariate analysis involving a large number of control variables is possible. Thus, if it can be shown that bilingualism is the same kind of SES (socio-economic status)-oriented reference group behavior as the adoption of a class speech style within a language, the hypothesis that women are more ready than men to adopt the speech of wealthier people can be put to a rigorous test. This test consists of establishing 1) that people of Spanish mother-tongue in Puerto Rico and French mother-tongue in Montreal regard speaking English

as prestigious, and then 2) seeing whether women are more likely than men to speak English net of all the factors which expose people to opportunities to learn English.

There are four possible outcomes. After controls for such relevant variables as amount of education and labor force participation, sex may not have a statistically significant effect on bilingualism in English. Even if the effect is statistically significant, it may not be very large. Statistical significance is easy to achieve with a large data set. Even if the effect is both statistically significant and substantial, it might show that either men or women have a statistically significant and substantial tendency to be bilingual. If it turns out that women have a statistically significant and substantial tendency to be bilingual, net of the control variables, then it could be much more convincingly argued that women have some kind of intrinsic need to talk "hoity-toity" than can be argued from the simple pairwise correlation between sex and speech behavior. We hypothesize that there is no such intrinsic relationship between sex and bilingualism, i.e., we predict that when controls are applied, sex will not have a substantial effect on bilingualism. It may be statistically significant, but the size of the effect is predicted to be negligibly small. The simple way of stating our hypothesis is that when controls are made on the appropriate variables, sex and bilingualism will not be meaningfully related, i.e., sex does not by itself make a difference in whether a person is more likely

to be bilingual. Before turning to the multivariate analysis of data on bilingualism it has to be shown that 1) bilingualism in a prestige language is the same thing as trying to speak in a prestige style, and 2) that speaking English is prestigious for people of French mother-tongue in Montreal and Spanish mother-tongue in Puerto Rico.

The Analogy between a Monolingual's Using a Prestige Style and a Bilingual's Using His/Her Prestige Language

Labov (1970:21) states that there is an essential equivalence between bilingualism and knowledge of two or more speech styles, associated with social class, in the same language. Of course, different speech styles of the same language have a great deal, perhaps nearly all, of their grammar and vocabulary in common. Actual linguistic differences between speech styles may be slight, but nevertheless socially important. Their use in particular types of social situations tends to become institutionalized. One style is more appropriate for giving a speech at school, another for yelling insults.

Among bilinguals, use of their two languages may also become institutionalized in different social contexts. Ferguson (1959) gives quite a few examples of bilinguals using one language as a formal, "prestige" language, correct and proper, taught in schools and spoken more frequently by the upper classes, and the other a language used more frequently by the upper classes, and the other a language used more frequently by the lower classes. Ferguson (1959)

reports that a bilingual will often deny knowing this second language at all. Thus wholly different languages can be used to fulfill exactly the same social functions as standard and non-standard forms of one language. Such a situation is called 'diglossia' by Ferguson (1959). Sociolinguists themselves often mix up the matter of use of a prestige style with a bilingual's use of or her prestige language when asserting that women have a tendency to adopt a prestige speech form. Gauchat (1905), Albó (1970), Trudgill (1974), and Grillet (1974) have already been cited as pointing out that women tend to prefer their prestige language.

One of the clearest cases of bilingualism in two languages of different amounts of prestige resembling SES-related speech styles is bilingualism in Spanish and Guarani in Paraguay (cf. Burling, 1970:100-101; Rona, 1966; Rubin, 1968). Historically, Spanish is the mother-tongue of the elite, the Spanish conquerors and their descendents, the language of the school, intellectual life, written communications, and formal, polite conversation. Guarani, an Amerindian language, survived because the Spanish were numerically few and intermarried with Indians. Guarani is the language of informal, intimate talk. Although there are Spanish monolinguals, about 8% of the population, and a large number of Guarani monolinguals in the country, about 40%, most of the population, 52%, are bilingual in both languages and separate the institutionalized contexts in which the two

languages are used (Rubin, 1968:14). Thus to insist on speaking Spanish in familiar, homey situations where Guarani is usually used would be defined as too formal, hoity-toity, too high class to be appropriate, if the people are bilingual. Conversely, use of Guarani in formal discourse, although encouraged to some extent by the government since Guarani is uniquely Paraguayan, would tend to be perceived as inappropriate, even possibly vulgar (Rubin, 1968:chap.4). There is a difference in prestige between the two languages. Rubin, (1968:111), in fact, found that Guarani tended to be the language of men with men; Spanish the language men tended to use with women, and women preferred.

We are not asserting that the use of two languages is as context-specific among French mother-tongue people in Montreal or Spanish mother-tongue people in Puerto Rico as in Paraguay. For most, it probably is not. It is enough to show that where prestige differences exist between languages in a bilingual society, the use of the two different languages tends to become institutionalized according to social situation, just as between SES-related speech styles in a monolingual society.

But is there a prestige difference between English and French in the Montreal metropolitan area and English and Spanish in Puerto Rico? There are two ways of establishing such a prestige difference. One way is to ask whether there is such a difference. Another is to show that the language characteristics of the wealthy acquire the prestige of

established wealth, i.e., the prestige of wealth rubs off on the language of the wealthy (cf. Labov, 1970:31). The story that Castillian Spanish pronounces an 's' as a 'th' because people once imitated a popular king of Castille who lisped illustrates the point, even if the story may be apocryphal.

Lambert, Hodgson, Gardner, and Fillenbaum (1972) in an experiment on Montreal people involving a "matched guise," that is, the tape recorded voices of flawless bilinguals speaking in English and French, show that French Canadians rated these people as being more desirable when they were speaking English than when they were speaking French, an indication that speaking English is prestigious. Lambert, Hodgson, Gardner, and Fillenbaum (1972:301-304) show that the relative prestige of different income groups is projected on to language characteristics to the extent they are correlated with income groups. Epstein (1966:222) in a dissertation on attitudes toward learning English in Puerto Rico states that "one need merely speak English fluently to persuade people that he is educated and of more than average means." Epstein (1966:53) also observes that speaking English has some snob appeal for the wealthy in Puerto Rico, that many parents are willing to pay money to have their children educated in private schools in order that their children be taught English more effectively than they would be in the public schools (Epstein, 1970:79), and that there is some risk of bilingualism in English becoming a class barrier that might separate rich from poor (Epstein, 1966:222). Wagenheim (1973:103) suggests that English enjoys prestige

in Puerto Rico because of its "monetary value." In both Montreal and Puerto Rico, not only do English mother-tongue people have substantially higher incomes than Spanish mother-tongue people in Puerto Rico, or French mother-tongue people in Montreal, but among Spanish or French mother-tongue people, bilinguals in English are substantially wealthier than monolinguals (cf. Lieberson, 1970:167-175; Angle, 1976b:chap.5). There is thus both strong direct and indirect evidence that ability to speak English is prestigious for French mother-tongue people in Montreal and Spanish mother-tongue people in Puerto Rico and that bilingualism in English is the same kind of speech behavior as knowledge and use of the speech styles of wealthy people in monolingual societies.

Data, Variables, and Methods

The sources of data are a public use sample of 27,433 cases drawn from individual records of the 1971 Canadian Census in the Montreal metropolitan area (cf. Canada, Statistics Canada, 1975) and a public use sample of 27,068 cases in the "state characteristics" file drawn from individual records of the 1970 Census of Population in Puerto Rico conducted by the U.S. Bureau of the Census (1972b). The Canadian Census in 1971 asked three questions on language: mother-tongue, language used in the home, and ability to speak Canada's two official languages, French and English. In Montreal only people of French mother-tongue, speaking French in the home are studied. This population is divided into two sub-populations, those between 10 and 19 years of age, and those older.

There are 3,548 people in the 10-19 year old Montreal sample, and 10,942 in the 20+ year old sample. The 10-19 year olds are singled out for detailed examination because these are the years of rapid learning of a second language and the adoption of adult roles, or process which might be related to which sex becomes bilingual in English. In Puerto Rico, only native born Puerto Ricans with at least one Puerto Rican born parent are studied. This restriction is made to insure Spanish mother-tongue. People in Puerto Rico are also divided into two groups: the 5,480 cases 10-19 years of age, and the 6,360 people 20+ years of age, a 50% sample of cases available in the file.

The principal variable of interest is bilingualism. It is a dichotomy in both censuses. A 'yes' answer to a census question on language ability usually indicates only a minimal ability in the language (cf. Angle, 1976b:chap.3). These census questions on ability in a language do not measure degree of facility, only whether a person is minimally able to speak it or not. The control variables included in the analysis are age, education, labor force status for those 20+ in age, school attendance for those between 10 and 19 in age, and for people in Puerto Rico, other contexts of exposure to people speaking English, whether they had been to the U.S. mainland for six months or more in the preceding five years, or whether they had served in the armed forces. For Puerto Ricans aged 10 to 19, the control was for living in the U.S. only.

Age is considered as a control variable since it might condition the relationship between sex and bilingualism. The theory that women adopt prestige speech forms as self-adornment suggests that younger women would exhibit this behavior more than older women. Labov (1973) put this hypothesis forward. Education is included as a control variable since it is probably the most important factor in explaining bilingualism in the individual. The hypothesis that possible sex differences in adopting prestige speech forms is due to the way the sexes relate to education has been suggested by Shuy (1969a) and Trudgill (1974:chap.4). Labor force status is included as a control variable for people 20 years of age or older since there might be on the job or job-related second language learning. Because there are more men in the labor force than women, this possible source of language learning might make men appear to be more ready to become bilingual than they are. Urban residence was used as a control for people in Puerto Rico since it may predispose people to be bilingual.

The contingency table is used to partial out the effects of control variables on the Sex-Bilingualism relationship. Many of the control variables are nominal and this method of multivariate analysis is suitable. Tables too large to percentage and read are generated, however. Log-linear analysis has to be used to interpret the tables. Davis (1974) and Goodman (1972, 1973) are good introductions to the technique. Log-linear models are sets of

contingency table marginals from which expected frequencies for table cells can be generated. The usual way to designate a marginal, referred to as a 'term,' is to assign a letter to each variable, such as: A=Sex, B=Bilingualism, C=Age, D=Urban/Rural Residence, E=Education, etc. A clump of letters together such as ACD indicates that the three variables Sex, Age, and Urban/Rural Residence and all their interactions are being used to generate expected frequencies. The particular marginals used to generate expected frequencies correspond to hypotheses about what explains variation in the frequencies. The way to test for the significance of a particular term is to generate expecteds without it, then with it, and compare the chi-square measures of the fit to the actual data. The difference between the chi-square of the first model and the chi-square of the second model is itself a chi-square statistic distributed with the difference of the degrees of freedom of the two models. This chi-square of the difference is used to test the statistical significance of the term under examination, in this paper, the Sex-Bilingualism term.

Results

Table 1 shows the percent bilingual in English by sex for the four groups under examination: French mother-tongue people in Montreal and Spanish mother-tongue people in Puerto Rico, in two age groups, those 10 to 19, and those 20 and older. Of these four groups, only the 10 to 19 year olds in Puerto Rico show more females than males able to

speak English. The boys and girls in Montreal are almost exactly even in their ability to speak English. The men in Montreal and Puerto Rico have a higher frequency of bilingualism than do the women. On the face of it, this evidence disconfirms the theory that women pick up prestige speech forms before men. This pattern is found only for 10-19 year olds in Puerto Rico.

However, the theory may yet be rescued if it can be shown that women would have a higher level of bilingualism than men if they experienced the same opportunities and incentives as men to learn English. It may be, if the hoity-toity talk and women theory is true, that being a woman itself is a plus in adopting a prestige speech form, but there may be some minuses for women in becoming bilingual if women are greatly disadvantaged vis a vis men. Women may, for example, have lower levels of education, and probably, lower labor force participation rates, factors which may provide opportunities and incentives to become bilingual. Thus, after controls for such variables have been made, we would expect, if the theory that women have some intrinsic attraction to prestige speech forms is true, that being female would have a <u>net</u> positive effect on being bilingual. Is there a <u>net</u> positive effect? If it is there, is it statistically significant, and if statistically significant, is it big?

Our strategy is to add control variables to see what happens to the Sex-Bilingualism relationship after each

control variable or set of control variables is added. These results are presented in Table 2. They show that among Spanish mother-tongue people in Puerto Rico, with all controls applied, the relationship between sex and bilingualism is not important regardless of its direction. There is no relationship between sex and bilingualism for 10-19 year olds in Montreal. Among older French-mother-tongue people in Montreal, there is a substantial, important relationship between being male and being bilingual. The long and the short of it is that the effect which was sought: a net tendency of women to be bilingual in English, i.e., to adopt a prestige speech form, was not found.

Conclusions

A large literature has appeared in sociolinguistics on the tendency of women to adopt the language styles characteristic of wealthy people, ways of talking taught as the correct standard in the schools, i.e., to talk "hoity-toity." Much of this literature, for understandable reasons, is not based on probability samples of the size of census public use samples. We have attempted to test the generalization about hoity-toity talk and women by making the analogy between a speech style distinctive of wealthy people, something which may take complex classification by a trained linguist to detect, and a wholly different language of a group with a higher average income level. We defend this analogy by pointing out functional similarities and establishing that in bilingual societies where mother-

tongue is correlated with income there is a prestige difference between the languages.

Once made, the analogy permits a rigorous test with multivariate analysis of large data sets of the theory about hoity-toity talk and women. The analysis disconfirms that theory. We find that adult men in Montreal tend to be more bilingual than women even net of the control variables. Ten to nineteen year olds in Montreal, however, have no sex pattern in their bilingualism. Controls wiped out any relationship between sex and bilingualism in Puerto Rico. While our hypothesis that there is no intrinsic tendency for either sex to adopt a prestige speech form before the other is neither confirmed nor disconfirmed, we think our findings provide a basis for a critical reassessment of the sociolinguistic literature on the relationship between sex and prestige speech forms.

Table 1. Percent Distributions and Percent Bilingual

	Spanish Mother-Tongue People in Puerto Rico				French Mother-Tongue People in Montreal			
	10-19 year[a] olds		20+ year[b] olds		10-19 year[c] olds		20+ year[d] olds	
	% distribution	% bilingual	% distribution	% bilingual	% distribution	% bilingual	% distribution	% bilingual
Sex								
male	51.1	37.1	48.6	45.3	50.4	24.2	47.4	61.1
female	48.9	43.2	51.4	38.0	49.6	23.8	52.6	39.8
	100.0		100.0		100.0		100.0	
Bilingualism								
yes	40.1	*	41.5	*	24.0	*	49.9	*
no	59.9	*	58.5	*	76.0	*	50.1	*
	100.0		100.0		100.0		100.0	
Age								
10-11	21.0	25.4	*	*	21.5	8.5	*	*
12-13	20.6	35.0	*	*	21.0	14.1	*	*
14-15	20.8	41.6	*	*	20.7	21.1	*	*
16-17	19.8	47.0	*	*	19.4	36.2	*	*
18-19	17.8	53.7	*	*	17.3	45.2	*	*
	100.0				99.9			
20-29	*	*	28.8	51.7	*	*	*	*
30-41	*	*	24.8	51.8	*	*	*	*
42-55	*	*	22.4	39.4	*	*	*	*
56+	*	*	24.0	20.8	*	*	*	*
			100.0					
20-26	*	*	*	*	*	*	20.0	52.3
27-36	*	*	*	*	*	*	23.5	49.2
37-49	*	*	*	*	*	*	25.6	52.8
50+	*	*	*	*	*	*	30.9	46.5
							100.0	

Table 1 cont.

	Spanish Mother-Tongue People in Puerto Rico				French Mother-Tongue People in Montreal			
	10-19 year olds		20+ year olds		10-19 year olds		20+ year olds	
	% distribution	% bilingual	% distribution	% bilingual	% distribution	% bilingual	% distribution	% bilingual
Urban/Rural Residence								
urban	49.9	50.5	60.0	51.6	*	*	*	*
rural	50.1	29.7	40.0	26.4	*	*	*	*
	100.0		100.0					
Education								
no schooling thru 5th grade	31.9	18.7	*	*	*	*	*	*
6th grade thru 8th	33.6	36.0	*	*	*	*	*	*
9th grade +	34.5	63.8	*	*	*	*	*	*
	100.0							
no schooling thru 4th grade	*	*	*	*	7.6	10.0		
5th grade thru 8th	*	*	*	*	43.4	12.3		
grades 9,10	*	*	*	*	26.9	25.8		
grades 11+	*	*	*	*	22.1	49.7		
					100.0			
no schooling thru 2nd grade	*	*	19.1	3.2	*	*	*	*
3rd grade thru 5th grade	*	*	20.8	12.4	*	*	*	*
6th grade thru 9th grade	*	*	24.1	39.0	*	*	*	*
10th grade thru grade 12	*	*	23.6	73.1	*	*	*	*
some college +	*	*	12.3	94.6	*	*	*	*
			99.9					

Table 1 cont.

	Spanish Mother-Tongue People in Puerto Rico				French Mother-Tongue People in Montreal			
	10-19 year olds		20+ year old		10-19 year olds		20+ year olds	
	% distribution	% bilingual	% distribution	% bilingual	% distribution	% bilingual	% distribution	% bilingual
Education								
no schooling thru 4th grade	*	*	*	*	*	*	7.9	26.0
5th grade thru 8th grade	*	*	*	*	*	*	37.1	35.0
grades 9 and 10	*	*	*	*	*	*	22.6	54.0
grades 11 and 12	*	*	*	*	*	*	21.6	65.9
grade 13+	*	*	*	*	*	*	10.9	77.9
							100.1	
School Attendance								
yes	78.5	43.8	*	*	78.9	22.7	*	*
no	21.5	26.4	*	*	21.1	29.0	*	*
	100.0				100.0			
Having Lived on U.S. Mainland for 6 months+ in previous 5 years								
yes	4.8	66.7	*	*	*	*	*	*
no	95.2	38.8	*	*	*	*	*	*
	100.0							
Having Lived on U.S. Mainland for 6 months+ in Previous 5 years, or, Having Served in Armed Forces								
yes	*	*	19.2	68.6	*	*	*	*
no	*	*	80.8	35.1	*	*	*	*
			100.0					
Labor Force Participation								
yes	*	*	44.3	56.2	*	*	56.1	59.5
no	*	*	55.7	29.9	*	*	43.9	37.7
			100.0				100.0	

[a] N=5,480

[b] N=6,360

[c] N=3,548

[d] N=10,942

Table 2. Comparison of Several Log-linear Models to Test Significance of Sex-Bilingualism Term. Spanish Mother-Tongue People in Puerto Rico and French Mother-Tongue People in Montreal[a]

Variables in Tables[b]	Code Letter	Number of Categories[c]
Sex	A	2
Bilingualism	B	2
Age	C	4,5[d]
Urban/Rural Residence[e]	D	2
Education	E	3,4,5[f]
School Attendance	F	2
Having Lived on U.S. Mainland for 6 months or more in previous 5 years[g]	G	2
Having Lived on U.S. Mainland for 6 months or more in previous 5 years, or, having served in armed forces[h]	H	2
Labor Force Participation	I	2

Models (fitted marginals)	X^{2}[i]	df[j]	p[k]	lambda[l]	Adjusted[m] partial r-square
Puerto Rico, 10-19 year olds					
1. ACD BC BD	34	14	<.5		
2. ACD BC BD AB	16	13	<.5		
Sex-Bilingualism interaction term, AB (model 2 vs. model 1)	18	1	<.001	+.06	.512
3. ACDEFG BC BD BE BF BG	197	230	>.5		
4. ACDEFG BC BD BE BF BG AB	189	229	>.5		
Sex-Bilingualism interaction term, AB (model 4 vs. model 3)	8	1	<.001	+.04	.036
Puerto Rico, 20+ year olds					
5. ACD BC BD	82	11	<.5		
6. ACD BC BD AB	26	10	<.5		
Sex-Bilingualism interaction term, AB (model 6 vs. model 5)	56	1	<.001	-.10	.654

Table 2 cont.

Models (fitted marginals)	X^2	df	p	lambda	adjusted partial r-square
7. ACDEHI BC BD BE BH BI	332	309	<.5		
8. ACDEHI BC BD BE BH BI AB	332	308	<.5		
Sex-Bilingualism interaction term, AB Model 8 vs. model 7)	0	1	>.5	-.01	0.0
Montreal, 10-19 year olds					
9. AC BC	4	5	>.5		
10. AC BC AB	4	4	<.5		
Sex-Bilingualism interaction term, AB (model 10 vs. model 9)	0	1	>.5	-.01	0.0
11. ACEF BC BE BF	51	71	>.5		
12. ACEF BC BE BF AB	51	70	>.5		
Sex-Bilingualism interaction term, AB (model 12 vs. model 11)	0	1	>.5	-.01	0.0
Montreal, 20+ year olds					
13. AC BC	510	4	<.001		
14. AC BC AB	16	3	<.001		
Sex-Bilingualism interaction term, AB (model 14 vs. model 13)	494	1	<.001	-.21	.957
15. ACEI BC BE BI	423	71	<.001		
16. ACEI BC BE BI AB	154	70	<.001		
Sex-Bilingualism interaction term, AB (model 16 vs. model 17)	269	1	<.001	-.19	.631

[a]There are 5,480 people in the sample of 10-19 year olds in Puerto Rico, and 6,360 in the sample of 20+ year olds in Puerto Rico, as well as 3,548 in the Montreal 10-19 year olds, and 10,942 in the 20+ year old Montreal sample.

[b]If a variable does not appear in a model, it is not in the table to which the model is fitted.

[c]Many of the variables are amenable to dichotomization. Continuous variables such as age or amount of education were divided into three or more categories

Table 2 cont.

to allow for the possibility of non-linear relationships with bilingualism. Cut-off points on education and age are not the same between the different comparison groups, since the cut-off points were chosen to maximize the variance on each variable for each population.

[d]The 10-19 year olds were divided into five two-year age groups. The older groups were divided into four-age groups in a way which maximized the variance of the variable.

[e]Urban/rural residence is a control variable only for people in Puerto Rico.

[f]Among the 20+ year olds, a five category breakdown on education is used. Since education is highly correlated with age among 10-19 year olds, a rougher breakdown on education was necessary: 3 categories for 10-19 year olds from Puerto Rico, 4 categories for 10-19 year olds from Montreal.

[g]This variable is defined only for 10-19 year olds in Puerto Rico.

[h]This variable is defined only for 20+ year olds in Puerto Rico.

[i]maximum likelihood ratio chi-square

[j]degrees of freedom

[k]significance level of the chi-square

[l]lambda, an ANOVA-type statistic, computed from logged frequencies in marginals of table, measuring effect of being in a particular category. Sign of statistic is determined by order of categories. In this case a '+' indicates a tendency of females to be bilingual; a '-' a tendency for males to be bilingual.

[m]adjusted partial r-square = $(X_0/df_0 - X_1/df_1)/(X_0/df_0)$, where X_0 is chi-square of model without the term and X_1 is the chi-square of the model with the term and so on for the degrees of freedom, df.

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